Whaling Diplomacy

NEW HORIZONS IN ENVIRONMENTAL LAW

Series Editors: Kurt Deketelaere, Director, Institute of Environmental and Energy Law, University of Leuven, Belgium and Zen Makuch, Department of Environmental Science and Technology, Imperial College, London, UK

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Whaling Diplomacy

Defining Issues in International Environmental Law

Alexander Gillespie
Professor of Law, University of Waikato, New Zealand

NEW HORIZONS IN ENVIRONMENTAL LAW

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Natura insidians pontum substravit avaris.

Nature laid out the sea as a trap for the greedy.
Properticus.

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Abbreviations and acronyms

ACAP	Agreement on the Conservation of Albatross and Petrels
ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
ASCOBANS	Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas
ASEAN	Association of South East Asian Nations
ASW	aboriginal subsistence whaling
ASWSC	Aboriginal Subsistence Whaling Sub-Committee
ATS	Antarctic Treaty System [Antarctica Treaty p. 655, n208]
BWU	blue-whale unit
CAP	Common Agricultural Policy
CBD	Convention on Biological Diversity
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources
CCSBT	Convention on the Conservation of the Southern Bluefin Tuna
CDS	catch certification/documentation scheme
CITES	Convention on International Trade in Endangered Species [of Wild Fauna and Flora]
CMS	Convention on Migratory Species of Wild Animals
COP	Conference of the Parties
CRAMRA	Convention on the Regulation of Antarctic Mineral Resource Activities
CRW	Convention on the Regulation of Whaling (1931)
CSD	Commission on Sustainable Development
DAC	Development Assistance Committee
DDT	dichlorodiphenyl-trichloroethane (insecticide)
DML	dolphin mortality limit
EC	Economic Community
ECOSOC	Economic and Social Council (UN)
ECSC	European Coal and Steel Community
EDG	expert drafting group
EEZ	exclusive economic zone
ETS	European Treaty Series
EU	European Union

EURATOM	European Atomic Energy Community
FAD	fish aggregation device
FAO	Food and Agriculture Organization (UN)
FCCC	see UNFCCC
GAR	General Assembly Resolution (UN)
GATT	General Agreement on Tariffs and Trade
GEF	Global Environment Facility
GPA	Global Programme of Action for the Protection of the Marine Environment from Land Based Activities
HSUS	Humane Society of the United States
I&O	inspection and observation
IAEA	International Atomic Energy Agency
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Convention on the Conservation of Atlantic Tuna
ICES	International Council for the Exploration of the Sea
ICJ	International Court of Justice
ICRW	International Convention on the Regulation of Whaling (1946)
ICSU	International Council of Scientific Unions
ICZM	Integrated Coastal Zone Management
IFAW	International Fund for Animal Welfare
ILC	International Law Commission
ILM	International Legal Materials
ILO	International Labour Organization
IMF	International Monetary Fund
IMO	International Maritime Organization
IO	international organization
IOS	Indian Ocean Sanctuary
IOS	International Observer Scheme
IOTC	Indian Ocean Tuna Commission
IPCC	Intergovernmental Panel on Climate Change
IPOA	International Plan of Action (FAO)
ISO	International Standards Organization
ITO	International Trade Organization
ITU	International Telecommunication Union
IUCN	International Union for the Conservation of Nature and Natural Resources
IWC	International Whaling Commission
IWG	intersessional working group
JARPA	[160, n23 and Ch. 5]
JARPN	[160, n23 and Ch. 5]

JICA	Japan International Co-operation Agency
LDC	London Dumping Convention
LNTS	League of Nations Treaty Series
MARPOL	International Convention for the Prevention of Pollution by Ships
MOP	Meeting of the Parties
MSY	maximum sustainable yield
NAMMCO	North Atlantic Marine Mammal Commission
NATO	North Atlantic Treaty Organization
NGO	non-governmental organization
NMP	new management procedure
ODA	Overseas Development Assistance
OECD	Organization for Economic Co-operation and Development
OECF	Overseas Economic Co-operation Fund
OILPOL	International Convention for the Prevention of the Sea by Oil
OJ	Official Journal
OPEC	Organization of Petroleum-Exporting Countries
PCB	polychlorinated biphenyl (toxic constituent of plastics)
PCSP	Permanent Commission of the South Pacific
POP	persistent organic pollutant
RAMSAR	Convention on Wetlands of International Importance
RMP	revised management procedure
RMS	revised management scheme
RSPCA	Royal Society for the Prevention of Cruelty of Animals
SAWS	South Atlantic Whale Sanctuary
SC	scientific committee
SCAR	Scientific Committee on Antarctic Research
SCSC	Sub-Committee on Small Cetaceans
SOS	Southern Ocean Sanctuary
SPWS	South Pacific Whale Sanctuary
STCW	small-type coastal whaling
TBT	tributyl tin
TCWG	technical committee working group
TED	turtle excluder device
TIAS	Treaties and other International Acts Series
UKTS	United Kingdom Treaty Series
UNCED	United Nations Conference on Environment and Development
UNCHE	United Nations Conference on the Human Environment
UNCLOS	United Nations Conference on the Law of the Sea
UNEP	United Nations Environment Programme

UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNTS	United Nations Treaty Series
UPU	Universal Postal Union
USC	United States Code
UV-B	ultraviolet radiation of wavelength 280–320m
VCIO	Vienna Convention on International Organisations
VCLT	Vienna Convention on the Law of Treaties
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WMA	World Medical Association
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization
WWF	Worldwide Fund for Nature (formerly World Wildlife Fund)
YBIEL	Yearbook of International Environmental Law

Preface

I must express my thanks to a number of people and organizations who have made all this possible. I must acknowledge the non-governmental organizations who assisted me before, during and after each meeting. Sigi, Kitty, Sue and Margi all merit special thanks. The people in these organizations are indispensable to the debate, and without their assistance, I doubt I could have completed this task. Thanks also to Wally Stone for getting me on the ocean in the first place, and planting the seed that grew into this work. I am grateful to the Law School at the University of Waikato for the support they have given me. My special thanks to Claire, for her encouragement and support, and my sons Jamie and Conor for putting up with me sometimes reading papers and thinking about distant things when I should have been playing with them.

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Finally, it is important to note that despite my connections with the New Zealand team, the views in this book are entirely my own and should not be assumed to represent the NZ or any other official position.

This book is for Jamie and Conor.

Introduction

My interest in whales, like with most New Zealanders, began at a very young age. However, despite an interest in this species my academic work initially took me in different directions within international environmental law. As such, it was only in 1997 that I was first invited to assist the New Zealand delegation at the International Whaling Commission (IWC) meeting for the following year in Oman. Since this time, my interest in the whaling debate and involvement in the discussions at both the IWC and elsewhere has only broadened. In many ways, this book is about these discussions.

When I first became involved, I was somewhat befuddled by the spectacle that I saw. In some ways, the international focus on environmental issues had moved on to newer developments – developments which were not even imagined when the IWC became a central focus of international concern in the early 1970s. However, in other ways, the focus on whales is as intense as ever, and the public interest in this debate has not shown any sign of weakening. Trying to understand why this issue retains such a prominent concern in the twenty-first century, despite more than two decades of bitter confrontation between opposing signatories to the convention – and no settlement of differences on so many issues – can only be fathomed when the issues are disentangled. When this is done, it quickly becomes apparent that the whaling debate is very different from many comparable altercations on environmental policy, because it involves so much. It is true that the whaling debate is fundamentally about whales, but it is also about questions of ethics, politics and law. There is no one primary concern within the altercations of the IWC, and at times it seems like a forum with a dozen or so unrelated, highly contentious issues battling back and forth. It is my hope that the chapters in this book will begin to explain to the interested reader exactly what is going on, and why.

This book is broadly divided into three parts, followed by a conclusion. Part I deals with the numbers of and threats to cetaceans at the present time. Part II examines what I consider to be underlying ethical issues relating to cetacean questions at the IWC. Part III investigates what I have labelled the 'mechanics' of international law. Although these parts and the chapters within them are presently separately, it is important to realize that they are all very much interconnected, and together, they make up one of the central debating grounds in international environmental law and policy.

NUMBERS AND THREATS

With regard to current threats to the overall status of whales, four chapters are offered. Chapter 1 seeks to show the reader a brief history of the whaling debate throughout the twentieth century, and an introduction to some of the key underlying concepts, with a particular emphasis on the international mismanagement of cetaceans before the commercial moratorium came into operation in 1986. Chapter 2 is primarily focused on how individual species have been managed, and gives an estimate of their current population abundance.

Chapter 3 suggests that a foremost threat for a number of species, and cetaceans in particular, in the new century is environmental change to the oceans they inhabit. As such, understanding the health and management of the oceans is essential to any meaningful comprehension of the scope of the problems ahead in this field. To further this goal the chapter has two objectives: to examine the environmental threats that are posed to cetaceans; and to display the way the international community has begun to deal with them. It is necessary to examine the broader response of the international community in general, as ultimately, the resolution of most of these difficulties will be achieved in *other* issue-specific forums, and not the IWC. This is unfortunate, as in regard to the problem of environmental threats, the IWC may be losing part of its ability to ultimately fulfil its mandate. This problem is doubly troubling, as many of the other forums have had only limited success in protecting the environmental health of the oceans. This chapter seeks to show the environmental threats, overlaps with other forums and the lacunas that exist.

The fourth and final chapter on 'threats' to cetaceans deals with bycatch. The bycatch of cetaceans is a growing problem, and is one which has been largely neglected until recently. However, since becoming apparent with regard to the management of cetaceans, it has also become highly noticeable in a number of other international wildlife forums such as those dealing with, *inter alia*, seabirds, turtles and sharks. Due to the fact that bycatch is not a new problem, and is a difficulty which the international community has tried to deal with over the last 150 years, it is possible to learn from their experiences and apply the principles which have been successful elsewhere, and in 2001 the IWC passed a resolution adopting these principles. The first principle is to be very accurate about defining the target species, and being willing to modify, if not abandon, technologies which are indiscriminate in their capturing. Assuming that technology cannot entirely prevent incidental catch, it is necessary to have a collection of secondary mechanisms in place. These suggest that if the incidentally caught species is alive (and assuming it has a good chance of survival), it should be released. Second, harvesting operations need to have direct quotas on how much bycatch they may take before having to cease

harvesting. Finally, when species which are the subject of separate conservation measures are ensnared as bycatch, they should not be landed and profited from. However the bycatch should be retained (not discarded at sea) and disposed of appropriately. Conversely, with bycaught species that are not the subject of concern under conservation regimes, their active utilization (rather than wasting them) should be considered. However, although the utilization of this form of bycatch should be pursued, it is important that those who caught it are not directly rewarded for the process.

PHILOSOPHY IN INTERNATIONAL ENVIRONMENTAL LAW

The chapters on humane killing (Chapter 6), scientific whaling (Chapter 5), the option of non-utilization in international law (Chapter 7) and so-called aboriginal subsistence whaling (Chapter 8) fall into what I broadly consider philosophical questions. In the first of the three chapters in this area (humane killing, scientific whaling and lethal non-utilization) Japan, Norway and a number of countries aligned to their views consistently argue that each one of these is trying to introduce 'new' things into the IWC. Moreover, these new things are often culturally relativistic and without precedent in international law. I try to counter all three of these arguments by demonstrating their consistent history within the IWC, recognition in national law and philosophies, as well as within comparable international law. The ideal is to make the reader realize that ethics is at the forefront of many of these discussions within the IWC.

On the question of humane killing, Japan and a number of like-minded countries have argued that any attempt to put humane killing considerations squarely within the considerations of the IWC is ultimately *ultra vires*, as it has no history within the IWC, is culturally relativistic and without precedent in international law. In my thinking, this argument represents the bottom line of ethical demands within international wildlife law. To argue against this bottom line is to ultimately suggest that humanity has no moral considerations, beyond the survival of the species. To argue this goes against nearly five decades of recognition of the consideration within the IWC, a vast collection of diverse philosophical and national concerns which recognize the legitimacy of humane killing concerns, and an emerging corpus of international wildlife law which recognizes that mitigating against unnecessary cruelty is a worthwhile and necessary goal.

The second area where ethics are paramount is with regard to scientific whaling. This area, in which legal rights have conflicted directly with necessary social limits, has become one of the major flashpoints in the IWC.

Moreover, this debate has direct implications in numerous overlapping national and international bodies, in which the quests of scientific knowledge come up against the legitimate limits of society, in both national and global settings. These areas range from so-called 'animal testing' debates, through to areas where one species is scapegoated for the decline of another species which humans wish to harvest. In this instance, the question is how far can scientific pursuits be allowed in the utilization of non-human species? To answer this question, the chapter examines the way in which numerous philosophical considerations have combined to suggest that the utilization of animals for scientific purposes is only permissible if no alternatives to animal utilization exist, and the information obtained has an overall merit which is needed. This broad philosophical basis has formed the core of multiple national laws, and has found its way into many international codes. Moreover, it is basically the bottom line of the IWC. However, some countries have acted against this ethical backdrop for over 15 years.

The third area where ethical concerns need to be dealt with has to do with the overall question of whether whales which are not endangered should be hunted or not. Chapter 7 deals with this argument, and shows that there are two diametrically opposed views on this question. One assumes that sustainable hunting is legitimate, and the other argues that even if it is legitimate, that does not necessarily mean it should be pursued. The foremost place where this debate has emerged, has been with the so-called 'Irish Proposal', of which the central issue is – to make the high seas into a global sanctuary for all whales. Although the Irish Proposal allows the idea of coastal whaling (something which the international community has limited authority over due to the exclusive economic zones of coastal states) the idea to turn the high seas into a sanctuary is radical. It is radical because it would involve opting for a non-lethal utilization of cetaceans – irrespective of their conservation status. A number of countries have argued that this is illegal and not possible within international law. However, this view is mistaken, as it is exactly what the international community did when it decided to make Antarctica into, effectively, an international wilderness park that would not be utilized by conventional means. Accordingly, the international community has already once decided that sometimes the best way to 'utilize' something, is not to pursue traditional utilization paradigms.

The last chapter in this philosophy part deals with aboriginal subsistence whaling (ASW). I have included this chapter to demonstrate the difficulties of defining indigenous peoples in international law, and how their causes and legitimate needs have been manipulated, within a forum which has struggled to deal with overlapping considerations of anthropology, philosophy, conservation and international law. This has happened as a number of countries have attempted to stretch this category beyond anything that was initially planned

for. Accordingly, traditional limits surrounding this category, such as non-commercial utilization, nutritional need and local consumption have become increasingly slippery and difficult to answer. However, these issues are relatively simple when compared to the question of how 'indigenous culture' itself fits into the IWC, and underlying assumptions of exactly what this is are explored. This becomes increasingly difficult when considerations of limits on such cultures (from humane killing to catch limits because of the severe endangerment of the stock) are considered.

THE MECHANICS OF INTERNATIONAL ENVIRONMENTAL LAW

Chapter 9 deals with the mechanics of international law, and how treaties evolve. Sanctuaries have a long and distinguished history within international law. In the last fifty years, the reasons for the creation of sanctuaries have expanded into more holistic considerations. However, when the International Convention on the Regulation of Whaling (ICRW) was drafted, this broader approach was not in currency. The establishment of sanctuaries has had to be achieved within the much narrower bounds of the text of the convention. On a prima facie level, arguments may be adduced that there is a scientific basis for the Southern Ocean Sanctuary (SOS) or the South Pacific Whale Sanctuary (SPWS) and that they have a purpose to play alongside the revised management procedure. As such, the strict requirements of the ICRW can be fulfilled. On a secondary and somewhat deeper level, it is possible to justify the SOS and SPWS via a method of statutory interpretation of the convention's text which reflects that although the language of the convention has not changed, the way it has been interpreted has. Via this approach, it is possible to construe the terms 'optimum use', 'best interests of the whaling industry' and the 'interests of the consumers of whale products' (the key phrases within the text) in non-consumptive ways. This type of interpretation may be supported under rules within international law, *if* examples of previous practice demonstrating interpretative usage within such a context can be cited – clearly, the earlier Indian Ocean Sanctuary and the moratorium do this. As such, the SOS may be regarded as being both a legal and an authoritative example of the way in which the majority of the international community has viewed one area of global environmental concern.

Chapter 10 also deals with the workings of international law, but this time with small cetaceans as the case study. Small cetaceans have been a focus within the IWC since the early 1970s. Since this time, the IWC has slowly brought the focus of its scientific committee to examine the status and trends on a number of these species. From such information, it has issued resolutions

calling for restraint, often directed to specific countries, where the species are clearly at risk. However, opposing this rise in interest in small cetaceans, a number of countries have continually objected, suggesting that any questions regarding small cetaceans are *ultra vires*. This is because the IWC was not given the authority to examine this issue within the ICRW. The alleged proof for this is that small cetaceans were not originally singled out for coverage, nor were they listed in the nomenclature. This approach is misplaced due to a number of reasons. First, the language of the convention, unlike the earlier whaling conventions, encompasses 'all' types of whales and whaling. Second, the idea that the nomenclature is anything more than a 'guide' is misplaced. To argue otherwise, is to implicitly try to limit the evolution of the ICRW, through the will of a three-quarters majority acting in accordance with the schedule.

A second area which has a strong focus in Chapter 10 is the IWC's relationship with the United Nations Conference on the Law of the Sea (UNCLOS). This question arises because of the assertion that only coastal states – and not the IWC have complete competence over small cetaceans. This contention is typically bolstered by the UNCLOS. However, this is mistaken as the UNCLOS does not accord to coastal states a complete sovereignty in territorial seas. Rather, it affords them a limited sovereignty, and requests nations to co-operate in international forums with regard to a number of related issues. The primacy of the IWC as the forum in question, was clearly recognized in Agenda 21 at the 1992 Earth Summit. This is not to suggest that decentralized approaches to the management of small cetaceans are not important. Rather, the point is that regional organizations need to be complementary to the primary international organization (the IWC) in this area. The regional ASCOBANS and ACCOBAMS agreements are strong examples of this.

Chapter 11 deals with the clashes between international organizations (IOs), or in this instance, between the IWC and the Convention on the International Trade in Endangered Species (CITES). The solution to the problem where CITES has tried to act against the wishes of the IWC can be found in international law, whereby questions of procedure and precedence are established for such situations. These rules, which have been followed in the IWC's relationships with other international organizations, such as the Convention on Migratory Species, and the Convention on the Conservation of Antarctic Marine Living Resources. However, although the same rules have been built into CITES, as this organization has evolved, it has increasingly turned against them, and become a forum in which disgruntled members of the IWC have attempted to overturn IWC decisions in CITES. This chapter argues against this situation, and seeks to make clear the primacy of the IWC in all matters relating to cetaceans, from which other IOs are obliged to follow. Failure to recognize the ideal of precedence in this situation also has large ramifications for other debates between competing IOs as disgruntled members of one IO go

'forum shopping' to other IOs in search of a more satisfactory result. The damage to international law and order could be massive.

The focus of Chapter 12 pertains to the discussions revolving around the IWC's attempts to secure a new inspection and observation regime. In this instance, the IWC is trying to catch up with international developments in this area, which have occurred in multiple other international and regional fisheries bodies over the last twenty years, since commercial whaling (and the traditional inspection and compliance regimes) has been redundant. The new developments that need to be adopted to make the IWC consistent with international best practice, and supplement the traditional compliance regimes such as vessel identification and foreign observers, are technologies such as vessel monitoring schemes, catch documentation schemes and DNA registers, so as to distinguish illicitly taken whales in the marketplace. Once the illicit catch can be identified, then it will become important for the IWC to revert to its traditional practice of restricting market access to wrongfully taken whales.

Chapter 13 deals with the issue of reservations to treaties. This became a controversial issue within the IWC in 2001, when Iceland, which had earlier been a member of the IWC but later left, attempted to readhere to the ICRW. However, its attempted readherence was refused on a majority vote by the IWC because of the 'conditional' reservation to the schedule which is attached to the ICRW. On rejection of its membership, Iceland raised a number of allegations, suggesting that the IWC's actions were inconsistent with international law. This chapter challenges Iceland's assertions, and shows that the IWC acted in harmony with international doctrine on this question.

Chapter 14 deals with transparency in international law. There are three areas which lend themselves to an analysis of the success of the quest for transparency of the IWC. The first of these relates to non-governmental organizations (NGOs). As it stands, the IWC is operating on a procedural system which is somewhat unique by comparison to other international forums. Although progress has clearly been made in allowing NGOs to increasingly witness what goes on within the IWC and most of its committees, the abilities of NGOs to fully contribute are limited in comparison to other forums. Moreover, a backlash is developing from some member countries against some NGOs within the IWC. With regard to media experience, although it has taken five decades, the IWC has increasingly opened its doors to external media attention. Likewise, with the issue of secret voting, despite a number of attempts to introduce increased secrecy into the IWC, these have been defeated and, as such, a degree of sovereign accountability has been maintained.

So-called 'vote-buying' is the subject of Chapter 15. Vote-buying is something which has become connected to the 'conditions' that countries attach

when giving foreign aid. This has become a big issue at the IWC, where vote-buying was recognized as the antithesis of good faith, good neighbourliness, and any form of reasonable diplomatic practice. However, although this has been conceded within the IWC, the question now becomes: where to from here? The answer to this question is in two parts. First, the problem of vote-buying must be identified as being squarely rejected by the international community. Second, mechanisms to deter this practice need to be invoked.

The last chapter in this part (Chapter 16) deals with a debate which has bedevilled the IWC for decades – that of how to fund the organization. One of the more vocal suggestions of late has been to adopt the UN scale of contributions. However, this proposal, like many others examined by the IWC, fails to incorporate principles that have evolved in international administrative law which are much more innovative and dynamic than the earlier blunt approaches based upon compulsion for members, irrespective of benefits or causation of problems. A suitable solution for the IWC would be a division of its budgets into administrative and operational segments, broadly in accordance with the practices of other comparable international organizations.

Finally, Chapter 17 offers a brief conclusion.

PART I

Numbers and Threats

1. From the blue-whale unit to the revised management scheme

> The history of whaling has seen over-fishing of one area after another and of one species of whale after another to such a degree that it is essential to protect all species of whales from further over-fishing. (Preamble, International Convention for the Regulation of Whaling, 1946)

1 THE FIRST INTERNATIONAL TREATIES

The cetaceans that exist in the early twenty-first century and their respective suborders of *Odontocetes* and *Mysticetes* have an evolutionary history dating back over 55 million years.[1] Their relationship with humanity during the subsequent periods can only be guessed at. However, by 5,000 years ago, it is clear that some cultures were hunting cetaceans. The first records of a commercial approach to whaling come from the Basque country between France and Spain and date to about AD 900. Basque whalers put out to sea in small boats in pursuit of the Biscayan right whales, which were the 'right' whales to pursue because they swam slowly and floated when dead. The whalers took their toll on Biscayan right whales, which have never recovered, and in order to maintain their livelihood the whalers were forced to travel further away. They ventured to Iceland and Greenland and by 1538 were in Newfoundland. The English and the Dutch joined the Basques off Greenland and Iceland, all of them intent on another right whale, the Greenland right or bowhead. Under the pressure of the continuing hunt the number of bowheads declined. By 1630 these whales were rare off Spitzbergen and the whalers shifted their attention to Greenland and Baffin Island. The harvest there was large, but again bowhead numbers dropped and the whale was commercially extinct in the new ground within 50 years. American whalers, operating at first from the coast and later in seagoing boats, took about 200,000 right whales in addition to humpbacks and grays. Like the Basques before them, they soon found they had to travel abroad to find whales, and from this quest the Yankee whalers from New England evolved. During the peak of this period between 1835 and 1846 there were about 600 ships. By this time, sperm whales were prime targets and by the 1920s, the stocks of these in the Atlantic had crashed.

American whalers discovered the calving grounds of the gray whales off Baja in California in 1853, and within 45 years and the turn of the 20th century this industry had collapsed due to a near liquidation of the stock. Thereafter, once new technology allowed it, the whaling nations turned their attention to the last great whaling ground – the waters of Antarctica. Within twenty years of beginning operations there the scarcity of some species of whales was becoming apparent, and the need for international co-operation on the issue manifested itself.

The calls for meaningful international agreements for the protection of cetaceans began only nine years after the formation of the League of Nations. In 1928, the International Council for the Exploration of the Seas was arguing: 'there is a real risk of those stocks being so reduced as to cause serious detriment to the industry'.[2] This call was clearly reasonable when it was realized that by the 1930/31 season, worldwide whaling operations were resulting in an annual catch of almost 43,000 whales. This represented an almost thirteen-fold increase in the period between 1910 and 1930. With such considerations in mind, the economic committee of the League of Nations decided in 1929 to convene a meeting of a committee of experts in Berlin in 1930 to consider the situation. This meeting led to the 1931 Convention on the Regulation of Whaling,[3] which was followed by a rewrite in 1937,[4] followed by protocols in 1938[5] and 1945[6] before the current International Convention on the Regulation of Whaling (ICRW) came into existence. This treaty was deemed at the time (by the UK) as: 'one of the minor, if not one of the major miracles of human achievement [as] many nations had united for the common purpose of conserving whale stocks throughout the world'.[7]

2 TWENTY YEARS OF FAILURE

Due to the fact that whales were hunted mainly for their oil, the 1945 Protocol Amending the International Agreement of 1937 for the Regulation of Whaling[8] clearly explained that the mechanism to measure and set the amount of whales that could be caught by the signatories to the convention was the *blue-whale unit* (BWU). Thus, 'blue whale units shall be calculated on the basis that one blue whale equals two fin whales or two and a half hump back whales or six sei whales'.[9]

In 1945 the BWU was set at 16,000 for the season.[10] In 1951 and 1952,[11] under the auspices of the new convention, the 16,000 BWU threshold was retained despite clear concern expressed by the International Whaling Commission's (IWC's) scientific committee (SC) at this limit.[12] In 1953, the UK warned that if restraint was not exercised 'in two or three seasons the whale would be extinct'.[13] Despite these concerns, the BWU was only reduced

to 15,500.[14] It fell to 14,500 in 1955 (due to concern about falling numbers of blue whales).[15] However, seven governments lodged formal objections to parts (or all) of the reduction (and certain species restrictions).[16] Such responses caused the United States to suggest: 'The whales are a world resource and not the property of any one individual nation, or group of nations'.[17] Likewise, New Zealand added:

> [T]he stocks of whales are . . . a general trust and . . . no country is free to neglect this consideration, nor is the commission free to neglect it . . . in the limits it is setting. . . . There is great evidence that a crisis caused by over-killing faces the whaling industry . . . it would lie heavily on the conscience of any nation which by its single action taken in opposition to all its partners in an international body caused the dissipation of a mighty store of wealth.[18]

Despite the growing concerns it was decided to leave the BWU at 14,500 in 1956, 'as otherwise a number of countries for the coming season would not be governed by any limit at all'.[19] This was against the scientific advice which produced more evidence that suggested that catch amounts were continuing to fall as well as declines in the average size of the whales being taken.[20] The following year, countries continued to refuse to abide by any international reductions unless other nations also followed suit. Thus, for example, 'so long as the protection was not applicable to Iceland, Denmark also refused to be bound by it'.[21] Once more, the BWU remained the same at 14,500.[22] The following year, despite recommendations that the BWU should be drastically reduced,[23] the level was retained at 14,500.[24] Failure to resolve the difficulties within the IWC had meant that the five pelagic whaling nations (the UK, the USSR, the Netherlands, Norway and Japan) had begun to meet separately, outside the auspices of the IWC. These discussions were 'without result'.[25] Although this outside meeting had failed, it became clear that a number of countries were thinking of leaving the IWC. Rather than risk this, the IWC decided to *increase* quotas, as an incentive to make the nations stay. As the chairman's report explained:

> [C]onscious of the importance of maintaining the Convention, the Commission showed a willingness to consider making some increase in the Antarctic permitted catch if thereby loss of the three member countries which had given notice of withdrawal, could be averted.[26]

Despite this, Norway and the Netherlands announced their intention to leave the IWC (although they both promised to abide by IWC targets) 'as a result of failure outside the Convention to rationalise fishing efforts of the countries participating in Antarctic pelagic whaling'.[27] As this occurred, the Soviet Union announced that it 'would adhere thereto only if [its] interests

were not damaged by the activities of countries outside it'.[28] The UK agreed with the USSR, by suggesting that its position would be 'governed by the need to avoid prejudice to the position of the British whaling fleets in comparison with any other fleets that might be operating free of the Convention'.[29] As a result, the Commission set the BWU at 15,000 units for the following year.[30] Faced with such a serious situation, the SC counselled that a reduction of at least 2,500 units was needed, and that 'anything less . . . would have little beneficial effect'.[31] However, as the chairman of the SC realized, the SC were 'asking for stronger protective measures than the Commission feels able to take'.[32] This was a correct analysis, as the Commission was unable to make the recommended reductions because of the necessity to entice those outside the Commission back in, and those wavering, to stay. As such, it was argued:

> [T]he blue whale unit ceiling should be suspended for two seasons to enable a quota agreement to be reached . . . the suspension of the ceiling could be conditional upon the return of the Netherlands and Norway to the Convention within a short time.[33]

During this period of 'no ceiling' it was deemed to be of 'extreme importance'[34] that each government restrain its nationals to the earlier IWC quota targets. Accordingly, the catch quota of the IWC was suspended for two years, and the five Antarctic whaling nations ended up unilaterally setting their own quotas, which increased the BWU total to 17,600. In addition to the removal of the ceiling, a small independent committee of scientists (the committee of three) qualified in population dynamics, were to undertake an assessment of the stocks, and then to report to the IWC.[35]

Norway rejoined the IWC in 1960,[36] but threatened to withdraw immediately if an agreement was not signed on national allocation of Antarctic quotas. Simultaneously, meetings were being held between the Antarctic pelagic whaling nations, 'for the purpose of reaching an agreement regarding a formula for the division of the total permitted Antarctic catch'.[37] While these negotiations were being carried on, the countries operated according to their own quotas,[38] which totalled 17,780 BWU. It was not surprising that with such high quotas, the Commission noted the following year that 'the stocks were in a bad way'.[39] However, it decided to postpone definitive action until the next meeting, when 'the results of the special investigation' by the committee of three were presented.[40] It retained the overall catch limit at 15,000 BWU, and passed a resolution inviting the APW states to reconsider their objections.[41]

The following year, partly following the recommendations of the committee of three, the Commission agreed to reduce the BWU to 10,000 units (although countries like Japan objected to these when applied to specific recommendations for species such as the blue whale).[42] Finally, the Commission decided to continue the work of the committee of three, by seeking the assistance of the

Food and Agriculture Organization of the United Nations (FAO) in assisting with the same questions.[43] The next year, the SC and the FAO suggested a total catch of 2,500 BWU for the Antarctic.[44] Despite this clear recommendation, the IWC was unable to agree upon a catch limit for the Antarctic pelagic expeditions. As the Commission report explained:

> [T]hose countries engaged in whaling could not see their way to accept such a drastic reduction of the . . . catch limit as the scientific evidence indicated while the non-whaling countries were unable to vote for any limit substantially higher than warranted by this evidence.[45]

This failure to agree meant that no catch limit was set at all for the season, and countries were asked to agree to a voluntary target of 8,000 BWU between them (which could not be reached).[46] Since no quota was fixed, a special IWC meeting took place, for the purpose of fixing the Antarctic quota,[47] where a total of 4,500 BWU was agreed[48] (and followed also in the subsequent year).[49] At the 1964 meeting, the FAO informed the Commission that its future co-operation with the IWC on stock assessment would terminate unless it agreed to measures to be taken to bring the whaling regulations into line with the scientific findings (of the committee of three). Otherwise, the FAO did 'not wish to be associated with a policy which could imply, ultimately, the effective destruction of the whaling resources'.[50] At the 18th meeting, the SC and the FAO recommended (and it was unanimously accepted by the Commission)[51] that the total BWU from the Antarctic should be between 3,000 and 3,500.[52] This was reduced to 3,200 for the following two years[53] before falling to 2,700 in 1969[54] and 1970.[55] In 1971, continued debate about the maximum sustainable yields generally[56] led to the BWU for the Antarctic being reduced to 2,300.[57] At this point (the early 1970s) the North Pacific catches in terms of BWU were greater (by about 100,000 barrels) than those in the Antarctic.[58] However, these, too, quickly fell by 20 per cent.[59] (See Box 1.1.)

BOX 1.1 BARRELS OF OIL

In 1931, whale oil production for that year was recorded at 3,686,976 barrels, or about 615,000 tons (as a rule of thumb, six barrels were equivalent to a ton) as compared to 284,320 barrels, or just under 47,500 tons for 1909/10. In 1950 the whale output, including land stations, was 2,153,185 barrels. In 1953, 2,285,526 barrels were taken. In 1954 it was 2,237,560 barrels. The following year, a further 2,237,560 barrels of whale oil were

taken from around the Antarctic. Approximately, 600,000 barrels were taken from whales outside of the Antarctic. In 1956, the 19 factory ships and 257 catches working the Antarctic, managed to obtain 2,306,679 barrels of whale oil. In 1958, a total of 2,318,479 barrels was obtained from around the Antarctic. By 1965, this had fallen to 1,299,476 barrels. In 1971, it was reported that the total oil output for the Antarctic had risen from the previous season of 483,991 barrels, to 505,011. Outside the Antarctic, a further 25,791 whales (15,418 from the North Pacific) were added to the catch. In 1974, with regard to the Antarctic, it was reported that the total oil output (excluding sperm, which added 268,937 barrels from pelagic hunts and a further 72,885 from land stations) was 140,312 barrels.

3 THE REALIGNMENT OF THE IWC: 1972–1982

Between 1972 and 1982 the IWC began to seriously realign itself and correct its shortfalls. There were three key areas to this process: the abandonment of the BWU; the adoption of the new management procedure (NMP); and the conclusion of the inspection and observation regime.

Removal of the Blue-Whale Unit

In 1956, the Commission refused to set quotas for each species of baleen whale due to 'practical objections'.[60] In 1961 the SC argued: '[T]he available biological evidence indicated that the overall catch limit in recent seasons has permitted excessive catches . . . each stock should be made subject to special conservation measures'.[61] The following year the SC again argued for a stock-by-stock approach.[62] The Commission again refused to accept this because 'the results of the special investigation' (the committee of three) were still pending.[63] The SC also recommended that the BWU be abolished and replaced by total numerical quotas for the different species.[64] However, despite such recommendations, the IWC as a whole found it impossible to act upon them.[65] The Commission felt that 'the BWU was the only practical method that could be administered'.[66] The following year the SC and the FAO again reported the necessity to focus on individual species.[67] At the 18th meeting, the distinct move away from Blues and Humpbacks meant that the revised quotas, although still using the BWU terminology, were framed in terms of recommended take levels for fin and sei whales.[68] The SC again reiterated their concern that 'a rational scheme of management requires species quotas

for each species'[69] between the late 1960s and early 1970s[70] before it was finally 'deleted from the Schedule' in 1972.[71] Once the BWU was abandoned, species targets were issued under the NMP.[72] Accordingly, the IWC finally accepted that 'regulation by species and stocks was the only practical method of whale conservation'.[73]

The New Management Procedure

As a way to both replace the BWU and to deflect the drive towards the moratorium a *new management procedure* was adopted at the 26th meeting.[74] This proposal was 'designed to classify the whale stocks into categories and provide for their individual management'.[75] This scheme, which was designed to improve the management of the IWC, divided whale stocks into three categories:[76]

1. initial management stocks, which could be 'reduced in a controlled manner to maximum sustainable yields (MSY) or optimum levels';[77]
2. sustained management stocks, by which stocks should be maintained at or near MSY; and
3. protection stocks, by which stocks would be 'fully protected'.[78]

Within this new framework, it was suggested that it was possible to sustainably harvest Antarctic fin, sei, minke and sperm whales.[79] However, almost as soon as the NMP was adopted, the scientific basis for population estimates of these species and the suggested numbers available to harvest were challenged as being riddled with uncertainties by both the FAO[80] and, in some instances, by the SC itself. Indeed, the SC commented on 'the deficiencies of knowledge and understanding of the facts and principles involved in applying ecological criteria' and the difficulties 'deriving largely from the possibilities of error in its assessments of the state of the stocks . . . for the present'. It added that 'there will continue to be a risk for many stocks as these errors are large'.[81]

4 THE MORATORIUM ON COMMERCIAL WHALING

Despite such improvements as the removal of the BWU and the NMP, remaining uncertainties coupled with decades of failure meant that the push towards a complete moratorium slowly gathered pace. However, the moratorium could only be achieved by a scheduled amendment (the schedule is the operative part of the IWC, by which the operational aspects of the Commission, including quota numbers are set), which requires a three-quarter majority of the Commission to agree. The process began in 1972, when the United States

warned that 'the whole concept of this multilateral international commission as an effective means of dealing with the conservation of major living resources was on trial'.[82]

The assertion about being on trial was correct, as the international community recommended outside of the IWC, at the 1972 United Nations Conference on the Human Environment (UNCHE) in Stockholm that:

> Governments agree to strengthen the International Whaling Commission, to increase international research efforts, and as a matter of urgency to call for an international agreement, under the auspice of the International Whaling Commission and involving governments concerned, for a 10 year moratorium on commercial whaling.[83]

At the 1972 IWC meeting (which followed the Stockholm meeting), the moratorium idea was delivered in person by Maurice Strong, the Secretary General of the Stockholm conference. In doing so, he explained that '[a] larger interest . . . exists for the Governments of the world in the question of whales not only as a resource for commercial exploitation but as a world resource in a larger sense'.[84] This plea was strongly supported by the United States and the United Kingdom because 'the state of knowledge of the whale stocks was so inadequate that it was only common prudence to suspend whaling'.[85]

Despite this plea, the call for a global moratorium was rejected for the next decade within the IWC. The first reason for this rejection was that 'a blanket moratorium is in the same category as the blue whale unit quota, in that they are both attempts to regulate several stocks as one group whereas prudent management requires regulation of the stocks individually'.[86] Second, it was suggested that there was 'no scientific basis for a moratorium' (it could not be justified on biological grounds).[87] Indeed, 'the Commission had really come to grips with its problems and achieved much more success than it was given credit for by its critics'.[88] The third argument was that 'a cessation of whaling would result in reducing the research effort from loss of data and from inability of countries to provide increased fund for investigation into the whale stocks'.[89] The fourth argument was that a moratorium 'could result in a complete setting aside of all that was being achieved by the Commission and lead to unregulated whaling in several parts of the world'.[90] The fifth point was the suggestion that a moratorium would be in contravention of the preamble of the ICRW with regard to an effective system of regulation. Japan (in particular) suggested that it was contravening 'the spirit of the Convention'.[91] The opposing countries later argued:

> [T]his proposal is in contravention of Article V(2) of the Convention, since it is not based on scientific findings nor takes into consideration the interests of the consumers of whale products, and would create serious unemployment problems in

> the whaling industry. The Commission cannot act in a manner which is contradictory to the Convention.[92]

The main counterpoint raised in support of the moratorium was about international responsibility to conserve,[93] uncertainties in stock assessments, unsatisfactory killing methods and the need for what was effectively a precautionary principle.[94] Consequently, with regard to 'scientific doubt' the benefit of 'the uncertainty to be given to the whales'.[95] Thus: 'All the species of great whales were at present depleted considerably below their original population levels, due not only to excessive exploitation but also because knowledge was inadequate to protect the species'.[96]

The result of the debate between the two sides for a number of years meant that the annual attempts to achieve a commercial moratorium failed[97] and it was not until 1979 that the technical committee recommended an amendment to the schedule, which was 'designed to stop whaling until there is in effect a conservation proposal which will ensure the survival of whales'.[98] However, although enough support existed within the Commission for this, for commercial pelagic whaling, the moratorium could not be extended to land stations.[99] Likewise, an attempt to gain a commercial moratorium on all sperm whaling (due to an incomplete global population status picture) failed.[100] The same failures were repeated in 1980.[101] However, in 1981, although the overall attempt for a moratorium failed,[102] the Moratorium on the Commercial Catching of Sperm Whales (in both the southern and northern hemispheres) was successful.[103] Finally, in 1982 at the 34th meeting of the IWC, the proposals to suspend indefinitely all commercial whaling gained the requisite three-quarter majority. This was despite objections from Norway and Japan about the lack of scientific justification, and assertions that the IWC was violating its responsibilities.[104] The new paragraph 10(e) of the schedule read:

> Notwithstanding the other provisions of paragraph 10, catch limits for the killing for commercial purposes of whales from all stocks for the 1986 coastal and the 1985/86 pelagic seasons and thereafter shall be zero. This provision will be kept under review, based upon the best scientific advice, and by 1990 at the latest the Commission will undertake a comprehensive assessment of the effects of this decision on whale stocks and consider modification of this provision and the establishment of other catch limits.[105]

Despite the achievement of the moratorium on commercial whaling, whaling under objection (as permitted by the ICRW) and scientific whaling (also permitted under the ICRW) accounted for the killing of 21,416 whales between 1986 and 2000.[106]

5 THE REVISED MANAGEMENT PROCEDURE

Against such a background of calls for a global moratorium, and recurring uncertainties about stock numbers and catch quotas, the NMP was short-lived and in 1981 at the 33rd meeting, it was resolved that a new *revised management procedure* (RMP) would be developed.[107] In addition, a comprehensive stock assessment[108] by which the IWC could have an 'in-depth assessment of whale stocks'[109] would also be completed. Generally, the core of the RMP is that of calculations of catch quotas using an algorithm that seeks to account for uncertainty in abundance estimates. Three parameters are essential for the operation of the algorithm: estimates of current abundance (taken at regular intervals by specified survey methodology) and knowledge of both past and present catches.[110] Specifically, in 1991 the IWC clearly set out the objectives of the RMP. These were/are:

1. stability of catch limits which would be desirable for the orderly development of the whaling industry;
2. acceptable risk that a stock not be depleted (at a certain level of probability) below some chosen level so that the risk of extinction is not seriously increased by exploitation; and
3. making possible the highest possible continuing yield from the stock.

With these considerations in mind, the IWC agreed that the RMP should incorporate the following elements:

1. Commercial whaling shall only be permitted for populations in areas and seasons for which catch limits are in force. These catch limits shall have been calculated by the scientific committee, and forwarded to and approved by the Commission.
2. The 'high tuning' level of 0.72 shall be adopted (i.e. catches reach maximum permitted level at 72% of initial population abundance).
3. To permitted depleted stocks (i.e. stocks below 54% of the unexploited level) to recover to more productive levels, catch limits under the Revised Management Procedure shall only be greater than zero in cases when the stock is determined to be above 54% of its exploited level.[111]

Although this plan for the RMP was agreed upon in the early 1990s,[112] the IWC has had to take a number of 'additional steps' to complete the procedure.[113] These included consideration of how much environmental change factors,[114] 'human induced mortalities' (bycatch),[115] and the falsification of earlier whaling data[116] should be taken into account within the catch limit algorithm. Although it was assumed that the RMP was settled, in 2004 Norway

announced that the RMP was too conservative and needed to be revised, so as to be able to justify higher quotas.[117]

Additional non-scientific aspects that make up the revised management scheme (RMS), which have to be concluded before it can become operative, include a fully effective inspection and observation (I&O) regime.[118] In 1996, the IWC agreed 'with a view to completing the work expeditiously on the remaining elements of the Revised Management Scheme'.[119] These were listed as completing an effective I&O scheme, arrangements to make sure that total catches over time are within the limits set under the RMS and incorporating into the schedule all of the necessary specifications of the RMP.[120] Attempts to complete this process were pursued over the following years, leading to a further resolution in 2000 which recognized that the primary remaining elements to be completed were an effective I&O scheme and arrangements to make sure that total catches over time were adequately included in the considerations. To further the completion of these, a special working group on the RMS (on I&O) was set at an intersessional meeting in Monaco, with the intention of developing text for the RMS.[121] Although the Monaco meeting produced a document for discussion,[122] which was further discussed at the 53rd meeting in London in 2001,[123] it was decided to defer this issue once more until a further intersessional 'expert drafting group' (EDG) could further refine the text. This group met in Cambridge in late 2001 and Auckland in early 2002. There was no conclusion on this process, and the opposing sides remained in deadlock at the end of this phase of the EDG process. Nevertheless, the 54th IWC meeting in 2002 decided to continue the intersessional work on this outstanding aspect. Accordingly, the group reassembled in Cambridge in late 2002, before reconvening yet again at the 2003 meeting, before devolving into further specific groups, which finally ended up as a 'friends of the chair' group. From this group, and specifically the chair, came a 'package' for final discussion[124] which formed the basis from which future work was targeted. The eventual resolution from the 2004 meeting[125] agreed to re-establish the working group on the RMS with a view to holding an intersessional meeting prior to the meeting in 2005. An attached Intersessional Plan of Work for the RMS working group, a small drafting group and technical specialist groups was agreed, with the aim of having the results ready for consideration, including 'for possible adoption' at IWC57, and/or to identify any outstanding policy and technical issues.

NOTES

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2. League of Nations Archive, Economic Committee, Report of the Council. C.307.M.106.1929.II. Noted in Juda, L. (1995). *International Law and Ocean Use Management: The Evolution of Ocean Governance* (Routledge, London): 117.
3. International Whaling Convention. Geneva. 1931. LNTS, No. 3586. Reprinted in Hudson, R. (ed.) (1950). *International Legislation* (Oceana, New York). Volume V: 1929–31: 1081.
4. 1937 International Agreement for the Regulation of Whaling. 190 LNTS. 79. In Ruster, B. and Simma, B. (eds) (1976) *International Protection of the Environment* (IPE) (Oceana, New York). Volume VII: 3475.
5. Protocol Amending the International Agreement for the Regulation of Whales, 1938. IPE, ibid, Volume VII: 3482. Article 4. Reprinted in Hudson, supra n3. Volume VII: 1935–37: 762.
6. 1945 Protocol Amending the International Agreement of 1937 for the Regulation of Whaling. In IPE, supra n4. Volume VII: 3488. The 1945 Protocol was designed to address the 'emergency produced by post-war conditions without prejudice to the conservation of stocks of whales'.
7. Nugent, recorded in IWC. 5th Report. (1954). 1.
8. 1945 Protocol Amending the International Agreement of 1937 for the Regulation of Whaling. In IPE, supra n4. Volume VII: 3488.
9. Article 4. 1945 Protocol.
10. Article 4.
11. IWC. 4th Report. (1953). 7.
12. IWC. 3rd Report. (1952). 2.
13. Nugent, supra n7.
14. IWC. 5th Report. (1954). 1.
15. The intention was of taking it down to an eventual limit of 13,000. IWC. 7th Report. (1956). 19.
16. IWC. 7th Report. (1956). 18–19.
17. Ibid. This quote is noted in Birnie, P. (1985). *The International Regulation of Whaling* (Oceana, New York). Volume 1: 375.
18. IWC Doc. XIII D (1956). 111. This quote is noted in Birnie, supra n17: 376.
19. IWC. 8th Report. (1957). 19.
20. IWC Doc. XIV. A. Plenary Session. 16.
21. IWC. 9th Report. (1958). 14.
22. Ibid. 17.
23. IWC 10th Report (1959) 3.
24. Ibid. 16.
25. IWC 11th Report. (1960). 16.
26. Ibid.
27. The explanation was noted the following year. See IWC. 12th Report. (1961). 14.
28. IWC. 11th Report. (1960). 16.
29. Ibid. 17.
30. IWC. 2nd Plenary Session, 25 June 1959. IWC Doc XIV. 28.
31. IWC. 12th Report. (1961). 15.
32. IWC/12/11. Verbatim Record, 2nd Plenary Session. 15.
33. This was suggested by the UK. See IWC. 12th Report. (1961). 17.
34. Ibid.
35. Ibid. 8, 16.
36. IWC. 13th Report. (1962). 15.
37. Ibid. 17.
38. Ibid. 18–19.
39. IWC. 14th Report. (1963). 16.
40. Ibid.
41. Ibid. 14–23, 73.
42. IWC 15th Report. (1964). 17.
43. Ibid. 18.
44. IWC/SM/3. Report of the 1964–65 Season by Fisheries Division, FAO. IWC. 16th Report. (1966). 25–6. IWC. 17th Report. (1967). 55.

45. IWC. 16th Report. (1965). 3.
46. Ibid.
47. This was known as the committee of six, consisting of the Antarctic Pelagic Whaling states commissioners, and those of the United States, Canada and France. Ibid. 24.
48. Ibid. 6.
49. IWC. 17th Report. (1966). 20.
50. IWC. 16th Report. (1965). 25.
51. IWC. 18th Report. (1968). 19.
52. Ibid. 18.
53. IWC. 19th Report. (1968). 18; IWC. 20th Report. (1969). 16.
54. IWC. 21st Report. (1970). 19.
55. IWC. 22nd Report. (1971). 21.
56. An important paper from the FAO displayed that the MSY 'does not in fact fit precisely the actual situation in the sea'. IWC. 23rd Report. (1972). 200–209.
57. Ibid. 11.
58. IWC. 22nd Report. (1971). 20.
59. IWC. 23rd Report. (1973). 20.
60. IWC. 8th Report. (1957). 16.
61. IWC. 13th Report. (1962). 16.
62. IWC. 14th Report. (1963). 16.
63. Ibid.
64. IWC. 15th Report. (1964). 16.
65. IWC/15/17. Verbatim Record, Plenary Session. 66.
66. IWC. 15th Report. (1964). 17.
67. IWC/SM/3. Report of the 1964–65 Season by Fisheries Division, FAO. IWC. 16th Report. (1966). 25–6; IWC. 17th Report. (1967). 55.
68. IWC. 18th Report. (1968). 17.
69. Ibid. 19.
70. IWC. 21st Report. (1971). 20; IWC. 23rd Report. (1973). 9, 20.
71. IWC. 24th Report. (1974). 20.
72. IWC. 26th Report. (1976). 5.
73. IWC. 24th Report. (1974). 20, 46.
74. The following year, in IWC. 27th Report. (1977) the specifics of the NMP were spelt out. See pages 6–8.
75. IWC. 26th Report. (1976). 5.
76. Ibid. 25–6.
77. Ibid. For further discussion, see Deddington, J. (1976). 'Marine Mammals: Future Conditional.' *New Scientist*. September 23: 636–7.
78. IWC. 26th Report. (1976). 25–6.
79. Nevertheless, the SC explained that: 'the deficiencies of knowledge and understanding of the facts and principles involved in applying ecological criteria' and the difficulties 'deriving largely from the possibilities of error in its assessments of the state of the stocks . . . for the present'. It added that: 'there will continue to be a risk for many stocks that these errors are large'. Ibid. 39–41.
80. The FAO found that the research for the IWC had not been adequate to the tasks and responsibilities of the Commission. As such, strengthened research was needed. The FAO also called into question the assumption that the whales would recover if ultimately totally protected and called for their recovery to be monitored closely, as earlier models may have had built-in biases. This had, the FAO suggested, in turn reflected the tentative nature of the SC estimates. Ibid. 30, 254–7. See also Gordon-Clark, J. (1977). 'Whaling Curbed'. *New Scientist*. June 30: 756.
81. IWC. 26th Report. (1976). 39–41. IWC. 24th Report. (1974). 41–6.
82. IWC 23rd Report. (1973). 18–19.
83. Recommendation 33 went to the plenary of the Stockholm Conference and was voted on (53 in favour, none against, 12 abstentions including Japan). Japan stated that: 'while it was favourable to a moratorium on commercial whaling, it had abstained in the vote because

the whole question was to be considered by the IWC on the basis of available scientific evidence'. Report of the United Nations Conference on the Human Environment. Stockholm, 5–15 June 1972. UN Doc. A/CONF.48/14/Rev/1. Pp 56. Paragraphs 190–91.

84. IWC. 24th Report. (1974). 24.
85. Ibid.
86. Ibid. 28.
87. IWC. 25th Report. (1975). 26.
88. This sentence is from the UK Minister of Agriculture, Antony Stodart's address to the IWC. IWC. 24th Report. (1974). 21–2.
89. IWC. 24th Report. (1974).
90. Ibid.
91. IWC. 25th Report. (1974). 48. See also IWC/25/13–14. 28. The following year Japan again argued that the proposed moratorium would be 'in contradiction to the spirit of the Convention'. IWC. 25th Report. (1975). 26.
92. IWC. 31st Report. (1981). 19. See also Cherfas, J. (1982). 'Japanese Prepare to Counter Whaling Ban'. *New Scientist*. July 29: 286.
93. '[T]he [whaling] industry is jeopardising the resource which is an international heritage'. IWC. 32nd Report. (1982). 20.
94. IWC. 31st Report. (1981). 18.
95. IWC. 32nd Report. (1982). 18, 20. Editor (1982). 'Science Harpooned in Whaling War.' *New Scientist*. July 29: 282.
96. IWC. 25th Report. (1975). 26.
97. IWC 27th Report. (1977). 6–8.
98. IWC. 30th Report. (1980). 26.
99. Ibid.
100. Ibid. 26–7. However, a recommendation was achieved which required the technical committee to examine the possible economic costs to the whaling industry, if a worldwide ban on commercial whaling was implemented. This was deemed a 'necessary step in achieving a long-term ban without imposing undue hardship'. See Appendix 1. Recommendation Concerning a World-Wide Ban on Whaling. Ibid. 33. Cherfas, J. (1979). 'The Great White Wash.' *New Scientist*. July 19: 175.
101. IWC. 31st Report. (1981). 18–19. Cherfas, J. (1980). 'Among the Sharks and the Whales.' *New Scientist*. July 31.
102. IWC. 32nd Report. (1982). 18–19.
103. Ibid. 19. Cherfas, J. (1981). 'Whaling: Some Ups But Some Downs.' *New Scientist*. July 30: 271–2. Cherfas, J. (1982). 'End of the Ban on Sperm Whaling Hunting?' *New Scientist*. April 1: 4.
104. IWC. 33rd Report. (1983). 21.
105. Ibid.
106. Statement by Germany at the 53rd IWC meeting in London, 2001.
107. See Appendix 2: 'Resolution on Developing Revised Management Procedures.' IWC. 32nd Report. (1982). 35.
108. At the 34th meeting, as the moratorium on all commercial whaling was finally accepted, a working group was established to develop new procedures to 'overcome the difficulties at present experienced in estimating stock sizes'. IWC. 33rd Report. (1983). 21. See also Anon (1986). 'The Whale Count Begins in Earnest.' *New Scientist*. April 17: 15.
109. See Appendix 2: 'Resolution on the Framework of a Comprehensive Assessment of Whale Stocks.' IWC. 34th Report. (1984). 30. Discussions on the object of the comprehensive assessment continued into the following years. See IWC. 36th Report. (1986). 12–13; IWC. 37th Report. (1987). 12–14; IWC. 39th Report. (1989). 13–15; IWC. 40th Report. (1990). 17–21; IWC. 41st Report. (1991). 16–19. The cornerstone document for this was IWC (1986). *The Comprehensive Assessment* (IWC, Cambridge, Special Issue 11).
110. Donovan, G.P. (1993). 'The International Whaling Commission and the Revised Management Procedure.' In European Parliament (1993). *Proceedings of the Conference on Responsible Wildlife Resource Management* (Brussels): 4–10.

111. Appendix 4: 'Resolution on the Revised Management Procedure.' IWC. 42nd Report. (1992). 47–8.
112. IWC (1994). 'The Revised Management Procedure.' Report of the International Whaling Commission: 42, 47–8. Several new proposals were developed by members of the IWC's SC before the version developed by Dr Justin Cooke. See Cooke, J. (1994). 'The Management of Whaling.' *Aquatic Mammals*. 20(3): 129–35.
113. Accordingly, the USA argued that it was 'premature to adopt the RMP into the Schedule until the entire RMS can be adopted as a package'. IWC. 45th Report. (1995). 26. This view was broadly echoed in the resolution on the RMS that year which noted that although the IWC 'accepts that the specification of the Revised Management Procedure . . . completes the main scientific component in the development of a Revised Management Scheme'. Appendix 5: IWC Resolution 1994–5. 'Resolution on the Revised Management Scheme.' IWC. 45th Report (1995). 43–4. Point 3.
114. Appendix 5: IWC Resolution 1994–5. 'Resolution on the Revised Management Scheme.' IWC. 45th Report (1995). 43–4.
115. IWC. 47th Report (1997). 34–5. See also Appendix 4: IWC Resolution 1997–4. 'Resolution on Cetacean Bycatch Reporting and Bycatch Reduction.' '[B]ycatches can substantially contribute to the total catches overtime and therefore need to be recorded'. IWC. 48th Report (1998). 47.
116. IWC. 45th Report. (1995). 19. See Appendix 6: IWC Resolution 1994–6. 'Resolution on the Unreliability of Past Whaling Data.' Ibid. 44.
117. Revision of the RMP, A Norwegian Notification. IWC/56/22.
118. See Appendix 3: 'Resolution on the Revised Management Scheme.' IWC. 43rd Report. (1993). 40.
119. Appendix 6: Resolution 1996–6. 'Resolution of Provisions for Completing the Revised Management Scheme.' IWC. 47th Report (1997). 51.
120. Appendix 6: Resolution 1996–6. 'Resolution of Provisions for Completing the Revised Management Scheme.' Ibid.
121. See Resolution 2000–3. 'Resolution on the Revised Management Scheme.' 52nd Meeting in 2000. (2001). 65.
122. Proposed Revisions to and the Organisation of the Schedule. IWC/53/RMS4.
123. Report of the RMS Working Group. IWC/53/9. Agenda Item 9.
124. Summary of Status of Discussions on RMS Elements and Related Issues. IWC/56/27.
125. Resolution 2004–6. 'Resolution On Completion Of The Revised Management Scheme (RMS).' IWC/56/42. Sorrento, 2004 (unpublished Chair's report of the IWG meeting). Also, Pearce, F. (2004). 'To Whale Or Not To Whale?' *New Scientist.* July 31: 6–7.

2. Management and numbers

1 INTRODUCTION

Before beginning this chapter, it is essential to note that an accurate estimation of whale populations is complicated by manifest uncertainty. This uncertainty pertains not only to difficulties with methods of calculation, but also with mistakes around the calculation (both accidental and deliberate) in the past. As such, all of the following estimates must be taken with a degree of caution. Nevertheless, it may be suggested that some estimates are more reliable than others. Generally speaking, long-term non-lethal studies of whales such as right and humpback appear to generate more reliable population estimates than vessel-based surveys conducted every five years.

2 RIGHT WHALES (*EUBALAENA SPP*)

Complete prohibitions were placed on the taking of certain whales from the outset of international negotiations in 1931. Article 4 of the 1931 Convention on the Regulation of Whaling stated clearly:

> The taking or killing of Right whales, which shall be deemed to include North-Cape whales, Greenland whales, southern Right whales, Pacific Right whales and southern pygmy Right whales is prohibited.[1]

This prohibition was incorporated into the ICRW, and was consistently maintained. As such, in 1972 the ban on killing right whales in the Antarctic was renewed with the recommendation that it be 'continued indefinitely'.[2] In 1973, total protection south of the Equator for southern right whales was again accepted,[3] reiterated for the North Pacific in 1977 and reaffirmed as worldwide protection in 1978.[4]

Despite over seventy years of such theoretical protection (that is, these stocks were illegally harvested by the Soviets until 1971) in 1999, the Commission acknowledged that all four northern stocks of right whales remain highly endangered.[5] Although taxonomy and nomenclature of the right whales is in flux, there is no doubt that the populations in the North Atlantic, North Pacific and Southern Ocean are completely isolated from one another,

and all have been decimated. The special workshop (1986) on right whales suggested that for the populations which it had numbers for, there were 400–600 in the South African/Argentina populations; 100–200 for the North West Atlantic, Northwest Pacific, Southwest and East Australia and New Zealand; and near extinction in the North East Atlantic and Northeast Pacific.[6] It is estimated that there are only 3,000–7,000 southern right whales, down from an original population size of an estimated 60,000.[7] In the North Pacific, a total stock of perhaps 50–500 exists and there are between 300 and 350 in the western North Atlantic.[8]

It is with the northern right whale that the situation is most critical. Ship strikes, entanglement with fish gear, and simple inability to find a mate may be sufficient to destroy this species. There has been no substantial population growth in the last two decades, and its overall survival is questionable.[9] With the western North Atlantic right whale, there are only 300–350 individuals remaining, with at least 50 deaths between 1970 and 2001. With the North Pacific right whale: 'numbers were of the order of tens of individuals, with only one sighting of a possible juvenile in the 20th century'.[10] In 2000, it was noted that this population was 'at very low absolute abundance and thus highly vulnerable to stochastic variation in population dynamic processes . . . [moreover] . . . it appears to be decreasing'.[11] The resolution on western North Atlantic right whales from the 2000 meeting added that if the current trends continue, it is 'projected to become extinct'.[12] The SC reiterated these views in 2001, 2002,[13] 2003 and 2004, although in 2003 and 2004 it was noted for the first time in years that calves were being born without observed mortalities.[14]

3 BOWHEAD WHALES (*BALAENA MYSTICETUS*)

The bowhead falls into the category of right whales, and are some of the most endangered of all the whale species. This is despite the fact that at the end of the seventeenth century, there may have been about 900,000 bowheads in the wider Arctic. A large part of their status problem may be because of their extremely slow reproduction and longevity, with some bowhead living as long as two hundred years.[15] They are critically endangered and have been a protected species for many decades. The IWC recognizes five stocks of Arctic species. Range-wide abundance is thought to be in the order of 10,000 individuals.[16] In 1999, the Baffin Bay–Davis Strait bowhead whale stock was believed 'to be in the low hundreds'.[17] In 2003, this was divided into 128 from Eclipse Sound and 256 in Prince Regent Inlet.[18] The Okhotsk Sea (300–400), Spitsbergen ('tens') and the Hudson Bay stocks of bowhead whales (between 400 and 500) are all classified as highly endangered.[19] The IWC does not

condone any taking from these stocks. Nevertheless, Canada has allowed a very limited catch from some of these stocks for aboriginal subsistence whaling (ASW) purposes. This action has led to a number of directed resolutions to Canada (even though Canada is no longer a member of the IWC) urging it to refrain from these actions.[20]

The only bowhead stock which is not critically threatened (but is still endangered), from which the IWC does allow a limited ASW take is the Bering Sea population. As of 2001, there are approximately 9,860 (up from a previous estimate of 7,500–8,000) of these whales left.[21] It with this last stock of bowhead that distinct difficulties have traditionally arisen within the IWC with regard to ASW claims.

At the turn of the new century it is now implicit in the ASW exemption that cultural and subsistence whaling has to be 'consistent with effective conservation of whale stocks'.[22] Therefore, since the objective has been to 'enable aboriginal people to harvest whales in perpetuity' it has been necessary 'to ensure that the risks of extinction to individual stocks are not seriously increased by aboriginal whaling'.[23] Accordingly, the 1994 technical review[24] of ASW guidelines stipulated that: 'highest priority shall be accorded to the objective of ensuring that the risk[s] of extinction to individual stocks are not seriously increased by subsistence whaling'.[25] However, from the late 1970s until the mid-1980s, this was not necessarily the case.

This problem arose because the stock that the applicable indigenous people wished to hunt were *below* maximum sustainable yields which are meant to be applied to commercial whaling.[26] The stock in question is currently below maximum sustainable yield because of overexploitation caused by European and Yankee commercial whalers in earlier times.[27] Subsistence catches of about 12 animals per year continued between 1910 until 1969. Between 1970 and 1977, however, there was a significant increase in the catch, with up to 32 animals landed in 1977 alone. In addition to the whales landed, the number of whales struck but lost increased from ten in 1973 to 79 in 1977.[28] This increase did not escape the notice of the SC which in 1972 began to call upon the United States to provide better information on the bowhead hunt and to take steps to reduce the number of whales struck but not landed. In 1976 the SC and later the IWC called for a proper study of bowhead numbers and urged the United States to 'limit the expansion of the fishery and reduce loss of struck whales'.[29]

By 1977, evidence relating to the bowhead hunt had been assembled which showed that a stock which had been as high as 18,000 in 1850 had, by 1977, been reduced to between 600 and 2,000 individuals. The evidence suggested that the bowhead was 'the most endangered of all whale species despite its protection from commercial harvesting for 40 years'.[30] Not surprisingly, to quote Spain: 'the world [was] watching to see what [was] happening to the

only really endangered species'.[31] The SC suggested that given the small numbers of Bering Sea bowhead, 'the chances of survival of the species' were highly questionable.[32] Even without further takes, the SC envisaged that over time the population was likely to fall 'below a critical level where extinction [was] likely'.[33] Accordingly, it concluded that 'there is a clear scientific case to be made for a moratorium on this species'.[34] The IWC responded to this information by deleting the exemption clause which had previously allowed the aboriginal catch.[35] Without this measure, it appeared that at some time, 'extinction of the stock within the foreseeable future' would follow.[36]

Despite this 'unequivocal' scientific advice[37] a total moratorium on any take from this stock was not achieved. This was because the United States, which tried to implement this ban internally, found itself the subject of lawsuits brought by American indigenous groups.[38] This resulted in the US presentation of proposals to the IWC for a 'modest take' of bowheads (15 killed or 30 struck) in place of the total ban in order to satisfy the subsistence and cultural needs of the Alaskan Eskimos.[39] The response of the SC was that even a kill of 15 whales per year could lead to extinction of the species and, consequently, the Commission could not accept the US proposals. However, following a reworked estimate of the bowhead population which placed its numbers as high as 2,264, it became possible to set a limit at the 1978 meeting for the 1979 hunting season of 18 whales landed or 27 struck.[40]

In 1979, following the three panel reports on ASW, including the Wildlife Panel which recommended a zero quota,[41] the IWC passed a resolution which stated that 'the stock will not be subjected to undue risk'.[42] No sooner had the resolution been passed, however, than it became apparent that the quota set for 1980 had already been exceeded. This state of affairs was of 'great concern' to the SC, which suggested that: '[in order] to reduce the risk of extinction no catch should be taken. . . . The only safe course for the commission is for the catch limit to be zero'.[43] Although the call for a zero quota was reiterated in 1982[44] as the IWC continued to 'recognize the danger of extinction faced by the Bering Sea Bowhead whale and the consequences for the Inuit culture',[45] the United States nevertheless indicated that it wished to honour the block quota that had been adopted two years earlier. The IWC agreed to this but it warned that it retained 'the authority to take emergency action if an unforeseen circumstance should create an imminent threat to the Bowhead whale population'.[46] This debate continued within the IWC for the following five years[47] with the number being allowed to be struck rising a little (to 43)[48] and then falling (to 26)[49] before new stock estimates suggested that the Bering Sea stock of bowhead whales was around 7,200 whales. This estimate subsequently rose to 7,500[50] and is now thought to be as high as 8,000. With such a population estimate, although 'caution' has still been urged, the permitted quota has begun to increase from that of 35 whales struck per year in 1987[51]

to close to fifty per year at the year 2000 and 49 landed (75 struck) in 2001.[52] The joint claim for the indigenous communities of the United States and Russia in 2002 requested a quota of 280 for a five-year period, or 67 per year. Although this take was below the possible take limit of 102 per year, this quota was refused (for political, not sustainability reasons) at the 54th IWC meeting in 2002.[53] However, at the special meeting held later in 2002, this quota was agreed by consensus.[54]

4 GRAY WHALES (*ESCHRICHTIUS ROBUSTUS*)

Stocks of gray whales present a paradox. On the one hand the North Atlantic gray whale is the only population of large whale believed to have gone extinct in recent history.[55] This was despite attempted protections dating back to 1937.[56] The number of gray whales in the western North Pacific is believed to be only in the region of 50–250.[57] The IWC recognizes this stock as highly endangered.[58] As such, in 2000 the International Union for the Conservation of Nature and Natural Resources (IUCN) listed the western gray as 'critically endangered' because of its geographic and genetic isolation and the fact that fewer than 50 reproductive individuals are believed to exist. Due to such an extreme situation, the IWC endorsed the SC's recommendation in 2001 that 'every effort must be made to reduce anthropogenic mortality' on this stock. In 2004, these concerns were added to as habitat destruction and disturbance led the SC to recommend as a matter of urgency that measures be taken to protect this population, which is 'in serious danger of extinction'.[59]

Conversely, the eastern North Pacific gray, which has been protected for over five decades, is believed to be the only population of great whale to have recovered to close to its original numbers of 26–27 thousand.[60] However, this figure was later lowered to 17,414.[61]

The only substantial (the United States has a very small quota for the Makah of eastern North Pacific gray whale, as does St Vincent and the Grenadines, also for ASW)[62] whaling that has remained on any gray whale stocks has been through the ASW quota for the former Soviet Union/Russia. Under this quota throughout the 1980s, an average of 179 eastern North Pacific gray whales were being taken annually by the Soviet Union for its aboriginal people.[63] In the early 1990s, it was suggested that the overall rate of the kill (179) was possibly higher than the annual growth rate of the stock (174). Despite this uncertainty over the status of the stock, the Russian Federation only reluctantly agreed to reduce its request to 169.[64] Although the downward trend has continued in the period of 1998–2002, with the annual quota being taken back to 140 (strikes) per year[65] before falling to 124 struck in 1999,[66] 135 in 2000[67] and 112 in 2001.[68] The new joint claim (for Russia

and the United States) for a take from this stock, which was accepted by the IWC, was for 620 whales (with 600 going to Russia, and 20 to the United States) over a five-year period (with an annual maximum take of 140).[69] These figures may still become contentious as it would now appear that the annual replacement yield is approximately 611 whales.[70] Moreover, due to the population abundance of this species in 2002 (from 26,500 to 17,414) the SC lowered the possible take limit from 472 per year to 463.[71]

5 BLUE WHALES (*BALAENOPTERA MUSCULUS*)

From 1910 to 1925, 47,200 blue whales were caught around the Antarctic. That 15-year total was exceeded between 1926 and 1930 by a total catch of 49,800. It surged to 29,400 in 1931 alone (the highest ever season). A further 118,300 were caught in the eight years prior to the Second World War. Cumulatively, between 1904 and 1967 more than 350,000 were taken from around the Antarctic alone.[72] After the Second World War, it was apparent that the stock was in a state of decline. The 1949–50 catch of blue whales was the lowest on record and in the early 1950s, concern over the 'dangerous state' of Antarctic[73] and northern hemisphere blue whales was clearly voiced.[74] However, unbeknown to the Commission, the information it was obtaining was strongly manipulated by countries such as the former USSR who were both under- and over-reporting their catches. For example, with regard to just one of the four Soviet factory ships operating in the southern hemisphere in the early 1950s, only 156 blue whales were recorded as being taken, whereas the true catch of this species was actually 1,433.[75] At other times, the USSR under-reported their catches so that blue whale catch limits would not be reduced, and to hide the undeclared catches of other species. There was also significant alteration to the catch positions, apparently to hide the locations of whaling grounds from competitors.[76] Such deceptions did not help the Commission, who in the face of stock uncertainties and political pressures retained unsustainably high quotas[77] until the situation got so bad that they sought limited bans in the various blue whaling grounds.[78] However, Canada, Japan,[79] the United States, the USSR, Denmark and Iceland all objected to all or part of these measures.[80] Attempts to find working solutions to this problem had to be largely deferred[81] due to ongoing, larger debates within the IWC in the late 1950s. Nevertheless, as the evidence mounted concerning the desperate situation in the late 1950s[82] and early 1960s[83] comprehensive moratoriums could not be agreed due to the objections of the pelagic whaling states,[84] despite pleas by the Commission for these states to reconsider their position.[85] Even when the committee of three suggested that the blue whale was 'in danger of extinction'[86] and were estimated at less than 1 per cent of

their estimated 1938 100,000 population figure,[87] countries such as Japan stipulated that they could not stop catching it because of its short-term 'particular importance' to the industry.[88] Similar objections were placed on record by all the Antarctic whaling countries.[89] This deadlock was not broken until the late 1960s when a moratorium on taking blue whales from the North Pacific and Antarctica was unanimously agreed by the Commission.[90] In 1972 the ban on killing blues in the Antarctic was extended 'indefinitely'[91] and in 1973 total protection was granted for all blues south of the Equator[92] before being made worldwide in 1978.[93] At the time of the 1973 protection, it was estimated that only 360 blue whales (less than 1 per cent of their initial abundance a century earlier) were remaining.[94]

The current status of blue whales is one in which 'blue whale stocks remain at extremely low levels and show no significant evidence of immediate recovery'.[95] As such, they are classified as being 'highly endangered'.[96] This is despite the fact that some populations are slowly growing. For example, the Antarctic blue whale population is increasing at a mean rate of 7.3 per cent per annum. Nevertheless, this stock only has an estimated circumpolar population size of approximately 1,700. There are also an additional 5,000 in the Indian Ocean, 1,930 off the US West Coast, while the western North Atlantic has between 100 and 560.[97] The northern Indian Ocean and North Pacific stocks have no estimates. In addition, nothing is known of the pygmy blue whale, beyond the fact that more than 8,000 of these were taken by illegal Soviet whaling.

6 HUMPBACK WHALES (*MEGAPTERA NOVAEANGLIAE*)

The exact numbers of humpback whales before commercial whaling started to make significant inroads into their overall stock numbers is a matter of scientific debate. Nevertheless, working from genetic diversity and mitochondrial DNA it is possible to speculate that the original numbers of this species were in the hundreds of thousands. It is estimated that the original population of the North Atlantic humpback was in the range of 240,000 animals. Despite such originally massive numbers, current numbers are often only a small fraction (one twenty-fourth) of these.[98]

At the first meeting in 1949, the humpback protection around the Antarctic from the earlier conventions was relaxed in spite of scientific uncertainties surrounding this species.[99] Despite continued warnings by the SC in the early 1950s,[100] the Commission retained the quota (which was exceeded by 380)[101] at 1,250 humpbacks[102] per year. Attempts to implement bans[103] on the taking of humpbacks in the Antarctic and North Pacific were met by formal objections

(by Canada, Japan, the United States and the USSR). This was despite clear calls to increase protection for humpbacks (especially around Antarctica) and repeated warnings throughout the late 1950s[104] and early[105] to mid-1960s[106] by the SC for complete protection around Antarctica and elsewhere.[107] This situation was made all the more difficult due to the illegal whaling of countries such as the former Soviet Union at this period. Records released after the collapse of the USSR have shown that the quotas for humpbacks during this period were blatantly disregarded. For example, with regard to just one of the four Soviet factory ships operating in the southern hemisphere in the late 1950s, only 152 humpbacks were recorded as taken, when in fact 7,207 were taken. In the 1959/60 season alone, 12,900 humpbacks were illegally taken. In the following season of 1960/61, two Soviet whaling fleets took a total of 12,529 humpbacks, but reported only 302 to the IWC. [108] This take in a single six-month season represents 5–6 times the total remaining population of humpbacks in the entire South Pacific region. Irrespective of even knowing about the breadth of the illegal hunting at the time, the IWC was powerless to control even the smaller 'legitimate' quotas. As such, pleas for humpback protection were ignored for a number of years because of the then ongoing, larger debates both inside and outside the IWC.[109] Complete protection for the humpback could not be accepted by the IWC[110] until the mid- to late 1960s for the Antarctic and North Pacific stocks.[111] This was reconfirmed by the IWC in 1970.[112] In 1972, the ban on killing humpbacks in the Antarctic was renewed with the recommendation that it be 'continued indefinitely'[113] and in 1973, total protection for all humpbacks south of the Equator was accepted[114] followed by worldwide protection in 1978.[115]

Two aboriginal subsistence hunting exceptions exist to the general prohibition on hunting humpback whales. The smallest of these claims is for St Vincent and the Grenadines, whose quota has gone from two per year in the 1980s and 1990s, to four (landed, five struck) per year as of the new quota in 2002.[116]

The second exception to the worldwide ban has been with the ASW catch for Greenland, which has been in effect since 1955. By the early 1980s, the SC had concluded that this Greenland humpback stock was 2–4 per cent of the original population, at an estimated total of 800–1,500 individuals.[117] Since the stock had been 'substantially depleted', the SC recommended that 'every effort be made to reduce the number of removals'.[118] This recommendation caused Denmark, which was then harvesting ten humpbacks per year for aboriginal purposes, to reject the SC proposition[119] and alternatively propose that fin whales should be taken instead, with the combined catch of fin and humpback *not* exceeding 15 whales.[120] The Commission adopted this proposition.[121] In 1982, evidence suggested that 'the situation [was] not as serious as believed'.[122] Nevertheless, 'in the face of uncertainties', the SC once more

recommended that the Greenland exemption be removed.[123] However, in the years that have followed, the population estimates of the North Atlantic humpback have climbed, with the West Indies breeding stock maintaining a population of between 7,000 and 12,500.[124] In 2002, the SC suggested that 13,900 humpbacks existed off Iceland. However, there were still uncertainties in this area, as the models, sightings and estimates did not coincide.[125] Nevertheless, the earlier urgency around the takings from this species dissipated. Accordingly, as the SC noted in 1999, with the North Atlantic Humpback, 'a catch of up to three whales annually is unlikely to harm this stock'.[126] Likewise, with the West Indies population of humpbacks, which is probably related to the East Caribbean stock (which the St Vincent and the Grenadines' aboriginal subsistence hunt is focused on), a take of up to four whales per year is unlikely to harm this stock.[127]

At the turn of the new century, it would appear that the humpback in the southern hemisphere is beginning to grow in numbers, with population estimates ranging from 5,000 in 1994,[128] 10,000 in 1999[129] and possibly 17,000 in 2,000.[130] In 2001, these numbers were refined, with individual stocks in the southern hemisphere identified as those off Gabon (1,746), New Caledonia (350), Brazil (3,871) and Western Australia (8,207–13,604).[131] In the North Pacific, the number is 6,000–8,000 (394 western North Pacific, 4,005 central North Pacific and 1,600 in the eastern North Pacific). In the North Atlantic, approximately 10,600 exist.[132] Despite these figures, it is important to note that humpback recovery is highly localized. As such, although there have been recoveries in some places such as Australia and East Africa, conversely, around New Zealand, Fiji and South Georgia there appears to be very little recovery.

7 FIN WHALES (*BALAENOPTERA PHYSALUS*)

In 1956, the SC found that fin whale stocks around the Antarctic were declining sharply, and recommended reductions in this quota.[133] It repeatedly reiterated this concern until the mid-1960s.[134] By the 1970s, although reductions had been made in stock quotas, the SC was suggesting that this stock level was at about 35–40 per cent of what was needed to be sustainable. However, attempts to reduce it (and follow the SC advice) to 1,800 were unsuccessful,[135] and the final quota was set at 1,950.[136] The following year quotas were reduced to 1450 (despite the fact that the SC had recommended a zero quota),[137] before falling to 1,000[138] and then to 220 for 1975.[139] Soon after, the fin whale stocks around the Antarctic were classified as 'protected stocks'.[140]

In 1970, the quota for the North Pacific fin was 1,332 per year.[141] The SC

argued against increasing this quota, suggesting that there was uncertainty in the population numbers. Although Japan argued against the SC on this count for the next few years,[142] the quota fell to 1,170[143] and later to 650,[144] 550[145] and 300 (following evidence of a 'sharp decline').[146] Finally, in the mid-1970s, the North Pacific fin whales were classified as protected stocks.[147] Accordingly, no catches were approved. In the mid-1970s, 275 fin whales were taken from the North Atlantic stock.[148] This soon rose to 398,[149] then to 543,[150] before falling back to 500 in the early 1980s,[151] and then descending to around 285[152] before the commercial moratorium set in.

A clear exception to the moratorium for this stock has been Greenland's ASW claim of 10 fins per year from the West Greenland stock when the moratorium began.[153] This quota was taken out of a population originally estimated at 1,693.[154] Two years later the West Greenland stock has an estimate from 1988 of only 1,096.[155] Such low numbers resulted in 'the Scientific Committee [being] unable to predict the long-term effect' of this take by 1988.[156] This uncertainty was reiterated in 1991 when, due to 'the lack of information on stock identity' the SC was unable to determine 'whether or not the stock was above or below a minimum level below which aboriginal subsistence catches could not be taken'.[157] In spite of this uncertainty, Denmark successfully applied for a catch of 21 fin whales on an annual basis, effective from 1992 to 1994.[158] By 1997, this number had been reduced to 19 whales per year on the grounds that there was an inadequate stock assessment. By 2001, seven were being taken per year.[159] This problem arose once again in 1998 when the SC noted that it had 'never been able to provide satisfactory advice on those stocks due to the lack of requisite data, particularly on stock identity and abundance'.[160] This concern was reiterated by the SC each of the following three years.[161] In 2002, the SC added: 'the inability to provide advice on safe catch limits is a matter of great concern . . . with potentially serious consequences for the status of the stock involved'.[162] Similar advice was given in 2003,[163] and again in 2004 when the SC stated that in the absence of an agreed population abundance estimate for fin whales in the year ahead, it would likely respond immediately that the take of fin whales off West Greenland should be reduced or eliminated.[164]

Nearly three-quarters of a million fin whales were reportedly taken in the southern hemisphere alone between 1904 and 1979. Accordingly, current population numbers are but remnants of much larger numbers. In 1991, a cumulative figure of 52,150 North Atlantic fin whales has been produced.[165] Later estimates put the western North Atlantic stock at 3,590–6,300, the East Greenland/Iceland stock at 11,560 and the British Isles, Spain and Portugal stock between 4,490 and 17,360.[166] Fin whale populations in the southern hemisphere are believed to be in the tens of thousands. The North Pacific has an estimate between 14,620 and 18,630.[167] In 1992, the North Atlantic stock

from around Iceland was given a probable total of 10,300.[168] Although this figure sounds large, it needs to be noted that with this last stock alone (North Atlantic fin) the original population estimate may have been as high as 360,000.[169]

8 SPERM WHALES (*PHYSETER MACROCEPHALUS*)

The SC first expressed concern about the state of sperm whales around the Antarctic in the early 1960s.[170] By 1970, concern was also registered for North Pacific stocks. Nevertheless, in the North Pacific, quotas remained very high. As such, 11,200 were taken in 1970,[171] before falling to 10,000[172] for the next few years,[173] then declining to 8,300.[174] The quota then plummeted for this (and other sperm whale stocks) as international attention sought a commercial moratorium on all sperm whaling (due to an incomplete global picture).[175] Although this moratorium did not get sufficient numbers, the quotas fell radically. By 1977, the North Pacific quota was 763.[176] It then rose a little to 890 and then finally fell to 450 in 1982 before the moratorium became active.[177] The only place where any hunting of sperm whales continues is in Indonesia, where a few to a few tens are believed to be taken each year.[178]

In the southern hemisphere, outside the Antarctic, an additional 13,000 sperm whales were given as an annual quota in the early 1970s[179] until the mid-1970s,[180] after which it fell (in 1975) to 10,740.[181] Soon after, the quota plummeted (6,444 in 1977), with falling figures reflecting increasing uncertainty about the sperm whale stocks,[182] and a desire to phase out this hunt by 1982. Accordingly, the limit for 1980 was to be 550, and for 1981 it was to be 300.[183] After that, it was zero.[184] Quotas for North Atlantic sperm also fell from 685 per year in the mid- to late 1970s,[185] down to 130 in the early 1980s.[186]

With regard to the current status of sperm whale stocks, a picture of overall uncertainty is quickly apparent.[187] Estimates are available for the US West Coast (995), the western North Atlantic (2,200–2,700) the northern Gulf of Mexico (530), and Iceland (1,230), and in 2002, an estimate of sperm whales over the entire North Atlantic was put at 9,477.[188] However, a number of other areas have no specific estimates. This failure covers the stocks of the Azores, Spain, the northern Indian Ocean and the southern hemisphere as well as western and eastern North Pacific stocks.[189]

Although a number of references indicate that sperm whales are no longer in danger of extinction, in reality, considerable uncertainty exists over basic population data. An independent global estimate of the number of sperm whales in 2002 was put at 360,000. This was considerably less than the estimates from the early 1980s which put the world number between 1.5 and 2 million.[190]

9 SEI (*BALAENOPTERA BOREALIS*) AND BRYDE'S (*BALAENOPTERA EDENI*/*BRYDEI*) WHALES

In 1963, the committee of three suggested that the sei whale around Antarctica could be under threat,[191] and by the mid-1980s these were classified as a protected stock under the NMP.[192] However, in the North Pacific, quotas (which were originally intermingled with Bryde's whales) were being set at close to 5,000 in 1970.[193] This fell to 4,700[194] and then to 3,000 sei (and Bryde's),[195] before rising again to 4,500[196] and falling once more to 3,000.[197] The quota rose again in 1975 to 4,000 (sei and Bryde's)[198] before falling to 2,000[199] following the SC urging caution with this quota.[200] In the North Atlantic, around the early 1980s, 100 were being taken per year[201] until the moratorium took effect with the 1986 season.[202]

With regard to current population numbers, in 1974 the IWC suggested that the North Pacific sei whale population was between 20 and 23 thousand. The total Northwest Atlantic stock was around 2,000 and in the southern hemisphere, seis were in the region of 53,000 (down from 125,000 in 1961/62).[203] Later estimates suggested that the southern hemisphere stock is between 9,720 and 12,000. The North Pacific is at 9,110 (although this has been the subject of scientific dispute, with some arguing that it may be as high as 68,000), and the North Atlantic at 4,000 (with the Iceland/Davis Strait stock at 1,590 and the Novia Scotia at 1,390–2,250). There is no estimate for the Labrador Sea stock.[204]

The difficulty of distinguishing Bryde's whales from sei whales has confounded much of the historical literature and management of this separate species. Indeed, although the SC had recognized Bryde's as a separate stock as early as 1970,[205] its quotas were commonly intermixed with sei whales. It was only when sei were classified as protected stocks that precise quotas were placed on Bryde's.[206] As such, in the North Pacific, the quotas for Bryde's began in the mid-1970s at 1,363,[207] before falling to 524[208] and to 264,[209] then rising to 479,[210] 510,[211] 526,[212] 546[213] and 536,[214] and then falling at the 36th meeting to 357.[215] Quotas in the southern hemisphere for Bryde's appear in 1980 for 622,[216] followed by an increasing 689[217] and 754,[218] to a high point of 866,[219] before quickly falling in the mid-1980s[220] to 165 in 1983.[221]

Recent estimates of stock numbers for the North Pacific Bryde's began in 1987 with an estimate of 15,689.[222] In 1995 this was raised to 23,751,[223] before going to 25,640 in 1996.[224] However, these figures must be treated with caution, as the question of how many species and populations of Bryde's there are is ongoing. Accordingly, the IUCN Red List of Endangered Species classifies this species as 'data deficient', by which it cannot be accorded a threat status.

10 MINKE WHALES (*BALAENOPTERA ACUTOROSTRATA*)

In 1971 attention began to focus upon the 'as yet essentially unexploited' minke whale stocks in the Antarctic,[225] of which it was believed there were 150,000–200,000.[226] In 1972, a catch limit for this 'under-harvested'[227] resource was set and it was suggsted that the earlier figure of 150–200 thousand was 'too low'.[228] In 1974, a quota for minke was set at 5,000 (despite widely divergent population estimates and warnings by the SC).[229] For the following year, catch limits for the Antarctic minke, which were now placed within the NMP, again despite warnings of uncertainties by the SC,[230] were set at 7,000.[231] In 1975 these were reduced to 6,810,[232] before falling to 5,690 in 1977, due to continued uncertainties about stock estimates.[233] This rose in 1978 to 8,102,[234] before falling to 7,072 in 1980.[235] The figure adopted for the 1983 meeting was 8,102.[236] Although the moratorium was agreed in 1982 at the 34th meeting, it was not to take effect until 1985/86. Accordingly, quotas were still set for this period: in the southern hemisphere, a total of 7,072 minke in 1982,[237] 6,655 in 1983,[238] and 4,224 in 1984.[239]

In the North Pacific, in 1977 the minke quota was set at 400 (although there was specific concern over the Sea of Japan minke whale stock).[240] In the 1980 season the quota was set at 1,368 (on a five-year, 4,712 total block).[241] This average was exceeded the following year with a quota set at 1,871.[242] The quota then fell to 1,361,[243] before falling again to 1,075,[244] and to 1,006 in 1983[245] and 320 in 1984.[246]

Finally, with regard to the North Atlantic a quota of 2,550 minke was set by the IWC in 1976.[247] In 1977, the overall quota was 2,555.[248] This fell to 2,475[249] before rising to 2,554,[250] where it stayed in the following years.[251] In 1983 the quota for the North Atlantic fell to 926.[252] In 1984, it was set at 877.[253] At the 37th and 38th meetings, the only quotas issued were for North Atlantic minke, and these were set at 130 for each year.[254] Once the moratorium vote was passed, Norway lodged an objection to paragraph 10(e) of the schedule and continued to unilaterally authorize commercial minke whaling. These actions resulted in a series of directed resolutions to Norway in the 1990s to refrain from such activities,[255] which continued into the new century.[256]

An exception to the commercial moratorium on the catching of minke can be seen with Denmark's ASW claim to catch what is known as West Greenland minke (which makes up the bulk of Denmark's current ASW catch).[257] Although Denmark had requested takes of around 250 whales in the early 1980s, this figure had been reduced to around 130 by the mid-1980s, and has since dropped to as low as 110 because of 'the continuing uncertainties in the identity, current population size and replacement yields for this stock.'[258] In

1988, the stock size estimate of the West Greenland minke was placed at 1,153. According to the SC, this figure, which 'was smaller than previously thought', meant that 'the stock was severely depleted, below the level in 1985'.[259] Although Denmark disputed this estimate, it none the less dropped its request to a catch of 60 minke.[260] Since this time, revised stock assessments have suggested that the population was larger than previously thought – totals of 3,270[261] and later 8,371 (for West Greenland minke).[262] Accordingly, increased catch levels were approved in spite of the considerable uncertainty which remains. By the end of the century, 170 were being struck per year.[263] This fell to 142 in 2000[264] and 151 (137 from West Greenland, and 14 from East Greenland) in 2001.[265] Nevertheless, the SC was unable to offer any advice on the best size limitation for catches in order to allow the stock to move towards the MSY level.[266] In 1999, the SC noted that due to a lack of adequate research and data, it has 'never been able to provide satisfactory scientific advice on Minke whales off Greenland'. Accordingly, it 'strongly recommended' a research programme for the purpose.[267] This was reiterated in 2000,[268] 2001[269] and 2002 and 2003 as a matter of 'great concern'.[270]

Current attempts to ascertain the population numbers of minke reflect the clear uncertainties in this area. These uncertainties relate to both the number of minke species and the numbers within each species. For example, it has only been since the mid-1990s that the species distinction between the common minke whale and the Antarctic minke whale (*Balaenoptera bonaerensis*) became widely understood and accepted. The current convention is to divide common minke whales into two, and possibly three subspecies for the North Atlantic, the North Pacific and the 'dwarf' minke whale.

Recent attempts to calculate the numbers of these species began in 1990 for the North Atlantic minke (made up of West Greenland, central and northeastern stocks) of which the sum of the estimates for this area was in the range of 74,700 to 145,200.[271] In 1991, the SC suggested that the best available estimate for Northeast Atlantic Minke was 68,447.[272] This was actually a lower figure than the 1990 estimate for this specific stock, which was 81,000.[273] In 1992, the figure was placed at 86,000,[274] and in 1995 it was reworked to 75,600.[275] This discrepancy caused concern in the IWC,[276] and forced the SC to unanimously agree that: 'there is currently no valid abundance estimate for Minke whales in the North-eastern stock'.[277] Uncertainty was raised again in 2001, due to a fear that counting methods may be critically flawed.[278] In 2002, it was argued that there was a total of 109,298 minke in the North Atlantic.[279] Although this is still a substantial number of animals, the original stock of North Atlantic minke may have been as high as 265,000. As such, this stock has been reduced by whaling to an estimated 45–70 per cent of its pre-exploitation abundance.[280] The only take from this stock is done by Norway, and although this take is legal, it has been subject to criticism by the IWC.[281]

In 2004, Norway announced that it was setting an annual quota of 1,800 minke whales – three times above its previous catches and equal to catches before the commercial moratorium commenced.[282]

In 1991, Japan argued that there were 25,049 North Pacific minke. These numbers are divided between the so-called 'J-stock', which inhabits the Sea of Japan, the Yellow Sea and the East China Sea, and the 'O-stock' which inhabits the Sea of Okhotsk and Pacific waters. The J-stock is thought to have declined by more than 50 per cent because of intensive whaling in the past by China, Korea and Japan. The O-stock is also well below its pre-exploitation abundance but is less exploited than the J-stock.[283]

In 1992, it was suggested that there were 760,000 southern hemisphere minke.[284] However, the credibility of this later figure has been seriously challenged following publication of new survey data from the 1990s. As such, it is deemed 'no longer [an] appropriate [estimate] of current Minke whale abundance'. Rather, the SC, in scrapping the 760,000 estimate, was 'unable to provide reliable estimates of current Minke whale abundance'.[285] A revised figure of as low as 268,000 was suggested in 2001, before being raised to 312,000 in 2002.[286] This uncertainty reflects a long history of 'guesses' on the number of this species, although the reasons for the discrepancy in the numbers were being examined. The first estimate seems to have been a Japanese one in 1970 of 23,000 in Area IV (the Antarctic is divided into six areas of 60 degrees longitude, roughly corresponding to what were originally believed to be stocks of blue whales). This was extrapolated to give a total population of 70,000. During the following decade, the SC gave a number of estimates, mostly around the 150,000 mark. At a special meeting on minke whales in 1981, the estimate was 262,560 (excluding Area II) or around 300,000 in total. At the 34th meeting in 1982, the estimate was 400,000. In 1988, the estimates given to the IWC ranged from 440,000 to 690,000.[287]

Such uncertainties in stock estimates have repeatedly caused anxiety for a number of delegations, who remained cautious of adopting the RMS in the face of such ambiguity.[288] They have also led to demands to make further refinements to improve the accuracies of abundance surveys.[289] Finally, such uncertainties have been linked to pleas for countries such as Japan to cease scientific whaling of these stocks.[290]

11 SMALL CETACEANS

The conservation and status of certain stocks of small cetaceans continue to be threatened through, *inter alia*, targeted kills, incidental catches in fishing operations and habitat degradation.[291] Together, these impacts may kill around 100,000 small cetaceans per year.[292] In some instances, it is possible (although

there is great uncertainty in many areas),[293] 'that small cetaceans are the next class of animals facing disappearance'.[294] This realization was furthered in part in 2000 when the IWC emphasized that 'freshwater dolphins and porpoises are among the world's more threatened mammal species'.[295]

One of the difficulties in this area is that there is a vast diversity of small cetacean species. For example, there are 28 species of ocean dolphin, six of freshwater dolphin, six of porpoise, two of monodontids (the white whale and the narwhal), eight of beaked whale, as well as the killer whale, the false killer whale and the melon-headed whale.

In terms of very basic numbers and threat classifications,[296] with regard to marine dolphins, Commerson's dolphin appears relatively abundant, as is Heaviside's dolphin. In global numbers, the short-beaked common dolphin appears abundant, although some local populations are clearly threatened. The same scenario applies for the short-finned pilot whale, the pantropical spotted dolphin, the spinner dolphin, the rough-toothed dolphin, the common bottlenose dolphin, the striped dolphin and Risso's dolphin. There is no serious concern for the pygmy killer whale, the hourglass dolphin, the Atlantic spotted dolphin, the Pacific white-sided dolphin, dusky dolphins, northern and southern right whale dolphins, the Indo-Pacific bottlenose, the white-beaked dolphin or the long-finned pilot whale. The Tucuxi is locally abundant. The long-beaked common dolphin may be declining in population numbers quite quickly, and the Indo-Pacific humpback dolphin may also be vulnerable, along with the Clymene dolphin and the Atlantic humpback dolphin. The Irrawaddy dolphin (which is also freshwater) has some critically endangered populations, ranging in the dozens. Hector's dolphin, although having a total of 7,400 animals, breaks into three areas, with some of these containing less than 100 individuals. The Chilean dolphin is data deficient, as are Fraser's and Peale's dolphins. In terms of freshwater dolphins, the blind river dolphin is data deficient. The Boto and the Franciscana are both threatened, but not critically. The Ganges and the Indus dolphins are both believed to be suffering strong population declines. The Baiji has a population which may be as low as 13, and is expected to become extinct.

In terms of porpoises, although the global numbers for the harbour porpoise are strong, some local populations are clearly endangered, such as those around the Black Sea. A similar situation occurs with Dall's porpoise and its 11 subspecies. The spectacled porpoise is data deficient, as is the Burmeister porpoise. The Vaquita is critically endangered with a total population abundance of only a few hundred. With regard to beaked whales, Arnoux's beaked whale is considered uncommon but not necessarily under threat. Baird's beaked whale needs strong assessment and may be under threat. The northern bottlenose whale is at least locally abundant, and the southern bottlenose whale is abundant as is Longman's beaked whale and Cuvier's beaked whale. Shepherd's beaked whale and Mesoplodonts are both data deficient.

Finally, there may be about 150,000 white whales in total, but some local populations are only around 50 strong. The 36,700 narwhals are also grouped in relatively small local populations in the region of the low hundreds. The killer whale has strong global numbers, but is regionally vulnerable in some areas. The melon-headed whale is data deficient. The false killer whale could be vulnerable.

Although the threats to small cetaceans are in many instances very serious, it is important to note that the threats are different. Moreover, it is often difficult to be specific, as some small cetacean species may be resident in a number of different regions. For example, the humpback dolphin is present in the waters of the East Atlantic, and the Indian and Western Pacific oceans. Each of these areas has different threats,[297] ranging from being indirectly captured as bycatch, victims of environmental pollutants or habitat destruction, or directly targeted. It is with regard to the last category that the following discussion proceeds.

Since the 1970s, it has been apparent that as commercial whalers have increasingly been deflected from taking large whales, their attention – in terms of seeking targets for direct kills – has turned to small ones. This sudden turn of attention has (since 1984)[298] identified species which are suffering takes which may go beyond 2 per cent of the overall stock in question:[299] killer whales,[300] the short-finned pilot whale,[301] the bottlenose dolphin,[302] Baird's beaked whale,[303] and the Black Sea dolphins and porpoises.[304] As time progressed, specific resolutions were issued by the IWC relating to the directed takes of the small cetacean species of the striped dolphin (of the Northwest Pacific),[305] Dall's porpoise (Northwest Pacific),[306] the northern bottlenose whale (North Atlantic),[307] white whales and narwhals,[308] Antarctic killer whales[309] and Baird's beaked whale.[310]

The problem of the incidental capture of small cetaceans first arose at the IWC in the mid-1970s. Since this time, it has become apparent within the IWC that several species are threatened by incidental catch, including: harbour porpoises in the North Atlantic;[311] the Black Sea dolphin;[312] around Latin America with regard to the Tucuxi[313] and Commerson's dolphin,[314] the Vaquita,[315] Heaviside's dolphin[316] and the Chilean (black) dolphin;[317] the Chinese river dolphin (*baiji*);[318] the Indus River dolphin (*susu*);[319] and New Zealand's Hector's dolphin.[320]

NOTES

1. Article 4. Convention on the Regulation of Whaling (1931).
2. IWC. 24th Report. (1974). 28.
3. IWC. 25th Report. (1975). 50–53. See also Appendix 2: 'Resolution on Sea of Japan Minke Whale Stock.' Resolution of the IWC 29th Annual Meeting. IWC. 28th Report. (1978). 21, 28.

4. IWC. 30th Report. (1980). 29.
5. Appendix 8: IWC Resolution 1999–7. 'Resolution on Small Populations of Highly Endangered Whales.' IWC. 51st Report. (2000): 55.
6. See IWC (1986). *Right Whales* (IWC, Cambridge, Special Issue 10): 12.
7. Anon (1995). 'Right Whale.' *New Scientist*. September 2: 11.
8. See Gerber, L. (2000). 'Measuring Success in Conservation.' *American Scientist*. 88 (July–August): 318.
9. Levy, S. (1999). 'What's Wrong With the Right Whale.' *New Scientist*. November 6. WWF (2000). *Northern Right Whale: The Most Endangered Great Whale in the World* (WWF, London). Gerber et al., supra n8: 321.
10. IWC. 51st Meeting in 1999. (2000). 22. IWC. 52nd Meeting in 2000. (2001). 29.
11. Ibid. 30.
12. See 'Resolution on Western North Atlantic Right Whales.' IWC Resolution 2000–8. IWC. 52nd Report. (2001). 69.
13. Report of the Scientific Committee. IWC/53/4. 31; IWC/54/4. 57.
14. Report of the SC. IWC/55/Rep 1. 29. Report of the SC. IWC/56/Rep 1. 36.
15. See Allen, R. (2001). 'The First Great Whale Extinction: The End of the Bowhead Whale In the Eastern Arctic.' *Explorations in Economic History*. 38: 448. Hrynyshyn, J. (2000). 'The Old Man of the Sea.' *New Scientist*. November 18: 45–8. Pain, S. (1987). 'Age Miscalculations Threaten Bowhead Whales.' *New Scientist*. March 5: 21.
16. See IUCN (2003). *Dolphins, Whales and Porpoises: Conservation Action Plan* (IUCN, Gland): 33.
17. In addition, the SC reiterated its concern that 'additional knowledge of their status is crucially needed'. IWC. 51st Meeting in 1999. (2000). 22.
18. Report of the SC. IWC/55/Rep 1. 28.
19. Appendix 8: IWC Resolution 1999–7. 'Resolution on Small Populations of Highly Endangered Whales.' IWC. 51st Meeting in 1999. (2000). 55. In 2001, Canada suggested to the Aboriginal Subsistence Whaling Sub-Committee of the IWC that the Hudson Bay population was at least 485. See Aboriginal Subsistence Whaling Sub-Committee. IWC/53/8. 5.
20. See IWC Resolution 2000–2. 'Resolution on Whaling of Highly Endangered Bowhead Whales in the Eastern Canadian Arctic.' IWC. 52nd Meeting in 2000. (2001). 64–5.
21. Scientific Committee. IWC/54/4. Item 9.
22. Appendix 3: 'Resolution Concerning Aboriginal Subsistence Whaling.' IWC. 33rd Report. (1983). 38.
23. For the 1981 criteria, IWC. 43rd Report. (1993). 19.
24. IWC. 45th Report. (1995). 22.
25. Appendix 4: IWC Resolution 1994–4. 'A Review of Aboriginal Management Procedures.' Ibid. 42–3.
26. Where stocks are above the maximum sustainable yield (MSY) level, aboriginal subsistence catches are permitted up to 90 per cent of MSY.
27. See Gambell, R. (1997). 'Recent Developments in the IWC Aboriginal Subsistence Whaling Category.' In Petursdottir, G. (ed.). *Whaling in the North Atlantic* (Fisheries Institute, University of Iceland): 122, 125. An average of 11 bowheads were landed each year between 1900 and 1969. However, between 1970 and 1977, the number increased to 29 per year. This figure did not cover the number struck, but not captured, which rose from 10 in 1973 to 79 in 1977. See Gambell, R. (1982). 'The Bowhead Whale Problem and the International Whaling Commission.' In IWC (ed.), *Aboriginal/Subsistence Whaling: Report of the International Whaling Commission*: Special Issue 4 (IWC, Cambridge): 1.
28. Ibid. Marquette, W. (1980). 'Historical Shore Based Catch of Bowhead Whales in the Bering, Chukchi and Beaufort Seas.' 42 *Marine Fisheries Review*: 5–19.
29. See Appendix 6: 'Resolution on Bowhead Whales.' IWC 27th Report. (1977). 33.
30. IWC. 28th Report. (1978). 22.
31. IWC. 32nd Report. (1982). 26.
32. Gambell (1982), supra n27: 2.
33. Ibid.

34. Ibid. 1.
35. Ibid.
36. Ibid.
37. 'Unequivocal' was the language used by Australia. IWC. 30th Report. (1980). 12, 1.
38. See, for example, *Adams* v. *Vance*. No. 77-1960 LDC Dir. order filed 24 October 1977, as discussed in 8 *Environmental Law Reporter* (1979): 60–63. For some commentary on this period, see Cherfas, J. (1980). 'Among the Sharks and Whales.' *New Scientist*. July 31: 353. Cherfas, J. (1982). 'Conservationists in a Whale of a Row.' *New Scientist*. February 4: 295. Anon (1983). 'US Backs Eskimo Whaling Plea.' *New Scientist*. July 21: 179.
39. See Donovan, G.P. (1982). 'The International Whaling Commission and Aboriginal/Subsistence Whaling: April 1979 to July 1981.' In Gambell (1997), supra n27: 79, 80.
40. Gambell (1982), supra n27: 1. See also Donovan, supra n39; 79, 80.
41. 'Present evidence suggests that the current Bering Sea stock of the Bowhead whale is a small percentage of its initial size (in 1850). Given the small absolute population size, this panel agrees with the IWC Scientific Committee recommendation . . . that from a biological point of view, the only safe course is to reduce the kill of the Bowhead whales from the Bering Sea to zero'. Report of the Wildlife Panel (1982). In Gambell (1982), supra n27: 11,19.
42. Appendix 4: 'Resolution on Bering Sea Bowhead Whales.' IWC. 30th Report. (1980). 35.
43. IWC. 32nd Report. (1982). 26.
44. IWC. 33rd Report (1983). 28–9.
45. Appendix 4: 'Resolution to the Government of the United States on the Bering Sea Bowhead Whale.' IWC. 32nd Report. (1982). 36.
46. Appendix 4: 'Resolution on Bering Sea Bowhead Whales.' IWC. 30th Report. (1980). 35.
47. See IWC. 34th Report. (1984). 22–4; IWC. 35th Report. (1985). 18.
48. IWC. 34th Report. (1984). 23. See also Anon (1985). 'How Science Proved the Inuit Right About Whales.' *New Scientist*. September 12: 22.
49. IWC. 36th Report. (1986).17; IWC. 37th Report. (1987). 19.
50. IWC. 42nd Report. (1992). 28.
51. IWC. 38th Report. (1988). 20.
52. Suydan, R. (2002). 'Subsistence Harvest of Bowhead Whales by Alaskan Eskimos During 2001.' SC/54/BRG20. IWC. 39th Report. (1989). 20; IWC 42nd Report. (1992). 30; IWC. 45th Report. (1995). 21–2; IWC. 48th Report. (1998). 51; IWC. 52nd Meeting in 2000. (2001). 21. Forty-seven were struck in 2000. See Additional Extract from the Scientific Committee Report (2001). Section 4.1.1.2.
53. See Proposal by Russia and the United States. IWC/54/20. Report of the Scientific Committee. IWC/54/4. 9.1.2.
54. See IWC (2002). Summary of outcomes of the 5th Special Meeting of the Commission. Section 3.
55. See Gerber, L. et al., supra n8: 316. See IUCN, supra n16: 37.
56. Article 4.
57. Gerber, L. et al., supra n8: 318.
58. Appendix 8: IWC Resolution 1999–7. 'Resolution on Small Populations of Highly Endangered Whales.' IWC. 51st Meeting in 1999. (2000). 55.
59. See Resolution 2001–3. 'Resolution on the North Pacific Gray Whale.' IWC. 53rd Meeting in 2001. (2002). 55. For the 2004 discussions, see Report of the Scientific Committee. IWC/56/Rep 1. 37. 'Resolution on the Western North Pacific Gray Whale.' IWC/56/21. Rev 1.
60. In relation to the northeastern stock of gray whales, it was believed throughout the 1990s that this stock was 'well above its minimum population size'. IWC 39th Report. (1989). 20. Accordingly, by the late 1990s, a take of up to 482 whales per year was deemed sustainable by the SC. Report of the Aboriginal Sub-Committee. IWC/51/13. Agenda Item 11.2.
61. Rugh, D. (2002). 'A Preliminary Estimate of the Abundance of the Eastern North Pacific Stock of Gray Whales.' SC/54/BRG6. Scientific Committee. IWC/54/4. Report of the Scientific Committee. IWC/55/Rep 1. 22. The 2003 report put the lower figure at 16,848.

62. In 1996, the SC was of the opinion that, with regard to the Makah request, '[T]he take of five extra whales would not have any significant impact'. IWC. 46th Report. (1997). 155. The same conclusion was reached for the St Vincent and the Grenadines ASW quota in 2001. See Report of the Scientific Committee. IWC/53/4. 33.
63. Report of the Scientific Committee. IWC. 32nd Report. (1982). 109.
64. IWC. 42nd Report. (1992). 28, 33
65. Appendix 11. IWC 48th Report. (1998). 51.
66. IWC. 52nd Meeting in 2000. (2001). 21.
67. See Additional Extract from the Scientific Committee Report (2001). Section 9.1.2.2.
68. Scientific Committee. IWC/54/4. Also, Borodin, R. (2002). 'Historical and Present Information About the Aboriginal Harvest of Gray Whales in Chukota.' SC/54/BRG27.
69. Proposal by the United States and Russia. IWC/54/22.
70. See Gambell (1997) supra n27: 122, 127–8.
71. Scientific Committee. IWC/54/4.
72. See IUCN's supra n16: 35. Also, WWF (2001). *Blue Whales: The Largest Animals Ever to Live on Earth* (WWF, London): 2.
73. IWC. 5th Report. (1954). 6.
74. IWC. 6th Report. (1955). 6. It was suggested that the blue whale 'stock is now only a fraction of the original population and its powers of recovery might already be found to be largely lost even if it received total protection'. IWC Doc. III, 1955. Report of the Scientific Sub-Committee. 5.
75. IWC. 46th Report. (1996). 23.
76. IWC. 51st Meeting in 1999. (2000). 21.
77. IWC. 2nd Report. (1951). 7–8.
78. IWC. 6th Report. (1955). 5–6, 15–16. Both the blue and the humpback were granted five-year moratoriums in the North Atlantic, North Pacific and for parts of the Antarctic (for the humpback) except for four days in February.
79. Japan was arguing that in the North Pacific: 'the blue whales in the North Pacific had had a rest period of more than 15 years and it appeared the stock had increased'. IWC. 8th Report. (1957). 16–17.
80. Ibid. 15.
81. IWC. 10th Report. (1959). 14–15.
82. IWC 11th Report. (1960). 5, 17.
83. IWC. 13th Report. (1962). 16. The following year, the ad hoc SC, and the standing SC stated that the stocks of blue whales were giving cause for serious concern and were in need of complete protection around the Antarctic. IWC. 14th Report. (1963). 15–17.
84. IWC. 11th Report. (1960). 18.
85. IWC. 14th Report. (1963). 14–23, 73.
86. IWC 15th Report. (1964). 16.
87. IWC. 19th Report. (1968). Appendix III. 154. Later evidence suggested that by the mid-1960s, the blue whale which had its breeding grounds off South Africa was down to 3 per cent of its initial abundance. Report of the SC. IWC/55/Rep 1. 27.
88. IWC 15th Report. (1964). 17. In 1964, because of 'the extremely depleted state' of blue whale stocks, the SC recommended a total ban on the taking of all blue whales in the Antarctic, and a five-year moratorium for the North Pacific. IWC. 16th Report. (1966). 54, 58.
89. IWC. 17th Report. (1966). 19.
90. IWC. 18th Report. (1968). 18.
91. IWC. 24th Report. (1974). 28.
92. IWC. 25th Report. (1975). 50–53.
93. IWC. 30th Report. (1980). 29.
94. Report of the Scientific Committee. IWC/56/Rep 1. 34.
95. See Appendix 5: 'Resolution on Research Related to Conservation of Large Baleen Whales.' IWC. 44th Report. (1994). 33. See also Appendix 13: IWC Resolution 1994–12. 'Resolution on Promotion of Research Related to Conservation of Large Baleen Whales in the Southern Ocean.' IWC. 45th Report. (1995). 48.

96. Appendix 8: IWC Resolution 1999–7. 'Resolution on Small Populations of Highly Endangered Whales.' IWC. 51st Meeting in 1999. (2000). 55.
97. Gerber et al,. supra n8: 318. For the problem of the uncertainty of these numbers, see Franklin, C. (1994). 'Playing Tag With Blue Whales.' *New Scientist*. August 6: 18.
98. Pearce, F. (2003). 'Oceans Raped of Their Former Riches.' *New Scientist*. August 2: 4–5.
99. IWC. 1st Report. (1949). para. 38.
100. IWC. 5th Report. (1954). 6; IWC. 6th Report. (1955). 6
101. IWC. 3rd Report. (1952). 15.
102. Ibid. 2.
103. IWC. 6th Report. (1955). 5–6, 15–16.
104. IWC. 10th Report. (1959). 14–15.
105. IWC. 13th Report. (1962). 16. '[I]f catching were to continue at the level of the past few years the decline would continue to disastrous levels'. IWC. 12th Report. (1961). 15.
106. In 1962, the ad hoc SC, and the standing SC stated that the stocks of humpback were in a state of accelerated decline. IWC. 14th Report. (1963). 15–16. The following year, the Committee of Three warned that the humpback was 'also threatened' (and needed complete protection). IWC. 15th Report. (1964). 16.
107. IWC. 14th Report. (1963). 16–17.
108. IWC. 46th Report. (1996). 23. Report of the Scientific Committee. IWC/56/Rep 1. 33.
109. IWC. 13th Report. (1962). 21.
110. IWC. 14th Report. (1963). 14–23, 73.
111. At the 18th meeting, a moratorium on humpback whales from the North Pacific was unanimously agreed by the Commission. IWC. 18th Report. (1968). 18.
112. IWC. 22nd Report. (1972). 22.
113. IWC. 24th Report. (1974). 28.
114. IWC. 25th Report. (1975). 50–53.
115. IWC. 30th Report. (1980). 29.
116. The St Vincent and the Grenadines Aboriginal Subsistence Quota. IWC/54/25. Review 2. In 1990, the SC, in relation to the St Vincent hunt, 'agreed that a catch limit of up to 3 animals was unlikely to harm the stock'. IWC. 41st Report. (1991). 30. This view remained in place during the next decade. See Aboriginal Whaling Sub Committee. Extract from IWC/53/4/ Draft Report of the Scientific Committee. Item 9. These views were repeated in 2002.
117. IWC. 32nd Report. (1982). 26.
118. Ibid.
119. Ibid.
120. Ibid. 28–9.
121. Ibid.
122. IWC. 33rd Report. (1983). 30.
123. Ibid.
124. IWC. 53rd Meeting in 2001. (2002). 14.
125. IWC/54/4. 54–5.
126. IWC. 51st Meeting in 2001. (2000). 17.
127. Scientific Committee. IWC/54/4. Item 9.1.4.
128. IWC. 45th Report. (1995). 24. Anderson, I. (1993). 'Whales Doing Well in the Southern Seas.' *New Scientist*. July 24: 10.
129. IWC. 51st Meeting in 2001. (2000). 22.
130. In 2000, Area IV alone was suggested to have 12,000. IWC. 52nd Report. (2001). 33. This increase was again noted in 2001.
131. Scientific Committee. IWC/54/4. 51.
132. Gerber et al., supra n8: 318.
133. IWC. 8th Report. (1957). Appendix IV. 20–27.
134. IWC. 11th Report. (1960). 5, 17. 'The Committee was unanimously of the view that the fin whale stock was declining'. IWC. 12th Report. (1961). 14; IWC. 13th Report. (1962). 16. In this year, the ad hoc SC, and the standing SC stated that the stocks of fin were in a state of accelerated decline. IWC. 14th Report. (1963). 15–16. The committee of three added that the catch of fin whales was unsustainable. IWC. 15th Report. (1964). 16.

135. IWC. 25th Report. (1975). 48.
136. IWC. 24th Report. (1974). 29.
137. IWC. 25th Report. (1975). 27.
138. IWC. 26th Report. (1976). 6.
139. IWC. 27th Report. (1977). 8.
140. See Appendix 2: 'Sea of Japan Minke Whale Stock.' Resolution of the IWC 29th Annual Meeting. In IWC. (1978). 28th Report. 28; IWC. 30th Report. (1980). 28–9.
141. IWC. 21st Report. (1971). 19.
142. IWC. 22nd Report. (1972). 21. IWC. 23rd Report. (1973). 19.
143. IWC. 22nd Report. (1972). 20–21.
144. IWC. 24th Report. (1974). 31.
145. IWC. 25th Report. (1975). 29.
146. IWC. 26th Report. (1976). 27.
147. IWC. 27th Report. (1977). 9.
148. Ibid.
149. IWC. 28th Report. (1978). 21.
150. IWC. 30th Report. (1980). 29.
151. IWC. 32nd Report. (1982). 24.
152. Some 293 in IWC. 33rd Report. (1983). 26; 287 in IWC. 34th Report. (1984). 18–19; and 281 in IWC. 35th Report. (1985). 16–17.
153. This number rose from six to eight (in 1985) and up to ten in 1986. Although the quota was exceeded by six in 1985, the same limit (eight) remained in the schedule. IWC. 36th Report. (1986). 18.
154. Ibid.
155. Report of the Aboriginal Subsistence Whaling Sub Committee. IWC/55/Rep 3. 4.
156. IWC. 39th Report. (1989). 20–21.
157. IWC. 42nd Report. (1992). 29.
158. Ibid. 32. See also IWC. 43rd Report. (1993). 20.
159. IWC/43/3. Item 9.1.3.
160. IWC. 49th Report. (1999). 12.
161. In 1999, the SC noted that it had 'never been able to provide satisfactory scientific advice on either fin or Minke whales off Greenland'. Accordingly, it 'strongly recommended' a research programme (which was also endorsed by the ASWSC) for the purpose. IWC. 51st Meeting in 1999. (2000). 17. See also IWC. 52nd Meeting in 2000. (2001). 21. Report from the Aboriginal Subsistence Whaling Sub Committee, IWC/53/8. 4.
162. Scientific Committee. IWC/54/4. Item 9.1.3.
163. Report of the Aboriginal Subsistence Whaling Sub Committee. IWC/55/Rep 3. 4. Report of the Scientific Committee. IWC/55/Rep 1. 23.
164. Report of the Aboriginal Subcommittee. IWC/56/Rep 3.
165. IWC. 42nd Report. (1992). 19. The three-quarters of a million figure comes from IUCN, supra n16: 36.
166. Gerber et al., supra n8: 318.
167. Gerber et al., supra n8: 318.
168. IWC. 43rd Report. (1993). 23.
169. Pearce, F. (2003). 'Oceans Raped of Their Former Riches.' *New Scientist.* Aug 2: 4–5.
170. IWC. 13th Report. (1962). 16. The following year, the ad hoc SC, and the standing SC stated that the sperm whales were showing signs that caused concern. IWC. 14th Report. (1963). 15–16.
171. IWC. 22nd Report. (1972). 20–21.
172. IWC. 24th Report. (1974). 31.
173. IWC. 25th Report. (1975). 29; IWC. 26th Report. (1976). 27.
174. IWC. 27th Report. (1977). 9.
175. IWC. 30th Report. (1980). 26–7.
176. IWC. 28th Report. (1978). 20.
177. IWC. 31st Report. (1981). 22; IWC. 33rd Report. (1983). 24.
178. IUCN, supra n16: 50.

179. IWC. 24th Report. (1974). 31–2.
180. IWC 25th Report. (1975). 28; IWC. 26th Report. (1976). 8.
181. IWC. 27th Report. (1977). 8.
182. See Gordon-Clarke, J. (1977). 'Slaughter for Soft Leather.' *New Scientist*. December 8: 618. Gordon-Clarke, J. (1977). 'Whaling Quotas.' *New Scientist*. December 15: 682. Barzdo, J. (1979). 'IWC Confesses Doubt.' *New Scientist*. January 4: 2.
183. IWC. 31st Report. (1981). 20.
184. IWC. 30th Report. (1980). 28.
185. IWC. 28th Report. (1978). 21.
186. IWC. 31st Report. (1981). 23.
187. See Whitehead, N. (2002). 'Estimates of the Current Global Size and Historical Trajectory for Sperm Whales.' SC/54/06. Dufault, S. (2000). 'An Examination of the Current Knowledge on the Stock Structure of Sperm Whales Worldwide.' *Journal of Cetacean Resource Management*. 1(1): 1–10.
188. Scientific Committee. IWC/54/4. 59.
189. Gerber et al., supra n8: 318.
190. Anon (2002). 'Low Sperm Count Torpedoes Whalers Claim.' *New Scientist.* April 27: 21. Gerber et al., supra n8: 318.
191. IWC. 15th Report. (1964). 16.
192. IWC. 26th Report. (1976). 39–41; IWC. 27th Report. (1977). 9. See Appendix 2: 'Sea of Japan Minke Whale Stock.' Resolution of the IWC. 29th Annual Meeting. In IWC 28th Report. (1978). 28; IWC. 30th Report. (1980). 28–9.
193. The actual figure was 4,924. IWC. 21st Report. (1971). 19.
194. IWC. 22nd Report. (1972). 14.
195. IWC. 24th Report. (1974). 31.
196. IWC. 25th Report. (1975). 27.
197. Ibid. 29.
198. IWC. 26th Report. (1976). 6.
199. Ibid. 10.
200. Ibid. 28.
201. IWC. 30th Report. (1980). 29.
202. IWC. 33rd Report. (1983). 26–8.
203. See IWC. (1974). *Sei and Bryde's Whales* (IWC, Cambridge, Special Issue 1): 6.
204. Gerber et al., supra n8: 318. The 68,000 figure comes from Report of the Scientific Committee. IWC/56/Rep 1. 56.
205. IWC. 21st Report. (1971). 21. This was accepted by the Commission the following year. See IWC. 22nd Report. (1972). 23.
206. IWC. 27th Report. (1977). 9.
207. Ibid.
208. IWC. 28th Report. (1978). 20.
209. IWC. 30th Report. (1980). 28.
210. Ibid. 28–9.
211. IWC. 31st Report. (1981). 23.
212. IWC. 32nd Report. (1982). 24.
213. IWC. 33rd Report. (1983). 27–8.
214. IWC. 34th Report. (1984). 18–19.
215. IWC. 35th Report. (1985). 16–17.
216. IWC. 31st Report. (1981). 20.
217. Ibid. 23.
218. IWC. 32nd Report. (1982). 24.
219. Ibid.
220. In this year, the southern hemisphere quota was reduced by 100. IWC. 33rd Report. (1983). 26–8.
221. IWC. 34th Report. (1984). 18–19.
222. IWC. 38th Report. (1988). 19.
223. IWC. 46th Report. (1996). 24.

224. IWC. 47th Report. (1997). 32.
225. IWC. 23rd Report. (1973). 9.
226. Ibid. Up until 1970, only 2,000 minke had been taken from the Antarctic waters. See Gulland, J. (1988). 'How Many Minkes Are There in the Antarctic?' *New Scientist*. October 29: 44.
227. IWC. 24th Report. (1974). 20.
228. Ibid. 29.
229. The SC stated 'it had no sound basis for determining which of the estimates was more accurate'. IWC 25th Report. (1975). 27.
230. IWC. 26th Report. (1976). 39–41.
231. Ibid. 6.
232. IWC. 27th Report. (1977). 8.
233. '[R]eliable population assessments are not available'. IWC. 28th Report. (1978). 19.
234. IWC. 30th Report. (1980). 28.
235. IWC. 31st Report. (1981). 20.
236. IWC. 32nd Report. (1982). 24.
237. IWC. 33rd Report. (1983). 25–6.
238. IWC. 34th Report. (1984). 18–19.
239. IWC. 35th Report. (1985). 16–17.
240. See Appendix 2: 'Sea of Japan Minke Whale Stock.' Resolution of the IWC 29th Annual Meeting. In IWC. 28th Report. (1978). 28.
241. IWC. 30th Report. (1980). 28–29.
242. IWC. 31st Report. (1981). 22.
243. IWC. 32nd Report. (1982). 24.
244. IWC. 33rd Report. (1983). 25–6.
245. IWC. 34th Report. (1984). 18–19.
246. IWC. 35th Report. (1985). 16–17.
247. IWC. 27th Report. (1977). 9.
248. IWC. 28th Report. (1978). 21.
249. IWC. 30th Report. (1980). 29.
250. IWC. 31st Report. (1981). 23.
251. IWC. 32nd Report. (1982). 24;. IWC. 33rd Report. (1983). 21.
252. IWC. 34th Report. (1984). 18–19.
253. IWC. 35th Report. (1985). 16–17.
254. IWC. 37th Report. (1987). 26. In 1985 the IWC decided to move the northeast Atlantic minke to full protection status.
255. See IWC Resolutions 1995–5, 1996–5, 1997–3, 1998–1, 1997–4.
256. See 'Resolution on Norwegian Whaling.' IWC/53/26. Agenda Item 9.2.
257. Local minke whaling in West Greenland began only in 1948. See Gambell (1997), supra n27. 122, 126.
258. IWC. 38th Report. (1988). 21.
259. IWC. 39th Report. (1989). 21.
260. Conversely, however, Denmark sought an increase in its quota for fin whales to 23. IWC. 39th Report. (1989). 21.
261. IWC. 42nd Report. (1992). 28.
262. Report of the Aboriginal Subsistence Whaling Sub Committee. IWC/55/Rep 3. 4.
263. IWC. 52nd Meeting in 2000. (2001). 22.
264. See Aboriginal Subsistence Whaling Sub Committee. IWC/53/8. 4.
265. Scientific Committee. IWC/54/4. Item 9.1.3.
266. IWC. 42nd Report. (1992). 28.
267. IWC. 51st Meeting in 1999. (2000).17.
268. IWC. 52nd Meeting in 2000. (2001). 22.
269. Aboriginal Subsistence Whaling Sub Committee. IWC/53/8. 4.
270. Report of the Scientific Committee. IWC/55/Rep 1. 23.
271. IWC. 41st Report. (1991). 21.
272. IWC. 42nd Report. (1992). 22. For the debate on this figure, see Joyce, C. (1990). 'Scientists Oppose Bid To Life Whaling Moratorium.' *New Scientist*. June 9: 6.

273. As pointed out by the UK. IWC. 42nd Report. (1992). 22.
274. IWC. 43rd Report. (1993). 23. Hadfield, P. (1993). 'Whaling Report "Open to Interpretation".' *New Scientist*. May 15: 5.
275. IWC. 46th Report. (1996). 24.
276. See Motluk, A. (1995). 'Norway's Wrong Numbers Fuel War on Whaling.' *New Scientist*. 146, 1979: 11. Motluk, A. (1995). 'Paralysis Stalls Progress on Whaling.' *New Scientist*. 146, 1980: 4. Anon. 'The Whaling Scandal.' *Oryx*. 28(3): 149. Motluk, A. (1995). 'Norway's Wrong Numbers Fuel War on Whaling.' *New Scientist*. May 27: 11. Motluk, A. (1996). 'Crisis Looms Over Whaling Ban.' *New Scientist*. June 29: 4.
277. See Appendix 6: IWC Resolution 1995–5. 'Resolution on Northeastern Atlantic Minke Whales.' IWC. 46th Report. (1996). 44.
278. See Young, E. (2001). 'Minke Whales Out for the Count.' *New Scientist*. June 16. 12.
279. Scientific Committee. SC/54/RMP5.
280. IWC. 43rd Report. (1993). 23. IUCN, supra n16: 34.
281. See Resolution 2001–5. 'Resolution on Commercial Whaling.' IWC 53rdMeeting in 2001. (2002). 54.
282. Anon (2004). 'Whale Hunt to Resume.' *New Scientist.* May 22: 5.
283. IWC. 42nd Report. (1992). 20. IUCN, supra n16: 34.
284. IWC. 42nd Report. (1992). 24.
285. IWC. 52nd Meeting in 2000. (2001). 28. The reasons for the differences were believed to be because of mistaken school size estimates, observer inefficiency in counting, changes in minke classifications, missed animals and duplications, environmental conditions affecting sightings, timings and surveys. See Report of the Scientific Committee. IWC/53/4. 36–42.
286. Scientific Committee. IWC/54/4. 41.
287. See Gulland, J. (1988). 'How Many Minkes Are There in the Antarctic?' *New Scientist*. October 29: 44.
288. See Appendix 6: IWC Resolution 1995–5. 'Resolution on Northeastern Atlantic Minke Whales.' IWC. 46th Report. (1996). 44. For the 2000 mistake and concern, see IWC. 52nd Meeting in 2000. (2001). 33.
289. Appendix 8: IWC Resolution 1995–7. 'Resolution on Surveys Intended to Provide Abundance Estimates for the Implementation of the Revised Management Scheme.' IWC. 46th Report. (1996). 45. See also Appendix 5: IWC Resolution 1996–5. 'Resolution on NorthEast Atlantic Minke Whales.' IWC. 47th Report. (1997). 50–51. Appendix 3: IWC Resolution 1997–3. 'Resolution on Northeastern Atlantic Minke Whales.' IWC. 48th Report. (1998). 46.
290. See 'Resolution on Whaling Under Special Permit in the Southern Ocean Sanctuary.' IWC Resolution 2000–4. IWC. 52nd Meeting in 2000. (2001). 66.
291. Appendix 4: IWC Resolution 1996–4. 'Resolution on Small Cetaceans'.
292. In 1981 the SC noted that direct and incidental catches of small cetaceans by IWC members were estimated to total 112,000. IWC. 32nd Report. (1982). 27.
293. See Appendix II: 'Comments and Advice on Small Cetaceans Provided by the Scientific Committee.' IWC. 35th Report. (1985). 27.
294. Young, E. (2003). 'The Great Whale Debate Ignores Dolphin's Plight.' *New Scientist.* May 24: 12. McCarthy, M. (1991). 'Dolphins and Porpoises on the Verge of Extinction.' *The Times* (London). May 28.
295. 'Resolution on the Conservation of Freshwater Cetaeans.' IWC Resolution 2000–9. IWC. 52nd Meeting in 2000. (2001). 70.
296. All of the following classifications and numbers come from IUCN, supra n16: 34–54.
297. For the various humpback populations, see SC/54/SM27; SC/54/SM7; SC/54/SM6; SC/54/SM33; SC/54/SM35; SC/54/SM37.
298. The issue of direct catches was the subject of advice from the Scientific Committee Sub-Committee on Small Cetaceans in terms of live-capture fisheries. Appendix 4. IWC. 34th Report. (1984). 31.
299. Appendix 4. IWC. 34th Report. (1984). 31. It was also suggested that if a guideline for rate of removals was adopted pending stock assessment, then it was to be lower than the guideline of 2 per cent that had been used by the USA in interim management of bottlenose dolphins.
300. Appendix 4. IWC. 34th Report. (1984). 31.

301. Ibid.
302. Ibid. Report of the SC. IWC/55/ Rep 1. 41. The committee noted the considerable uncertainty surrounding this species, and the IUCN listing as 'data deficient'.
303. Appendix 4. IWC. 34th Report. (1984).
304. Ibid.
305. Concern first arose at the 28th meeting in 1976. Concern was reiterated in 1981, IWC. 31st Report. (1981). 24; IWC. 32nd Report. (1982). 27. By the 41st meeting, the SC was strongly recommending that assessments of the striped dolphin population be made as a matter of 'urgency' and 'strongly advised an interim halt to all direct catches of this species until the assessment is complete'. IWC. 42nd Report. (1993). 30–31. At the 44th meeting, a Resolution on the Directed Take of Striped Dolphins was issued by the Commission asking Japan 'to take appropriate action as soon as possible that will allow recovery of the population'. Appendix 10: 'Resolution on the Directed Take of Striped Dolphins in Drive Fisheries'. IWC. 43rd Report. (1993). 51. A similar resolution was repeated the following year with added 'urgency.' Appendix 10: 'Resolution on the Directed Take of Striped Dolphins.' IWC. 44th Report. (1994). 34. It was reported two years later to the IWC that the Japanese take of striped dolphins, had been reduced by close to 50 per cent in 1993 from the 1992 figure (1,045 down to 544). IWC. 45th Report. (1995). 35.
306. This has been a registered concern within the IWC since the 28th meeting in 1976. Similar concern was reiterated throughout the early 1980s. IWC. 35th Report. (1985). 19. In the late 1980s the take of Dall's porpoises rose from 13,000 in 1987 to about 39,000 in 1988. The SC suggested that it was 'urgent' that this catch be reduced. IWC. 40th Report. (1990). 29–30. Two years later it was reported that the take of Dall's porpoise had risen to 40,367. This led to the SC expressing its 'extreme concern about the continued takes and to urge some specific actions' to protect a species which was being taken 'far above levels that could be sustained'. IWC. 41st Report. (1991). 37. A specific resolution on Dall's porpoise requested: 'the Japanese government to consider the advice from the Scientific Committee as a matter of urgency, and as soon as possible to reduce the takes to at least the levels before 1986 [10,000] and that even further reductions be considered'. Appendix 4: 'Resolution on the Directed Take of Dall's Porpoises.' IWC. 41st Report. (1991). 48–9. This was reiterated in 2001 in Resolution 2001–11. 'Resolution on Dall's Porpoises.' IWC. 53rd Meeting in 2001. (2002). 54. This noted that since 1990, Japan had exceeded the [theoretical] sustainable catch limits of 10,000 per year, and urged the Government of Japan to halt the directed take of Dall's porpoises until a full assessment by the SC had been carried out. See also Report of the Scientific Committee. IWC/53/4. 66–8. For further discussion on this species, see Environmental Investigation Agency (1999). *Japan's Senseless Slaughter: An Investigation into the Dall's Porpoise Hunt, The Largest Cetacean Kill in the World* (EIA, London).
307. Concern was first noted at the 28th meeting in 1976. Following the directed focus upon the bottlenose dolphin, two years later, in 1978, the Commission endorsed the SC's recommendations and stipulated that the northern bottlenose dolphin should have continued provisional classification as a protected stock with zero quota. IWC. 30th Report. (1980). 27. The retention of further studies on this population IWC. 30th Report. (1980). 29; IWC. 32nd Report. (1982). 27.
308. At the 31st meeting the following year in 1979, the SC recommended that white whales and narwhals be listed in the schedule paragraph 1. IWC. 30th Report. (1980). 30. However, this was not accepted at the time. The SC reiterated its concerns soon after at the 32nd meeting. IWC. 32nd Report. (1982). 27. From the 32nd meeting a resolution on small cetaceans was issued which largely evolved out of the debate which followed the SC recommendation to list various beluga and narwhal stocks as protected stocks. IWC. 31st Report. (1981). 23–4, 31. This recommendation, after long discussion led to the resolution asking 'member governments' (that is, Canada) 'to continue to continue submitting reports to the Scientific Committee concerning the status of, *inter alia*, beluga and narwhal stocks'. Appendix 8: 'Resolution Concerning Extension of the Commission's Responsibility for Small Cetaceans.' IWC. 31st Report. (1981). 31. This generalized resolution was followed up by a directed one to Canada at the following 33rd meeting. (Appendix 3: 'Resolution Concerning White Whales and Narwhals.' IWC. 32nd Report. (1982). 36), which among

other concerns, urged Canada 'to prevent further taking from the severely depleted stocks of white whales'. This was followed up at the 43rd meeting. Appendix 11. IWC. 43rd Report. (1993). 52. At the 50th meeting, another resolution was directed to Canada, which 'expressed its concern that directed takes of white whales might not be sustainable'. Appendix 10: IWC Resolution 1998–9. 'Resolution on Directed Take of White Whales.' IWC. 50th Meeting in 1998. (1999). 46. The SC recommended that this species receive the 'highest conservation concern' possible. Report of the Scientific Committee. IWC/55/Rep 1. 42. The following year in 2004, the SC noted that stocks of white whales should be of highest conservation concern. Stocks of narwhals off Northwest Greenland were estimated at only 15 per cent of their original abundance as estimated in 1986. It was noted that continued hunting at the same level may result in extinction of West Greenland narwhals in the near future. Report of the Scientific Committee. IWC/56/Rep 1. 47.

309. In 1980, the SC made 'specific recommendations for the management and conservation of Antarctic killer whales'. IWC. 31st Report. (1981). 24. The following year, the SC recommended a classification of zero-catch limits for killer whales, in a manner akin to that of the listing of the bottlenose whale. In 1982 the SC recommended that killer whales on the coast of Norway be unclassified with zero-catch limit pending assessment and identification of stocks. Likewise, they recommended that southern hemisphere killer whales be classified with a zero catch limit. IWC. 32nd Report. (1982). 27.
310. At the 34th meeting, the Commission adopted the technical committee's recommendation that the SC review the status for Baird's beaked whales as a matter of priority. IWC. 34th Report. (1984). 17.
311. Concern was first registered at the 28th meeting in 1976. Similar concern about the possibly unsustainable take of this species was reiterated in IWC. 31st Report. (1981). 24; IWC. 41st Report. (1991). 38. A directed resolution followed at the 44th meeting. Appendix 11: 'Resolution on Harbour Porpoise in the North Atlantic and the Baltic Sea.' IWC. 44th Report. (1994). 34. IWC. 50th Meeting in 1998. (1999). 34. Berggren, P. (2002). 'Passive Acoustic and Visual Survey of Harbour Porpoises.' SC/54/SM3. Report of the Scientific Committee. IWC/56/Rep 1. 46–7.
312. IWC. 34th Report. (1984). 24. At the 41st meeting, it was suggested that for the Black Sea dolphin, current take levels were unsustainable. IWC. 41st Report. (1991). 38.
313. Appendix 4. IWC. 34th Report. (1984). 31. Anon (1985). 'When Eyeballs of Dolphin Become Part of the Trader's Brew.' *New Scientist*. December 5: 22.
314. Appendix 4. IWC. 34th Report. (1984). 31. Appendix 2. IWC. 35th Report. (1985). 27. The SC requested that the Chilean and Argentinean governments 'investigate the levels of direct takes'. Appendix 2. IWC. 35th Report. (1985). 27.
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3. Environmental threats to cetaceans and the limits of the IWC

1 INTRODUCTION

Traditionally, the greatest threat to cetaceans was overharvesting. In the present and future, it is likely that whales, dolphins and porpoises will face different threats, less visible, but just as deadly as the traditional forms of whaling that have commonly led to their overexploitation. The new threat is environmental change. That is, in the twenty-first century, environmental changes may now be the greatest threat facing the overall survival of a number of species (not just whales) that inhabit the water, of which cetaceans are one of the more apparent.[1] As such, understanding the health and management of the oceans that cetaceans inhabit is essential to any meaningful comprehension of the scope of the problems ahead in the coming decades.

This chapter has two objectives. The first is to examine the environmental threats that are posed to cetaceans. The second goal is to display the way the international community has begun to deal with them. It is necessary to examine the broader response of the international community in general, as ultimately, the resolution of most of these difficulties will be achieved in *other* issue-specific forums, and not in the IWC. This problem is doubly troubling, as many of the other forums have had only limited success in protecting the environmental health of the oceans. This chapter seeks to show the environmental threats, overlaps with other forums and the lacunas that exist.

2 ENVIRONMENTAL THREATS AND CETACEANS

The awareness of the threat of environmental degradation began at the IWC in 1973, when the scientific committee expressed a belief that the effects of pollution on whale stocks may be an important consideration.[2] Seven years later in 1980, the Commission resolved '[t]hat responsible member governments of the IWC should take every possible measure to ensure that degradation of the marine environment, resulting in damage to whale populations and subsequent harm to affected peoples does not occur'.[3] Although this issue was discussed in passing within the IWC throughout the 1980s,[4] it was at the inter-related

forums of the Convention on Migratory Species of Wild Animals (CMS) in 1985 that the issue appeared with greater force. Here, in preparation for some specialist regional agreements on cetaceans, the problem that pollution posed to their conservation status was clearly recognized within the Commission of the CMS[5] and the working group that was working on an 'Outline Proposal for an Agreement on small cetaceans in the North Sea'.[6] The issue of the effects of pollution upon small cetaceans arose once again at the second Conference of the Parties (COP 2) of the CMS in 1988.[7]

In the early 1990s, the issue returned to the IWC with force, with the call upon its signatories 'to prevent, reduce and control degradation of the marine environment in accordance with their policies, priorities and resources, so as to improve its life support and productive capacities'[8] of the oceans. At the same time, the need for environmental research[9] on environmental change[10] became more heightened within the IWC and the CMS regional cetacean conventions – the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS)[11] and the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)[12] – with the decision to direct the SC to establish a regular agenda item to address the impact of environmental change upon whale stocks.[13] Although this was clearly a large task, the IWC has been reticent to move into all areas. For example, noise pollution was a topic which was slow to evolve but has subsequently become increasingly important.[14] Nevertheless, the 'environmental concerns' agenda was adopted as it was believed that such knowledge was an essential guide for the Commission, because of 'the increasing evidence of degradation of the marine environment which threatens whales and other marine living resources and makes more difficult the attainment of the objectives of the ICRW'.[15]

As a follow-up to this new approach, the IWC decided to set up special workshops to investigate a number of specific problems. Following the completion of these workshops in 1995 (chemicals, and again in 1999) and 1996 (climate) the IWC instructed the SC and the newly formed standing working group on environmental concerns to go on to consider a supplementary agenda, including the problems of noise pollution, anthropogenic environmental degradation, and direct and indirect effects of fisheries. Further workshops on specific studies on the Arctic ecosystem (due to overlap of cetacean populations, toxic pollutants, climate change and the effect of the ozone hole) were added to the schedule. In 1998 the IWC commended the SC on its work in this area and created a dedicated fund for research on environmental change and cetaceans.[16]

Finally, in 2003 a new body was created within the Commission (the 'conservation committee') which was designed to help synthesize, prioritize

and create the correct platform of responses within the IWC to such interrelated environmental concerns.[17] However, progress on work with this new body has been slow due to strong debates over issues of competence in terms of its relationship with other bodies within the Commission, its terms of reference, funding issues and uncertainty over exactly which issues it should examine (and how).

3 THE EXPANDING PARADIGM: CONSUMPTION OF POP-INFECTED CETACEANS

A strong example of the danger that environmental threats represent to cetaceans is found with persistent organic pollutants (POPs). However, the threat that POPs represent is not limited to cetaceans. Rather, if the POP-infected cetaceans are consumed by humans, the problem moves up the food chain. As such, the IWC is faced with a problem with intersectionalities, on a number of levels.

POPs are a particularly unfortunate part of the modern chemical age. Although scientists do not know how many exist in total, 12 POPs (the 'dirty dozen') are particularly good candidates for international attention as they are fairly well understood. Those currently under debate are from pesticides (aldrin, chlorodane, DDT, dieldrin, endrin, heptachlor, mirex and toxaphene), industrial processes (PCBs and hexachlorobenzene) or the unintended byproducts of combustion and industrial processes (dioxins and furans). The factors which make all of these chemicals, or their related processes, worthy of note is their commonly shared characteristics. These include their ability to persist in the environment for a long time before they break down; their semi-volatility and ability to travel long distances; and their ability to bioaccumulate. The result of all these characteristics is that (as the British Royal Society concluded in 2000) they are 'a grave concern'[18] because of the direct threat to human health that they pose.

POPs also represent a widespread direct threat to the health of cetaceans. The traditional argument has been that whale species in the northern hemisphere[19] and toothed whales in particular, are the primary cetacean species that are vulnerable to POP contamination.[20] However, this approach is an oversimplification, as although certain species from northern waters and around some tropical countries[21] do have higher concentrations than those in southern waters,[22] evidence is currently suggesting that baleen whales, from as far away as Antarctica, may be carrying increasing levels of POPs.[23] Nevertheless, in high latitudes, POPs are believed to be increasing faster than elsewhere.[24]

Cetaceans are among the most vulnerable wildlife to the long-term effects of POPs.[25] Immunological abnormalities, liver damage and endocrine

disturbance, possible birth defects and developmental defects, intestinal cancers and mass mortality events have all been linked to detrimental impacts of POPs upon cetaceans.[26] Despite these possible problems, the SC has been cautious in its conclusions about the link between POPs and cetacean decline. After holding a directed workshop on chemical pollutants and cetaceans in 1995, it concluded that despite a lack of direct evidence for cetaceans, there was sufficient data on the adverse effects of pollutants on the health of other marine species and terrestrial species to warrant concern for cetaceans. In an effort to better understand the threat that POPs pose, three species of cetacean (the white whale, the harbour porpoise and the bottlenose dolphin) have been singled out for attention as indicator species by which clearer evidence of the cause–effect relationships of POPS may be established. In 2001, the SC agreed that PCB levels in cetaceans will probably increase over the next few decades, and that such increases pose a potential threat to certain cetacean populations.[27]

Human Consumption of POP-infested Cetaceans

Although conclusive links between POP infection and the declining health of a number of cetacean species have yet to be finalized, the IWC has adopted a precautionary approach with regard to the human consumption of such animals. Increasing human stress from environmental disease is a growing problem. Part of this problem concerns the consumption of products which are (unacceptably) poisoned. Consumer safety has arisen as a legitimate concern in a number of international forums, and a number of international bodies have been established with the goal of setting international food standards in international trade (such as Codex Alimentarius within the Food and Agriculture Organization: FAO) and recommendations on health standards (such as the World Health Organization: WHO) in response to this problem.[28] With specific regard to food sources from the ocean, the ICRW was originally unique in that it obliged the signatories to take into account the consumers of whale products.[29] Decades later, consumer safety was highlighted in the FAO Code of Conduct on Responsible Fisheries[30] and the 1995 Kyoto Declaration.[31]

With such considerations in mind, a problem arises when it becomes apparent that in certain places, people are consuming cetaceans (which represent a very strong pathway to POP ingestion) that contain concentrations of POPs that continue to accumulate and bio-magnify up the food chain to dangerous levels. For example, in the Arctic where POP contamination can be 10–20 times higher than in most temperate regions, indigenous people who rely on traditional diets are likely to be more exposed to several toxic substances than the majority of people elsewhere in the world.[32] Along the west coast of

Greenland, in Nunavik, Canada, and in Nikel on the Kola Peninsula of Russia, blood levels of DDT are only a small fraction lower than the levels that are known to have caused neurological defects in babies. Detrimental PCB contamination is a strong problem in Nunavik, and in northwest Greenland, where foetal and childhood development may be at direct risk. This conclusion is not surprising in Greenland, where more beluga and narwhal is consumed than anywhere else, as 95 per cent of women exceed the Canadian guideline limit for PCB contamination (five parts per million). Such problems, which have been associated with the consumption of POP-infested products (typically cetaceans), have not been restricted to the Arctic.

A similar body of evidence is also now developing in Japan in regard to general toxicity problems arising from seafood (in general, and whalemeat products in particular) which may contain several sorts of environmental toxins at levels above the safety limits prescribed by most national and international authorities. For example, in 2002, samples from the Tokyo market revealed dolphin meat, mislabelled as whalemeat, which contained 2,000 micrograms of mercury per gram. This is 5,000 times higher than the 0.4 microgram safety level.[33]

A number of attempts have been made to challenge the seriousness of the consumption of POP-infested cetacean products.[34] These challenges have focused on the supposed lack of conclusive evidence of damage to consumers; a greater problem being the risk to the lifestyle of traditional (indigenous) consumers if they give up their traditional ways; and the alleged health benefits of whale blubber.[35] Despite these challenges, a number of countries (such as Canada,[36] Iceland, Japan,[37] Denmark and the Faroe Islands[38]) have issued recommendations for the limitation of the consumption of cetacean products due to their pollutant content.

With such considerations in mind, the IWC introduced a resolution in 1998 that focused on the health effects from the consumption of cetaceans.[39] The resolution noted that 'the scientific evidence indicat[es] that some Arctic communities are currently faced with the threat of organic contaminants, and heavy metals from the consumption of certain cetacean products'. The following year, the IWC issued another resolution on the health effects from the consumption of cetaceans, with the difference from the 1998 resolution that the focus of health concerns was no longer just Arctic communities. In 1999, the secretariat was instructed to forward the resolution to the WHO.[40] The general concern was reiterated in 2000 with a specific IWC resolution on POPs and heavy metals, which reiterated the position that 'organic contaminants and heavy metals are seriously polluting the environment and its living resources including whales, and may have a significant negative health effect on consumers of marine mammal products'.[41]

There is little more that the IWC can do in solving these problems, as the

solutions which are intimately connected to a clean and healthy ocean can only be resolved in other international, regional and national forums which directly address the specific threats. Unfortunately, the success of these other forums has, overall, been limited, and this may have direct implications for the oceans in general and cetaceans in particular.

4 THE GENERAL OBLIGATION NOT TO POLLUTE THE OCEANS

As a rule, pollution of the oceans can no longer be regarded as an implicit freedom of sovereign states in the 'unowned' commons. This approach is a relatively new development, as although regional attempts to control pollution of the ocean date back to the end of the nineteenth century, international attempts to control ocean pollution date back only five or so decades. This new rule was clearly evident within the United Nations Convention on the Law of the Sea (UNCLOS), which states as one of its basic objectives (*inter alia*): 'A legal order for the seas and oceans which will facilitate . . . the conservation of the living resources [of the ocean], and the study, protection and preservation of the marine environment'. Specifically, Article 192 stipulates: 'States have the obligation to protect and preserve the marine environment'. Moreover, Article 193 clearly puts this obligation over the sovereign right of states to exploit their natural resources. Accordingly, states shall take all measures that are 'necessary to prevent, reduce and control pollution of the marine environment from any source'.

Such general international objectives are typically mirrored by soft law declarations such as those in Chapter 17 of Agenda 21 and the subsequent Plan of Implementation from the 2002 World Summit on Sustainable Development (WSSD).[42] They are also reflected in the regional conventions which are designed to protect shared parts of the oceans. In this regard, a number of treaties dealing with pollution in regional oceans have been established. The impetus for this development was the action-orientated regional seas programme, which was established with the formation of the United Nations Environment Programme (UNEP) in 1974. This was developed incrementally, and now comprises 13 regions (although more are under discussion).[43]

The first regimes of particular note were established for the protection of the marine environments of the North Sea and Northeast Atlantic[44] and the Baltic Sea;[45] both in 1974. In 1976 the Convention for the Protection of the Mediterranean Sea Against Pollution[46] was finalized. This was different from the earlier regional conventions in that it contained the general obligation 'to take all appropriate measures'[47] to prevent and abate pollution caused by dumping,[48] ship-based pollution and pollution caused by land-based

sources.[49] Although this convention was built upon by subsequent (more specific) protocols,[50] the idea of a framework regional convention on oceanic pollution followed by specific protocols was copied by a number of subsequent regional treaties. The framework regional treaties which followed were conventions for Kuwait (1978);[51] the West and Central African region (1981);[52] the Southeast Pacific (1981);[53] the Red Sea and Gulf of Aden (1982);[54] the Wider Caribbean region (1983);[55] the Eastern African region (1985);[56] and the South Pacific region (1986).[57] In addition, in some places where there are no regional conventions, 'action plans' exist – such as for the East Asian Seas[58] and the Northwest Pacific.[59] In 1992, following the emphasis of Agenda 21, a number of reviews of the regional plans were undertaken, so as to ensure that the revitalized and expanded principles from the United Nations Conference on Environment and Development (UNCED) could be incorporated into the previous frameworks. Included within these 1992 revisions were the conventions for the Northeast Atlantic,[60] the Baltic[61] and a new convention for the Black Sea.[62]

All of these regional agreements are different, but common themes run through them all. Typically, these include the necessity for signatories to adopt 'best environmental practice' and 'best-available technology' options in trying to achieve their goals. The 1992 conventions add in the requirements of taking: 'all appropriate measures . . . to prevent and eliminate pollution in order to promote the ecological restoration'[63] of the covered oceans, as well as adopting the precautionary, polluter-pays and best-available technology principles.[64] Despite these general international and regional approaches, the protection of the ocean in an international sense cannot be found in any single codified document which addresses all problems. Rather, the protection of the marine environment, and the species therein, from pollution is found in a number of diverse areas and particular threats, which together appear to represent an overall umbrella; however, this umbrella has many holes in it.

5 NUCLEAR CONSIDERATIONS

Radiation is naturally present in the physical environment. However, since the advent of the nuclear age it has been supplemented by human utilization (both intentional and accidental) of nuclear materials. At high intensities, radiation can kill cells and lead directly to death. At low levels, it can interfere with a cell's DNA and lead to various forms of cancer.[65] The amount of damage caused to a living organism will depend upon the type and magnitude of radioactivity and level of dose received. Moreover, certain organisms (such as shellfish, cuttlefish and squid), and even certain organs within species, have a

greater predisposition towards absorbing and accumulating radioactive material. This becomes a heightened problem when the species which bioaccumulate such contaminants are in turn consumed by predators further up the food chain, such as cetaceans.[66]

The world's marine environment already contains multiple radionuclides. However, such material is not distributed evenly and amounts differ from one region to another. Differences are due to dynamic marine environmental processes and the particular source of radionuclides in a region. Even so, soluble radionuclides have been transported over long distances by prevailing ocean currents.

There is a relatively strong legal framework that covers the general goal 'to reduce and/or eliminate emissions and discharges of radioactive substances in order to prevent, reduce and eliminate pollution of the marine and coastal environment by human-enhanced levels of radioactive substances'.[67] Following from this goal, specific conventions on nuclear safety,[68] accidents,[69] assistance,[70] compensation and liability[71] and its oceanic transport[72] are relatively well addressed. However, even within this extensive regime gaps remain. For example, with the WSSD, the Plan of Implementation called upon governments:

> [To take] into account the very serious potential for environment and human health impacts of radioactive wastes, to make efforts to examine and further improve measures and internationally agreed regulations regarding safety, while stressing the importance of having effective liability mechanisms in place, relevant to international maritime transportation and other transboundary movement of radioactive material, radioactive waste and spent fuel, including, *inter alia*, arrangements for prior notification and consultations done in accordance with relevant international instruments.[73]

This recommendation makes the point that the sheer magnitude of risk that the nuclear industry can represent (from weapons to waste) should not lead to the assumption of either safety or a 'problem solved' situation. Indeed, as a result of nuclear tests, nuclear accidents and intentional disposal in the ocean, this threat to the world's oceans is far from removed.

Global fallout of artificial radionuclides (which affected both the terrestrial and marine environments) is known to be mainly due to the 2,410 nuclear tests – ranging from atmospheric[74] to underground locations – in typically isolated places close to coastal environments.[75] Cumulatively, these tests left a radioactive worldwide legacy[76] with some island test states, such as the Bikini Atoll of the Marshall Islands and Mururoa and Fangataufa in French Polynesia, retaining a radioactive legacy which may have vast implications for the surrounding coastal ecosystems.[77] The global impact of these tests has been supplemented by nuclear accidents. Such accidents have included submarines,

satellites,[78] and the disaster that befell the nuclear power plant at Chernobyl which had a direct impact upon the Baltic and the Black Sea.[79]

The final – and greater – threat to the oceans comes from the intentional disposal of nuclear waste into the oceans. The oceans were the original dump for nuclear waste before the 1958 Convention on the High Seas frowned upon the disposal of 'high grade' waste at sea.[80] This was supplemented by the Antarctic Treaty[81] and the oceanic regimes for the Mediterranean, the Baltic, the Northeast Atlantic and the South Pacific. Although these regional approaches are important, the primary convention dealing with this subject is the London Dumping Convention (LDC). From its inception the dumping of 'high-level' radioactive material was prohibited. However, the division between grades of radioactive waste meant that some states continued to wilfully dispose of 'low-level' radioactive waste (94,000 tons into the Atlantic between 1967 and 1982) into the marine environment. Even though this practice has stopped, due to the long life of radioactive material, distinct threats to the marine environment remain (and will remain for decades to come).[82] A *voluntary* moratorium on the dumping of all radioactive waste in the sea was agreed in 1983, pending a full scientific study of the implications of this type of dumping.[83] This moratorium, which was later supported by Agenda 21[84] and formally adopted by the LDC in 1993, was objected to by the United Kingdom, which refused to change its practices until 1997, when the evidence of radiation pollution in the local marine environment became insurmountable.[85]

Despite the acceptance by the UK of the general prohibition, other states (such as the Russian Federation) have maintained their objection to the prohibition on the dumping of low-level radioactive liquids. The problem that the Russian Federation presents is not merely contemporary. Since the collapse of the former Soviet Union it has become apparent that this regime was wilfully violating the LDC, the International Atomic Energy Agency (IAEA) guidelines and domestic law by disposing of all grades of nuclear waste into the oceans at a number of locations.[86] To date, these have included the newly discovered sites in the Kara, Barents and Far Eastern seas and the Northwest Pacific Ocean.[87]

6 POLLUTION FROM SHIPS

The threats from vessels to cetaceans are multiple. These range from unintentional ship strikes, which may threaten the very existence of some critically endangered species,[88] through to more insidious problems of pollution. The focus of this section is upon the latter, and the environmental problems that sea vessels may create.

Oil

In the short to medium term, large amounts of oil in restricted spaces may prove lethal to marine life.[89] This is considered such a risk that in 2002, the CMS passed a resolution, calling upon parties to implement a monitoring process to assess the cumulative environmental impacts of oil pollution on migratory species, and to develop guidelines for the treatment of oil-affected wildlife.[90]

Over 600,000 tons of oil enter the oceans each year as a result of normal shipping operations, accidents and illegal discharges. As of 2002, tanker and pipeline spills put 150,000 tons of oil into the ocean. A further 38,000 tons comes from oil-well leaks. However, 480,000 tons comes from run-off from land spills and emissions from small boats used for recreation.[91]

Only one-fifth of the oil that enters the oceans is from shipping accidents. The vast majority is from other sources. It is useful to note that the amount of oil entering the oceans from accidents is declining (roughly a quarter of what it was in the 1970s). Nevertheless, between 1993 and 2002, 470 accidents put an estimated 580,000 tons of oil into the ocean.[92] This improvement has been due to increasingly safe vessel designs; [93] enhanced international and regional co-operation[94] in dealing with oil accidents at sea; and strong supplementing international liability regimes.[95]

Apart from the intentional acts of environmental destruction in war involving the discharge of oil into the ocean,[96] the intentional discharge of oil into the oceans typically derives from the operations of oil tankers carrying out routine operations. The international community first began to address this problem in 1926 before agreeing to the International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL) in 1954.[97] OILPOL addresses the problem of the cling-age of oil or 'slops'. Its thrust was relatively simple: the signatories adopted standards of what slops (that is, in terms of oil concentration and overall amounts) could be dumped in 'prohibition zones' (typically set distances from coastlines or areas of special significance). To help achieve these goals, design and equipment standards for oil tankers (such as segregated ballast tanks, and improved ways of cling-age washing) were agreed upon and later enhanced in the 1960s, before being supplemented by the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL) in 1973[98] which has been regularly updated[99] and expanded to cover other coastal threats such as ballast water[100] and (to a limited degree) sewage from vessels.[101] MARPOL is viewed as one of the most successful international environmental treaties and has been credited with reducing pollution by ships worldwide by about 60 per cent.[102]

Garbage

In the early 1990s it was estimated that some 6.5 million tons of litter was finding its way into the sea.[103] In the past, much of it disintegrated quickly, but resistant substances have replaced many natural, more easily degradable materials. The key, and most problematic, replacement has been plastic, which makes up 50–80 per cent of the rubbish in some oceans.[104] This rubbish may have a direct impact upon marine life. For example, one survey discovered that 90 per cent of Hawaiian albatross chicks had plastic pellets (probably mistaken for food) in their digestive tracts. With regard to sea turtles, the problem is particularly pronounced with loggerheads and leatherbacks.[105] This is partly due to the fact that the loggerhead is almost entirely carnivorous, and the leatherback lives almost exclusively on jellyfish. The difficulty is that plastic litter often looks like jellyfish.[106] In one survey, 44 per cent of all leatherbacks examined had some form of plastic in their stomachs.[107] Likewise, cetaceans[108] and seals[109] are also known to have ingested plastic garbage. Because plastic cannot be digested, the results are often fatal.[110]

Litter enters the marine and coastal environment from multiple sources. In terms of oceanic sources, 150,000 tons of rubbish comes the fishing industry.[111] Merchant vessels were disposing of up to 639,000 plastic containers at sea each day in the early 1990s. On a cruise ship carrying 3,000 passengers and crew, more than seven tons of garbage may be generated on a daily basis.[112] The need to confront problems such as discarded fishing gear appeared in the mid-1980s with discussions over the conservation of fur seals.[113] By the mid-1990s, the necessity to confront the problem was being generally reiterated in international policy documents,[114] as well as specific conventions such as the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), which have banned certain fishing materials which would otherwise be disposed of in the ocean.[115] In addition, the problem of litter from vessels is primarily dealt with by the MARPOL agreement,[116] which provides a comprehensive regime for dealing with garbage at sea and in port on all ships over 400 tons. Notably, the disposal of plastic into the sea is prohibited.[117] This MARPOL annex has been explicitly followed in some fragile marine environments, such as around Antarctica.[118]

Akin to the controls of garbage and waste coming directly from ships are the controls against the deliberate dumping of rubbish (generated on land) into the seas. The practice of the dumping of plastics and other similar persistent-type wastes, such as netting and ropes, which may float or remain in suspension in the sea in such a manner as to interfere materially with fishing, navigation or other legitimate uses of the sea, was banned by the international community in 1972 with the LDC.[119] This approach has been mirrored with

the regional seas conventions covering the Northeast Atlantic, the Mediterranean, the South Pacific, the Baltic and the Black Sea.

7 DUMPING LAND GENERATED WASTE INTO THE OCEANS

As the above examples show, the dumping of waste generated on land, but disposed of in the oceans, is something which deserves attention. The disposal of such wastes (with the exception of high-level radioactive waste) into the high seas was a practice that was relatively unregulated until 1972. A strong example of this was the practice of the dumping at sea of unused chemical weapons. This alone involved over 100 incidents between 1945 and 1970,[120] and is a continuing problem in a number of oceans.

1972 London Dumping Convention

As the above example highlights, although national governments routinely dumped wastes into the oceans (the first *officially* designated dump sites were being listed at the end of the nineteenth century) the motivation to regulate the practice was slow in coming to both national and international law. It was not until the early 1970s, with support from international organizations such as the IWC[121] and international forums like the 1972 UNCHE in Stockholm, that a strong global regime was to emerge. The 'overall instrument'[122] that evolved from the conference is known as the London Dumping Convention (LDC).[123] The LDC called upon its signatories to 'take all practicable steps to prevent the pollution of the sea by the dumping of wastes'.[124] The LDC did not prohibit all dumping. Rather, the objective was to control it. The dumping of particular substances, such as high-level radioactive waste, was prohibited only if hazardous on grounds of toxicity, persistence, bioaccumulation and the likelihood of widespread environmental exposure. From such considerations, two annexes were drawn up, and added to over the years. Annex I contains substances whose dumping was absolutely prohibited.

The LDC has a very successful record in terms of reducing the wastes dumped into the oceans, and is considered part of customary international law. Although regional agreements are encouraged under the LDC, and a number of regions have their own specific ocean dumping regimes (such as those covering parts of the Atlantic with the conventions from Oslo in 1972, the Baltic in 1974, the Mediterranean in 1976, and the South Pacific in 1986), the LDC represents an overall global minimum on ocean dumping. Moreover, although the LDC is already a 'strong' convention, it is possible that this will be strengthened to an even greater degree if the proposed 1996 London

Dumping Convention (LDC96) Protocol[125] enters into force. The LDC96 is stronger as it is based upon the precautionary principle, and an overall objective to 'prevent, reduce and where practicable eliminate pollution caused by dumping or incineration at sea'.[126] Thus the earlier presumption of LDC that it was permissible to dump waste unless proven harmful, has now been eclipsed.

Limited Success in Confronting Heavy Metal Pollution of the Oceans

Together, the LDC and the LDC96 represent a strong example of the success of the international community in addressing the various threats that such ocean dumping of waste generated on land. One of the strongest examples of this success is how the global community has come to terms with the ocean dumping of heavy metals. These are metals that are stable and have a certain density above a set percentage. They are natural constituents of the Earth's crust, and are essential to multiple life processes. Many heavy metals such as nickel, mercury, zinc, lead, arsenic, copper and chromium end up as an unintended byproduct with negative environmental effects.[127] Such altered metals are stable and persistent environmental contaminants which are difficult to destroy. Therefore, they tend to accumulate in the soils and sediments. The main anthropogenic sources of heavy metals are various industrial point sources, including present and former mining activities, foundries and smelters, and diffuse sources such as piping, constituents of products, combustion byproducts, traffic and so on. Relatively volatile heavy metals and those that become attached to airborne particles can be widely dispersed on a very large scale. Thus, by addressing any one problem – such as leaded petrol – lower levels of heavy metals (lead) in ocean surface waters will typically follow. Heavy metals are also conveyed in aqueous and sedimentary transport (for example, river run-off) with the result that they enter the normal coastal biogeochemical cycle and are largely retained within near shore and shelf regions. If the concentration of some metals continues unabated, they may become toxic and cause problems – from various forms of cancer through to immune system deficiencies. The detrimental effects that heavy metals can have on nature has been documented since 1958 when mercury poisoning of birds that were eating seeds dressed with a mercury-based compound became evident. Similar incidents followed in the coming decade, with human poisonings following the consumption of marine food, detrimentally contaminated with heavy metals. The worst example of this was with the methyl mercury which was generated from an inorganic mercury catalyst used in the manufacture of acetaldehyde and discharged into the sea off Japan and ingested by fish and shellfish. Over 1,500 people consuming the seafood were poisoned (with Minamata disease), and 200 died.[128]

Despite such clear evidence concerning the problems of heavy metals, both their discharge and their impacts continue. Some of the discharges of heavy-metal contaminated products are deliberate. Others are accidental (but equally deadly). Many of the discharges are the result of unintended processes (such as lead from leaded gasoline). Whatever the source of the heavy metals, their accumulation in various environments has grown to disturbing levels. This becomes particularly problematic when people consume species with an already unacceptable level of heavy metals. This has already become a problem with the heavy metals of cadmium, mercury and selenium in certain Arctic regions,[129] and in samples taken from domestically consumed cetacean products in Japan.[130] With such considerations in mind, the local inhabitants in some regions have been advised to restrict their intake of certain infected species. This has occurred in relation to fish consumption around the Baltic[131] and the Great Lakes.[132] With the Faroe Islands, the specific problem of detrimental concentrations of mercury found in pilot whales[133] has led to the Faroese health authorities issuing guidelines (in 1998) to reduce pilot whalemeat and blubber consumption, and end the consumption of whale liver or kidneys.[134]

As the above example demonstrates, cetaceans are particularly adept at absorbing heavy metals.[135] This specific problem has been evident since the late 1970s, when Japanese studies of heavy metal contaminants in small and toothed (*Odontocete*) marine mammals became evident,[136] and were reported to the IWC.[137] In 1981, the IWC acknowledged the serious threat that increasing levels of heavy metals in the aqueous environment represented to whale stocks.[138] In the following twenty years, mercury contamination has also been located in the livers of baleen whales,[139] and in 2000 the IWC passed a resolution expressly recognizing the problem of heavy metals.[140]

Although there is no overall international control on pollution by heavy metals, and only rudimentary regional controls of this problem as a land-based source of pollution, with regard to oceanic dumping the situation is somewhat different. The focus upon and control of the problem of oceanic pollution by heavy metals began in 1972 when the Stockholm Convention called upon the conference members to control 'discharge of . . . heavy metal . . . wastes [which] may affect even high sea resources'.[141] This objective was realized in the LDC, which banned the dumping of Annex I waste that includes mercury and cadmium. Annex II, which only allows dumping with 'special care', covered the other notable heavy metals (copper, lead, vanadium, zinc, beryllium, chromium and nickel). The LDC96 has all industrial waste (which would encompass all heavy metals except those of an inert nature) in Annex I. Once the LDC96 becomes customary international law, the supplementing regional seas conventions (covering the South Pacific, the Baltic, the North Sea and the Mediterranean), which also deal with oceanic dumping of heavy metals like the LDC, will most probably adopt accordingly.

The problem of heavy metals as a *land-based source* of marine contamination is dealt with in a number of different ways which range from focusing on specific problems, through to more genetic approaches. For example, with the 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds,[142] the signatories agreed to 'endeavor to phase out the use of lead shot for hunting in wetlands by the year 2000'.[143] Elsewhere, more generic approaches by individual countries such as Denmark have attempted to phase out the use of all products containing heavy metals.[144] Such forthright approaches have not been matched in regional and international policies. This is despite a clear recognition by various international forums in the early 1920s that some heavy metals were problematic.[145] Despite this long history of concern, the first generation of regional sea approaches to regulating heavy metals was very generalized and although commonly acknowledging the problem, regimes (both international and regional) generally lack the specifics of how to respond to it beyond generalized promises to try to 'prevent, reduce, control and eliminate' such contaminants from entering into the oceans. Conversely, the second generation of regional sea conventions around Europe (for the Baltic, the Black Sea, and the Northeast Atlantic) have gone further than their predecessors by drawing up specific plans for the 'reduction and phasing out of substances which are persistent and liable to bio-accumulate arising from land based sources'.[146] Heavy metals fall within this rubric. Likewise, the 1978 Great Lakes Water Quality Agreement[147] contains specific thresholds that the water must not cross in terms of heavy metal contamination. Finally, the 1991 Protocol on Environmental Protection to the Antarctic Treaty stipulates that any wastes containing harmful levels of heavy metals that are generated within the treaty area, must be removed from the continent.[148]

8 POLLUTION OF THE OCEAN FROM LAND-BASED SOURCES

It is commonly accepted that the vast majority of oceanic pollution comes from land-based sources. The exact figure is probably somewhere between 70 and 80 per cent[149] in terms of total causation. Conversely, marine pollution, maritime transport and dumping at sea activities contribute about 10 per cent each. Sewage, industrial waste and agricultural run-off, and byproducts from air and atmospheric pollution are all part of this problem. The paradigm for the problem emerged in the late 1960s when it became apparent that the poison from the sea could actually be coming indirectly from the land, not from the oceans. As such, to solve problems like oceanic pollution, controls of the most important sources – such as land-based pollution – are needed.

The international focus upon the problem of land-based pollution of the

marine environment began with the 1972 Stockholm Action Plan, which called upon governments to 'strengthen national controls over land-based sources of marine pollution'.[150] However, this call was clearly addressing *national* controls over such activities, and not necessarily proposing co-ordinated international action. A similar, lukewarm recognition of the problem appeared with the UNCLOS.[151] Despite recognition of the problem of land-based pollution of the ocean, the mandate to 'endeavor' to create global instruments on this issue was hemmed in by the directive that any such attempt must '[take] into account characteristic regional features, including the economic capacity of developing States and their need for economic development'.[152] Together, the weak operative word 'endeavor' and the basis for negotiations (differentiated responsibility) represented a conclusion that was far from a direct call to action.

Against this background, in 1982, UNEP took the initiative to develop advice to governments on addressing impacts on the marine environment from land-based activities. This initiative resulted in the preparation of the 1985 Montreal Guidelines for the Protection of the Marine Environment Against Pollution from Land Based Sources.[153] These guidelines were particularly soft in that they gave guidance only on control strategies. States were to be individually responsible for the negotiation or adoption of detailed standards. By the early 1990s, as the limitations were becoming obvious, a number of international calls for a strong and dedicated instrument were made in Agenda 21.[154] UNEP was directed to help prepare a convention on the protection of marine areas from land-based pollution. However, progress was limited, as international preference opted, once more, for a soft, recommendatory (non-legal) type of instrument with broad objectives, primarily under the auspices of national and regional considerations (as opposed to international ones) which eventually came out as the 1995 Global Programme of Action for the Protection of the Marine Environment from Land Based Activities (GPA).[155] This was revisited in 2001[156] and, with a view to improvement in 2006, was supported by the WSSD.[157] A variation on the soft approach was the 1999 Agreement Concerning the Creation of a Marine Mammal Sanctuary in the Mediterranean by which the signatories (France, Italy and Monaco) promised to 'intensify the fight against any form of pollution, whether of maritime or land-based origin having or likely to have a direct or indirect impact on the conservation status of marine mammals'.[158]

This soft approach (in 1995 and 2001) was because states were generally unwilling to adopt a stronger text during the UNCLOS negotiations. They wished to preserve for themselves as much freedom of action as possible in balancing environmental protection measures against the needs of their own economic interests, from where most of the land-based pollution was generated behind sovereign boundaries.[159] Due to the failure of an overarching, meaningful

agreement on this, it is necessary to examine the situation on a problem-by-problem basis. Four strong examples of this can be seen with the problems of coastal habitat destruction, disposing of sewage into the ocean, not controlling excessive nutrients entering into coastal environments, and the difficulty of land-based rubbish entering into the water. In these problems, the base consideration is the same: they are seen as difficulties that should primarily be resolved within sovereign boundaries, and international standards have little applicability. This is regrettable, as although the origins of the land-based pollution may be clearly sovereign concerns, the implications of such contamination of the oceans ultimately fall upon the international community and those seeking to manage international resources such as whales.

Coastal Zones and Habitat Destruction

Coastal zones are valuable in every sense of the word. These are the areas where the upwelling systems collide as the cold, nutrient-rich deep water currents run up against continental margins. They are hotbeds for marine biodiversity, filters for marine pollution and epicentres for social and economic wealth. They are also under threat. Currently, two-thirds of the world's largest cities are coastal. More than 2 billion people live within 100 kilometres of a coastline.[160] The global impact of this problem is such that 34 per cent of the world's coastal zones are deemed to be at high risk and a further 17 per cent are believed to be at moderate risk. This can be expected to worsen as the human population doubles within the next 30 years.

Two examples are particularly strong exemplars of this 'development' and its implications on coastal environments. First, mangroves around the world are regressing at an alarming rate – these shrubs and trees of the inter- and super-tidal zones shelter many bird and mammal species, offering nursery and breeding grounds for freshwater and marine life. Despite their importance, the harvesting and destruction of mangroves worldwide is estimated at 1 million hectares per year.[161] The second example involves coral reefs. These vital ecosystems play a critical role in fostering the productivity of many oceans.[162] Despite their overt importance, the world coral reefs are under assault from dozens of anthropogenic influences (from bad fishing practices to global warming).[163] The cumulative result of these impacts is that globally, 58 per cent of the world's reefs are at medium risk from human activities and 27 per cent are deemed to be at 'high or very high risk'. In some regions, such as Southeast Asia, the percentage of reefs at moderate risk is over 80 per cent, including 55 per cent at high risk.[164]

The threats that such coastal destruction represent to species which reside in or visit such places may be massive. With regard to cetaceans, it has been proposed since the 32nd meeting of the IWC in 1980, that: 'necessary

measures be taken to preserve the habitat of whales . . . [as] . . . the survival and health of whale populations is dependent upon [the] maintenance of a health[y] marine and coastal environment'.[165]

In the mid-1990s, the problem of habitat destruction became a particularly focused issue within the IWC as it became apparent that a number of the most threatened species[166] were being directly challenged by the destruction of their coastal ecosystems.[167] The first instance of this involved the Mexican proposal to expand a commercial salt operation in the El Vizcaino Biosphere Reserve in Baja California.[168] This became a direct concern for the IWC[169] because the proposal would have involved the destruction of the habitat supporting one of the three main breeding grounds of the North Pacific gray whale. A second instance involved the introduction by the Mexican government of a 1996 management plan for the Biosphere Reserve of the Upper Gulf of California and the Colorado River Delta. With this decision, the IWC, while being '[fully] conscious of the sovereign rights of Mexico within its coastal waters . . . congratulated . . . commend[ed] and . . . compliment[ed] . . . Mexico' on its decision to set up the biosphere reserve, and effectively protect the cetacean within its habitat (which was being threatened by other unsustainable practices within that area – such as driftnetting and incidental catch).[170] A similar commendation was forwarded to China two years later for its efforts to protect the Baiji, which is critically threatened by incidental catch, pollution and habitat destruction.[171] Habitat destruction has also been identified as a threat for the Indus susu,[172] southern resident killer whales[173] and some stocks of bowhead whales.[174] Due to such concerns, in 2000 the SC issued a series of general recommendations on freshwater cetaceans,[175] which led to the creation of a workshop on habitat destruction, and the recognition in a resolution that 'habitat degradation and alteration is the primary threat to the survival of freshwater cetaceans'.[176] In 2002, the Russian search and exploitation of oil reserves within its exclusive economic zone (EEZ) was believed to threaten the highly endangered Western Pacific grey whales. This matter became such a source of concern that in 2004, a dedicated resolution was adopted by consensus that noted the 'absolute urgency' that measures are taken to protect the stocks of whales and their habitat off Sakhalin Island.[177]

Such issues as those relating to habitat interference for cetaceans were generically dealt with in the IWC in 2001 with the Resolution on the Importance of Habitat Protection and Integrated Coastal Zone Management (ICZM).[178] ICZM is an idea which is directly linked to controlling the habitat destruction of coastal environs. This recognition has also been mirrored in a larger sense with regard to law relating to the oceans since the early 1990s – when the threat of climatic change, rising seas, overfishing and so on, drew the attention of the international community to the importance of protecting ocean and coastal habitats.[179] The general goal became clearly articulated in the GPA

objective, which is to '[s]afeguard the ecosystem function, maintain the integrity and biological diversity of habitats which are of major socio-economic and ecological interest through integrated management of coastal States'.[180]

With such considerations in mind, attempts to achieve ICZM management schemes have been made by regional seas organizations covering the Black Sea, the Mediterranean, the wider Caribbean and the South Pacific. With regard to specifics, the regional examples of directives seeking the protection of habitats of marine life can be seen in 1990 with the Agreement on the Conservation of Seals in the Wadden Sea,[181] the 1996 ACCOBAMS agreement,[182] and the 1999 Agreement Concerning the Creation of a Marine Mammal Sanctuary in the Mediterranean.[183] In a similar fashion, the turtle agreements which cover sections of the Americas,[184] the Atlantic Coast of Africa,[185] the Mediterranean,[186] Southeast Asia[187] and the Caribbean Coast of Costa Rica, Nicaragua and Panama[188] also all have extensive provisions for the protection of critical habitats (typically nesting beaches) for marine turtles.

Coastal habitat protection has also been advocated within the Convention on Wetlands (RAMSAR).[189] Its 2002 resolution on ICZM[190] largely mirrored the work being undertaken in the Convention on Biological Diversity (CBD).[191] It is with this latter forum that the most constructive progress on ICZM has been made. This has been evinced in the 1995 (Jakarta) Mandate[192] which later received support at the 2002 WSSD.[193] The Jakarta Mandate stipulated that ICZM is the most effective way to implement the CBD with respect to the conservation and sustainable use of marine biodiversity. Despite the clear acceptance of this broad goal by both the CBD and the international community, the distinct position of sovereign limitation was clearly noted in the annex to the original Jakarta Mandate. That is, the obligations are only to be considered, within a sovereign context, 'where appropriate and practical'.[194] As such, ICZM is not something with ultimate recourse to the international community. The same prognosis exists with high-profile coastal destruction focuses such as coral reefs. Thus, although some are world heritage sites,[195] and a number of international 'initiatives' have been created,[196] the strongest action has been the (Non Binding) Call to Action and a (Non Binding) Global Framework for Action,[197] which was subsequently endorsed at the WSSD.[198]

The difficulty here lies in the fact that all of these mechanisms, while recognizing the problem, clearly place the responsibility of solving it at the feet of sovereign governments. This, of course, is in complete accordance with international law generally, and international environmental law in particular. Indeed, as the first part of Article 193 of the UNCLOS makes clear: 'States have the sovereign right to exploit their natural resources pursuant to their environmental policies'. This is problematic given that sovereign concerns,

often myopically focused, place environmental concerns for coastal protection as clearly secondary considerations. As such, a clear tension exists with the second part of Article 193, which places the limit on the sovereign right to be carried out also 'in accordance with their duty to protect and preserve the marine environment'. The limits of this approach are clearly evident in the following examples of litter, nutrients and sewage.

It is estimated that 80 per cent of persistent wastes found in the ocean or the coastal environment originate from land.[199] Despite land-based sources being the primary source of causation for this problem, there is only one (regionalized) international law (for Antarctica) which confronts this problem by mandating that all waste must be carefully controlled (and largely removed from the Continent).[200] Outside of the Antarctic regime few organizations have directed mandates on the control of the *unintentional* disposal (in terms of being unapproved by the state) of litter, although a few regions have clear restrictions on the *intentional* disposal of municipal garbage into the ocean.[201] As such, control of litter falls within the general hopes of better waste control mechanisms, recycling and institutional prohibitions against such practices. It is fundamentally a problem dealt with by individual countries – not the international community. At best, the hope as manifested in Agenda 21 is for the adequate and complete waste disposal services for *all* urban communities by 2025.[202] This goal was slightly enlarged by the GPA, which hoped that its signatories would come to establish controlled and environmentally sound facilities for receiving, collecting, handling and disposing of litter from coastal areas.[203]

To be fertile, is to be fruitful, or to produce an abundance. To fertilize something, is to make the thing, such as soil or animals, fertile. In terms of agriculture, the primary fertilizers are nitrogen and phosphate. On a global basis, the use of nitrogen for agriculture grew more than fivefold from 1960, to more than 210 million metric tons per year by 2000. Too much nitrogen and phosphorous can overwhelm the natural nitrogen cycle and overflow into the waterways. Once there, excess nitrogen when combined with phosphorous, and when combined with additional factors like warmer water and unique species (sometimes via bioinvasions) can help stimulate the growth of algae and other aquatic plants. As such, the algae 'blooms' may appear. To this point, the process may be regarded as 'eutrophic', which literally means 'nourishing well'. However, when the process begins to turn bad, it becomes a problem of eutrophication, which in terms of current usage means that the aquatic environment (which is rich in phosphates, nitrates and other nutrients that promote the growth of algae) suddenly de-oxygenates the water by the mass subsequent decomposition of the organic matter. In the process of de-oxygenization, the ecosystem (which may cover thousands of kilometres) suddenly changes and may have overtly detrimental effects on certain species – including whales[204]

– which inhabit the ecosystem or the humans who feed from them.[205] This has been a particular problem with restricted flow seas such as the Baltic, the Black Sea and the Mediterranean.[206]

Although attempts to control the discharge of effluents from agriculture (in such quantities as were liable to be injurious to fishing) date back to 1880,[207] the modern recognition of the problem of eutrophication did not become recognized until the early 1990s when agricultural run-off and sewage were deemed the most urgent problems in terms of overall oceanic pollution.[208] By 2000, UNEP was arguing that nitrogen pollution was one of the major forthcoming challenges in the new century.[209] Despite this recognition, only soft goals and targets to confront this problem have been advocated in the international context in Agenda 21[210] and the GPA.[211] However, in some regional situations where the problem is particularly pronounced, such as with the Great Lakes,[212] the Baltic[213] the Black Sea[214] and the Northeast Atlantic[215] nutrient load targets have been set, although in most of these seas the results have been questionable.

The final problematic area in which the state has a largely unfettered discretion to protect its coastal environment is with sewage. Sewage is everything that goes down the drain, sink and toilet. Broadly, there is industrial and municipal sewage. The focus here is upon municipal, as it is typically this category that ends up in the oceans, and it is deemed to be one of the most urgent oceanic problems[216] which presents overt threats to both humans and other species which utilize the oceans, including whales.[217] Although it can come to represent an overt threat, apart from the Antarctic regime (which has a detailed regime for sewage treatment before release into the ocean)[218] the international response has been with weak goals within Agenda 21,[219] (50 per cent of all sewage from industrialized countries going into the oceans should be treated by 2005) and the GPA (disposal of all sewage by 2025 should be in accordance with national or international standards).[220]

On a regional level, early attempts to control the 'discharge of noxious sewage' into commonly shared waters date back to 1925.[221] Despite this early start, and the fact that a number of regional conventions recognize that sewage must be adequately treated before being discharged into the oceans,[222] there is far from a consistent approach on this matter. The lack of hard standards is because the treatment of raw sewage is a matter of sovereign choice and responsibility. As a result, although the WHO provides recommended values for sanitation, countries do not always meet these standards. This problem is often particularly acute in poorer countries,[223] although it is by no means restricted to them. For example, around the coastline of the United Kingdom it is estimated that about 300 million gallons of raw or partly treated sewage are discharged into the ocean every day.[224]

Even if sewage is treated by a primary method and the solids are removed

(and the remaining liquid can go on to further treatment) the solid component – the sludge – still has to be dealt with. The dumping of sewage sludge into the oceans is one particular problem that the international community has steered clear away from. Although there is, as Agenda 21 suggested, 'scope for improvement in this area'[225] only with the Northeast Atlantic is there a presumption that this practice will be stopped.[226] Elsewhere, no such presumption exists (unless the sludge contains prohibited elements). This presumption is also mirrored in the international standards set by the LDC, whereby the dumping of sewage sludge is prima facie acceptable.[227] This approach is problematic, for it means that the ocean can still be used as a dump for the 16 million tons of sewage sludge that the Philippines, the Republic of Korea and Japan continue to dump each year.[228]

9 POLLUTION OF THE OCEAN FROM LAND-BASED SOURCES: INTERNATIONAL RESPONSES VIA INTERSECTING CONCERNS

In contrast to the above section, whereby the threats to oceans from land-based sources are dealt with via primarily sovereign or regional responses, the final section of this chapter focuses upon land-based pollution of the marine environment which is being dealt with via primarily international responses. However, it is important to realize that these international responses are only incidentally focused on the protection of the ocean. Moreover, the international approaches to rivers, POPs, climate change and ozone depletion have met with limited success.

Rivers

An estimated 44 per cent of the total marine pollution (about 59 per cent of all land-based marine pollution) flows down rivers into tidal estuaries, where it bleeds out to sea. Rivers, which are often polluted by every country that they pass through, eventually carry out to the oceans everything dumped into them. For example, the Danube, which flows into the Black Sea, each year deposits 60 tons of mercury, 240 tons of cadmium, 4,000 tons of lead, 900 tons of chrome, 50,000 tons of oil, 60,000 tons of phosphorous and 340,000 tons of nitrogen.[229] In other places, the rivers which eventually lead to the sea are so badly polluted that they fail to meet water standards for agriculture, industry or fishery uses, let alone human consumption. This is a particular problem in regions such as China and the former Soviet Union.[230] It was due to this type of problem that Article 23 of the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses[231]

stipulated that watercourse states shall individually and co-operatively 'take all measures with respect to an international watercourse that are necessary to protect and preserve the marine environment'. Despite this laudatory goal, the success of the objective has been torn between multiple other debates over the equitable utilization of freshwater courses, of which conservation is just one aspect.[232] The obligation remains a general one to take all appropriate measures to prevent the causing of significant harm to other watercourse states.[233]

These general principles not to pollute rivers with international dimensions are mirrored in a number of regional agreements on river co-operation.[234] Despite the growth in these new agreements, very few of them contain any specifications on the amounts of pollutants that may enter into the rivers, let alone eventually flow out into the oceans. The exceptions to this general trend are those within Europe,[235] with specific prohibitions that are enforced being contained within individual treaties for the Danube,[236] the Oder[237] and the Rhine.[238] Likewise, the waterways shared by the United States and Canada are dealt with on the principle that the parties will work towards the elimination within the waterways of the certain listed critical pollutants.[239]

Persistent Organic Pollutants (POPs)

POPs may enter the marine environment through either direct dumping into the oceans or inadvertent release from land-based pollution. With regard to dumping, the regional conventions, like the LDC[240] all contain prohibitions against the dumping of wastes which are toxic, persistent or bioaccumulate.[241] Carcinogenic, teratogenic or mutagenic are other considerations also often taken into account.[242] With such considerations in mind, the dumping of organo-halogen and organo-silicon was prohibited in all three regional dumping conventions.[243] Organo-phosphorous (in the Mediterranean and South Pacific) and organo tin (in the Mediterranean) are also prohibited. For these conventions, any pesticides not listed on Annex I were automatically placed on Annex II. In regard to the problem of POPs as land-based sources of pollution, some regional treaties (such as the 1983 Quito Protocol for the Protection of the South East Pacific Against Pollution from Land-Based Sources)[244] have begun to take soft considerations of such concerns whereby the signatories have promised to endeavour to prevent, reduce and eliminate such POPs. At least five other regional conventions, dealing with the Northeast Atlantic,[245] the Baltic,[246] the Black Sea[247] the Mediterranean[248] and the boundary waters between Canada and the United States,[249] have all taken a more forthright approach and have called for direct restrictions on the amounts of POPs entering the oceans.

Although these initiatives are to be applauded, the real progress in this area

has been through the conventions dedicated to removing POPs altogether, and not just in regard to their impact on the marine environment. The necessity to phase out POPs within a meaningful international treaty took over thirty years to evolve.[250] This was despite the objective receiving mention (among other concerns) in UNCLOS,[251] Agenda 21,[252] RAMSAR,[253] CMS regional agreements, such as the European Agreement on Bats,[254] and the GPA.[255]

After years of indirectly addressing the problems of POPs in inter-related forums, success finally became apparent at the international level with the specific case of tributyl tin (TBT), and the Stockholm POPs convention. TBT is the organic form of tin which is used in most of the world's marine paints and has been linked to dead cetaceans.[256] Due to its overt toxicity[257] and given that alternatives exist (which unfortunately also present problems),[258] TBT has been the subject of limited controls (that is, it cannot be used on boats less than a certain size) in certain countries since the 1980s. By 1990, the International Maritime Organization (IMO) was considering the issue, and what began as recommendations against its use in the 1990s[259] ended up as directives in the new century, by which its usage should have ended by 2003.[260] The support for this IMO initiative to end the use of such anti-fouling paints was reflected at the WSSD.[261]

The success in controlling TBT has been mirrored in more generic POP conventions. This began with the 1998 (European) Aarhus Protocol (which bans eight POPs and tightly restricts four others).[262] This was followed with the truly international 2001 Stockholm Convention on Persistent Organic Pollutants.[263] Although this should be strongly welcomed, the convention remains limited by the fact that of the so-called 'dirty dozen' POPs, only three will be totally eliminated. A further five will be eliminated, subject to country-specific exemptions. Questions over existing POPs in use, exemptions for developing countries, and financial assistance for developing countries, may also limit the effectiveness of this convention.[264]

When the POP process is viewed from the perspective of the IWC, the limits of the organization in the face of this manifest threat become apparent. That is, although the pollution of cetaceans by POPs has been a specific concern since 1981, where the 'serious threat to whale stocks' caused by increasing levels of PCBs and other organo-chlorines detected in cetaceans was noted,[265] there was ultimately very little it could do about the problem. As such, the IWC's response has been both to study the problem (as noted above) and to encourage the international community to successfully address this problem.[266] Accordingly, from the mid-1990s, the IWC has called upon all its contracting governments to individually control their POPs which end up in the marine environment,[267] and collectively, it has supported the ideal of as many countries as possible joining the Stockholm POPs convention as there is a 'mutual interest in supporting the ratification of the Protocol'. Accordingly,

the IWC called upon all of its members to sign and ratify this protocol 'as soon as possible'.[268] This was reiterated in 2001.[269]

Climatic Change

The third report by the Intergovernmental Panel on Climate Change (IPCC) in 2001[270] confirmed its earlier reports with the suggestion that not only is climatic change under way, but that its implications may be massive. Specifically, the IPCC suggested that the average temperature increases may be as high as 5.8 degrees centigrade.[271] Accompanying the temperature increases will be rises in sea levels of between 0.09 to 0.88 metres between 1990 and 2100. Apart from the overt effects that this will have on human populations are the impacts upon ecosystems in general, and for the purpose of this chapter, oceans in particular.[272]

The oceans, which sequest and store large amounts of carbon land-based reserves and retain heat storage (and control thermal inertia), are described as the flywheel of the climate system because of these capacities of which incidents like the El Niño phenomenon are prominent manifestations.[273] Although the biological consequences of a changing climate upon the ocean are far from being fully understood, it is believed that the change will bring detrimental results by raising the temperature of the oceans and increasing sea levels. This will probably change migratory patterns for ocean species,[274] facilitate habitat destruction (especially in critical areas for whales like around the North and South Poles)[275] and may lead to drastic changes in ocean circulation, vertical mixing and overall climatic stability.[276] Such effects could have strong implications in terms of nutrient availability, biological productivity, and the structure and functions of marine ecosystems, from the bottom to the top of the food chain for the ecosystems most critically effected.[277]

When combined with other factors, such as an already unfavourable conservation status, climate change may be one of the final factors leading to ultimate declines for many species. This problem has already been linked to concerns with the decline of some oceanic species,[278] and whales in particular. The impact on whales will probably come from changing food sources, changed migration patterns and habitat destruction. Upon the species which are already endangered, the effects may be final.[279] This conclusion was reached within the IWC in 1995[280] and 1996.[281] While research on this problem is ongoing, the primary (and only) response of the IWC,[282] as with the POP problem, has been to urge its member governments to join international efforts to reduce greenhouse gas emissions.[283]

Although this 'urging' is probably the only option available to the IWC, it is reflective of the unfortunate situation of the international community not adequately confronting the problem of climatic change. In a nutshell, the IPCC

have been informing the international community since 1992 that at least a 60 per cent reduction in carbon dioxide emissions (the main greenhouse gas) is required just to stabilize its build-up in the atmosphere. However, the immediate response of the international community to this target, as formulated in the Kyoto Protocol[284] is a 5 per cent reduction by the industrialized countries of what their greenhouse gas emissions were in 1990.[285] Unfortunately, this small target, which applies only to most of the industrialized world (the US and Australia have refused to ratify the Protocol), although laudable, is largely inadequate in terms of the scale of greenhouse gas reductions that are required to meaningfully confront the problem.

The Ozone Layer

All life on Earth depends on the ozone layer. It is this thin layer of gas found largely in the upper atmosphere that protects the planet from the devastating consequences of ultra-violet radiation. However, anthropogenic activities have caused the ozone layer, at both the North and South Poles, to be considerably thinned.[286] This thinning has resulted in many detrimental effects on both the species and ecosystems below it. With regard to the effects on aquatic ecosystems, evidence suggests that phytoplankton – a crucial part of ocean and freshwater ecosystems – will have their growth and reproduction detrimentally affected. Phytoplankton ecosytems in polar areas are a particular concern. Although long-term effects are uncertain, short-term effects show that a 4–23 per cent reduction in productivity was measured under the ozone hole.[287] In addition, increased intensity of UV-B radiation (ultraviolet radiation of wavelength 280–320 m) also damages the larval development of some crabs, shrimp and fish. In turn, this may add an extra detrimental impact on the world's fish stocks.[288]

These indirect links of a disrupted food chain for cetaceans[289] are supplemented by a final direct link to ozone damage, which suggests that some cetacean species with low skin pigmentation living in areas subject to ozone depletion may be particularly at risk. Increased exposure to UV-B may have short-term effects upon cetaceans by impacting vision, immune response, reproductive success and disease occurrence.[290] The long-term effects of increased UV-B are unknown.

The IWC's response to this problem has been akin to that of the problem of climatic change – to urge its signatories to abide by the relevant international conventions. However, unlike the area of climate change, the problem of ozone depletion has been dealt with much more successfully by the international community – with the Vienna Convention for the Preservation of the Ozone Layer, the following Montreal Protocol and five further amendments to the protocol.[291] With this regime it can be suggested that impressive achievements

have been made, and although a number of areas still require attention, overall, the international community has a clear success story in the protection of the ozone layer and towards the end of the twenty-first century, the ozone layer should have repaired itself.

10 CONCLUSION

Historically, the greatest threat to cetaceans was overharvesting. In the future they will face additional threats via anthropogenic environmental change. The IWC has been aware of this risk since the mid-1970s, although the recognized types of risk have expanded each decade. These threats will be less visible than traditional ones, but ultimately, they may be just as deadly as the oceans become increasingly at risk and the international community struggles to come to terms with these risks in a multitude of other indirectly related forums. As such, two questions are manifest. First, what are the threats to the oceans and the species within them, and, second, how well does the international community currently protect the oceans?

Although there is a general obligation in international law not to pollute the oceans, there is no single codified document specifying exactly how to do this. Rather, each pollution source is the subject of a different regime. Some of these are successful, and some are not. For example, with regard to the threat of nuclear pollution, nuclear accidents, nuclear tests and the dumping of nuclear waste (both openly and secretly) into the oceans have already left a discernible impact, which although being confronted by the international community, appears to be an emerging threat (due more to past incidents than future ones). Conversely, the threat of pollution from ships, in terms of oil (both accidental and deliberate discharges) and litter appears to be making clear progress in standards. Likewise, the disposal of most forms of waste into the oceans in general via the London Dumping Convention, is clearly an improving situation, although loopholes exist through which a number of other forms of supposedly non-toxic materials will continue to be dumped.

These successes are being offset by the failure of the international community to come to terms with the threat of land-based pollution of the marine environment, which has been deemed to fall under sovereign control. Only the softest of targets are considered by the international community, and problems such as the destruction of coastal habitats, litter from land-based sources, sewage and nutrient overloads represent increasing problems, to which there is limited international response, despite clear regional and international impacts. Conversely, the international community has taken a direct interest in the areas of climate change, ozone depletion, river pollution and POPs.

Although the international response to ozone depletion has been successful, and the POPs convention shows promise, the international community is clearly failing with regard to dealing adequately with climatic change, and its response to rivers suffers from a lack of specific commitments at both the general and specific levels.

In sum, the world's oceans are under threat from multiple sources of pollution, some of which are being adequately addressed, and some are not. The implications for the oceans and the whales that inhabit them can only be guessed at. The implications for the IWC, however, are much clearer in that the IWC must increasingly be active in related forums (as it has begun to be) as the ultimate conservation of cetaceans may be decided elsewhere, not within traditional whaling debates.

NOTES

1. See United States of America. *Global Environmental Change: Understanding Threats to Cetaceans*. IWC 51/25. Agenda Item 15.2. P. 1. IWC. 50th Meeting in 1998. (1999). 30, IWC. 51st Meeting in 1999. (2000). 29. Motluk, A. (1995). 'Deadlier than the Harpoon?' *New Scientist*. July 1: 12.
2. Accordingly, it asked the Commission to express its concern to member states and to urge their adherence to the International Convention on Ocean Dumping. IWC 25th Report. (1976). 27. Paragraph 10. Noted in Birnie, P. (1985). *The International Regulation of Whaling* (Oceana, New York). Volume 1: 437. Note, this issue became sharply focused in the late 1980s. See Holderness, M. (1987). 'Dolphin Deaths Raise Pollution Worries.' *New Scientist*. September 3: 22. Anon (1988). 'The Chain of Death Spreads.' *New Scientist*. January 28: 30. Pearce, F. (1988). 'Seal Virus Spreads to Porpoises.' *New Scientist*. November 5: 21. Anon (1990). 'What Is Killing the Mediterranean's Dolphins?' *New Scientist*. September 15: 7.Webb, J. (1991). 'Dolphin Epidemic Spreads to Greece.' *New Scientist*. September 7: 18.
3. Appendix 10: 'Resolution on Preservation of the Habitat of Whales and the Marine Environment'. IWC. 31st Report. (1981): 32.
4. In 1985, at the 37th meeting, the SC noted the need for studies to assess the effects of marine pollutants on cetaceans. IWC. 37th Report. (1988). 52.
5. CMS/Com.I/7/Rev.1. 8.
6. Ibid. 9. The proposed agreement was to cover the environmental threats posed to the cetaceans in this ocean, from such major threats as: 'chemicals (PCBs, DDT, Dieldrin, and other organochlorides etc.)'.
7. UNEP/CMS.Conf.2.16, Resolution 2.3: 21.
8. Appendix 13: 'Resolution on the Preservation of the Marine Environment.' IWC. 44th Report. (1993). 36.
9. Appendix 2: 'Resolution on the Need for Research on the Environment and Whale Stocks in the Antarctic Region.' IWC. 43rd Report. (1993). 37. Appendix 12: 'Resolution on Research on the Environment and Whale Stocks.' IWC. 44th Report. (1994). 35.
10. See Appendix 6: IWC Resolution 1998–5. 'Resolution on Environmental Changes and Cetaceans. IWC.' 50th Meeting in 1998. (1999). 43.
11. ASCOBANS. Action Plan. Part 1(a). Also, ASCOBANS. MOP 2 (1997). 'Resolution on Management and Further Research to Address Effects of Pollutants on Cetacean Health.'
12. ACCOBAMS. Conservation Plan. 1.d & 2.
13. See IWC. 45th Report. (1995). 31. Appendix 14: IWC Resolution 1994–13. 'Resolution on Research on the Environment and Whale Stocks.'

14. It was not until 2004 that a mini symposium was held on the problem of noise pollution. The committee agreed that there is compelling evidence implicating military sonar as a direct impact on beaked whales in particular. It also endorsed a full review of typical and atypical strandings that could have an overlap with noise pollution. Finally, it strongly recommended that certain key habitats should have protections against certain forms of noise pollution. A dedicated workshop on the overall topic was scheduled for 2006. Scientific Committee Report. IWC/56/Rep 1. 42–5. For earlier discussions of this topic, see IWC. 54th Meeting in 2002. (2003): 9. Anon (2004). 'Boats Drown Out Orcas' Cries.' *New Scientist*. May 1: 19. Edwards, R. (2003). 'Sonar Kills Whales.' *New Scientist*. October 11: 10. Anon (2003). 'Sonar.' *Scientific American*. December 21. Jones, N. (2003). 'Is Undersea Noise Harming Whales?' *New Scientist*. February 22: 8. Doleman, S. (2002). 'Noise Sources in the Cetacean Environment.' SC/54/E7. Dotinga, H. (2000). 'Acoustic Pollution in the Oceans: The Search for Legal Standards.' *Ocean Development and International Law*. 31: 151–82. Anon (2002). 'Not So Pacific Ocean.' *New Scientist*. March 30: 23. Hecht, J. (2001). 'Navy Accepts Blame For Whale Deaths.' *New Scientist*. January 12: 15. Marks, P. (2000). 'Cracking Up: Is the Din in the Arctic a Headache for Beluga Whales?' *New Scientist*. September 30: 12. Hrynyshyn, J. (2001). 'Going Round the Bend.' *New Scientist*. December 15: 17. Holmes, B. (1997). 'Noises Off.' *New Scientist*. March 22: 24–7. Report of the SC. IWC/55/Rep 1. 39.
15. IWC. 44th Report. (1994). 26.
16. Appendix 7: IWC Resolution 1998–6. 'Resolution for the Funding of Work on Environmental Concerns.' IWC. 50th Report. (1999). 44. See IWC. 51st Report. (2000). 48. See IWC Resolution 2000–7. 'Resolution on Environmental Change and Cetaceans.' IWC. 52nd Report. (2001). 68. Report of the Scientific Committee. IWC/53/4. 60.
17. Report of the Conservation Committee. IWC/56/Rep 5. The Berlin Initiative on Strengthening the Conservation Agenda of the International Whaling Commission. IWC/55/4 Rev 2. Agenda Item 4. Coghlan, A. (2003). 'Defining Moment for Saving Whales.' *New Scientist*. June 21: 7.
18. See Bateson, P. (2000). *Endocrine Disrupting Chemicals* (Royal Society, London): 3.
19. Japan has suggested that pollution levels of DDT, PCB and Cd levels are very low in minke whales, and that there is a significant difference between those caught in the North Pacific, where the concentrations are higher, and those caught around Antarctica. IWC. 50th Meeting in 1998. (1999). 36.
20. This argument was suggested by Denmark. See IWC. 50th Meeting in 1998. (1999). 36. 'There are no problems in consumption of meat from baleen whales'. Hansen, J. (2000). 'Traditional Food – Environmental and Health Concerns.' Prepared for the Greenland Home Rule Government at IWC 2000. IWC/52/AS2. This was discussed in IWC. 52nd Meeting in 2000. (2001). 48–9.
21. See Parsons, E. (2002). 'The Impact of Pollution on Humpback Dolphins.' SC/54/SM5.
22. PCBs and DDT residues have also been found in New Zealand's Hector's dolphins. See Ministry for the Environment (1997). *The State of New Zealand's Environment* (MFE, Wellington). 9: 132.
23. Studies have indicated that high levels of DDT have been found in young female Bryde's whales from the South China Sea. See Whale and Dolphin Conservation Society. (2000). *Contaminated Cetacean Products in Japan* (WDCS, Bath): 1. Compare JARPN II (Japanese whale programme in the North Pacific). IWC/56/20. 18; JARPA (Japanese whale programme in the Antarctic). IWC/56/19. 12.
24. See Report of the Scientific Committee. IWC/53/4. 61.
25. Simmonds (2000). 'Cetacean Contaminant Burdens: Regional Examples.' SC/51/E 13.
26. Reijnders, P. (eds) (1996) 'Report of the Workshop on Chemical Pollution and Cetaceans.' *Journal of Cetacean Research and Management: Chemical Pollutants and Cetaceans*: Special Issue 1: 3–14. Parsons, E. (1999). 'Immune Level Abnormalities.' *Veterinary Record*. 144: 75–6. Troisi, T. (1996). 'Toxic Effects of PCBs on Marine Mammals.' *Soundings*. 2(8): 1–2. See WWF (1999). *Are Chemicals Killing Whales?* (WWF, London): 1–4. Colborn, T. (1996). 'Epidemiological Analysis of Persistent Organic Pollutants in Cetaceans.' *Review of Environmental Contamination and Toxicology*. 146: 91–172.

Edwards, R. (1999). 'Sea Sickness: Deaths of Harbour Porpoises are Linked to PCBs and Mercury'. *New Scientist*. December 18: 12. Beland, P. (1996). 'The Beluga Whales of the St. Lawrence River.' *Scientific American*. May: 58–65. See EIA (1999). *Storm Warning: The Environmental Threats to Whales, Dolphins and Porpoises* (EIA, London): 14–15.

27. See Report of the Scientific Committee. IWC/53/4. 61.
28. Van Leeuwen, R. (2000). 'Dioxins: WHOs Tolerable Daily Intake Revisited.' *Chemosphere*. 40: 1095–101. The IWC began working with the WHO in 2000 on this problem. See Report of the Scientific Committee. IWC/53/4: 65. IWC. 54th Meeting in 2002. (2003). 39.
29. Article V.2.d.
30. FAO. Code of Conduct. 11.1, 11.1.1.–11.1.4. Reprinted in 1995 YBIEL. 6. Document 10. Also available from the FAO, via <http://www.fao.org/>.
31. Kyoto Declaration (1995). Available from the FAO, via <http://www.fao.org/> Paragraphs 15, 21.
32. Arctic Monitoring and Assessment Programme (1997). *Arctic Pollution Issues: A State of the Arctic Environment Report* (AMAP, Oslo): 3.28, 5.1, 5.6, 5.7, 5.16. Swiss Coalition for the Protection of Whales/Global Survival Network (1999). *Polar Exposure: Environmental Threats to Arctic Marine Life and Communities* (GSN, London): 16.
33. See Environmental Investigation Agency (2003). *Mercury Rising: The Sale of Polluted Whale, Dolphin and Porpoise Meat in Japan* (EIA, London). Anon (2002). 'Bad Catch.' *New Scientist*. March 23: 5. Coghlan, A. (2002). 'Its Madness.' *New Scientist*. June 1: 17.
34. For example, in 2000, Denmark presented a paper which suggested that, although there exists increasing evidence to show that at present levels both wildlife and man are negatively influenced by environmental contaminants (which includes extrapolation from animals to man), there are also some serious uncertainties. Hansen. Supra n20. Likewise, the Arctic Report, supra n32, suggested that such studies, although meriting concern, are limited and not conclusive.
35. Arctic Report, supra n32: 5.10. Hansen. Supra n20. In general, it has been argued that traditional diets provide a strong nutritional base for the health of Arctic peoples, which is often accompanied by a more active (that is, hunting) lifestyle which is deemed to be better for them. Thus a move away from traditional foods could contribute to poor health, and specifically to a higher risk of diabetes and cardiovascular diseases. Arctic Report, supra n32: 5.24. IWC. 50th Meeting in 1998. (1999). 32. Norway, St Vincent and the Grenadines, and Japan all supported this view, with the added suggestion that consumption of whalemeat, due to factors such as its oil content and positive impact on heart disease, adds to longevity.
36. In Canada, it was recommended that although the consumption of traditional foods should continue, women of reproductive age should eat less (that is, caribou and beluga) of them. Arctic Report, supra n32: 5.16.
37. See EIA (2004). *Global Chemical Pollution and the Hunting of Whales, Dolphins and Porpoises* (EIA, London): 3. The EIA report draws heavily from Arctic Monitoring and Assessment Programme (2004). *Human Threats in the Arctic* (Oslo).
38. In 1998, the Faroese health authorities issued guidelines to reduce pilot whalemeat and blubber consumption, and end consumption of liver or kidneys. MacKenzie, D. (1997). 'Arrested Development.' *New Scientist*. November 22: 4. Anon (1998). 'Off the Menu.' *New Scientist*. September 5: 21. Anon. (2000). 'Mercury Cuts.' *New Scientist*. July 22: 21. Hansen, supra n20.
39. IWC. 50th Meeting in 1998. (1999). 36.
40. See Appendix 5: IWC Resolution 1999–4. 'Resolution on Health Effects from the Consumption of Cetaceans.' See IWC. 50th Meeting in 1998. (1999). 53.
41. See IWC Resolution 2000–6. 'Resolution on POPs and Heavy Metals.' IWC. 52nd Meeting in 2000. (2001). 67.
42. See paragraphs 30–34 of the Plan of Implementation of the World Summit on Sustainable Development. A/CONF.199/L.1.
43. See Melvasalo, T. (1998). 'Cleaning the Seas.' *Our Planet*. 9(5): 1–5. Regional co-operation for environmental purposes is also in accordance with Article 197 of UNCLOS.

44. The 1974 Convention on the Protection of the North-East Atlantic from Land Based Sources. BH646.txt.
45. The 1974 Helsinki Convention for the Protection of the Marine Environment of the Baltic Area. In UNEP (1983). *Selected Multilateral Treaties in the Field of the Environment*. (ed. A. Kiss, UNEP, Nairobi): 405.
46. Ibid. 448.
47. Article 4.
48. Article 5.
49. Article 8.
50. See the 1980 (Athens) Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-Based Sources. In BH 778 and UNEP (1991). *Multilateral Treaties in the Field of the Environment*. (ed. I. Rummel-Bulska, Cambridge University Press, Cambridge): 81. The Protocol for the Protection of the Mediterranean Sea Against Pollution from Land Based Sources and Activities was revisited in 1996.
51. Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution. In UNEP (1983), supra n45: 486.
52. 1981 Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region In UNEP (1991), supra n50: 118.
53. The 1981 Convention for the Protection of the Marine Environment and Coastal Area of the South East Pacific. In UNEP (1991), supra n50: 130. This convention was particularly vague, with little more than the hope that the contracting parties shall 'endeavour' (Article 3) to address the problem of ocean pollution. It was, however, later built upon with specific protocols.
54. 1982 Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment. In UNEP (1991), supra n50: 144.
55. The 1983 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. In UNEP (1991), supra n50: 258.
56. The 1985 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (Nairobi Convention). In UNEP (1991), supra n50: 32.
57. 1986 Convention for the Protection of the Natural Resources and Environment of the South Pacific Region. In UNEP (1991), supra n50: 372.
58. East Asian Seas Action Plan, adopted in 1995. See 1995 YBIEL. 6: 239.
59. In 1994, the Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the North West Pacific Region was adopted. See 1994 YBIEL. 5: 178.
60. 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR). BH1012.txt. 32 ILM 1069. The convention came into effect in 1998.
61. The preamble recognized that the purpose of the new convention was to 'extend, strengthen and modernise' the earlier convention.
62. 1992 Convention on the Protection of the Black Sea Against Pollution. BH1004.txt. 32 ILM 1101.
63. 1992 Convention on the Protection of the Marine Environment of the Marine Environment of the Baltic Sea Area. Reprinted in *United Nations Law of the Sea Bulletin* No. 22. Article 3(1). See also the OSPAR Convention Article 2(1)(a). Article 3. For the Black Sea Convention, see Article V.
64. For a discussion of this approach, see 1995 YBIEL: 247–48.
65. See Anon (2000). 'Inside Science: Radiation and Risk.' *New Scientist*. 129, March.
66. Anon (2003). 'Sea Mammals Irradiated.' *New Scientist*. September 20: 10. Calmet, D. (1992). 'Radioactivity in Three Species of Porpoises Caught in the Eastern Tropical Pacific Ocean'. *Journal of Environmental Radioactivity*. 15: 153–69. In 2001, the SC were directed to study the 'potential impact of threats including radionuclide contamination' for the narwhal. See Resolution 2001–13. Resolution on Small Cetaceans. IWC. 53rd Meeting in 2001. (2002). 60.
67. GPA. Paragraph 109.

68. 1980 Convention on the Physical Protection of Nuclear Material. In UNEP (1991), supra n50: 75.
69. 1986 Convention on Early Notification of a Nuclear Accident. In UNEP (1991), supra n50: 363.
70. 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. In UNEP (1991), supra n50: 367.
71. The 1960 Convention on Third Party Liability in the Field of Nuclear Energy. In UNEP (1983), supra n45: 159. 1963 Vienna Convention on Civil Liability for Nuclear Damage. In UNEP (1991), supra n50: 179. The 1971 Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Materials. In UNEP, supra n50: 253.
72. See Van Dyke, J. (1996). 'Applying the Precautionary Principle to Ocean Shipments of Radioactive Waste.' *Ocean Development and International Law*. 27: 379–97.
73. WSSD. Plan of Implementation, supra n42: Paragraph 33bis.
74. Treaty Banning Nuclear Weapon Tests In The Atmosphere, In Outer Space And Under Water (1963). BH454.txt. See Article 1 (b).
75. For the current situation at Bikini Atoll, see Stegnar, P. (1998). 'Review at Bikini Atoll.' *IAEA Bulletin*. 40(4): 15–17. For a discussion of these impacts on the environment (fish stocks) of this period, see McDoual, M. (1955). 'The Hydrogen Bomb Tests and the International Law of the Sea.' *American Journal of International Law*. 49: 356–61. See also Johnston, D. (1988). *The International Law of Fisheries: A Framework for Policy Orientated Inquiries* (Nijhoff, New Haven, CT): 15. See also Juda, L. (1995). *International Law and Ocean Use Management: The Evolution of Ocean Governance*. (Routledge, London): 126–7.
76. See Gonzalez, A. (1998). 'A Radiological Legacy: Radioactive Residues of the Cold War Period.' *IAEA Bulletin*. 40(4): 2–6.
77. Planque, E.G. (1998). 'The Mururoa Study.' *IAEA Bulletin*. 40(4): 21–3. Povinec, P. (1998). 'From the Atolls to the Seas.' *IAEA Bulletin*. 40(4): 34–8.
78. See Copley, J. (2000). 'Tainted Wilderness: Humans Have Left Their Radioactive Mark on the Antarctic'. *New Scientist*. October: 14.
79. See Povinec, P. et al. (1996). 'Chernobyl and the Marine Environment: The Radiological Impact in Context.' *IAEA Bulletin*. 38(1): 18–22.
80. 1958 Convention on the High Seas. UNTS. No. 6465. Volume 450: 82–103. Article 25.
81. Antarctic Treaty. 402 UNTS. 71. Article 5. Note, the 1991 Protocol on Environmental Protection to the Antarctic Treaty. BH992.txt, Annex III, Article 2.
82. See Edwards, R. (1995). 'Leaky Drums Spill Plutonium on Ocean Floor.' *New Scientist*. July 22: 5.
83. London Dumping Convention Resolution 14(7), 1983 and Resolution LDC 21(9), 1985.
84. Agenda 21. Chapter 22. Paragraph 22.5.
85. See Editorial. (2000). 'What a Waste.' *New Scientist*. February 26: 2. Edwards, R. (2000). 'Dead in the Water.' *New Scientist*. February 26: 16–18. 1994 YBIEL. 5: 182–3. 1998 YBIEL. 9: 199.
86. 1992 YBIEL. 3: 305. See also MacKenzie, D. (1994). 'Doubts Lurk in Graveyard for Nuclear Subs.' *New Scientist*. March 12: 4–5. Anon (1993). 'Row Over Sunken Nuclear Sub.' *New Scientist*. September 18: 7. Anon (1993). 'Whole Reactor Lurks Under Barents Sea.' *New Scientist*. February 13: 9. MacKenzie, D. (1993). 'Russia Owns Up to Sea Burial for Nuclear Waste.' *New Scientist*. April 17: 5.
87. Livingston, T. (1998). 'Tomorrow's Oceans.' *IAEA Bulletin*. 40(3): 2. Compare Edwards, R. (1998). 'Hot Waters.' *New Scientist*. May 9: 11. Povinec, P. (2000). 'Marine Scientists on the Arctic Seas: Documenting the Radiological Record.' *IAEA Bulletin*. Available from the IAEA website http://www.iaea.org/worldatom/. Povinec, P. (1998). 'Worldwide Marine Radioactivity Studies: Assessing the Picture.' *IAEA Bulletin*. 40(3): 11, 14.
88. The problem of ship strikes, which is probably underestimated globally, is a particular problem for the Western North Pacific gray whale, and the North Atlantic right whale. Scientific Committee. IWC/54/4: 23. With regard to the North Pacific gray, in 2001 the IWC urged that 'all practicable actions to eliminate anthropogenic disturbances in the migration corridor and on their breeding and feeding grounds' be pursued. See Resolution

on Western North Pacific Grey Whale. IWC/53/24.Rev. Agenda Item 6.6. A similar approach has been mooted for the North Atlantic right whale. Indeed, of the 50 deaths of this critically endangered species between 1970 and 2000, 18 were because of ship strikes. See Report of the Scientific Committee. IWC/53/4. 51. Williams, C. (2002). 'Sound of Silence Saves Whales.' *New Scientist*. December 14: 20. Copley, J. (2001). 'Hit and Run on the High Seas.' *New Scientist.* January 27: 14.

89. Jones, N. (2002). 'Oil Spills Show They Can Stick Around.' *New Scientist*. October 26: 21. Pearce, F. (1993). 'What Turns An Oil Spill Into a Disaster?' *New Scientist*. January 30: 11–15. Pain, S. (1994). 'Living Coastline Suffers Most from Oil Spills.' *New Scientist*. January 8. National Academy of Science (1985). *Oil in the Sea* (NAS, Washington).
90. See CMS Resolution on Offshore Oil Pollution and Migratory Species. UNEP/CMS/Res.7.11.
91. Anon (2002). 'Dead in the Water.' *New Scientist*. June 1: 7. Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) (1990). *The State of the Marine Environment* (Nairobi, UNEP).
92. Fry, C. (2003). 'Map Sends Out Warning of Oil Spill Black Spots.' *New Scientist*. September 13: 10.
93. '1991 MARPOL Amendments Enter into Force.' *IMO News* 2 (1993). 2. This ideal eventually appeared as Regulation 25A in Annex 1. See also 1994 YBIEL. 5: 184–5.
94. This process began with the 1969 International Convention Relating to Intervention on the High Sea in Cases of Oil Pollution Casualties. In UNEP (1983), supra n45: 230. 1969 Agreement for . . . the North Sea. 1976 Protocol Concerning the Mediterranean. The 1978 (Kuwait) Protocol. The 1981 (Abidjan) Protocol. 1981 (Lima) Agreement. 1981 (Jeddah) Protocol. 1983 Protocol on the Wider Caribbean Region. 1983 Agreement for the North Sea. Protocol for the Eastern African Region. 1986 Protocol for the South Pacific Region.
95. 1969 Convention on Civil Liability for Oil Pollution Damage. 973 UNTS. 3. 1971 Convention on the Establishment Fund for Compensation for Oil Pollution Damage. 11 ILM. (1971). 284. International Convention on Liability and Compensation for Damage in Connection With the Carriage of Hazardous and Noxious Substances by Sea (1996). 35 ILM. 1406.
96. Such as the disposal of about 6 million barrels into the Persian Gulf during the Gulf War. See Low, L. (1995). 'Compensation for Wartime Environmental Damage: Challenges to International Law After the Gulf War.' *Virginia Journal of International Law*. 35: 405–82.
97. International Convention for the prevention of Pollution of the Sea by Oil, 1954. 327 UNTS. 3.
98. International Convention for the Prevention of Pollution from Ships, 1973. 12 ILM. (1973). 1319.
99. Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships. 17 ILM. (1978). 1546.
100. IMO Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ship's Ballast Waters and Sediment Discharges. IMO, Marine Environment Protection Committee (MEPC). 50(31).
101. Annex IV is the only MARPOL Annex not yet in force. It covers sewage from ships, and over 25 years have elapsed since its adoption. See 1998 YBIEL. 9: 204.
102. Ellis, E. (1995). 'International Law and Oily Waters.' 6 *Colorado Journal of International Environmental Law and Policy*. 31–60.
103. Tolba, M. (ed.) (1992). *The World Environment: 1972–1992, Two Decades of Challenge* (UNEP, Chapman Hall, London): 120.
104. Ibid. CCAMLR XVII–1998. Commission Report. Paragraphs 6.6–6.10.
105. Allen, W. (1992). 'Loggerhead Dies After Ingesting Marine Debris.' *Marine Turtle Newsletter*. 58: 10. Bentivenga, F. (1995). 'Removal of a Polyethylene Cord from a Loggerhead.' *Marine Turtle Newsletter*. 71: 5. Editor (1994). 'Loggerhead Turtles Consume Tar and Plastic.' *Marine Turtle Newsletter*. 64: 30.
106. Chatto, R. (1995). 'Sea Turtle Killed by Flotsam.' *Marine Turtle Newsletter*. 69: 17–18.
107. Mrosovksy, N. (1981). 'Plastic Jellyfish.' *Marine Turtle Newsletter*. 17: 5–7.
108. Usher, R. (1997). 'All That Glitters is Not Plankton.' *TIME*. December 22: 17–18.

109. Preamble of 63/XV. See also CCAMLR XVII–1998. Commission Report. Paragraph 6.4.
110. See Ananthaswamy, A. (2001). 'Junk Food: A Diet of Plastic Pellets Plays Havoc With Animals' Immunity.' *New Scientist*. January 20: 13. Joyner, C. (1991). 'Plastic Pollution in the Marine Environment.' *Ocean Development and International Law*. 22: 34–7.
111. Tolba. (1992), supra n103: 120. Elsewhere the figure is put at 24,000 tons of plastic strapping, and 135,000 tons of plastic fishing nets.
112. IMO Briefing 10. (1998). Shipboard Garbage Management Plans Compulsory from 1 July 1998.
113. Statement by the Governments of Canada, Japan and the USSR with regard to the 1984 Protocol Amending the Interim Convention on Fur Seals. This can be found at Congressional Testimony CT99-5, 99th Congress 1st Session, Senate Treaty Document 99-5).
114. Expert Consultation on the Code of Conduct for Responsible Fishing (1994, FAO, FIIT/R506). Paragraphs 17, 23.
115. Conservation Measure 63/XV. Regulation on the Use and Disposal of Plastic Bands on Fishing Vessels. CCAMLR XVII-1998. Commission Report. Paragraph 6.16.
116. Nevertheless, see regional agreements such as the 1974 Convention on the Protection of the Marine Environment of the Baltic Sea (UNEP (1983), supra n45: 405) which contained Annex IV with its 'recommendation' dealing with ship pollution and was clearly covered and intended to restrict garbage. Annex IV. Recommendation 8.
117. Regulation 3, Paragraph 1(a). See 1998 YBIEL. 9: 203.
118. BH992.txt. See Article 5 of Annex IV.
119. Annex 1(4): 'persistent plastics and other persistent synthetic materials, for example netting and ropes, which may float or may remain in suspension in the sea in such a manner as to interfere materially with fishing, navigation or other legitimate uses of the sea.' London Dumping Convention. UKTS 43 (1976) Cmnd. 6486. 11 ILM. (1972). 1294.
120. See Chepesiuk, R. (1997). 'A Sea of Troubles.' *Bulletin of Atomic Scientists*. October: 40–44. 1994 YBIEL. 5: 193. 1997 YBIEL. 8: 208.
121. Adherence to the London Dumping Convention of 1972 was strongly urged by the IWC. IWC. 25th Report, supra n2.
122. Recommendation 86. Stockholm Action Plan. (c) & (e).
123. London Dumping Convention. UKTS 43 (1976) Cmnd. 6486. 11 ILM (1972) 1294.
124. Article I. LC 72. Ibid.
125. Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, the 1996 Protocol. 36 ILM. 1 (1997).
126. Article 2.
127. See Nriagu, J. (1996). 'History of Global Metal Pollution.' *Science*. 272: 223–8.
128. See Smith, E. and Smith, A. (1975). *Minamata* (Holt, New York). For a full discussion of the ecotoxicological aspects of these pollutants, see Walker, C. (2001). *Organic Pollutants* (Taylor & Francis, London): 149–56.
129. 1998 YBIEL. 9: 270.
130. Studies of cetacean meat in Japan have revealed levels of mercury and methyl-mercury 1,600 and 50 times, respectively, over permitted national safety levels for consumption. Likewise, cadmium levels are also a source for concern. See Whale and Dolphin Conservation Society (2000), supra n23: 12.
131. Hallberg, R. (1991). 'Environmental Implications of Metal Distribution in Baltic Sea Sediments.' *Ambio*. (November): 12–23.
132. Carpenter, D. (1996). 'Great Lakes Contaminants.' *Health and Environment Digest*. (July): 23–8. Note, substantial progress has been made in this area overall.
133. See Simmonds, M. (1994). 'Organochlorines and Mercury in Pilot Whale Blubber Consumed by Faroe Islanders'. *Science of the Total Environment*. 149: 97–111. Arctic Report, supra n32 at 5: 18–19.
134. Faroese Food and Environmental Agency. Dept. of Occupational and Public Health and Chief Medical Officer, August 1998. Noted in EIA (1999), supra n26: 15.
135. See Swiss Coalition (1999), supra n32: 17.
136. Arima, S. (1979). 'Mercury and Selenium Content of Odontoceti.' *Bulletin of Japanese Society of Scientific Fishing*. 45: 623–6.

137. Taguchi, M. (1981). 'Mercury Levels of Whale Meat Sold In Japan.' SC/32 O11.
138. Appendix 7: 'Resolution Relating to Pollutants in Whales.' IWC. 32nd Report (1982) 37.
139. Parsons (1999), supra n26.
140. 'Resolution on POPs and Heavy Metals.' IWC/52/21/ Agenda Item 14.4.2.
141. Recommendation 48.
142. 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Reprinted in Austen, M. and Richards, T. (2000). *Basic Legal Documents on International Animal Welfare and Wildlife Conservation* (Kluwer, Dordrecht): 271–6.
143. Action Plan. 4.1.4.
144. See MacKenzie, D. (2000). 'Denmark Outlaws Heavy Metal.' *New Scientist*. November 25: 14.
145. ILO Convention Concerning the Use of White Lead in Painting. Reprinted in Ruster, B. and Simma, B. (eds) (1976). *International Protection of the Environment* (IPE) (Oceana, New York). Volume XXIX: 137.
146. Annex 1. Article 3.
147. 1978 Great Lakes Water Quality Agreement, TIAS 9257.
148. BH992.txt.Article 2 (Waste Disposal) of Annex III.
149. Agenda 21. Chapter 17. Paragraph 17.18. Report of the Independent World Commission on the Oceans (1998). *The Ocean: Our Future* (Cambridge University Press, Cambridge): 27. Overall Review of Progress Achieved Since UNCED. Reprinted in Osborn, D. (1998). *Earth Summit II* (Earthscan, London). Appendix 3. Paragraph 74.
150. Recommendation 86. (f).
151. See Articles 207, 212.
152. Article 207 (4).
153. UNEP/WG.120/3. Reprinted in 14 *Environmental Policy and the Law*. (1985). 77.
154. Agenda 21. Chapter 17. Paragraphs 17.18, 17.25.
155. The Global Programme of Action for the Protection of the Marine Environment from Land Based Activities. A/51/116 Annex II. Available from UNEP. 1995 YBIEL. 6: 245.
156. Summary Report of the Intergovernmental Review Meeting on Implementation of the GPA for the Protection of the Marine Environment from Land-Based Activities. Available from <http://www.iisd.ca/linkages/sd/gpa/sdvol165num5.html>.
157. WSSD. Plan of Implementation. Para 32.(a).
158. Article 6.
159. See Nollkaemper, A. (1996). 'Balancing the Protection of Marine Ecosystems with Economic Benefits from Land-Based Activities: The Quest for International Legal Barriers.' *Ocean Development and International Law*. 27: 153–79. Ring, D. (1997). 'Sustainability Dynamics: Land-Based Marine Pollution and Development Priorities.' *Columbia Journal of Environmental Law*. 22(1): 65–137.
160. See Claussen, E. (1997). 'Critical Coastlines.' *Our Planet*. 8(5): 1–5.
161. *The Ocean: Our Future*, supra n149: 177. UNEP (2000) *GEO 2000*. (Earthscan, London): 86, 130.
162. UNEP (1995). *Global Biodiversity Assessment* (Cambridge University Press, Cambridge): 381–7.
163. Nowak, R. (2004). 'Sewage Nutrients Fuel Coral Disease.' *New Scientist*. January 10: 11. MacKenzie, D. (2000). 'Coral is Dying to Tell Us Something.' *New Scientist*. September 16: 14–15. Anderson, I. (1999). 'Great Barren Reefs.' *New Scientist*. July 10: 12. Pearce, F. (1999). 'Coral Crumbles.' *New Scientist*. April 24: 13. Watson, M. 'Too darn Hot.' *New Scientist*. November 4: 24. Commission on Sustainable Development. Oceans and Seas: Report of the Secretary General. E/CN.17/1999/4.
164. See World Resources Institute (1998). *Reefs at Risk: A Map Based Indicator of Threats to the World's Coral Reefs* (WRI, Washington DC).
165. Appendix 10, supra n3.
166. With certain species, such as the right whale, studies have revealed the necessity to carry out in-depth analysis of their habitat, and how it affects their critical status. IWC. 50th Meeting in 1998. (1999). 31.

167. In 1998, the SC received several documents relating to habitat. Such as on sea-surface temperatures, feeding grounds and so on. IWC. 50th Meeting in 1998. (1999). 30.
168. In 1995 Mexico asked the IWC for a gray whale migration specialist to assist in the discussion of the proposed expansion. IWC. 47th Report. (1997). 41.
169. In 1999 'concern was expressed regarding possible habitat degradation for gray whales if a proposed salt works is constructed at San Ignacio Lagoon located in the Baja California peninsula'. IWC. 50th Meeting in 1998. (1999). 30.
170. Appendix 3: 'Resolution on Biosphere Reserve of the Upper Gulf of California and the Colorado River Delta'. IWC Resolution 1994–3. IWC. 45th Report. (1995). 42.
171. Appendix 4: 'Resolution on Small Cetaceans'. IWC Resolution 1996–4. IWC. 52nd Meeting in 2000. (2001). 51.
172. IWC. 52nd Meeting in 2000. (2001). 50.
173. See Taylor, M. (2002). 'Habitat Degradation: Contribution to the Extinction Risk For Southern Resident Killer Whales.' SC/54/E10.
174. Taylor, M. (2002). 'Limits to the Recovery of the Bering-Chukchi Bowhead Whales: Habitat Degradation.' SC/54/E11.
175. These included, *inter alia*, 'that the impacts of water development schemes on freshwater cetaceans be investigated thoroughly, and that future plans for any water development projects and water usage in the range of these species take into account their habitat requirements'. IWC. 52nd Meeting in 2000. (2001). 47–8, 51.
176. IWC Resolution 2000–9. Conservation of Freshwater Cetaceans. IWC. 52nd Meeting in 2000. (2001). 70.
177. 'Resolution on the Western North Pacific Gray Whale.' IWC/56/21. Also, Gordon, D. (2002). 'Suckered At Sakhalin.' *Ecologist*. 32(1): 32–5. Weller, D. (2002). 'Influence of Seismic Surveys on Western Gray Whales off Sakhalin Island, Russia.' SC/54/BRG14. Report of the SC. IWC/55/Rep 1. 29.
178. Resolution 2001–11. 'Resolution on the Importance of Habitat Protection and Integrated Coastal Zone Management.' IWC. 53rd Meeting in 2001. (2002). 59.
179. Declaration of the International Conference on Responsible Fishing. Cancun, Mexico, 6–8 May 1992. Available from the FAO. Paragraph 8. Chapter 17:11 of Agenda 21. 1993 YBIEL. 4: 250–51; 1994 YBIEL. 5: 252. 1997 YBIEL. 8: 288. FAO Code of Conduct. Paragraph 6.8.
180. GPA. Paragraph 151.
181. The 1990 Agreement on the Conservation of Seals in the Wadden Sea. Reprinted in Austen and Richards, supra n142: 292–6. Article VII.
182. See the Agreement on the Conservation of Cetaceans of the Black Seas, Mediterranean Sea and Contiguous Area. (1997). 36 ILM. 777. Article II.3.
183. This can be found at http://www.oceanlaw.net/texts/sanctuary.htm. See Article 4.
184. 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles. Article IV.2.d. and Annex II. Reprinted in 1998 *Journal of International Wildlife Law and Policy*. 1(1): 179–202.
185. Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa. 39 ILM. 1 (2000). Paragraph 1, following preamble.
186. The Action Plan for the Conservation of Mediterranean Marine Turtles. Available from http://www.oceanlaw.net/texts/medturtles.htm. See Paragraph 10(a)(2).
187. The 2000 Memorandum of Understanding on the Conservation and Management of Marine Turtles and Their Habitats of the Indian Ocean and South East Asia. Reprinted in 2000 *Journal of International Wildlife Law and Policy*. 3(2): 190–95. Point J.
188. Co-operative Agreement for the Conservation of Sea Turtles on the Caribbean Coast of Costa Rica, Nicaragua and Panama. Annex 2, 6, 7. Available from <http://www.oceanlaw.net/texts/turtles2.htm>.
189. The International Convention on Wetlands of International Importance. 11 ILM. 693.
190. Resolution 8.4. 'Principles for Incorporating Wetland Issues Into Integrated Coastal Zone Management' (2002, Valencia).
191. Secretariat of the CBD (2004). 'Integrated Marine and Coastal Area Management Approaches for Implementing the Convention on Biological Diversity.' (CBD. Technical Series No. 14).

192. Decision II/10 on Conservation and Sustainable Use of Marine and Coastal Biodiversity. For the follow-up to this within the CBD, see 1997 YBIEL. 8: 287. In 1998, at the fourth CBD COP, decision IV/5 entitled Conservation and Sustainable Use of Marine and Coastal Biological Diversity was passed.
193. WSSD. Plan of Implementation, supra n42: Paragraph 31 (b). For the broad support of the ICZM idea, see paragraph 31(e).
194. Annex I to Decision II/10. Additional Conclusions on Recommendation I/8 adopted by the Subsidiary Body on Scientific, Technical and Technological Advice at its First Meeting. UNEP/CBD/COP/2/5.
195. In 1996 UNESCO's World Heritage Committee added the Belize Barrier-Reef System to the list of Natural World Heritage Sites. See 1996 YBIEL. 7: 225. See also Recommendation 6.7 On the Conservation of Coral Reefs. (6th Meeting of the RAMSAR COP, Brisbane, 1996).
196. The Coral Reefs Initiative was established in 1994. 1994 YBIEL. 5: 257. See 1998 YBIEL. 9: 299–300.
197. See 1995 YBIEL. 6: 330.
198. WSSD. Plan of Implementation, supra n42: Paragraph 31(e).
199. GPA. Paragraph 142.
200. 1991 Protocol on Environmental Protection to the Antarctic Treaty. BH992.txt. Article 6. Annex 3.
201. For example, 1983 Quito Protocol, Article V & Annex 1. For the Black Sea, 1996 YBIEL. 7: 162, 226.
202. Agenda 21. Paragraph 21.39.
203. GPA. Paragraph 144.
204. See Anon (1996). 'Red Tide Killings.' *New Scientist*. July 13: 11. Joyce, C. (1989). 'Poisonous Algae Killed the Atlantic Dolphins.' *New Scientist*. February 11: 31. Tolba, supra n103: 118–20.
205. Anderson, D. (1994). 'Red Tides.' *Scientific American*. (August): 62–8. Pearce, F. (1997). 'Planet Earth is Drowning in Nitrogen.' *New Scientist*. (April 12): 10. Anon (1996). 'Tiny Killers Bloom in Warmer Waters.' *New Scientist*. February 24: 9.
206. *The Ocean: Our Future*, supra n149: 177. UNEP (2000), supra n161: at 11–113.
207. 1880 Convention between Prussia and the Grand Duchy of Hesse, for the Protection and Promotion of Fishing, Berlin, January 19. 1880. Reprinted in IPE, supra n145, XI. 5399.
208. GESAMP (1990), supra n91: 27.
209. UNEP (2000), supra n161: 27.
210. Agenda 21. Chapter 17. Paragraph 17.28. (f).
211. GPA. Paragraph 128.
212. Reprinted in Environmental Protection Agency (1998). *The Great Lakes Water Quality Agreement* (EPA, Washington): 3. Article III (e). Annex 3.
213. Annex 1. 1(2). 1998 YBIEL. 9: 200–201.
214. 1995 YBIEL. 6: 247–8. 1997 YBIEL. 8: 198.
215. Annex 1, Article 3. 1995 YBIEL. 6: 246–7. 1998 YBIEL. 9: 199.
216. GESAMP (1990), supra n91: 27.
217. Brown, P. (1997). 'Seabirds Dirty Diet Spreads Disease.' *New Scientist*. March 22: 11.
218. Madrid Protocol. BH992.txt. Article 5 or Annex III.
219. Agenda 21. Chapter 21. Paragraph 21.29.
220. GPA. Paragraph 96(b)&(c).
221. 1925 Convention Between Estonia and Latvia for the Protection of Fish. IPE, supra n145, Volume VI. 2599. See Article 6.
222. 1974 Baltic Sea Convention, Annex III & Article 6:6; for the Black Sea, see 1993 YBIEL. 4: 166.
223. See WRI, UNEP, UNDP, World Bank (1998). *World Resources: A Guide to the Global Environment 1998–1999* (Oxford University Press, Oxford): 121.
224. See Pearce, F. (1996). 'Word Games at the Ministry of Sewage.' *New Scientist*. August 10: 12. Anon (1993). 'We Still Like to Be Beside the Sewage.' *New Scientist*. December 11: 9. Anon (1987). 'Cleanup of Beaches a Waste of Money.' *New Scientist*. May 21: 28. Sewage

standards around the European Union are dictated by the 1976 Bathing Water Directive, the Urban Waste Water Treatment Directive 91/271/EEC and the Shellfish Waters Directive. 79/923/EEC. See Beder, S. (1990). 'Sun, Surf and Sewage.' *New Scientist*. July 14: 24–7. MacKenzie, D. (1998). 'Waste Not.' *New Scientist*. August 29: 26–8.

225. Agenda 21. Chapter 21. Paragraph 21.27.
226. See Annex II & Article 3(1). See OSPA 15/13/I Paragraphs 3.26–3.27. 1993 YBIEL. 4: 163, 180.
227. Even though the dumping of industrial waste was prohibited from 1996, sewage sludge was clearly excluded from this rubric. See Annex I, 11.
228. See <http://www.londonconvention.org/>.
229. Osvath, I. (1998). 'Sustaining Development in the Black Seas Region: A Sea of Changing Fortunes.' *IAEA Bulletin*. 40(3): 32.
230. 1992 YBIEL. 3: 150–51. Arctic Report, supra n32: 5: 1–7.
231. Convention on the Non-Navigational Uses of International Watercourses. 36 ILM. 700 (1997).
232. On the general objectives, see Articles 5 & 6(f) of the Convention, ibid.
233. See McCaffrey, S. (1998). 'The United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses'. *American Journal of International Law*. 92: 97–107. For the suggested mechanisms to achieve this, see Article 21 (a),(b) & (c).
234. See Birnie, P. and Boyle, A. (1992). *International Law and the Environment* (Oxford University Press, Oxford): 222–5, for the list of examples predating 1990. Since then, the list has proliferated. For Kenya, Tanzania and Uganda and Lake Victoria, see 1998 YBIEL. 9: 190–91; for Brazil and Uruguay and the Cuareim river. Ibid. 192; for the Ganges with India and Bangladesh, see 36 ILM. 519 (1997); for Nepal and India, see 1996 YBIEL. 7: 138; China and Mongolia, see 1995 YBIEL. 6: 236; for Cambodia, Laos, Thailand and Vietnam and the Mekong, see ibid. 237; for Ethiopia and Egypt, see 1992 YBIEL. 150–51; and for Ethiopia and Uganda, and the Amazon river system, see ibid. 153–4.
235. See the 1968 European Agreement on the Restriction of the Use of Certain Detergents in Washing and Cleaning Products. In UNEP (1983), supra n45: 214. In 1992 when the United Nations Economic Commission for Europe concluded the Convention on the Protection and Use of Trans-boundary Watercourses and International Lakes. See 1992 YBIEL. 3: 233–5, 1997 YBIEL. 8: 188–9.
236. 1994 Convention for the Protection and Sustainable Use of the Danube River. 1994 YBIEL. 5: 172–3.
237. International Committee for the Protection of the Oder River, was formed in 1997. 1997 YBIEL. 8: 190.
238. The first Rhine regulations appear to be the 1868 Regulations Between Baden, Bavaria, France, Hesse, the Netherlands and Prussia, which restricted the ways that gunpowder, sulphuric, nitric and hydrochloric acids and other chemicals could be transported on the Rhine river. See IPE, supra n145: 4689. More comprehensive protection of the Rhine river began with Rhine specific agreements in 1963, 1976 and 1998.
239. The 1909 Boundary Waters Treaty, was later eclipsed by the 1978 Great Lakes Water Quality Agreement, 30 UST 1383, TIAS 9257. UN Legislative Texts and Treaty Provisions. ST/LEG/SerB/12, 260.
240. Annex 1 of the London Dumping Convention lists organo-halogen compounds as the first substance of consideration. Annex 2 (for which special care is required) lists 'pesticides and their by-products' not covered by Annex 1. LDC.
241. 1976 Mediterranean Dumping Protocol. Article 7 and Annex III. South Pacific Convention. Article III.
242. 1980 Athens Protocol. See also Annex 1 of the earlier 1972 Oslo Convention.
243. The 1972 Oslo Convention. 1976 Protocol for Mediterranean. 1986 Protocol for South Pacific. Note, for the South Pacific, Organo-silicon, is an Annex II substance.
244. See Article IV.
245. OSPAR. Annex 1, Article 3. 1992 YBIEL 3: 252. 1994 YBIEL. 5: 182 and 1995 YBIEL. 6: 246. 1996 YBIEL 7: 147. 1998 YBIEL. 9: 199.
246. Annex 1. Part 3. Pesticides.

247. Protocol. Article 4.
248. Athens Protocol. 1993 YBIEL. 4: 156. 1996 YBIEL. 7: 226–7.
249. 1978 Great Lakes Water Quality Agreement, 30 UST 1383, TIAS 9257. Article IV(f). Annex 1. 1992 YBIEL. 3: 236–7. 1997 YBIEL. 8: 187.
250. See Recommendation 48 of the Stockholm Conference.
251. Articles 194(3)(a) & 207 (5). The latter reiterates the necessity 'to minimize, to the fullest extent possible, the release of toxic, harmful or noxious substances, especially those which are persistent, into the marine environment'.
252. Agenda 21. Chapter 17.28(e) & 19. Paragraph 19.44.
253. RAMSAR. Recommendation 6.14 on Toxic Chemicals (COP 6, 1996).
254. 1991 Agreement on the Conservation of Bats in Europe. Treaty Series No. 9 (1994). HMSO. Cm 2472. Preamble and Article III.8.
255. GPA. Paragraphs 88, 103 (a).
256. See Pearce, F. (1996). 'Dead Dolphins Contaminated by Toxic Paint.' *New Scientist*. January 13: 5. Law, R.J. (1998). 'Organotin Compounds in Harbour Porpoises.' *Marine Pollution Bulletin*. 36 (3): 214–47.
257. For a full discussion of the ecotoxicological aspect of this pollutant see Walker, C. (2001). *Organic Pollutants* (Taylor & Francis, London): 156–62. See also Coghlan, A. (1990). 'Lethal Paint Makes for the Open Sea.' *New Scientist*. December 8: 8. Anon (1996). 'Lingering Poison.' *New Scientist*. April 27: 12.
258. Pearce, F. (1999). 'Choose Your Poison.' *New Scientist*. May 8: 23. Anon (1988). 'Ecology Groups Call Foul on New Paints.' *New Scientist*. May 12: 43. Pearce, F. (1995). 'Alternative Antifouling.' *New Scientist*. January 14: 7.
259. See 1997 YBIEL. 8: 203.
260. See IMO Briefing 9 (1999). Marine Environment Protection Committee – 43rd Session, Requests Anti-Fouling Systems Conference in 2000–2001. Anon (2001). 'Gender Bending Ban.' *New Scientist*. October 18: 17.
261. WSSD. Plan of Implementation, supra n42: Para. 33.a.
262. 37 ILM. (1998): 505. Article 3(5). 1998 YBIEL. 9: 272–3.
263. See UNEP/POPS/CONF/2. 9 March 2001.
264. Grandbois, M. (1998). 'POPs Convention: First Intergovernmental Negotiating Committee.' *Environmental Policy and the Law*. 28(5): 227–8.
265. See Appendix 7: 'Resolution Relating to Pollutants in Whales.' IWC 32nd Report. (1982). 37.
266. See the 'Resolution on the Stockholm Convention on POPs.' IWC/53/36. Agenda Item 12.4.
267. See Appendix 13, supra n8. Also, Appendix 11: 'Resolution on the Marine Environment and Whale Stocks.' Resolution 1995–10. IWC. 46th Report. (1996). 47.
268. IWC Resolution 2000–6. 'Resolution on POPs and Heavy Metals.' IWC. 52nd Report. (2001). 67.
269. Resolution 2001–7. 'Resolution on the Stockholm Convention on Persistent Organic Pollutants.' IWC. 53rd Meeting in 2001. (2002). 58.
270. Intergovernmental Panel on Climate Change (IPCC) (2001). 'Third Assessment Report: Summary for Policy Makers' (internet edition): 6–8.
271. IPCC (2001). *The Scientific Basis* (Cambridge University Press, Cambridge): 8.
272. UNEP (1995), supra n162: 321, 763, 796–8. Gates, D.M. (1993). *Climate Change and Its Biological Consequences* (Sinauer Associates, Cambridge, MA).
273. IPCC (1995). *Climate Change 1995: Impacts, Adaption and Mitigation* (Cambridge University Press, Cambridge). UNEP, (2000), supra n161: 32–3.
274. Broecker, W. (1997). 'Thermohaline Circulation: The Achilles Heel of our Climate System?' *Science*. 278: 1582–8. *The Ocean: Our Future*, supra n149: 88.
275. IPCC (2001), supra n271: 2, 11.
276. Ibid. 10.
277. *The Ocean: Our Future*, supra n149: 86.
278. Pearce, F. (1999). 'In Hot Water.' *New Scientist*. November 20: 4.
279. Burns, W.G. (2000). 'From the Harpoon to the Heat: Climate Change and the International

Whaling Commission in the 21st Century.' *Journal of International Wildlife Law and Policy*. 3(1): 50–72. Loeb, V. (1997). 'Effects of Sea Ice Extent and Krill or Salp Dominance on the Antarctic Food Web.' *Nature*. 387: 897. IWC. 47th Report. (1997). 39. Tynan, C. (2002). 'Climate Change and the Impact on Cetaceans.' SC/54/IA7. Report of the SC. IWC/55/Rep 1. 36.

280. Appendix 8: IWC Resolution 1996–8. 'Resolution on Environmental Change and Cetaceans.' IWC. 47th Report. (1997). 52.
281. Report of the IWC Workshop on Climate Change and Cetaceans. SC/48/Rep. 2 (1996).
282. Note, Denmark and Russia were sceptical about increasing the IWC role with regards to the climate change debate. IWC. 47th Report. (1997). 40.
283. IWC. 47th Report. (1997). 40. See also, Report of the IWC Workshop on Climate Change and Cetaceans. SC/48/Rep. 2. (1996). 3.
284. Adoption of the Kyoto Protocol. FCCC/CP/L.7.
285. Gillespie, A. (1997). *Climate Change and the New Zealand Response* (Dunmore Press, Palmerston New Zealand). Gillespie, A. and Burns, W. (eds) (1999). *Climate Change in the South Pacific: Impacts and Responses in Australia, New Zealand and Small Island States* (Kluwer Academic Publishers, Dordrecht). Gillespie, A. (1998). 'Sinks, Biodiversity and Forests: Inter-Linkages With Other Environmental Multilateral Agreements and Instruments.' In Chambers, B. (ed.). *Global Climate Governance: Inter-Linkages Between the Kyoto Protocol and Other Multilateral Regimes* (United Nations University, Tokyo): 117–39.
286. See UNEP (1999). *Synthesis of the Reports of the Scientific, Environmental Effects and Technology and Economic Assessment Panels of the Montreal Protocol* (UNEP, Nairobi): 21–31.
287. Co-Chairs of the Assessment Panels (2003). 'The Synthesis Report'. UNEP/OzL.Pro/WG.1/23/3. 27. United Nations Environment Programme (UNEP) (1998). *Environmental Effects of Ozone Depletion: 1998 Assessment* (UNEP, Nairobi): 86. Schrope, M. (2000). 'The Hole Story?' *New Scientist*. February 19: 12–13. Edwards, A. (1998). 'UV-B and Plankton.' *New Scientist*. August 8: 6.
288. Knight, J. (2000). 'Frying Fish: UV Light Could Be Cooking Fish Larvae to Death.' *New Scientist*. December 16: 9.
289. See Tynan, C.T. and DeMaster, D. (1997). 'Ozone Depletion Over the Arctic.' SC/50/E:1.
290. See Clark, E. (2002). 'The State of the Ozone Layer and Consequences for Cetaceans.' SC/54/E4.
291. All of these treaties may be found in Ozone Secretariat/UNEP (2000). *Handbook for the International Treaties for the Protection of the Ozone Layer* (UNEP, Nairobi, 5th edn).

4. Incidental capture

1 THE OVERALL PROBLEM

The oceans provides crucial functions for the planet in general, and humanity in particular. One of the more important roles for humanity is the supply of fish, for an ever-hungry, expanding human population.[1] In spite of this need, and in correlation with an ever-increasing take from the oceans,[2] the current state of the world's fisheries is dismal.[3] According to the FAO, 11 of the world's 15 most important fishing areas and 70 per cent of the major fish species are either fully or overexploited.[4] Apart from the problem that much of this catch is destined for animal feed (approximately 25–30 per cent),[5] a further approximate quarter is wasted. This wastage is typically known as 'bycatch'.

'Bycatch' is a large problem in international environmental law generally. In definitional terms, 'bycatch' refers to 'all species captured other than target species'.[6] In some fisheries, the incidentally caught species are discarded straight away. In others, they are utilized for other purposes.[7] Some fisheries are particularly problematic. For example, shrimp trawlers which work with fine-mesh nets in areas of high species diversity, take on average 5 kilograms of bystanders for every kilogram of shrimp they catch. In some shrimp fisheries, up to 97 per cent of the bycatch is discarded (although the industry average appears closer to 85 per cent) producing over 4 million tonnes of waste fish. Total bycatch from all of the world's oceans is estimated at 17.9–39.5 million tonnes of 'undesired species' being killed per year. The mean estimate of this problem is 27 million tonnes.[8] This figure may be an underestimate in that recreational fishery discards are not included and in many areas a number of species (such as marine mammals, seabirds and turtles) are often not recorded as discard.[9] Much of this practice is completely wasteful, and it has been suggested that the total figure could easily be reduced by up to 60 per cent if more selective fishing practices were adopted.[10] If it is not reduced, the impacts may range from insignificant to critical on the associated ecosystems and non-target species therein.[11]

2 RECOGNITION OF THE DIFFICULTY

Pliny the Elder, the great Roman natural historian who died in AD79 appears to have been the first to note that fishing may trap associated species such as

dolphins.[12] However Pliny did not see this as a bad thing, as he perceived the dolphins to be very clever, and along with the dolphins' good intentions of helping those fishing, they also had the ability to escape the nets. As such, incidental catch was not seen as a direct concern. The first laws which actually recognize the incidental catch of the wrong target species appear around AD1000.[13]

These early examples were soon eclipsed as the problem of incidental catch went from being a national problem, to a regional one and finally to an international one. The first generational responses to bycatch were typically focused upon hitting the wrong members of the target species (that is, too small or the wrong sex) and do not appear to have been concerned about the impacts of indiscriminate fishing on associated species. However, by the end of the twentieth century, bycatch of non-target or 'associated' species has become an important focus to influential consumer non-governmental organizations[14] and to multiple international organizations in general. Despite the actions of a number of countries which have attempted to deal with bycatch problems on an individual level,[15] the sheer magnitude of this issue has meant that it has become increasingly focused upon in the international arena.

International attention on the problem of bycatch began with general calls to improve fishing methods and restrict the detrimental impacts on associated (non-target) species in 1982 with the United Nations Convention on the Law of the Sea. This convention set out clear (but general) principles of conservation which stipulated that in seeking to maintain maximum sustainable (in terms of stock status) harvests, states have the duty to make sure that species associated with or dependent on harvested species are not depleted to levels at which they would become seriously threatened.[16] This was followed up with high-level discussions[17] in 1992 at the Earth Summit,[18] and the International Conference on Responsible Fishing.[19] This was reiterated at international meetings in 1994[20] and 1995, including the Rome Consensus on World Fisheries,[21] the FAO Code of Conduct for Responsible Fisheries,[22] and the 1995 Kyoto Plan of Action.[23] In the same year, the 1995 Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks[24] was adopted. This agreement, when dealing with flag-state responsibilities, required the reporting of catch of target and non-target species[25] and compliance with regional organizations which have specific measures 'aimed at minimizing catches of non-target species'.[26] The importance of adopting these agreements was clearly spelt out at the 2002 World Summit on Sustainable Development.

Within the same 1980–2000 framework, the necessity for consideration of fishing impacts upon non-target species became a prominent concern in regional and international oceanic resources covering the Antarctic,[27] the

North Atlantic,[28] the Mediterranean,[29] the North Pacific,[30] the South Pacific[31] and the Western and Central Pacific.[32]

Broadly within the same period, the issue of bycatch of non-target species also became prominent in a number of affected international organizations. A foremost example of this is the International Whaling Commission. Although accidental catch of wrongly targeted cetaceans (that is, mistaken identity when harpooning) dates back in the IWC records to the 1950s, the accidental catch of cetaceans by being incidentally caught in other (non-whale-related) harvesting operations only arose in 1975 when it was noted that whales (large and small) may be affected as bycatch in a number of ways. For all whales which are small in size (that is, including juvenile large whales), short-term death due to entanglement is quite possible. However, with larger whales, although drowning is often unlikely, swimming away with fishing gear attached to them may lead to impaired feeding ability or serious infection. Unfortunately, entanglement is a large problem for many species of whales. For example, 71 per cent of all humpbacks and 62 per cent of all North Atlantic right whales have been entangled at some point in their lives, with an annual rate of entanglement of 10–31 per cent for humpbacks and 10–28 per cent for North Atlantic right whales. Bycatch of sperm whales during the late 1980s and early 1990s could have had an adverse effect on their population levels.[33] With regard to total cetacean bycatches off the United States alone (in gillnet, trawl and other fisheries) a generic annual figure of between 60 and 300 thousand was presented in 2003.[34]

At the 1975 meeting, it was recommended that member nations begin to record the bycatch of (small) cetaceans taken because of harvesting intentions for other species. Information soon arrived, which began to display the extent of the effect of purse-seine nets (anchored or set) gillnets and (the related) driftnets.[35] Gillnets have been a particular focus within the IWC since 1985.[36] They have proved particularly problematic for the small cetacean harbour porpoises[37] and dolphin[38] in the Black and North Seas; around Latin America with regard to the Tucuxi[39] and Commerson's dolphin,[40] the Vaquita,[41] Heaviside's dolphin[42] and Chilean (black) dolphins;[43] the Chinese river dolphin (*baiji*);[44] the Indus[45] and Ganges river *susu*;[46] the Irrawaddy dolphin; the finless porpoise;[47] Dall's porpoise;[48] and New Zealand's Hector's dolphin.[49] All of these species of small cetaceans are threatened by indiscriminate fishing methods. In general response to this, the IWC passed a resolution (on freshwater cetaceans) which noted:

> [B]y-catches of freshwater dolphins and porpoises in gill nets and other fishing gear have cause population declines, and that fishing effort is increasing rapidly in many areas where freshwater cetaceans occur. . . . [Accordingly, the IWC] . . . recommends that efforts are made to assess the relative magnitude of incidental catches of freshwater cetaceans among different areas and fishing techniques, and

that appropriate mitigation strategies be developed to reduce by-catch levels known to be sustainable.[50]

The indiscriminate capture of large cetaceans first arose in the IWC in 1979 at the 31st meeting with regard to the wrongful capture of sperm whales.[51] The wrongful capture of minke in nets (124 off Newfoundland alone between 1979 and 1990) was later noted.[52] This problem is particularly notable with some highly endangered species, such as the North Atlantic right whale (which has a total population of about 300); which between 1970 and 1999, had 45 recorded mortalities, caused by a combination of ship strikes and entanglement. With such concerns in mind, the IWC called upon the United States and Canada to 'reduce as far as possible ship strikes on right whales . . . [and] . . . to consider appropriate fishery measures to reduce right whale mortality and injury, including fixed gear modifications and restrictions on usage'.[53]

As the above resolutions show, it had become clear at the IWC that in certain situations, such bycatch problems may tip the balance towards the unsustainable status of the cetaceans in question.[54] Despite this clear concern, although the IWC utilized bycatch data,[55] it has been restricted in its ability to make strong responses to the issue for two reasons. First, much of the causation of this problem occurs within other international forums, over which the IWC has little direct control. Second, where it arguably does have control (with regard to small cetaceans), all too often it has overlapped with the sensitive questions of coastal sovereignty and (typically) areas of competence over small cetaceans in national waters. The strongest current initiatives on the bycatch of cetaceans involve the reporting by the signatories of their amounts of incidentally caught large and small cetaceans. Unfortunately, this has often been inadequate, and the need for much more comprehensive reporting has been highlighted by the scientific committee.[56] Nevertheless, in 2000 and 2001, a series of recommendations and resolutions evolved from the IWC on this topic. The specifics of the mechanisms adopted to confront this problem were clearly set down in two resolutions in 2001, which will be dealt with in the following pages.[57]

The other forum where bycatch of non-target species has become prominent is the Convention on Migratory Species (CMS).[58] In 1999 the Conference of the Parties of CMS passed a resolution which recognized bycatch as an ongoing problem which required further action. Accordingly, 'as a matter of gravity' it was requested that 'all Parties . . . strengthen the measures taken to protect migratory species against by-catch by fisheries' with a view to '[minimizing] as far as possible the incidental mortality of migratory species listed in Appendices I & II'.[59] The urgency of this situation was reiterated by the CMS in 2002, when it called upon the parties to the agreement to compile information on bycatch by fishing activities within their jurisdiction, complete

further research on the topic, and implement appropriate schemes, to determine the impact of fisheries bycatch on migratory species.[60]

By the time that the CMS passed the 1999 resolution, it had already been confronting the problem of bycatch within some of its regional agreements concerning cetaceans for nearly 15 years. This issue became a central concern in the CMS within its regional agreements for Small Cetaceans of the Baltic and North Seas (ASCOBANS)[61] and Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS).[62] It has also become a prominent concern within the Agreement on the Conservation of Albatross and Petrels (ACAP).[63]

3 STOPPING INDISCRIMINATE CAPTURE

From the time the first bilateral treaties on international fisheries came into effect, a series of principles with regard to reducing the incidental bycatch of non-target species began to appear out of the nineteenth century and have remained largely constant. The operational responses to this problem were (and commonly remain) size restrictions on the target species and complementary restrictions on the taking of the young or the wrong sex. To achieve these goals, closed seasons, the creation of better technology to further these objectives, such as minimum mesh-size requirements for nets, and the prohibition of indiscriminate fishing technologies such as the use of explosives are required. Despite these operational barriers to the capture of the wrong fish, if they were/are caught, then their return to the ocean when still alive has been recommended. If they are not caught alive, their sale should be restricted. In many ways, these first principles have been supplemented by the current attempts to control the bycatch of the associated species. Moreover, only when all are grouped together may the beginning of a full analysis of the problem and how to respond to it be contemplated.

Defining the Target Species

There was concern in the late nineteenth century that trawling, especially around the North Sea was too indiscriminate, and the catch resulted in great losses of fish which were too immature for market purposes.[64] These concerns arose in the deliberations for the 1882 North Seas Fisheries Convention, in which Germany argued that it was necessary to create measures to safeguard small fish. However, both Britain and France opposed such suggestions and they were not incorporated into the eventual agreement.[65] Nevertheless, soon after, bilateral, and later, multilateral treaties began to reflect the two key principles needed to address this problem – mesh size and size of the fish caught.

As I have discussed elsewhere, these principles have become cornerstones within most national, regional and international attempts to restrict the capture of the wrong species.[66] Around this period, size restrictions for (some) cetaceans began to appear in international law.[67] The 1931 convention proscribed: 'The taking or killing of calves or suckling whales, immature whales, and female whales which are accompanied by calves (or suckling whales) is prohibited'.[68] This is a prohibition which continued into the schedule of the ICRW.

In addition to size and species requirements, one of the other most common tools in this area is to implement closed seasons or closed areas. The utility of time/area restrictions as a strategy for bycatch mitigation depends on the behaviour and distribution of the species concerned. These may be particularly useful if it is known that at a certain time of year, a large percentage of the species may be newborn, for example, or the bycatch rates are predictably high. The effectiveness of any closure scheme will also depend on the spatial and temporal relationships between fish catch rate and the bycatch rate. In the case of Banks Peninsula, New Zealand, it was possible to maintain a viable fishery by relocating fishing outside the boundaries of the cetacean sanctuary. In contrast, in New England it has been necessary to allow fishing in areas of seasonally high porpoise density to maintain the economic viability of the fishery, and to develop alternative bycatch mitigation methods.[69] In terms of the international management of cetaceans, following dozens of regional and bilateral precedents on restricted areas, closed seasons for whale hunting began as a management option in 1931.[70] These became so important that in places they have extended into long-term sanctuaries.[71]

Modification of Technology

In order to facilitate the catching of primarily correct-sized target fish, mesh sizes of nets have been restricted since the nineteenth century.[72] Although this practice continues unabated, it is important to note that the emphasis of modifying technology in the area of bycatch has moved to also encompass attempts to reduce the bycatch of ecologically related species (and not just inappropriate target species) via the modification of technology. This has been very evident with the overt problems of the capture of seabirds, turtles and cetaceans. Although I have discussed these elsewhere, I shall briefly recap the problem and solution.

The incidental catch of seabirds is a problem in many international fisheries. The foremost example with this is with longline fishing. Tuna longlines are particularly well named. Each 135km line can carry up to 3,000 (and possibly more) baited hooks, which often attract and occasionally catch hungry seabirds which try to take bait off the hooks. The total number of seabirds

killed as bycatch by such methods is a matter of speculation. In 2000, it was suggested that up to 330,000 seabirds were killed in the CCAMLR region as bycatch in illegal operations between 1996 and 2000 – or between 48 and 90 thousand seabirds annually.[73] The international response to this problem was embodied in the 1999 FAO International Plan of Action (IPOA) for Reducing Incidental Catch of Seabirds in Longline Fisheries.[74] In many ways, the IPOA built upon the successes of the two regional fisheries commissions – the Convention on the Conservation of Antarctic Marine Living Resources: CCAMLR;[75] and the Convention on the Conservation of the Southern Bluefin Tuna: CCSBT.[76] These two conventions have confronted the problem by using an increased weight of hooks (this enables the bait to sink as quickly as possible and is potentially the most effective of existing mitigating measures) only using thawed bait (as it sinks quicker), using longlines only at night and with a minimum of ship lighting (so the birds cannot see the operation), the use of streamer lines designed to discourage birds from settling on bait during the deployment of longlines, and the prohibition of net monitor cables. These rules were later added to with the prohibition of offal discharge during longline hauls on the same side as the line hauling site (and thereby reducing the attractiveness of the vessel). In addition, experiments involving line floats, line-setting devices, artificial bait, gear colour and bait-taking behaviour of the seabirds have continued. These measures, when combined with the general compliance measures from other CCAMLR areas (such as observers on board vessels) are believed to have reduced the bycatch of seabirds by between 50 and 90 per cent for the registered vessels.[77]

With regard to sea turtles, all seven species are currently endangered or threatened worldwide. The most important causes of population decline include incidental capture and harvest, habitat alteration and loss, and pollution. Incidental capture in shrimp trawls was found to be the most important human-derived cause of turtle mortality by far in the United States, affecting as many as 55,000 animals per year.[78] To prevent the unnecessary drowning of these air breathing reptiles, turtle excluder devices (TEDs) were developed. TEDs are hard metal grids or soft webbing panels that can be placed in shrimp nets, and act effectively as trapdoors by which sea turtles and other large animals can escape. Correctly employed, TEDs can effectively reduce shrimp-related sea turtle mortality by about 97 per cent.[79] Following the débâcle on the shrimp-turtle case,[80] a number of regional initiatives to protect sea turtles were established around parts of the Americas,[81] Africa,[82] the Mediterranean,[83] the Indian Ocean and Southeast Asia.[84] The strongest of these documents is the Inter-American Convention for the Protection and Conservation of Sea Turtles which stipulates that each party shall require its shrimp trawl vessels to use TEDs that are properly installed and functional.[85] Elsewhere, the Mediterranean plan

has noted that TEDs (and modified longlines) should only be introduced if 'appropriate'.[86] Likewise, with the Indian Ocean and Southeast Asia[87] so far, only the possible utility of TEDs has been noted.[88]

With regard to the bycatch of dolphins, the modification of technology has been shown from changing the density of gillnets, through to the placement of 'dolphin safety panels' within certain purse-seine nets, by which the dolphins can effectively escape.[89] The other most prominent development with regard to technology and the bycatch of cetaceans is with acoustic devices – or 'pingers'. This name is derived from the underwater sound they produce at various depths and volumes. In many instances, pingers have proved successful (but not always)[90] in reducing the bycatch of certain cetaceans in national jurisdictions, by producing an adverse acoustic stimulus for the cetacean.[91] Of late, this interest has become regional, and the ASCOBANS signatories have all begun to examine seriously the option of enforcing the utilization of pingers as a primary method to reduce the bycatch of harbour porpoises.[92] The IWC's scientific committee earlier expressed concern that even if the pingers were deployed on all nets in the North Sea this could ensonify large portions of the marine environment, perhaps displacing small cetaceans from important habitat. However, Danish studies have shown that pingers ensonify an insignificant area of about 1 per cent of a total space. These results were deemed encouraging.[93]

Banned Technology

The second way in which the mechanisms of fishing have been controlled so as to avoid indiscriminate capture has been with the outright prohibition of various fishing methods.[94] International law has been banning indiscriminate technology – such as poisons or explosives – for over one hundred years. Other notable prohibitions from the early period included the restriction on drift- and trawlnets which began in bilateral treaties as early as the 1920s. In a modern sense, recent restrictions on fishing methods which capture the wrong type of target species have involved restrictions on fish aggregation devices (FADs) which are distinctly problematic in the incidental capture of juveniles of target species (as well as associated species). The three important Tuna Commissions (the Indian Ocean Tuna Commission (IOTC), the Inter-American Tropical Tuna Commission (IATTC) and the International Convention on the Conservation of Atlantic Tuna (ICCAT)) have all recognized this problem and have taken steps to reduce their utilization. Apart from the increasing restrictions on FADs, the foremost example of the outright prohibition of a fishing technology is with driftnets. Driftnets are nets that are not anchored to the seabed and float freely in surface waters. They are a form of net that traps fish by their gills, and an ancient fishing gear whose use goes

back hundreds, perhaps thousands, of years. However, modern driftnets, made of plastic twines that do not biodegrade, and can reach up to tens of kilometres long are a far cry from their distant predecessors. In 1990, it was estimated that these nets alone, which were at that point being utilized by over 250,000 vessels, had an aggregate of nets that may have been comparable to the overall amount in the industrial high seas fisheries.[95] Their indiscriminate impact upon cetaceans was vast. With such concerns in mind, the use of large driftnets has been restricted in a number of oceanic regions such as the South Pacific,[96] Antarctica[97] and the Mediterranean.[98] These regional approaches have been mirrored in the United Nations General Assembly (UNGA) resolutions,[99] which imposed a global moratorium on such practices on the high seas.[100] These resolutions were supported by a number of individual countries and international organizations, including the IWC.[101]

Dealing With the Catch

Releasing alive

Bycatch would not be a large problem if, when returned to the sea the incidentally caught species were alive and able to survive. However, most species when they are discarded are already dead, or in such a moribund state, that they will not survive. Their survival depends on the species, the method of capture and probably the physiological consideration of the species at hand. Estimates of 100 per cent mortality are not uncommon for some fish species. There is general agreement that round fish with large swim/air bladders (such as cod, hake, pollock, croakers, groupers and snappers) die as a result of distended bladders when being lifted from the sea, whereas some flat fish, sharks and invertebrates may survive the trauma of rapid depth changes and temperature. The survival rate therefore depends on species, the depth at which they are caught, gear, type, time taken in fishing and a number of other factors. Some species, if returned to the sea quickly, will survive. With large cetaceans, the degree and duration of entanglement will determine success in releasing alive. For example, in South Africa between 1978 and 2000, of 22 entanglements of southern hemisphere right whales, 80 per cent were released alive.[102]

As a practice, returning bycatch to the ocean (especially when still alive) is a well-established principle that may be traced back to a number of agreements at the beginning of the twentieth century which focused on target species. This approach has also been utilized with the bycatch of the non-target species of seabirds and turtles. For example, the Inter-American Convention begins with the obligation that to the greatest extent possible, *inter alia*, 'harm' to sea turtles should be avoided. As such, incidentally captured turtles should be 'released alive . . . to the maximum extent practicable'.[103] Likewise,

the IATTC in dealing with bycatch[104] in general and marine turtles in particular, stipulates that efforts should be made to disentangle, release and resuscitate these creatures if necessary.[105]

With regard to cetaceans, the 1998 Agreement on the International Dolphin Conservation Program has effective rescue plans for dolphins as a strong component of its overall package to reduce incidental take.[106] Likewise, ASCOBANS obliged its signatories to ensure: 'the obligation to release immediately any animals caught alive and in good health'.[107] In addition, ACCOBAMS parties also pledged to introduce or amend regulations with a view to requiring the immediate release of cetaceans caught incidentally in fishing gear in conditions that assure their survival.[108]

Finally, in 2001 the IWC recommended as a primary consideration that 'all contracting Parties make reasonable attempts to release alive, with minimum harm possible, whales that have been incidentally captured'.[109]

Thresholds of bycatch

Many prominent agreements restrict the amount of bycatch that may be caught in total, typically as a percentage ratio of the overall catch. This idea of set quotas for the amount of bycatch that may be obtained has become very important, with a number of regimes dealing with the incidental catch of non-target species in particular. Most forums invoke only general targets, such as that of the IWC, 'to reduce by-catch to levels known to be sustainable'.[110]

The bycatch of dolphins in some tuna fisheries has been a large problem in some specific fisheries such as with yellowfins in the Eastern Tropical Pacific fishery.[111] By the mid-1960s, bycatches of dolphins amounted to about 350,000 animals per year.[112] Following strong American leadership,[113] and the 'tuna-dolphin' debate at the General Agreement on Tariffs and Trade (GATT),[114] the United States and 11 other countries negotiated a multilateral (voluntary) agreement in 1992 (the La Jolla Agreement)[115] under the auspices of the IATTC, with the intention of reducing dolphin bycatches in the eastern Pacific.[116] The 1992 La Jolla Agreement established a programme with the objective of 'progressively reducing dolphin mortality in the eastern Pacific Ocean fishery to levels approaching zero'. This was to be achieved through the setting of annual limits (and the development of new technologies). The annual limits of bycatch of dolphins (the dolphin mortality limit: DML) began in 1993 at 19,500 (as 0.30 per cent of the species total), which was divided by the total number of vessels, and was to be scaled down to less than 5,000 (as less than 0.08 per cent of the total population estimates) by 1999.[117] Moreover, the agreement specified that if the incidental take exceeded 2 per cent of the total estimated stock numbers in one year, a warning would be issued, which could trigger a ban on setting on that stock. The greater the warning, the greater the ban.[118]

In 1995, the Panama Declaration reaffirmed the signatories' commitments to the La Jolla Agreement, and announced their intention to form into a binding legal instrument.[119] As well as agreeing market restrictions for those not complying with the agreement, they also lowered the threshold by which restrictions for setting on stocks of tuna could be triggered if the effects of the bycatch on dolphins exceeded 0.1 per cent of the total stock per year.[120] The eventual agreement which followed in 1998 (the International Dolphin Conservation Program) aimed at reducing bycatch 'to levels approaching zero' and the overall total of incidental catch of dolphins was set at 5,000 per year.[121]

One of the most interesting features of the agreement was the introduction of an 'incentive' scheme, whereby each vessel is assigned a DML, which is divided down from the overall per year, per stock, dolphin mortality caps. Under certain conditions, underutilized DML may be reallocated to other vessels.[122] This mechanism, acting in clear accordance with market-based principles, creates an incentive for operators of vessels to directly reduce their bycatch within their quota, as they may be able to sell what they do not use.[123]

The other regime interested in small cetaceans which has set an overall threshold which may not be breached is ASCOBANS.[124] At their second Meeting of the Parties (MOP 2) in 1997, they established the target 'that the general aim should be to minimize (i.e. to ultimately reduce to zero) anthropogenic removals within some yet-to-be specified time frame, and that intermediate target levels should be set'.[125] They then stipulated: 'That . . . the total anthropogenic removal of harbor porpoises in the central and south North Sea . . . is reduced as soon as possible to less that 2% of the current abundance estimate per year'.[126] MOP 3 lowered the threshold to 1.7 per cent, with the overall precautionary objective of reducing bycatch to less than 1 per cent of the best-available population estimate,[127] and the MOP 4 reiterated this target.[128]

Within the IWC, although the ASCOBANS approach, whereby bycatch limits and targets are set, has been endorsed by the SC,[129] there has been only one attempt at setting an actual target. This occurred with the critically endangered North Atlantic right whales, where it was suggested within the IWC that 'every effort needs to be made to reduce anthropogenic mortality in the population to zero'.[130]

Disincentives and restrictions on the sale of bycatch

The idea of not financially benefiting from accidentally caught species was first addressed by the IWC between 1950 and the late 1970s. The primary mechanism for dealing with this issue was by making sure that no bonus payments were made for that catch to a harpoon gunner who shot the wrong target.[131] In 2001[132] and again in 2002, it was suggested that the deliberate killing of whales in fisheries should in certain circumstances be considered an

infraction. Although this idea was not adopted, it clearly expressed the dissatisfaction of some IWC members over this issue.[133] Apart from this obvious first step, the question of what to do next – in particular with regard to what had actually been captured – becomes particularly difficult. The difficulty is twofold. On the one hand, if bycatch is sold, it may create a perverse incentive not to reduce the problem as those responsible for the incidental capture may financially benefit from the capture of something which should not have been captured. Moreover, the sale of bycatch may create an undesired market for the product. This is especially so with species that are already the subject of strict regulation or protection. On the other hand, to simply discard the dead bycatch and not utilize it in any way may be seen as not only wasteful (in economic terms as it may have any number of uses from pet foods to specialty products) but also possibly immoral when seen from the perspective of countries which have food deficiencies.

This problem of discarding and wastage is particularly obvious[134] with sharks (of which at least 20 of the 100 exploited species are now vulnerable, endangered or critically endangered).[135] Prior to the FAO's International Plan of Action (IPOA) for the Conservation and Management of Sharks, and apart from interest in ICCAT,[136] there were few international mechanisms which focused on this problem.[137] The FAO plan is very general, aiming only at the overall sustainability of shark species.[138] Accordingly, along with the axiomatic goal of species survival, and the collection of knowledge about the current status of sharks and the formation of plans to approach the issue, the broad objectives are to 'minimise unutilised catches of sharks' and 'minimise waste and discards from shark catches . . . for example, requiring the retention of sharks whose fins are removed'.[139] The overall goal is that the full carcass should be utilized and wastage minimized.

While this approach may be laudable with regard to the desire to decrease wasteful practices such as just taking the fin from sharks and then discarding the remaining carcass, it should be realized that if this approach is utilized without overall goals of limits of threshold for bycatch, or restrictions of sale for bycatch, then a perverse incentive not to capture sharks in general may have been created.

The alternative approach to avoiding the utilization of bycatch and encouraging what may be seen as wasteful practices is that non-target species may not be landed at all. The idea that undersize fish may not be landed and/or sold can be traced back to the nineteenth century. Since then, the practice has become well established. The primary approach has been in accordance with a long history in agreements which prohibit access to ports for fish or marine mammals taken in contravention of international conservation obligations.[140] The 1995 Panama Declaration is unique in that it reaffirmed the signatories' commitments to reducing dolphin bycatch, but rather than banning the sale of

the bycatch of dolphins, it only allows the sale of tuna caught in a 'dolphin friendly' way.[141] A final example of this is that of the IWC Commission, which recommended in 2001: 'if the whale cannot be released alive [then] there shall be no commercial exchange of incidentally captured whales for which no catch limit has been set by the Commission'.[142]

In comparison to the above approaches where no incidental catch may be landed, a number of other countries have refrained from creating disincentives to bycatch, and have begun utilizing their bycatch in non-traditional markets as a way to avoid the wastage of discards.[143] China, Cuba, Canada, Iceland, Norway and a number of African and Asian countries have begun to move down this route. Within the IWC, Japan, Iceland, Norway and Korea have all argued this position, whereby what is caught as bycatch is utilized, as failure to do so is deemed wasteful.[144] As such, the bycatch is brought in for commercial utilization. In some cases, such as with Iceland, when a rare whale has been caught in a net, its arrival was advertised in the supermarkets.[145] The obvious problem is that although this may reduce the wasteful practice of discarding, it may ironically create a perverse incentive not to attempt to reduce bycatch. Indeed, in some regions, countries have already directly opposed the adoption of mechanisms to reduce bycatch because although generally not as valuable as target species, it is still financially worthwhile to retain it on board and sell it. Some good examples of this can be found in Japan and Korea, where the sale of most captured cetaceans (but not blue, bowhead, right whales or finless porpoises) is permitted, once a DNA sample has been registered. The Japanese justification of this is that it encourages the reporting of bycatch.[146] Of course, it may also provide a direct incentive not to confront the over-riding problem. Indeed, following the Japanese regulation, the number of bycaught minke whales rose from 29 in 2000, to 79 in 2001.[147] This problem was reiterated in 2003, when it was revealed that since the introduction of the Japanese regulation, the bycatch of minke whales had increased fivefold.[148]

A possible way through this conflict of objectives may be in adopting a middle ground with incidentally caught species which are caught and cannot be released alive (or have no chance of survival). First, it is necessary to look at the bycaught species involved. If it is in any way threatened or the subject of conservation measures, it should not be allowed to enter into commercial trade. Moreover, it should not be discarded either. Rather, it should be retained on board (as simply taking up holding space which could be used for alternative legitimate take is a direct disincentive to wrongful capture) before being disposed of on land in a manner in which no demand for the product can be created.[149] As such, the product should not be consumed since, depending on the species at issue, the risk of creating an illegitimate demand for a species which is currently endangered, is of greater importance than not utilizing the carcass for consumption. This approach has been followed in Australia.[150]

Second, incidentally caught species which are captured and cannot be released alive (or have no chance of survival), and whose sustainability is *not* threatened should be retained, landed and sold for utilization. However, those responsible for the incidental capture should not directly benefit from the capture of wrongful targets, and where possible, a disincentive should be introduced. The IWC did this in 2001 when it suggested that cetaceans that have been incidentally caught but are subject to a quota (and can thus be commercially utilized) should be 'counted against the overall quota for that species or stock'. As such, no clear benefits from utilizing the bycatch will be created.[151] Similar arrangements exist in a number of countries, where although the bycatch may be utilized, there is no direct benefit to those who caught it. For example, in the United States some trial schemes have worked with the question of whether it is practical to utilize by donating the bycatch to a private, non-profit organization for distribution to the food needy.[152]

4 CONCLUSION

The bycatch of species in fishing operations is not a new problem. Rather, it is something which has plagued resource utilization debates in domestic settings for many hundreds of years, and in international settings, for nearly 150 years. At the end of the twentieth century, the problem of bycatch had become recognized in many diverse forums as a direct threat to a number of species including seabirds, turtles, sharks and cetaceans. However, thankfully, mechanisms by which it can be dealt with are available.

The first principle is to be accurate about the target species, and strictly define not only what is acceptable to take, but also what, when and where it may not be appropriate to take. Second, the possibility of modifying the existing technology used to harvest, needs to be examined. Modification can range from changing the mesh sizes on nets, through to the inclusion of particular exclusion, escape or deterrence apparatus. The last three examples of deterrence have already begun to prove quite successful in the protection of turtles, seabirds and small cetaceans in some settings. Despite the possibilities for some technological 'breakthroughs' it is important to realize that some technologies cannot be sufficiently modified to make their impact on incidental catch negligible. Fishing with explosives and driftnets on fish aggregation devices are examples of this.

Assuming that technology cannot entirely prevent incidental catch, it is necessary to have a collection of secondary mechanisms in place, so as to at least blunt the worst effects of the problem. First, if the incidentally caught species is alive (and assuming it has a good chance of survival), it should be released. Second, fishing operations should have direct quotas on how much

bycatch they may take before having to cease fishing. These quotas need to be part of effective compliance regimes, which should be operating independently of the question of bycatch. Moreover, the consideration of incentives or disincentives to address bycatch should also be examined. The idea that bycatch may not be landed and profited from has an obvious attraction when dealing with species which are already the subject of separate conservation measures. Although such species should not be allowed to enter the marketplace, they should not be discarded either. They should be retained on vessels (as a prima facie disincentive) before being disposed of after being landed. Conversely, with bycaught species that are not the subject of concern under conservation regimes, their active utilization should be considered. However, although the utilization of this form of bycatch should be pursued, it is important that those who caught it are not directly rewarded for the process. As such, it should be compulsory for all vessels to retain their bycatch (no discarding) and when it is landed, the benefits of utilizing the bycatch should go to deserving third parties.

In many ways, in the new century, the IWC has begun to come to grips with the problem of bycatch, and has attempted to install appropriate principles to confront it. Although the IWC cannot directly confront the problem (as the primary agents involved in this area are other, non-whale-focused forums) it has clearly stated that all efforts must be made to avoid the incidental capture of cetaceans, both large and small. If cetaceans are still captured, the overall obligation is to release them alive. If this cannot be done, then only incidentally captured cetaceans which are already subject to a quota may be traded (that is, those that are subject to specific conservation measures may not be allowed into the marketplace). However, even with those that may be commercially exchanged, the ones captured must be counted against the overall quota for that species. With such principles it is clear that the IWC has implemented the appropriate incentives to try to confront the problem. However, application of these principles is proving a very difficult task.

NOTES

1. See Gillespie, A. (2001). *The Illusion of Progress: Unsustainable Development in International Law* (Earthscan, London): Chapter 2.
2. World fishery production at 122 million tonnes in 1997. FAO (1999). *The State of the World's Fisheries and Aquaculture* (FAO, Rome): 3–5.
3. Programme for the Further Implementation of Agenda 21. Adopted by the Special Session of the General Assembly, 23–27 June 1997. Reprinted in Osborn, D. (1998). *Earth Summit II: Outcomes and Analysis* (Earthscan, London): Paragraph 36. Independent Commission on the World's Oceans (1998). *The Ocean: Our Future* (Cambridge University Press, Cambridge): 84.
4. FAO (1999), supra n2: 6. See also Rome Consensus on World Fisheries. FAO Ministerial Conference on Fisheries, 1995 (FAO, Rome). Paragraph 7.

5. *The Ocean: Our Future*, supra n3: 84.
6. See Alversen, D. (1994). 'A Global Assessment of Fisheries Bycatch and Discards'. (FAO, Rome, Fisheries Technical Paper No. 339).
7. Marine species may be discarded because they are the wrong species, the wrong size, the wrong sex, they are damaged and not of marketable grade, they are incompatible with the rest of the catch (that is, due to abrasion, slime or poison), they spoil rapidly, there is insufficient space on board the vessel, the quota has been reached, or they are a prohibited species, from a prohibited season, caught with the wrong gear or in the wrong place.
8. See Clucas, I. (1997). *A Study of Options for Utilisation of Bycatch and Discards from Marine Capture Fisheries* (FAO, Rome): 35–9. Alversen et al., supra n6: table 4.
9. See Secretary General. Environment and Sustainable Development: Sustainable Use and Conservation of the Marine Living Resources of the High Seas: Fisheries By-Catch and Discards. A/50/552. 12 October 1995. Paragraph 6.
10. Noted in Secretary General, ibid. Paragraph 28.
11. Clucas, supra n8: 27–9. Gerber, L. (2000). 'Measuring Success in Conservation.' *American Scientist*. July: 316–20.
12. See Pliny. *Natural History*. Book IX. 30–X (Harvard Classics, New York): 185.
13. See Gillespie, A. (2002).'Wasting the Oceans: Searching for Principles to Control Bycatch in International Law.' *International Journal of Marine and Coastal Law*. 17(2): 161–93.
14. For example, see the Marine Stewardship Council (MSC) (2000). 'Principles and Criteria for Sustainable Fishing.' For bycatch, see Principle 2.
15. For discussions of a number of individual approaches to this, see 'Large-Scale Pelagic Drift Net Fishing, Unauthorised Fishing, By-Catch and Other Developments: Report of the Secretary General.' UNGA. A/53/473. Paragraphs 150–78. See also OECD (2000). 'Transition to Responsible Fisheries: Post Harvesting Practices and Responsible Fisheries: Case Studies.' AGR/FI(2000)9/FINAL.
16. Article 61. Paragraph 4. See also Article 119. 1(b).
17. See FAO (1991). Report of the Nineteenth Session of the Committee on Fisheries. Rome. 8–12 April. FAO Fisheries Report. No 459. Paragraph 73.
18. Agenda 21. Chapter 17. Paragraphs 17.46.(c); 17.50; 17.74; 17.87. This call was repeated at the UNCED's five-year review in 1997 Programme for Further Implementation of Agenda 21. Reprinted in Osborne, supra n3. Paragraph 36 (e) & (f).
19. Declaration of the International Conference on Responsible Fishing. Cancun, Mexico, 6–8 May 1992. Available from the FAO. Paragraph 8.
20. Expert Consultation on the Code of Conduct for Responsible Fishing (1994, FAO, FIIT/R506). Paragraphs 16 & 31.
21. The Rome Consensus, supra n4. Paragraphs 4 & 10.
22. See FAO Code of Conduct for Responsible Fisheries (1995). Paragraphs 6.2; 6.6; 7.2.2.(g); 7.5.2; 7.6.9; 8.5; 12.10; 12.11. The Code can also be found in *Environmental Policy and the Law*. (1995) 25(4): 180–82.
23. Kyoto Plan of Action (1995). Available from the FAO. See Paragraphs 7 & 15.
24. 1995 United Nations Conference on Straddling Stocks and Highly Migratory Fish Stocks. 34 ILM. 1542.
25. See Article 18(e) & (f).
26. See Article 18(i).
27. Convention on the Conservation of Antarctic Marine Living Resources B.H.883.txt A/CONF.129/15 (25 ILM. 543). Article II(b) & IX.2.(i).
28. 1982 Convention for the Conservation of Salmon in the North Atlantic Ocean. Reprinted in Rummel-Bulska, I. (ed.) (1991). *Selected Multilateral Treaties in the Field of the Environment* (UNEP/Cambridge University Press, Cambridge): 157–200. Article 7.2.
29. See General Fisheries Commission for the Mediterranean. Report of the 24th Session. Alicante. Spain, 12–15 July 1999. Paragraph 46.
30. The 1993 Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean, http://www.oceanlaw.net/texts/npas.htm. Article 11, VII.1, VIII.3 & IX.1. For a useful discussion of this convention, see 3 YBIEL. (1992). 324.

31. With the Convention on the Conservation of the Southern Bluefin Tuna. http://www.oceanlaw.net/texts/npas.htm. See Articles 2 & 9(c). See also the 2000 Framework Agreement for the Conservation of Living Resources of the High Seas of the South Pacific. (the 'Galapagos Agreement'). Available from http://www.oceanlaw.net/texts/galapogas.htm. Articles 4(5) & 5(1)(c) & (f).
32. Available from <http:www.oceanlaw.net/texts/westpac.htm>. Articles 5(d), (e) & 10(c).
33. Report of the Scientific Committee. IWC/54/4. 20, 66. Report of the Scientific Committee. IWC/56/Rep 1. 15.
34. Report of the Scientific Committee. IWC/55/Rep 1. 18.
35. Before many of the driftnetting measures were agreed, it was estimated that in the Italian swordfish driftnetting industry alone, at least 13,500 small cetaceans were being killed annually. Environmental Investigation Agency (1990). *The Global War Against Small Cetaceans* (London, EIA): 46.
36. IWC. 34th Report. (1984). 24 and Appendix 4 at 30. More than 14,000 dolphins in the northern waters of Australia were killed in gillnets between 1981 and 1985. See Harwood, N. (1987) 'The Incidental Catch of Small Cetaceans in the Offshore Gillnet Fishery in Northern Australian Waters: 1981–1985.' Report of the International Whaling Committee. 37. IWC. 37th Report. (1987). 375. In the early 1990s, gillnets set for cod fishing in the Gulf of Saint Lawrence and the Saint Lawrence River inadvertently snare up to 2,000 harbour porpoises. See Hamilton, G. (1993). 'St Lawrence Seaway Nets 2,000 Porpoises Per Year.' *Gazette* (Montreal). February 22: A4.
37. The annual average for 1987–2001 was probably in the range of 5,591–5,817. However, towards the end of this period, the numbers were falling. See Uinther, M. (2002). 'Updated Estimates of Harbour Porpoise Bycatch.' SC/54/SM31. Concern was first registered at the 28th meeting in 1976. Similar concern about the possibly unsustainable take of this species was reiterated in IWC. 31st Report. (1981). 24; IWC. 41st Report. (1991). 38. A directed resolution followed at the 44th meeting. 'Resolution on Harbour Porpoise in the North Atlantic and the Baltic Sea.' Appendix 11. IWC. 44th Report. (1994). 34. Despite this, two years later, the scientific committee reported that for each of the three stocks that make up the North Atlantic Harbour Porpoise (Bay of Fundy, Gulf of Maine, and North Sea Celtic Shelf), bycatch exceeded 3 per cent of abundance. This warranted concerns about sustainability. IWC. 46th Report. (1996). 35–6. In 1998 the SC added that porpoises 'appeared to have significantly declined across the Baltic region. Even minimum bycatch estimates exceeded the calculated sustainable mortality rates'. IWC. 50th Meeting in 1998. (1999). 34.
38. 34th Report. (1984). 24. At the 41st meeting, it was suggested that with the Black Sea dolphin, current take levels were unsustainable. IWC. 41st Report. (1991). 38.
39. Appendix 4. IWC. 34th Report. (1984). 31.
40. Appendix 4. IWC. 34th Report. (1984). 31. Appendix 2. IWC. 35th Report. (1985). 27. Appendix 2. IWC. 35th Report. (1985). 27.
41. IWC. 41st Report. (1991). 36–7. Biosphere Reserve of the Upper Gulf of California and the Colorado River Delta. Appendix 3. IWC Resolution 1994–3. IWC. 45th Report. (1995). 42; IWC. 52nd Meeting in 2000. (2001). 52–3.
42. Appendix 2. IWC. 35th Report. (1985). 27.
43. Appendix 2. IWC. 35th Report. (1985). 27.
44. IWC. 42nd Report. (1992). 35–6. IWC. 52nd Meeting in 2000. (2001). 50–51.
45. IWC. 42nd Report. (1992). 35–6; IWC. 52nd Meeting in 2000. (2001). 50. CMS. Proceedings of the Sixth Conference of the Parties (Cape Town) (Bonn, UNEP). Volume 1: 107–8.
46. IWC. 52nd Meeting in 2000. (2001). 50.
47. For the Irrawaddy dolphin and the finless porpoise, see ibid. 50–51.
48. Between 1993 and 1999, 11,973 were caught in the Japanese driftnet fishery operating in the Russian EEZ. IWC. 53rd Meeting in 2001. (2002). 35.
49. Appendix 2. IWC. 35th Report. (1985). 27. For a discussion of this continued problem, see Ministry for the Environment (1997). *State of the New Zealand Environment* (MFE, Wellington). 9: 107, 132.

50. 'Conservation of Freshwater Cetaceans.' IWC Resolution 2000–9. In IWC. 52nd Meeting in 2000. (2001). 70.
51. IWC. 30th Report. (1980). 27–8; IWC. 33rd Report. (1983). 24.
52. Scientific Committee (2002). Report of the Sub-Committee on Bycatch. Annex M.
53. Western North Atlantic Right Whales. IWC Resolution 2000–8. IWC. 52nd Meeting in 2000. (2001). 30, 69.
54. In 1990, the IWC convened a workshop on cetacean mortality in gillnet and trap fisheries. They concluded that kill rates as low as 2 per cent of the population may not be sustainable, depending on the life history of the species and the age, and sex composition of the kill. See Perrin, W. (1990). *Gillnets and Cetaceans* (IWC, Cambridge): 7.
55. See Appendix 3: IWC Resolution 1998–2. 'Resolution on Total Catches over Time.' See IWC. 50th Meeting in 1998. (1999). 42. The IWC has established working groups to further this objective. See Report of the Scientific Committee. IWC/53/4. 15–20.
56. For the SC's recommendation, see IWC/54/4. 21. IWC. 46th Report. (1996). 34. IWC. 47th Report. (1997). 35. See Appendix 5: Resolution 1997–4. 'Resolution on Cetacean Bycatch Reporting and Bycatch Reduction.' IWC. 48th Report. (1998). 47. IWC. 47th Report. (1997). 35.
57. IWC. 52nd Meeting in 2000. (2001). 51. The two resolutions in 2001 were: 'Resolution on the Incidental Capture of Cetaceans.' IWC/53/29 and 'Resolution on Small Cetaceans' which called upon all governments 'to take appropriate measures to prevent, minimize and mitigate bycatch of small cetaceans in fishing operations'. IWC 53/47. Agenda Item 14.1.
58. CMS/Com.I/7/Rev.1. 8. CMS/Com.I/7/Rev.1. 9.
59. Resolution 6.2. 'Bycatch.' Reprinted in 1999. *Proceedings of the Sixth Meeting of the Conference of the Parties* (CMS, Bonn). Volume 1: 36. The problem of accidental catches was first noted at COP 2. See UNEP/CMS.Conf.2.16, Resolution 2.3: 21.
60. CMS. Resolution 7.15. 'Bycatch.' UNEP/CMS/Res.7.15.
61. Concern about bycatch can be recognized in ASCOBANS in the preamble of the agreement, the Action Plan (part 3) and numerous resolutions. See MOP 2 (1997). 'Resolution on the Incidental Catch of Small Cetaceans.' ASCOBANS. MOP 3 (2000). Incidental Take of Small Cetaceans. ASCOBANS. MOP 4 (2003). Incidental Take of Small Cetaceans.
62. The Agreement on the Conservation of Cetaceans of the Black Seas, Mediterranean Sea and Contiguous Area (1997). 36 ILM. 777. ACCOBAMS recognized the need to deal with the many facets of this problem in its conservation plan (see sections 1.a & 1.b) and investigation into cetacean bycatch was a key goal of implementation priorities identified at the first ACCOBAMS MOP. See Resolution 1.9. 'International Implementation Priorities for 2002–2006.'
63. ACAP. See the Preamble, Article III.h., Article XIII. 2. and Action Plan. 3.2.4.
64. See Juda, L. (1995). *International Law and Ocean Use Management: The Evolution of Ocean Governance* (Routledge, London): 9.
65. Ibid. 20–21.
66. See Gillespie, supra n13.
67. These first appeared in the 1937 International Agreement for the Regulation of Whaling (Article 4) and the protocol the following year in 1938. Protocol Amending the International Agreement for the Regulation of Whales, 1938. Reprinted in Ruster, B. and Simma, B. (eds) (1976). *International Protection of the Environment* (IPE) (Oceana, New York). VII: 3482. Article 4. This provision later became part of the Commission's possible powers in Article V of the ICRW. 161 UNTS. 143.
68. Article 5.
69. IWC. 52nd Meeting in 2000. (2001). 51–2.
70. 1931 Convention for the Regulation of Whaling. IPE, supra n67. Volume VII: 3466. See also the Protocol Amending the International Agreement. Article 1.
71. For a discussion of this, see Gillespie, A. (2000). 'The Southern Ocean Sanctuary and International Environmental Law.' *International Journal of Marine and Coastal Law*. 15(3): 293–316.
72. See Gillespie, supra n13.

73. See ‘Large-Scale Pelagic Drift Net Fishing,’ supra n15. Paragraph 202. CCAMLR XVII–1998. Commission Report. Paragraph 6.22. Observers Report to CCAMLR (2001). IWC/54/10. Agenda Item 14.2.
74. FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (FAO, Rome). Also available from <http://www.oceanlaw.net/texts/faoseabird.htm>.
75. Conservation Measure 29/XVI: Minimisation of the Incidental Mortality of Seabirds in the Course of Long-Line Fishing Research in the Convention Area. This was updated in 2000. See CCAMLR XIX–2000. Commission Report. Paragraphs 6.11–6.20. The renewed measure is Conservation Measure 29/XIX.
76. See CCSBT. Report of the Third Resumed Annual Meeting. Canberra. 18–22 February 1997. Agenda Item 1.5, 5 & Attachment E. ‘Recommendations Relating to Ecologically Related Species: Especially the Incidental Mortality of Seabirds by Long-Line Fishing.’
77. CCAMLR XVII–1998. Commission Report. Paragraphs 6.17 & 6.19.
78. See Lutz, P.L. and Musick, J.A. (1996). *The Biology of Sea Turtles* (Allen & Unwin, London): 385–7.
79. See Weber, M. (1995). *Delay and Denial: A Political History of Sea Turtles and Shrimp Fishing* (Earth Island, San Francisco): 1–46. Also, Anon (2001). ‘Porpoise Built Nets.’ *New Scientist*. January 6: 7.
80. Panel Report, Paragraph 7.60. Footnote 674. This is referred to in ‘United States – Import Prohibition of Certain Shrimp and Shrimp Products.’ AB-1998–4. WTO: WT/DS58/AB/R. Paragraph 26.
81. Inter-American Convention for the Protection and Conservation of Sea Turtles. Reprinted in 1998. *Journal of International Wildlife Law and Policy*. 1(1): 179–201.
82. 1999 Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa. Available from http://www.oceanlaw.net/texts/turtles_mou1.htm.
83. Action Plan for the Conservation of Mediterranean Marine Turtles. Available from http://www.oceanlaw.net/texts/medturtles.htm.
84. The 2000 Memorandum of Understanding on the Conservation and Management of Marine Turtles and Their Habitats of the Indian Ocean and South East Asia. Reprinted in 2000 *Journal of International Wildlife Law and Policy*. 3(2): 190–95.
85. Inter-American Convention, supra n81. Annex III (3).
86. Action Plan, supra n83. Paragraph 10(a)(3).
87. The 2000 Memorandum, supra n84. 190–95.
88. Point O. Draft Conservation and Management Plan for Marine Turtles in the Indian Ocean and South East Asian Region. Reprinted in 2000 *Journal of International Wildlife Law and Policy*. 3(2): 196–9.
89. See Annex VIII (2) of the 1998 Agreement on the International Dolphin Conservation Program. 37 ILM. (1988). 1246. Also, Kleiner, K. (1996). ‘Mexico Fishes for End to Tuna Ban.’ *New Scientist*. May 25: 19. See Larsen, F. (2002). ‘Reduction of Harbour Porpoises Bycatch in the North Sea By High Density Nets.’ IWC/SC/54/SM30.
90. IWC. 52nd Meeting in 2000 (2001). 52.
91. See Larson, F. (2002). ‘Use of Pingers in the Danish North Sea Fishery: A 100% Reduction Rate.’ IWC/SC/54/SM32. Gazo, M. (2002). ‘Are Pingers Useful?’ SC/54/Sm11.
92. See ‘Record of Discussion of the Working Group on Bycatch Mitigation.’ In Report of the 8th Meeting of the Advisory Committee to ASCOBANS (Denmark, 2001). Annex 5. See also Report of the Scientific Committee. IWC/56/Rep 1. 5.
93. IWC. 52nd Meeting in 2000. (2001). 52.
94. This necessity is often highlighted when the incidental capture involves severely endangered species. In some countries, various technology has been banned. For example, in New Zealand, set-nets have been banned within four miles of the coast of the North Island in an attempt to protect the critically endangered Hector’s dolphin for bycatch. See Hodgson, P. (2001). ‘Set Net Ban to Protect North Island’s Hector’s Dolphin.’ Media Statement. August 16.
95. See Northridge, S. (1991). ‘Driftnet Fisheries and Their Impact on Non-target Species.’ (FAO, Rome, Fisheries Technical Paper 320).

96. See Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific. 29 ILM. 1454. For discussion, see Anon (1989). 'Drift Net Peril Moves to South Pacific.' *New Scientist*. June 17: 9.
97. CCAMLR. Resolution 7/IX.
98. 'Driftnets: Controversy Over Policy.' (1995). *Environmental Policy and the Law*. 25(1): 40. Large-Scale Pelagic Drift Net Fishing, supra n15. Paragraphs 26, 48, 52–7.
99. UNGA Res. 46/215. See 3 YBIEL. 1992: 323–4.
100. UNGA. Res. A/RES/53/33 (1999, January 6).
101. At its 1990 meeting, the IWC unanimously passed a Resolution in Support of the UN Initiative Regarding Large-Scale Pelagic Drift-netting. Appendix 6: 'Resolution in Support of the United Nations General Assembly Initiative Regarding Large-Scale Pelagic Driftnet Fishing and its Impacts on the Living Marine Resources of the World's Oceans and Seas.' IWC. 41st Report. (1991). 37, 49.
102. IWC. 53rd Meeting in 2001. (2002). 14.
103. Article VI.2.h & 3.
104. See IATTC. 'Resolution on Bycatch.' June 2000. Point 3.
105. Ibid. Point 5.
106. Article 5 (b). See also Annex IV.I.(b) & VIII. 3.d.
107. ASCOBANS. Action Plan. Part 4.
108. ACCOBAMS. Conservation Plan. 1.a.
109. 'Resolution on the Incidental Capture of Cetaceans.' IWC/53/29. Agenda Item 14.3.
110. 'Resolution on the Conservation of Freshwater Cetaceans.' IWC Resolution 2000–9. IWC. 52nd Report. (2001) 70.
111. Joseph, J. (1994). 'The Tuna-Dolphin Controversy in the Eastern Pacific Ocean: Biological, Economic, and Political Impacts.' *Ocean Development and International Law*. 25: 1, 8.
112. Ibid. 1. Also, Anon (1977). 'Tuna Troubles.' *New Scientist*. May 26: 29. Anderson, I. (1988). 'Government Observers Forced to Lie About Dolphin Deaths.' *New Scientist*. June 16: 34. Anderson, I. (1988). 'Millions of Dolphins Butchered in Tuna Nets.' *New Scientist*. March 17: 28.
113. The United States, although allowing the incidental catch of cetaceans during commercial fishing operations has progressively hardened its intention to reduce bycatch to 'insignificant levels approaching a zero mortality'. Marine Mammal Protection Act (1972). Pub. L. No. 92–522, 86 Stat. 1027 (Codified as amended at 16 USC. ss. 1361–1407 (1988 & Supp. IV 1992). See 16 USC. ss. 1371 (a) (2) in particular. The United States pursued this goal at the forum primarily responsible for this problem – the IATTC – and as early as 1976 the IATTC agreed to take 'every reasonable effort . . . to avoid [the] needless or senseless killing [of dolphins]'. This 'summary of the minutes of the 33rd meeting' can be found in Joseph, supra n111: 4–5.
114. For a discussion of this, see Gillespie, supra n1. Chapter 3.
115. Agreement for the Reduction of Dolphin Mortality in the Eastern Pacific Ocean, 1992. Reprinted in 1994 ILM. 33: 936.
116. For a critical examination of this agreement, with the assertion that the dolphins in question are not necessarily threatened with extinction, whereas other parts of the bycatch from these operations are not receiving adequate attention, see Cullet, P. (1996). 'Dolphin Bycatches in Tuna Fisheries: A Smokescreen Hiding the Real Issues?' *Ocean Development and International Law*. 27: 333–48.
117. Agreement for the Reduction of Dolphin Mortality, supra n115. Preamble & Point 2.
118. If in one year the bycatch on any specific stock exceeds 4 per cent, a one-year ban will follow, and if it exceeds 6 per cent, the ban will remain in place for three years, 8 per cent for four years, and 10 per cent for five. See Appendix III.
119. The 1995 Panama Declaration was made under the auspices of the ICCAT, with regard to the bycatch of dolphins. This can be found in 1995 YBIEL (Volume 6). Document 11.
120. The Panama Declaration, ibid. 2.
121. 1998 Agreement on the International Dolphin Conservation Program. Articles II & V.1.
122. See Article 5, Annex IV, Annex III & Annex IV.
123. For a discussion of market-based environmental measures, see Gillespie, supra n1. Chapter 4.

124. ASCOBANS. First Meeting of the Parties, Stockholm, 26–28 September 1994. Annex 4, Resolution 2: 'Resolution on the Implementation of the Conservation and Management Plan.'
125. Second Meeting of the Parties, Bonn, 17–19 November 1997. Point 2. Annex K. 'Resolution on Incidental Take of Small Cetaceans.'
126. Recommendation 1. Ibid. See also Report of the Second Meeting. Ibid. Paragraph 61. The target date was by MOP 3. In 1999, a steering group was formed to organize a Workshop on the Bycatch Mitigation Measures in the ASCOBANS area. *CMS Bulletin*. No 9. 1999 (June). 4.
127. ASCOBANS. MOP 3 (2000). Incidental Take of Small Cetaceans.
128. ASCOBANS. MOP 4 (2003). Incidental Take of Small Cetaceans.
129. Report of the Scientific Committee. IWC/53/4. 68.
130. IWC. 52nd Meeting in 2000. (2001). 34.
131. See Infractions Sub-Committee. IWC/53/Inf.1. Item 6.
132. IWC. 54th Meeting in 2002. (2002). 45.
133. Infractions Sub-Committee. IWC/54/11. Item 16.1.
134. See UNGA. Large Scale Pelagic Drift Net Fishing: 50–53.
135. See FAO (1998). 'Sharks and Seabirds on Agenda for International Fishery Meeting.' (FAO Press Release, October 22). This figure is not surprising given that whereas 272,000 tonnes of shark were landed in 1950, by 1996, this was closer to 760,000. Dayton, L. (1991). 'Save the Sharks.' *New Scientist*. March 7: 35–8. MacKenzie, D. (1997). 'Alarm Sounds Over Slaughter of Sharks.' *New Scientist*. March 22: 13. MacKenzie, D. (1998). 'Save Our Sharks.' *New Scientist*. November 7: 14.
136. ICCAT. Recommendation 95–2. 'Resolution on Co-Operation with FAO With Regard to Study on the Status of Stocks and Bycatch of Shark Species.'
137. IPOA. Sharks. Paragraph 5.
138. FAO. 'International Plan of Action for the Conservation and Management of Sharks' (FAO, Rome). Also available from http://www.oceanlaw.net/texts/faosharks.htm. The objective of the IPOA is to 'ensure the conservation and management . . . and their long term sustainable use'. IPOA. Sharks. Paragraph 16.
139. IPOA. Sharks. Paragraph 20.
140. See Chapter 12 on compliance.
141. See Annex 1 of the Panama Declaration.
142. Resolution on the Incidental Capture of Cetaceans. IWC/53/29. Agenda Item 14.3.
143. See OECD (2000). 'Transition to Responsible Fisheries: Post Harvesting Practices and Responsible Fisheries: Case Studies.' AGR/FI(2000)9/FINAL. 23.
144. IWC. 54th Meeting in 2002. (2003). 45.
145. Report of the Infractions Sub-Committee. IWC/55/Rep 4.
146. The Japanese law is Ministerial Ordinance 92. Available from http://www.maff.go.jp/mud/410.html. For a discussion of the Japanese and Korean approaches, see Report of the Scientific Committee. IWC/53/4. 17. Also, Knight, J. (2000). 'Caught Out.' *New Scientist*. July 1: 11. Report of the Scientific Committee. IWC/56/Rep 1. 37.
147. Report of the Scientific Committee. IWC/54/4. Annex M. Sub-Committee on Bycatch.
148. Report of the Infractions Sub-Committee. IWC/55/Rep 4.
149. See Crean, K. and Symes, D. (1994). 'The Discards Problem: Towards A European Solution.' *Marine Policy*. 18(5): 422–34.
150. See Truelove, K. (1997). 'Australia: Policy Options for Fisheries Bycatch.' In Towards Sustainable Fisheries: Issues Papers. OECD/GD(97)54 (OECD, Paris): 81.
151. 'Resolution on the Incidental Capture of Cetaceans.' IWC/53/29. Agenda Item 14.3.
152. Clucas, supra n8: 54–6. This has come about through the (1996) reformulated Magnuson-Stevens Fishery Conservation and Management Act, section 208.

PART II

Philosophy in International Environmental Law

5. Whaling under scientific auspices

1 INTRODUCTION

This chapter seeks to cast some light upon one of the foremost debates that has dogged the IWC for a number of years, under which legal rights have directly conflicted with ethical considerations.[1] This debate has implications in numerous overlapping national and international bodies, in which the quest for scientific knowledge comes up against the legitimate limits of society, in both national and global settings. The commissioner for New Zealand, the Honourable Jim McLay, first raised this quandary at the IWC in 1997:

> Science is the province of the Scientific Committee, but there are occasions when it is proper for this body [the IWC] to give guidance on the Committee's scope. That is particularly true where a scientific research program raises moral and ethical issues. And ethical issues are inevitably raised when a research program results in nearly 3,000 animals being killed over eight years, with the prospect of another eight years to come . . . We need more than just a scientific direction here . . . we also need a moral compass.[2]

At the 50th meeting this was taken one step further when the secretariat was requested to undertake 'a comprehensive review of the ethical considerations taken into account by other international scientific organizations with respect to scientific research'.[3] Accordingly, the secretariat wrote to a number of international scientific organizations on this topic.[4] Although New Zealand and the UK criticized the Commission for not going far enough in its review, it was nevertheless noted in a resolution directed to Japan that comparable ethical markers in other regimes include: 'causing the minimum of stress and distress, suffering and pain, and at the same time considering if the research results can be achieved using fewer animals or by other (non-lethal) means'.[5]

These points provide the moral compass by which scientific whaling can be assessed.

2 ETHICS AND SCIENCE

Francis Bacon, writing at the outset of the Age of Reason, proclaimed that the purpose of science was for both 'the Glory of the Creator and the relief of

Man's Estate'.[6] Hundreds of years later, the need for sound science to address society's problems is omnipresent. This is especially so in an environmental context.[7] Despite this overt need, and hundreds of years of impressive achievements, science has often been the victim of a bad press[8] and of dubious social[9] agendas and ethically repugnant objectives.[10] The Third Reich and its scientific endeavours on living people was a foremost example of this.[11] The linkage soon after to the threat of mass destruction in which scientists ushered in the nuclear age added a heightened level to the ethical overlap.[12] In a modern context, these examples, along with a growing realization that science is not value free, have led to a large debate over the role of science and ethics[13] because as the United Nations General Assembly recognizes, science can be used for good or evil.[14] Thus, as former US President Bill Clinton suggested: 'Our deepest truths remain outside the realm of science . . . Science has no soul of its own. It is up to us to determine whether it will be used as a force for good or evil'.[15]

Such realizations have led to direct attempts to limit how far scientific research can proceed.[16] These limits date back to Antiquity and the Hippocratic Oath.[17] Within Modernity, the Nuremberg war crimes resulted in the Nuremberg Code, which was devised to ensure the compliance of scientific research with 'certain basic principles [which] must be observed in order to satisfy moral, ethical and legal concepts'.[18] These principles are now a common part of international medical society.[19] Aside from the area of medical ethics, international society has grown increasingly concerned about the implications of modern science and its ability to be put to 'bad' uses that are contrary to the needs of humanity. Accordingly, a number of soft obligations to make sure that science is only used for 'good' objectives have been promulgated by various international scientific bodies and the United Nations.[20] Likewise, in 1987 former President Ronald Reagan advocated a 'world code' for science.[21] Although Reagan's plan never got off the ground, such broad recommendations have become increasingly refined in their application to specific areas. These include, *inter alia*, xeno-transplantation,[22] transplantation from 'brain-dead' humans,[23] the use of embryos in research,[24] cloning (animals or humans),[25] the genetic modification of primates[26] and the human genome project.[27]

These examples point to the conclusion that scientific endeavour and its applications do not operate in a vacuum. Rather, society has invoked the moral imperative by establishing ethical limits upon what should, and should not, be attempted. Such concerns have recently appeared in the area of international environmental law, with calls for 'ethical principles and codes of practice'.[28] For example, Agenda 21 suggested:

> The objective should be to develop, improve and promote international acceptance of codes of practice and guidelines relating to science and technology . . . to be

> effective in the decision making process, such principles, codes of practice and guidelines must not only be agreed upon by the scientific and technological community, but also recognized by society as a whole.[29]

This drive reflects the earlier UNCLOS[30] stipulation for 'General Principles for the Conduct of Marine Scientific Research', that such research must 'be conducted with appropriate scientific methods'.[31] Likewise, the FAO Code of Conduct for Responsible Fisheries[32] stipulates: 'States should establish an appropriate institutional framework to determine the applied research which is required and its proper use'.[33] In the context of international environmental law, the necessity to have such frameworks is often to prevent abuse of scientific exceptions. This realization, which is over 100 years old in international law, can be traced to the 1902 Convention on Birds Useful to Agriculture[34] which, although containing exceptions for scientific research, only allowed for them 'in single instances and after taking all measures of precaution necessary to prevent any abuse of the same'.[35]

3 ANIMALS, SCIENCE AND ETHICS

Experimentation on animals dates back to Antiquity. However, it was not pervasive during that period due to the ready availability of human subjects who could be operated on without invoking ethical concerns. As humanity evolved, these practices were condemned. However, the shrinking list of choice for specimens did not hinder the drive for research. Rather, it merely changed the choice of subjects. The change in subjects became manifest in the interregnum between the Renaissance and the onset of the Enlightenment. In this period, prominent researchers such as Andreas Vesalius, Francis Bacon, William Harvey, René Descartes and Stephen Hales among others conducted experiments upon animals.[36]

As the Enlightenment blossomed and civilization embraced humanism, many social considerations – from the Rights of Man to an ethical concern about the treatment of animals[37] – fermented in the modern mind. In this atmosphere, the practice of vivisection became more widespread.[38] Soon after, certain sections of society began to argue against such experimentation.

As I have discussed at length elsewhere, the primary assumption working behind such practices as animal experimentation is anthropocentricism.[39] This claim is built around a large set of assumptions which are designed to separate humanity from other animals. However, no clear separations that would legitimately justify humanity's inconsistent practices are possible. This realization has produced two branches to the 'animal rights' tree. The first is what I call the 'deontological approach' (furthered by Tom Regan),[40] and the second is

the utilitarian approach (furthered by Peter Singer).[41] The difference between these two philosophies is that for Regan, animal testing under any consideration is illicit,[42] whereas for Singer, utilitarian considerations may justify testing under certain circumstances. The problem of the greatest good over-riding the pain of the minority considerations is, of course, a problem which vexes utilitarianism generally. In the context of moral considerations related to animal testing, if the consequences of the tests would produce the best aggregate balance of good over bad, then harmful experimentation is obligatory.[43] The ethical quagmire for utilitarianism, is that the same principle should apply for experimentation on humans, as well as animals. However, as noted above, modern society categorically rejects the conclusion that humans may be used as ends for other means – that is, sacrificed for some greater good or benefit. Conversely, with animal experimentation, despite fundamentally similar interests which make humans inviolable, animals, by contrast, are nearly always sacrificed for the greater (humanly determined) benefit.[44] Animal experimentation in the twenty-first century broadly follows the utilitarian route.

4 ANTHROPOCENTRIC ARGUMENTS ABOUT THE USE OF ANIMALS IN SCIENCE

The fundamental focus in the modern debate concerning the use of animals for scientific purposes is not about the central philosophical questions raised above, but about empirical claims as to the utility to humans that these practices represent. To the vast majority of people, animal experimentation is legitimate if it fulfils certain necessary considerations. The distinct cost to the utilized animals is seen as an unfortunate, but palatable consequence. However, before reaching this conclusion, a number of ethical steps have to be taken.[45] First, the experiments must be necessary. Second, if the answer is positive, then the debate progresses to how the animals in these procedures may be removed from the equations by replacement, reduced numbers or refined experiments. Finally, these two preliminary considerations are typically hemmed in by an overall ethical framework which recognizes that the animals at the centre of the exercises are sentient and deserving of respect, and forms of overall review to make sure that correct decisions are made and procedures complied with.

5 THE REVIEW PROCESS

As the debate about the necessity of animal experimentation has unfolded, it has become apparent that the decision makers who approve and legitimize

experimentation need to be independent of the advocates of such experiments. Similar conclusions apply to committees which review animal experiments.[46] Implicit in this position is that these decisions, where appropriate, rest with society as a whole, or suitably elected non-partisan[47] representative bodies who may oversee any questionable scientific processes.[48] To quote the Council for International Organisations of Medical Sciences, experiments that involve more than minimum pain, should be reviewed 'by a suitably constituted review body', as such decisions should 'not rest solely with the investigators'.[49]

This recognition that it is necessary to independently review scientific research which could have wider implications, has been recognized in a number of international bodies. For example, the (1993) Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean[50] stipulates that parties must submit their plans for scientific research in advance of research: 'to allow appropriate scientific review by all Parties'.[51] Moreover, 'the program shall not be implemented pending a decision by the Commission'.[52] Likewise, within the Convention on the Conservation of Antarctic Marine Living Resources,[53] scientific research involving more than 50 tons of oceanic species must first submit a research plan to the Commission, whereby all other members have the right to request a review of the research by the scientific committee who will provide advice to the Commission where the review process will be concluded. Until the review process is complete, the planned fishing for research purposes will not proceed.[54] Likewise the ACCOBAMS agreement permits only non-lethal research upon cetaceans for scientific purposes, after the advice of the SC has been sought.[55]

The necessity for independent evaluation of scientific projects involving animals is also clearly evident in certain domestic jurisdictions such as Australia,[56] Denmark,[57] the United Kingdom,[58] the United States,[59] Poland,[60] Japan,[61] Lithuania[62] and Sweden.[63] Although such practices were pointed out at the 2002 special meeting of the IWC, the countries which practise scientific whaling were clearly against any possible restrictions. As such, the discussion turned to the possibility of voluntary codes of practice in this area and possible voluntary agreements via which limits on scientific research within the IWC may be set. However, nothing was concluded.

6 COST/BENEFIT ANALYSIS AND THE IDEA OF NECESSITY

The 1875 Royal Commission (UK), responsible for the first animal experimentation legislation in the world, argued for the necessity 'to reconcile the

needs of science with the just claims of humanity'.[64] Under the UK's Cruelties to Animals Act 1876, experiments on animals were only allowable if they were likely to engender:

> The advancement by new discovery of physiological knowledge or of knowledge which will be useful for saving or prolonging life, or alleviating suffering, or the acquisition of such knowledge by persons attending lectures in medical schools, hospitals and elsewhere.[65]

The authorization of animal experimentation, that is, if it produces sufficient contributions to society, is commonly the ethical yardstick in legislation all over the world. Thus, 'animal experimentations should be undertaken only after due consideration of their relevance for human and animal health and the advancement of biological knowledge'.[66]

In more recent years, some societies have required careful scrutiny of the purported benefits of animal experiments. For example, Switzerland went as far as to have a referendum on the question of whether animal testing should be restricted to only those areas where the benefit is direct.[67] The necessity to weigh costs to the experimental animals and benefits to humanity has also been replicated in Europe,[68] Britain,[69] New Zealand,[70] Australia[71] (in part within) the United States,[72] and in Japan where the Experimental Animals Association expects its members to ask 'whether [their] animal experiments are truly necessary'.[73]

7 THE QUESTION OF NECESSITY

The benefits to humanity from animal experiments, as well as the necessity of experimentation to achieve these benefits, remains a highly controversial issue. At one end of the spectrum are those who claim that nearly all experimentation is beneficial and has resulted in great achievements for humanity, including the eradication of many infectious diseases, and increased life-span. They also contend that these breakthroughs would not have occurred without research on animals. Those who are opposed to animal experimentation are quick to point out that there are often huge gaps in the knowledge derived from the experiments, which may render them near worthless. The specific problems that supposedly make many of the experiments invalid include artificial induction of diseases, confusion of background variables, and fundamental biological differences between species.[74] Most notably, thalidomide was marketed as a sedative after extensive (and successful) animal trials, only to be subsequently found to have teratogenic effects on pregnant women.[75] Finally, it is argued that the fact that people live longer at the end of the twentieth century has more to do with improved diet, better living and working

conditions and sanitation than through the improvements brought about by animal testing.[76]

The truth is probably somewhere in between the rhetoric of the two extremes. What appears compelling is the impressive list of claimed achievements linked to animal experimentation from which many people (and other animals) have benefited.[77] These include immunization with vaccines, antiseptic surgery and anaesthetics; insulin for diabetes; the discovery of antibiotics; the development of transplantation; and the vast array of medicines for illnesses from asthma to ulcers. Research on animals may also be essential for future breakthroughs in research into cancer, heart disease, AIDS and the vast number of genetic, neurological and mental disorders.[78]

Given the above considerations, few people are willing to sacrifice these benefits to humanity, despite the unpleasant consequences for the animals experimented on.[79] In this regard, it may be assumed within the utilitarian paradigm that the experiments are permissible when they are necessary and are combined with the best approach.[80] However, when one moves from the medical arena (which is the most commonly touted by those advocating animal experimentation), then the question of necessity becomes more pressing and the triviality of the benefits derived from the experiments makes them harder to justify.[81] Accordingly, there is a big difference in support levels between lethal tests for leukaemia as opposed to 'trivial' objectives such as testing for cosmetics.[82] This claim is strengthened by the fact that often the more trivial needs invoke the most notorious animal experimentation procedures.[83]

Due to such concerns, a number of countries have introduced restrictions on animal testing in these sectors. For example, a 1987 amendment to Germany's Law for the Protection of Animals prohibited the experimental use of animals in the development and testing of weapons, and the safety testing of tobacco products, washing powders and decorative cosmetics.[84] Similar restrictions have been imposed in the United Kingdom and Poland.[85] In the European Community (EC), it has been stipulated that experiments on animals are forbidden unless they are carried out with the object of research aimed at preserving the species at issue, or essential biomedical purposes. Additionally, this dictate mandates that an experiment will not be permitted if another scientifically satisfactory method is reasonably and practically available that does not use animals.[86] As a consequence, a ban was imposed on the testing of cosmetics on animals from 2000.[87]

8 REPLACEMENT, REFINEMENT AND REDUCTION

Once it is accepted that research is justified in certain areas, the common approach seeks to improve the situation for animals. The core of this approach,

which has commonly been employed since 1959, is the 'Three Rs' – reduce, refine and replace.[88] The 'Three Rs' has been incorporated into legislation all over the world.[89] Although this approach has not been mandated under international law, many international bodies do invoke these principles. For example, the International Standards Organization stipulated in 1992:

> Scientists . . . shall make diligent efforts to ascertain that any proposed animal tests have not been done previously . . . priority should be given to validation and/or development of alternative methods . . . it is strongly recommended that authorities require only the minimum possible number of animal experiments . . . The final intention of ISO 10993 is to forego the need for animal experiments. Toward that goal, the planning of the experiment shall consider the use of the least invasive test methods in an animal and/or the reduction of animal experiments by using less invasive methods in the same animal.[90]

Alternatives

A core component of this approach is the advocacy of alternatives to animals.[91] This approach first appeared in 1839, in the *London Medical Gazette*, when an unnamed physician wrote in support of the use of animal experimentation 'under certain conditions'. He suggested: 'that animal experimentation should not proceed if the scientific question can be proved by any other evidence which is within reach, nor by any more gentle modes of inquiry'.[92] In a modern context, alternatives to animal testing (which are believed to be responsible for a 50 per cent decline of animal usage) are one of the most common approaches taken by organizations involved in animal testing. The growth of alternative methods to traditional animal experimentation is impressive.[93] These encompass a wide variety of approaches. For example, in-vitro studies/ tissue culture have proved effective in virology, and are making inroads into the areas of immunology, vaccine production and toxicology.[94] Organisms which have limited or no capacity for pain are increasingly being used in research, as well as gas chromatography and mass spectrometry. Modelling and simulation, whereby simplified analogues of systems are created and simulations and manipulations carried out, have also proved effective. These have ranged from substituting crash-test dummies for primates in the study of car crashes, to computer, chemical and electronic models. Finally, human studies (clinical, epidemiological and post-mortem) are making some aspects of animal testing redundant.[95]

Many of these alternatives have not only reduced the use of animals in experiments but have also resulted in cost savings and more accurate results. Thus, the push for alternatives has gathered momentum over the past four decades, including in international fora. For example, in 1992, the drafters of Agenda 21 suggested that it was necessary to promote 'research on, and validation of,

methods constituting a replacement for those testing [upon] animals'.[96] The objective to promote non-lethal techniques is also clearly evident within international agreements pertaining to Antarctica,[97] and the regional CMS agreements, relating to seals,[98] and cetaceans under the ACCOBAMS treaty, which only allows for scientific research which utilizes: 'non-lethal in-situ research aimed at maintaining a favorable conservation status for cetaceans'.[99] In a similar vein, the ASCOBANS agreement places a premium on non-lethal research,[100] and emphasizes that although scientific research is very important, '[t]he studies should exclude the killing of animals and include the release in good health of animals captured for research'.[101] The same approach was followed with the Agreement Concerning the Creation of a Marine Mammal Sanctuary in the Mediterranean.[102] Likewise, notable international bodies such as the International Council of Scientific Unions (ICSU) suggested that alternative methods of experimentation, such as cell culture and regulated systems, and computer modelling, are important adjuncts to animal experimentation and should be utilized whenever possible.[103]

The importance of utilizing alternatives to experiments on animals, wherever possible, has been clearly recognized in domestic legislation in Denmark,[104] Lithuania[105] Brazil,[106] New Zealand,[107] Japan,[108] India,[109] the United States[110] and the UK, where the burden is imposed upon the scientists applying for a licence, who have to explain why: 'no such alternatives would achieve the objectives of this project'.[111]

Some have contended that the barriers to reducing animal usage in scientific testing are 'the result of politics, commercial practices and conservative adherence to traditional methods and standards'.[112] However, alternatives are not commonly adopted because at the present time 'unfortunately, in many areas of biomedical research there is still no alternative to the use of animals'.[113] These gaps mean that in many areas animal experimentation remains 'indispensable'.[114] Thus:

> There remain many areas in biomedical research which, at least for the foreseeable future, will require animal experimentation. An intact live animal is more than the sum of the responses of isolated cells, tissues, or organs; there are complex interactions in the whole animal that cannot be reproduced by biological or non-biological 'alternative' methods.[115]

Specific examples of this problem have recently become manifest with the demands by some legislators (such as in the EC) that animal experimentation for the testing of cosmetics be stopped and replaced with alternative, non-lethal methods.[116] However, non-lethal alternatives have not proved to be effective in all cases. This is due to the fact that there are many limitations to the effectiveness of alternative tests.[117] Recognition of this fact resulted in the postponement of the ban in the 1990s until the year 2000.[118]

Species Choice, Numbers Involved and Pain Levels

It is a well-recognized principle that 'the animals selected for a procedure should be of an appropriate species and quantity and the minimum number required to obtain valid results'.[119] The necessity of minimum numbers is often complemented by the requirement that only 'appropriate species' be used.[120] The choice of species involved in experiments has been an ongoing source of contention, with a focus on the use of endangered species and 'higher' animals. With regard to using endangered species for scientific purposes, it is becoming clearly evident in international environmental law that this is not permissible. For example, the Protocol on Environmental Protection to the Antarctic Treaty,[121] although allowing exceptions for scientific research, states: 'in no case [should] more native mammals or birds [be] killed from local populations than can, in combination with other permitted takings, normally be replaced by natural reproduction the following season'. Likewise, with the 1996 Inter-American Convention on the Protection and Conservation of Sea Turtles, the use of scientific research to enhance sea turtle populations was encouraged, but only if it was conducted 'without putting sea turtles at risk'.[122] The 1991 Agreement on the Conservation of Bats in Europe[123] adopted guidelines for the study and capture of wild bats which emphasized as a first point: 'the research proposed should not adversely affect the conservation status of the population and should take into account the welfare of individual bats'.[124] Likewise, with the Agreement on the Conservation of Albatross and Petrels, an exception to the take of either ACAP birds or eggs is permissible if done: 'on a selective basis and to a limited extent for scientific, educational or similar purposes'. Note, however, that the exception applies 'only if there is no other satisfactory course of action' and any exemption 'shall be precise, and limited in space and time, and shall not operate to the detriment of the conservation status of albatrosses or petrels. Any Parties granting such exemptions shall, as soon as possible, submit full details of them to the Secretariat'.[125]

In addition to avoiding endangered animals, a trend is clearly evident towards the substitution of cold-blooded animals for warm-blooded ones, or invertebrates for vertebrates, and a reduction in the use of 'higher' animals in favour of 'lower' ones wherever possible.[126] For example, in the United Kingdom, the use of cats, dogs, primates or equidae is not permissible if the scientific objectives can be achieved by the use of 'other' (that is, 'lesser') species.[127]

The cynosure for this concern has been primates. Although the number of primates used in research remains high in some countries[128] the ethical challenge to this usage[129] of our closest biological cousin has been a flagship of the challenge against animal experimentation.[130] Some countries have now gone as far as to legislate that any proposal to use primates must explain why the research

cannot be done with another animal species. More common is the inclusion of specific welfare conditions within legislation which recognizes the special status of primates and attempts to improve the conditions of their usage.[131]

Finally, the reduction of pain to the lowest possible level is a very common approach by which to refine experiments.[132] This focus has become a specific concern within the area of scientific experiments on animals. As such, it is commonly accepted that if experiments are to be carried out, it is important that they be implemented with the minimum amount of inflicted pain (conducive with the experiment). This principle, which appears to be working,[133] appeared over one hundred years ago in the United Kingdom in the 1876 Cruelty to Animals Act,[134] which attempted 'to set the limit to the amount of suffering which may be caused in any circumstance'. That is, pain must be kept to a minimum and relieved wherever possible.

Today such principles are replicated in specific international environmental agreements. The Protocol on Environmental Protection to the Antarctic Treaty,[135] stipulates that: 'All taking of native mammals and birds [for scientific purposes] shall be done in the manner that involves the least degree of pain and suffering practicable'. Similar dictates can be seen in the principles of a number of international scientific bodies,[136] as well as in domestic legislation worldwide.[137] For example, Japanese law stipulates: 'when an animal is used for . . . scientific purposes . . . it shall be so used by methods that cause the animal minimum pain possible within the limits by the said purposes'.[138] Clear limits on the infliction of intentional pain on animals for scientific purposes are also evident in India,[139] Lithuania,[140] the UK,[141] Australia[142] and New Zealand.[143] Other approaches, such as European legislation on this question, only allow experiments involving 'severe pain' where the 'essential needs of man or animal' are involved.[144]

9 SCIENTIFIC WHALING

The purpose of the first sections of this chapter was to outline a few simple principles. The first of these was that ethics has become entwined with science. This has been especially so in terms of the use of animals for scientific purposes. Under this rubric, two broad questions have arisen which may be taken to be suitable ethical markers for the previous, and forthcoming discussions. The first of these questions is whether scientific endeavour involving the use of animals is necessary. If this question is answered in the affirmative, then the second question must be whether this process can be refined, the number of animals involved can be reduced, or whether the overall process itself can be replaced. Before these questions can be answered, it is necessary to understand the background of the current debate on scientific whaling.

10 ARTICLE VIII

International exceptions to regulations to protect cetaceans began with the 1937 International Agreement for the Regulation of Whaling.[145] This exception was later copied into the ICRW. Article VIII stipulates:

> Notwithstanding anything contained in this Convention any Contracting Government may grant to any of its nationals a special permit authorizing that national to kill, take and treat whales for purposes of scientific research subject to such restrictions as to number and subject to such other considerations as the Contracting Government thinks fit, and the killing, taking, and treating of whales in accordance with the provisions of this Article shall be exempt from the operation of this Convention.

Within a decade, as the IWC struggled to apply basic protections for threatened and endangered species, this section was becoming a loophole by which countries could continue to whale under the auspices of science. Given the pressures of the period and the fact that some scientists were close to representing scientific misconduct,[146] the Commission was forced to try to close this loophole as quickly as possible. Its first attempt was in 1957, when the Commission stated: 'Contracting governments should not issue permits for the taking of whales for scientific purposes outside of the whaling season unless the reasons for doing so were of utmost cogency'.

It quickly added to this by reiterating Article VIII(3), which stated that the results obtained from the scientific exceptions must be forwarded to the Commission.[147] Despite such attempts, the problem continued to grow and in 1962[148] it was agreed by the SC and the infractions committee that the SC should be consulted before the granting of such permits, that the application should set out the reasons, and the numbers taken should be the lowest necessary for the purposes of the permit. Many of these requirements were later incorporated into the schedule.[149] Despite these new dictates, in 1964 and 1965 Japan, Australia, the United States, Canada and the former Soviet Union all took whales under Article VIII.[150]

Although Japan issued itself a record scientific permit in 1976 (for 240 Bryde's whales),[151] the issue of scientific whaling did not reappear until the moratorium on commercial whaling came into force in 1986. At this point, the countries most affected by the moratorium switched to 'scientific' whaling and approximately 6,000 whales between 1986 and 2002 were killed under this auspice. This figure is 2.8 times more than all the catches under special permits between 1949 and 1987.[152] Moreover, the scale and ambit of the programme has been expanding. As such, in 2000, Japan expanded its scientific whaling to the biggest catch since the moratorium was agreed, by setting quotas for 100 minke, 50 Bryde's and ten sperm whales in the North Pacific

as well as 440 minke whales in the Southern Ocean.[153] In 2002, Japan announced its intention to also take 50 sei whales from the North Pacific, even though only 900 of these animals are believed to remain.[154] These moves were despite personal pleas from both Tony Blair and Bill Clinton. Clinton, who even went so far as to threaten trade sanctions, saw such actions as necessary to force Japan 'to respect the strong international consensus that has helped bring back some of the Earth's most majestic creatures'.[155] New Zealand Prime Minister Helen Clarke suggested:

> The bottom line is that there is no convincing scientific reason for the Japanese to kill any whales at all. It is well known that meat from the whales killed during the scientific expeditions finishes up at Japanese dinner tables. That's what appalls people.[156]

The response that the 2000 Japanese whaling expedition evoked, although louder than before, has been evident since 1986 when the IWC began to receive proposals for special permits for scientific whaling of a type and scale which had not previously been experienced. Unsurprisingly, at this point, the objectives of scientific whaling soon fell under scrutiny again and the IWC called upon the: '[c]ontracting government[s] proposing the issue of scientific permits . . . to take account of the serious concerns expressed in the Commission at the possibility of whaling for scientific purposes'.[157] As such, it was requested that 'permits [be] conducted strictly in accordance with scientific requirements, and in particular to take account of the advice and guidance of the Scientific Committee'.[158] The criteria by which the SC were to review scientific permits were then sharply focused. It was suggested that both the contracting governments when issuing permits, and the SC when reviewing them, should take into account whether:

> (1). The objectives of the research are not practically and scientifically feasible through non-lethal research techniques.
> (2). The proposed research is intended and structured accordingly to contribute information essential for rational management of the stock.
> (3). The number, age and sex of whales to be taken are necessary to complete the research and will facilitate the conduct of the comprehensive assessment . . .
> (4). Or that the research is necessary to meet other critically important research needs.
> (5). That the research addresses questions that cannot be answered by analysis of existing data.
> (6). That the research is likely to yield reliable answers to the questions being addressed.
> (7). Whales will be killed in a manner consistent with the provisions of Section III of the Schedule, [which sets out the Southern Ocean Sanctuary] with due regard being had to whether there are compelling scientific reasons to the contrary.[159]

From the mid-1990s into the twenty-first century, the issue of scientific whaling became more contentious as Japan practised lethal research within the Southern Ocean Whale sanctuary. In 1996 the IWC resolved that: '[c]ontracting governments should undertake . . . the conduct of a program of research in the Southern Ocean Sanctuary using non-lethal methods and . . . refrain from issuing special permits for research involving the killing of cetaceans in such sanctuaries'.[160] The Commission expressed its 'deep concern at Japan's continuing proposal to conduct lethal research in the sanctuary', arguing that 'with the development of modern scientific techniques it is not necessary to kill whales to obtain the information that is needed for initial implementation of the Revised Management Procedure for a particular stock'.[161] Therefore, the Commission stipulated:

> The scientific research intended to assist the comprehensive assessment of whale stocks and the implementation of the Revised Management Procedure shall be undertaken by non-lethal means [and] the scientific research involving the killing of cetaceans should only be permitted in exceptional circumstances where the questions address critically important issues which cannot be answered by the analysis of existing data and/or use of non-lethal research techniques.[162]

Another resolution in 1996 requested the SC to review existing lethal scientific research methods and consider whether the data obtained from them was 'justifiable in light of the recommendations above, and in particular, on whether any lethal scientific research substantially contributes to answering critically important questions which cannot be answered by other means'.[163] This directive to the SC was largely reiterated in 1999.[164] However, the possibility of a workshop on non-lethal methods was postponed.[165] The following year in 2001, a number of countries proposed a 'voluntary code of practice' for whaling under Article VIII. This proposal included the suggestion that such whaling should occur only when non-lethal alternatives are not available, and the research has the support of the scientific committee and the Commission. This topic was postponed for further discussion until 2002, before reappearing in the overall RMS package whereby a voluntary code on scientific whaling would be part of the quid pro quo for an eventual lifting of the RMS.[166]

11 THE SCIENTIFIC WHALING OF NORWAY, ICELAND, THE USSR AND KOREA

The focus of the Norwegian research has been to collect data for use in developing mathematical models of the Barents Sea ecosystem. A central part of the Norwegians' desire to develop such models was to improve management of fisheries.[167] The research, conducted under special permit, consisted of a pilot

study from 1988 to 1990 and a full programme from 1992 to 1994. The majority of studies have been focused on the feeding and energetics of Northeast Atlantic minke whales. Most of this work, with its emphasis on wider ecological and fisheries related objectives, has not been directly relevant to the requirements of the IWC as defined by the SC.[168] Although not directly relevant to the comprehensive assessment, Norway argued that it was part of a 'critically important research need' and that the information was relevant. However, following debates within the SC about the relevance of the studies (and the SC's subsequent lack of endorsement of the special permit proposals), the IWC passed several resolutions asking the Norwegian government to reconsider its special permit programme. The call for reconsideration was made because Norway's research programme did not satisfy all IWC criteria.[169] This was especially so in terms of the needs of the comprehensive assessment or other critically important research needs.[170] Despite these strongly expressed concerns on the part of the IWC, Norway made only minor changes in its programme. Its lack of response resulted in a continual series of very similar resolutions.[171] These ceased in 1995 when the Norwegian government stopped issuing special permits for scientific whaling and resumed commercial whaling.

The Icelandic programme, (1986–89) had a similar approach to the Norwegian one, but was not specific about how the data would be used for management or conservation. Accordingly, the IWC issued a series of resolutions which recommended 'that the Government of Iceland revoke and refrain from issuing special permits to its nationals . . . until the uncertainties identified [by] the Scientific Committee . . . have been resolved'.[172] Iceland progressively modified its programme, although never to the full satisfaction of the IWC, before finally stopping scientific whaling in 1989.[173] Following Iceland's rejoining the IWC in 2002, it reactivated its scientific whaling programme. Nevertheless, the new programme, like its predecessor came in for direct criticism the following year for taking whales (sei) that were the subject of scientific uncertainty in terms of stock abundance for purposes which could be ascertained by non-lethal ways.[174]

The failure to satisfy the criteria of the IWC resolutions on special permits and scientific research also led to criticism of the Korean research programme[175] and that of the former Soviet Union.[176]

12 JAPANESE SCIENTIFIC WHALING

Currently, the only country that is actively practising and expanding scientific whaling is Japan. It currently carries out scientific whaling in two different regions – through the JARPA programme in the Antarctic, and the JARPN

(later renewed as JARPN II) programme which focuses on the Northwest Pacific.[177] The stated objectives of the Japanese research programme in Antarctica are to estimate biological parameters for stock management and to elucidate the role of minke whales in the ecosystem.[178] Consideration of prey-consumed questions[179] is especially pertinent for both JARPA[180] and JARPN.[181] This last concern remains a central strand in the programme's justification.[182] Determining stock identity and general biological parameters were later added to the objectives of the research. The 'Elucidation of the Effect of Environmental Change Upon Cetaceans' was added to the programme in 1995 and has been repeatedly highlighted. Many of these objectives fall broadly under their advocacy of 'holistic ecological management approach' or 'ecosystem approaches' for managing marine resources.[183]

From the outset in 1987 the SC has raised doubts about whether these objectives were achievable, and also whether the role of whales in the ecosystem was germane to the IWC. Accordingly, as long ago as 1988, the IWC recommended that:

> The Government of Japan . . . refrain from the issue of special permits to its nationals . . . until such time as the Scientific Committee is able to resolve the serious uncertainties identified in its discussion as to the capability of the research methods proposed to contribute sufficiently reliable results needed for the Comprehensive Assessment or for other critically important research needs.[184]

In response to earlier criticisms from the SC, the Japanese government submitted a revised proposal to the IWC in 1987.[185] This new proposal was very similar to its initial request and created a pattern within the SC which divided those who believed that their objectives were achievable and worthwhile, and those who did not, and refused to accept its relevance to the comprehensive assessment. This continual lack of agreement between the scientists has resulted in a steady flow of resolutions by the IWC calling on the government of Japan to reconsider issuing special permits because they do not meet all the required criteria.[186] Despite these resolutions, the Japanese government has expanded (from 1995) its annual take of whales from the Southern Ocean from 300 to 400 (+/–10 per cent) per year.[187]

While many scientists acknowledge that such genetic analysis information on stock identity was important, most felt that it could be obtained through non-lethal research.[188] Because the criteria for justifying lethal research had not been fully met, the IWC passed another resolution inviting the Japanese government to reconsider the proposed take of minke whales.[189] In 1999, the IWC again requested the government of Japan to refrain from issuing any further permits for the forthcoming season for minke whales in the Southern Ocean whale sanctuary, and the North Pacific Ocean.[190] In the same year the SC report on the existing JARPN programme noted that there was a possibility

that their hunt was overlapping with other stocks (J stock which were distinct from the O stock: see Chapter 2, Section 10) and that:

> [G]iven the uncertain status of the J stock due to the continuing incidental takes and historical over-exploitation, these removals have the potential for an adverse effect on this stock, given the uncertainties involved, conducting the research, especially in [the stipulated area], is not consistent with the precautionary principle.[191]

The failure to provide for critically important research needs, the expansion of the scientific whaling programme, the repeated failure to seriously engage non-lethal techniques and a general overall perception of failure to act in good faith, resulted in two further resolutions in 2000.[192] The Resolution on Whaling Under Special Permit in the North Pacific Ocean, which accompanied the Resolution on Whaling Under Special Permit in the Southern Ocean Sanctuary,[193] was particularly forthright:

> [M]any major concerns [have been] expressed and not allayed. . . . [i]ncluding (among others) concerns that the proposal did not address questions of high priority relevant to management, did not make use of existing data, and revealed many methodological problems . . . [The IWC] strongly urges the Government of Japan to refrain from issuing special permits for whaling under JARPN.[194]

A similar resolution on the expanded JARPN programme (JARPN II) in 2001 reiterated the general concern that the IWC 'strongly urges the Government of Japan . . . to refrain from issuing any special scientific permits for whaling under JARPN II'. At a minimum the IWC urged Japan to 'take into account the views of the Scientific Committee and the Commission'.[195] An accompanying resolution also urged Japan to halt its lethal takes of minke under JARPA, at least until the SC had agreed on population abundance estimates for southern hemisphere minke whales.[196] This conclusion was reiterated in 2003, with the clear call for Japan to halt the JARPA programme until an in-depth review of the programme was completed, along with an assessment of what this programme may have already done to stocks with its lethal takes.[197]

13 THE ETHICS OF SCIENTIFIC WHALING

It is now appropriate to try to apply the ethical markers of necessity, and refinement, reduction and replacement which have been sketched out above. Unfortunately, the ethics of scientific whaling has not been forthrightly assessed by the IWC. This is because the IWC has not had the benefit of a third tier to operate between the scientific considerations of special permits and the advocates and antagonists against such practices. Rather, the situation is

increasingly muddied by additional considerations (such as financial benefits) which may tend to detract from the sincerity of some of the defences of the practice of scientific whaling.[198] Indeed, in the year 2000, the value of products derived from Japanese scientific whaling, was reputedly in the region of US$35 million per year.[199] This revenue, although within the legitimate consideration of Article VIII(2) of the ICRW,[200] may present a clear financial interest for some to retain the practice given the 3,000 tonnes of edible products per year that are produced from scientific whaling. Despite this approach being allowed within the ICRW, it is out of kilter with comparable international oceanic regimes such as the Convention on Fishing and Conservation of Living Resources in the Baltic Sea and the Belts[201] and the North Atlantic Fisheries Organization,[202] although both have 'exceptions' both restrict the ambit of the exception by stipulating: 'fish so taken shall not be sold or exposed or offered for sale'.[203] Given this anomaly, the IWC passed a resolution in 2003 which stated that despite the current practice by countries such as Japan in this area, Article VIII was not intended to be exploited in order to provide whalemeat for commercial purposes.[204]

The broad considerations of necessity and alternatives (that is, replacement) to the scientific procedure are easy to discern within the IWC literature. However, the additional factors of reduction and refinement are not so easily discovered in this debate. Nevertheless, it may be taken that the pain inflicted in their capture, the special 'status' of whales generally,[205] and the fact that whalemeat from endangered species[206] continues to appear in the Japanese marketplace (in part at least benefiting from the market stimulus generated from the sales of meat from the scientific catch) and the expansion (not reduction) of scientific whaling, are still indirect, but important concerns.

Necessary in the Broad Sense

The sanctuaries which the IWC has established are desired as places where whaling is not meant to occur. As well as Japan's objection to the established and proposed sanctuaries, it has continually sought to obstruct the objectives of the sanctuaries by conducting scientific whaling operations in the region, even in the face of numerous resolutions by the IWC parties calling upon it to respect the sanctuary.[207] This debate is central to the broader interpretation of whether scientific whaling is 'necessary' for the management of cetaceans, in reference to the IWC debates. If the view of the majority of the signatories to the ICRW is accepted, then since the Japanese programmes are being carried out in a specially designated sanctuary, the answer is clearly no. It is not necessary and this can be understood by the fact that the clear intention of the sanctuaries is to prohibit the hunting of cetaceans. From this perspective, one could venture the opinion that as it is not necessary in terms of the democratic

actions and opinion of the majority of the IWC, it is not a suitable standard to pursue.

Necessary in a Narrow Sense: The RMP

A second definition of necessity may be taken from the language of the ICRW itself. Accordingly, the question may be asked whether the information collected through the JARPA programme is actually required to achieve the objectives of the convention. A lack of knowledge of recruitment rates (the epicentre of the age-specific natural morality focus) was more of a problem under the old management approach.[208] The RMP has moved away from using such estimates because these have proved so unreliable in the past.[209] Accordingly, the RMP focuses solely upon abundance estimates and historical whaling data to generate catch limits, not biological factors. Thus, it becomes difficult to see what essential or critically important knowledge is derived from age-specific mortality rates, trends in mortality rates or average mortality rates. They are not required for operation (the 'rational management') of the RMP. In 1996 the SC arranged a special meeting in Tokyo to review the results of the JARPA programme to date. The JARPA review concluded:

> The results of the JARPA program, while not required for management under the RMP, have the potential to improve management of Minke whales in the Southern Hemisphere in the following ways: 1) reductions in the current set of plausible scenarios considered in Implementation Simulation Trials, and 2) identification of new scenarios for which future Implementation Simulation Trials will have to be developed.[210]

The first part of the first sentence of the above paragraph is crucial. This is because, strictly, the question about necessity as defined by the IWC has been answered, that is, the results of the JARPA programme are not required for management under the RMP. The alleged benefits of the programme would be to produce marginal increases in catch quotas.

Necessary Information and Non-lethal Research

The above considerations must also be viewed in the light of the Commission's preference for the use of non-lethal techniques in scientific research. It has repeatedly stipulated that the killing of cetaceans should only be permitted in exceptional circumstances where the questions address critically important issues which cannot be answered by the analysis of existing data and/or use of non-lethal research techniques.[211] Therefore, the question needs to be asked, is the information (collected by lethal means) essential (that

is, for the comprehensive assessment or other critically important issues) and could it not be answered in any other way?

The specific information that the IWC requires for the catch limit algorithm to implement the RMP, relates to knowledge of past catch history and current abundance levels. These latter considerations focus on the factors of stock identity, population size, population trends and productivity. Both lethal and non-lethal approaches can answer these questions, although the type of data provided from each are qualitatively and quantitatively different.[212] Nevertheless, non-lethal research can provide answers to the areas that are important to the workings of the RMP, such as stock identity and stock abundance.

Stock identity is a priority for research as part of the comprehensive assessment.[213] The lethal methods to approach this question have focused upon genetic studies in the field of molecular biology, isozyme studies,[214] pollution analysis[215] and parasitology.[216] Although all of these studies may help to build up information on stock identity, genetic information for stock identity purposes can also be collected using non-lethal skin biopsy techniques in which a small dart is fired at a whale and removes a thumbnail-sized piece of tissue.[217] The SC has recently supported this approach by recommending that new research methods for biopsy sampling (of fast swimming whales by large vessels in high seas) receive greater attention. Conversely, to date, the Japanese have used this approach only on an ad hoc, opportunistic basis and have difficulties in obtaining skin samples from fast-swimming minke whales.[218]

Stock abundance within biological populations can also be assessed by non-lethal methods. Thus, as the IWC recorded in 2001: 'Information needed for stock structure can and should be obtained using non-lethal means'.[219] These may be in the form of photo-identification, sightings (transect surveys) or acoustic methods. Photo-identification and sightings may be of limited use in Antarctica due to poor weather conditions and difficulties of changing physical characteristics.[220] Acoustic surveys may provide a more accurate estimate of whale numbers of some species (such as sperm whales) but may be of limited value in distinguishing aspects of other species (such as minke).[221]

Critically Important, Reliable Information and Non-lethal Alternatives

Although the JARPA review concluded that the Japanese scientific research was not required for the RMP, it did suggest that it had 'the potential to improve management of Minke whales in the Southern Hemisphere'. The question of the utility of this research needs to be weighed against the policy and scientific objective established by the Commission. Specifically, in this context, the relevant considerations are: (1) the research is necessary to meet

other critically important research needs; (2) the objectives of the research are not practically and scientifically feasible through non-lethal research techniques; and (3) the research is likely to yield reliable answers to the questions being addressed.[222]

It may be an oxymoron to characterize as 'critical' information that is not necessary to the functioning of the RMP. If anything, the emphasis for the answer should be drawn in the negative, as 'critically important' and 'exceptional circumstances' provide a very high burden of proof by which to consider the legitimacy (by IWC standards) of the practice of scientific whaling in a sanctuary.

Irrespective of this issue, the remaining questions of the utility of non-lethal research, and the reliability of data obtained from this 'useful' material need to be addressed. The issue of non-lethal research into two of the most touted aspects of the JARPA programme – environmental effects upon cetaceans, and the functioning of cetaceans within ecosystems – are particularly problematic.

As discussed in Chapter 3, the threat posed by environmental change in the marine environment, is a large one. The Japanese scientific programme has suggested that lethal research may assist in understanding this issue.[223] Specifically, it is suggested that knowing the age of the animals in this context is central to any effort to study the effect of marine pollution on whale resources. However, such assertions have been contested. For example, the SC Standing Working Group on Environmental Concerns noted: 'age is not required to normalise pollutant indicators and therefore was not essential for all analysis'.[224] The necessary material for this area could also be ascertained by reliance on stranded, bycaught specimens,[225] or through biopsy sampling.[226] It should also be noted that research in this area (both lethal and non-lethal) is very new, and many questions of cause and effect and multiple background considerations have cast considerable doubt on what knowledge may be obtained.[227] With such considerations in mind, at its 50th meeting the IWC instructed the SC to carry out research on environmental change, but emphasized the importance of utilizing non-lethal research to do it.[228] This was later emphasized in the resolution on environmental change, which stressed the importance of 'non-lethal means to elucidate the effects of environmental change on cetaceans'.[229] Debate in this area increased over the following years, with assertions that non-lethal alternatives to investigate environmental change considerations had been wrongfully excluded from consideration.[230]

Another set of considerations which needs to be weighed against the Japanese claim for 'potential to improve management of Minke whales in the Southern Hemisphere' is the accuracy of the knowledge that is being obtained. That is, the Commission has dictated that the research must yield reliable answers to the questions being addressed.[231] Yet as it stands, the accuracy of

much of the information described above is often far from certain. It is perhaps with the most contested of all the JARPA proposals – the estimation of age-specific natural mortality – that this issue becomes pertinent. Concerns pertain to assumptions in estimating age-specific natural mortality due to assumptions and uncertainties about population dynamics,[232] a lack of confidence in ageing technique,[233] as well as difficulties in obtaining truly random samples from which the information was taken.[234] These points were acknowledged to some degree in the JARPA review, which, although recognizing that 'much progress has been made', noted: 'there was still uncertainty whether information that fully represents a biological stock could be obtained . . . at the halfway point in the JARPA programme there are few definitive answers'.[235]

Whales Eat Fish

Scientific research into the role of whales in the marine ecosystems, or the 'whales eat fish' hypothesis by examining their feeding patterns has also been a strong focus justification for scientific whaling for Japan and Iceland.[236] Although this was not initially the case, it has become increasingly paramount.[237] Part of the background into the whales eat fish thesis is that the species composition of whale stocks in some areas is believed to have changed by previous large-scale whaling. This appears to be correct, as evidence would suggest that large-scale commercial whaling in the past precipitated massive, inter-related, ecosystem alterations which have been filled by 'smaller' whales which subsequently disrupt previous ecological patterns.[238] This disruption is believed to have two effects. First, with regard to cetaceans, it has been suggested that in the Antarctic, the minke whales are eating too many prey species which the blue whales require for food. As such, 'consideration [needs to] be given to [the] resumption of commercial whaling of minke whales as a means of enhancing the protection of blue whale populations'.[239] Second, with regard to humans, it is suggested that whales eat too much fish – fish that could be fed to hungry people. This issue was raised at the 46th meeting in 1994, when Grenada spoke of the need for whale/fisheries interaction studies, referring to the increased consumption of fish by marine mammals.[240] Moreover, 'the growth of whale stocks could affect fish resources which are important for human consumption'.[241] By the end of the century, Japan even suggested that total food consumption by cetaceans is three to six times the worldwide marine commercial fish catch (which would make it in the order of magnitude of 300–600 million tonnes per year).[242] This figure was later put at 250–440 million tonnes of fish per year, some 3–5 times the amount caught by the world's fishing fleets.[243]

The important thing to note about this argument, is that it has been applied to a number of predator species. Sharks and their consumption of long-line

fish (in particular tuna),[244] wolves and deer,[245] lynx and rabbits,[246] and seals and fish. It is with regard to this last consideration that a debate has raged for 25 years, ever since the 1976 Convention on the Conservation of North Pacific Fur Seals included research on 'whether fur seals have detrimental impacts on other living resources substantially exploited by any of the parties'.[247] The research that was generated from this quest suggested that seals (in multiple locations worldwide), sealions and even protected species of bird consume hundreds of thousands of tonnes of fish per annum. Such consumption has been alleged by some to be particularly problematic with regard to stocks which are trying to recover.[248] Accordingly, it was suggested that the seals should be culled both to increase the capture of fish for human purposes, and to help protect fallen stocks of fish.

For over 25 years, in multiple fisheries which have an interaction with seals, these suggestions have subsequently been seriously challenged by competing research which has shown that predators such as seals play little discernible role in the population dynamics of recovering fish stocks.[249] Moreover, culling the seals may actually have a negative impact on the already threatened stocks. For example, in the South Atlantic, South African calls for the culling of seals because they were believed to be overconsuming fish were reversed when close examination of the problem revealed that the seals were involved in a complex relationship (the seals were actually consuming the primary predators of the threatened species) that might well be increasing hake production in the fishery.[250]

The attempts to blame seals for a collapse in fish stocks represented a pitiful attempt to find a culprit, other than those who have decimated wildlife. The current example of linking whales to fisheries production is in the same vein. Together, they have created a great deal of confusion in media accounts of the issue, in an attempt to find scapegoats other than those who caused the problem. The scapegoats tend to be non-human predators, who become perceived as problems to be controlled, not as integral parts of a functioning ecosystem.

In addition to wilfully overlooking the real causes (overfishing, overcapacity and lack of adequate international mechanisms to protect the world's oceanic resources) for plummeting fish stocks, the assertion that whales are responsible is mistaken for a number of reasons. The most serious difficulty encountered in such analysis is the complexity of real food webs. There are, as shown above with the seal example, few cases in which a predator population depends exclusively on a single prey item in the way frequently assumed by models. Indeed, the ecological characteristics of whales are poorly understood. As such, there is no certainty that removal of whales from the ecosystem would increase commercial fishery yields, and it is possible it could actually work the other way. As it stands, there is no concrete evidence that cetaceans harm fisheries.[251] In addition, whales usually do not prey on the

same fish species as commercial fisheries, and the major predators upon fish in marine ecosystems are other fish, not whales.[252] To claim otherwise, as the United States suggested, is 'grossly oversimplified'.[253] Apart from its biological simplicity, it fails to pass two IWC considerations on scientific whaling. First, as the IWC stated to Japan in 2000, 'gathering information on interactions between whales and prey species is not a critically important issue which justifies the killing of whales for research purposes'.[254] Second, as added in 2001, even if it was critically important information that was needed, 'interaction between whales and prey species are not sufficient to justify the killing of whales for research purposes'.[255]

That is, the justification that only lethal means can ascertain information on the 'whales-eat-fish' hypothesis may be incorrect. Specifically, there are questions about the reliability of the identification of food sources from the stomach contents of dead cetaceans. Such questions include whether overall diet can be determined by sampling at a specific time, non-random sampling, variable digestion times for different species and lack of standardization in the collection and reporting of results.[256] Conversely, non-lethal studies of cetacean diet can be ascertained by alternative methods.[257] Considerably more information, especially relating to behaviour, migratory patterns and feeding grounds may also be obtained from studies – from direct observation through to telemetry of living groups or pods.[258]

Despite these conclusions, in 2001, by way of seeking to make some progress on this increasingly controversial justification for scientific whaling, an intersessional workshop was established to examine the whales-eat-fish hypothesis using a 'holistic and balanced approach'.[259] However, this workshop did not take place.

14 CONCLUSION

Science does not exist in a vacuum. Ethical considerations are closely intertwined with modern scientific endeavour. These considerations have become well recognized in the context of scientific procedures that use animals. Given that whales are animals and that 'science' is the pretext for the current culls within the ICRW, the application of these principles is obvious.

Despite some difficult philosophical questions within this area, the majority of modern societies, and regional and international institutions that work in this area, have applied broadly utilitarian considerations to the debate. Thus, it is generally recognized that it is permissible to use animals for scientific purposes if the greater utility (for humanity) outweighs the ethical costs (to the animal) involved. In ascertaining where the greater utility lies, two prongs have been developed. These pertain to the questions of whether the research is

necessary, and if so, if it may be refined, or the animals being used reduced in numbers or replaced by alternative methods. These considerations are useful yardsticks by which to measure the current debate over scientific whaling.

The question of the necessity of scientific whaling may be answered in two ways. The majority of the members of the convention have declared that scientific whaling is not necessary. In terms of the language of the resolutions of the Commission itself, an argument may be adduced that it may be necessary if the following considerations are fulfilled: (1) the objectives of the research are not practically and scientifically feasible through non-lethal research techniques; (2) it is necessary for rational management of the stock; and (3) it will facilitate the completion of the comprehensive assessment. However, at all points, the research must be necessary to meet critically important research needs. The answer to these considerations is in the negative on two counts. First, the practice of scientific whaling has not been proved either 'critically important' or necesssary via 'acceptable circumstances'. As it stands, at best, the conclusion for scientific whaling is that it may produce 'useful' results. However, this conclusion can be challenged by the fact that the results obtained are unethical, as they are not needed, and can be obtained by non-lethal alternatives. This result is all the more disappointing when it is realized that thousands of whales have already been taken under the pretext of answering such unnecessary questions.

NOTES

1. Article VIII provides a very clear-cut exception to the conservation objectives of the ICRW, and despite being ethically dubious, it is still the legal 'right' of contracting parties. This was indirectly conceded in Appendix 8: IWC Resolution 1998–7. 'Resolution on Coordinating and Planning for Environmental Research in the Antarctic.' See IWC. 50th Meeting in 1998. (1999). 45. This '[recognized] that the JARPA Program is conducted in the course of the exercise of the rights of the Government of Japan under the terms of the 1946 ICRW'. Nevertheless, the Japanese utilization of this provision may be an abuse of right by not acting in good faith. Australia has argued that Japan's utilization of Article VIII is a clear abuse of right, as it is exercised for a purpose contrary to the purpose for which it was conferred and where the exercise of the right is a sham, employed to evade a legal obligation. For a full discussion of this, see Triggs, G. (1999). 'Japanese Scientific Whaling: An Abuse of Right or Optimum Utilisation?' *Asia-Pacific Journal of Environmental Law*. 5(1): 124–50. Greenberg, E. (2002). 'Japan's Whale Research Program and International Law.' *Californian Western International Law Journal*. 32(2): 151–314. Compare Japan (2001). 'Japan's Whale Research and International Law.' IWC/53/10. Agenda Item 11.2. It may be interesting to note that in 2001, Japan attacked Triggs's paper, as being without merit and coming from a journal that did not have peer review. I heard this assertion with some surprise, as I was the one who refereed this paper!
2. Intervention by the IWC Commissioner for New Zealand, the Honourable Jim McLay on the Japanese Program of Scientific Research Whaling. 1997. Monaco. Document in the possession of the author. See also McLay, J. (1998). 'Whale Research Needs Moral Compass.' *New Zealand Herald*. March 23: A13.

3. Appendix 5: IWC Resolution 1998–4. 'Whaling Under Special Permit.' IWC. 50th Meeting in 1998. (1999). 43.
4. See IWC Secretary to the Commission (1999). 'Ethical Considerations With Regard to Scientific Research.' IWC/51/16. Agenda Item 14.2. Despite a large number of standards being in existence, the secretary only contacted the Council for International Organisations of Medical Sciences, the ISO and the RSPCA, and they noted the Council Directive of the European Communities.
5. Appendix 4: IWC Resolution 1999–3. 'Resolution on Whaling Under Special Permit.' IWC. 51st Meeting in 1999. (2000). 53. For discussion, see p. 28.
6. Bacon, F. 'Novum Organum' (Book 1). Reprinted in Commins, S. (ed.). (1972) *The Philosophers of Science* (Random House, New York): 73, 78.
7. Science is an 'essential component in the search for feasible pathways towards sustainable development'. Agenda 21. A/CONF.151/26. Section 35.2. Commission on Sustainable Development (1995). 'Education, Science and the Transfer of Environmentally Sound Technologies: Science for Sustainable Development.' E/CN.17/1995/16. 2 March 1995. Paragraph 7.
8. See Passmore, J. (1972). 'The Revolt Against Science.' *Search*. 3: 415–22.
9. See Dickson, J.P. (1986). *Science and Scientific Researchers In Modern Society* (UNESCO, Geneva): 144–9. Muller-Hill, B. (1988). *Murderous Science: Elimination by Scientific Procedure of Jews, Gypsies and Others, Germany 1933–1945* (Oxford University Press, Oxford). Graham, L. (1978). Australian Academy of Science (ed.). *Science and Ethics* (NSW University Press, Victoria): 48–73. Plimmer, I. (1996). *Telling Lies for God: Reason Against Creationism* (Random House, Sydney). Roszak, T. (1974). 'Science, Knowledge and Gnosis.' *Daedalus*. Summer: 31.
10. '[A] human life is nothing compared with a new fact'. Slosson, E. (1895). 'The Relative Value of Life and Learning.' *Independent* (NY). December 12. Cited in Linzey, A. (1976). *Animal Rights* (SMC Press, London): 51.
11. See Katz, J. (1997). 'Human Sacrifice and Human Experimentation: Reflections at Nuremberg.' *Yale Journal of International Law*. 22: 401–19.
12. Oppenheimer, R. (1955). *The Open Mind* (Oxford University Press, Oxford): Chapter 5.
13. See Jasanoff, S. (1990). *The Fifth Branch: Science Advisers As Policy Makers* (Harvard University Press, Cambridge, MA). Feyerabend, P. (1978). *Science in a Free Society* (NLB Publishers, New York): 88–91.
14. Declaration on the Use of Scientific and Technological Progress in the Interests of Peace and for the Benefit of Mankind. UNGA Res. 3384 (XXX) of 10 November. 1975. Preamble, paragraph 2.
15. Wadman, M. (1997). 'Clinton Sketches Out His "Ethical Guideposts" '. *Nature*. 387: 323.
16. Russell, B. (1931). 'The Scientific Outlook'. Reprinted in Herbert, F. (ed.). *Readings in the Philosophy of Science* (Appleton, Century, New York): 596–601.
17. The Hippocratic Oath in British Medical Association (1981). *The Handbook of Medical Ethics* (BMA, London): 63–4.
18. The War Crimes Tribunal (1949). *Trials of War Criminals before the Nuremberg Military Tribunals Under Control Council Law Number 10*. Volume 10 (The Medical Case): 181.
19. See World Medical Association (1949). *The International Code of Medical Ethics* (WMA, Geneva). In addition to specific instruments such as the Universal Declaration on Human Rights, the International Covenant on Economic, Social and Cultural Rights; and the Convention Against Torture, also contain indirect restraints upon the practice of science and medicine on humans. Also, UNGA. (1982). Principles of Medical Ethics Relevant to . . . The Protection of Prisoners and Detainees Etc.' UNGA. Res. 37/194.
20. 'Declaration on the Use of Scientific and Technological Progress in the Interests of Peace and for the Benefit of Mankind.' UNGA Res. 3384 (XXX) of 10 November. 1975. Article 1.
21. MacKenzie, D. (1987). 'US Advocates a World Code for Science.' *New Scientist*. November 5: 24.
22. WHO (1997). *Report of WHO Consultation on Xenotransplantation* (WHO, Geneva): 5–7. OECD News Release (1998). 'OECD Calls For International Co-Ordination on Xenotransplantation.' (Paris).

23. This has long been a distinct concern in Japan. It was only approved by an act of law in 1997. See Saegusa, A. (1997). 'Japanese Bioethics Debate Lags Behind Thinking in the West.' *Nature*. 389: 661.
24. See Butler, D. (1995). 'Pope Condemns "Immoral" Embryo Research.' *Nature*. 374: 489. Reuters (2000). 'Germans Slam UK Embryo Research Decision.' *NZ Herald*. December 22: B2.
25. For the issue, see Cohen, P. (2001). 'Brain Gain: US Ban on Cloning.' *New Scientist*. June 30. Butler, D. (1997). 'Calls for Cloning Ban Sell Science Short.' *Nature*. 386: 8–9, 97, 204. Council of Europe Draft Additional Protocol to the Convention on Human Rights and . . . Cloning Human Beings. ILM. 1415. (1997).
26. Coglan, A. (2001). 'Too Close for Comfort.' *New Scientist*. January 20: 6.
27. See Beardsley, T. (1998). 'Profile: Francis Collins: Where Science and Religion Meet.' *Scientific American*. February: 18–19. Dickson, D. (1996). 'HUGO Approves Ethics Code for Genomics.' *Nature*. 380: 279. Anon (1997). 'High Level Ethics Committee Needed to Guide Policy.' *Nature*. 385: 756.
28. Agenda 21. A/CONF.151/26. Section 31.1.
29. Agenda 21. A/CONF.151/26. Section 31.9. Commission on Sustainable Development (1997). 'Overall Progress Achieved Since the Earth Summit: Role and Contribution of Major Groups.' E/CN.17/1997/2/Add.22. 28 January 1997.
30. See Roach, J. (1996). 'Marine Scientific Research and the New Law of the Sea.' *Ocean Development and International Law*. 27: 59–73. Johnston, D. (1988). *The International Law of Fisheries: A Framework for Policy Orientated Inquiries* (Nijhoff, New Haven, CT): L–LV.
31. United Nations Convention on the Law of the Sea (1982). BH825.txt. Article 240(b).
32. FAO Code of Conduct for Responsible Fisheries. The FAO Code may be found in the *Yearbook of International Environmental Law* (Volume 6, 1995). Document 10. See Section 12.
33. FAO Code, ibid. Paragraph 12.2.
34. 1902. Convention on Birds Useful to Agriculture. 102 BFSP. 63.
35. Article 7.
36. See Maehle, A. and Trohler, U. (1987). 'Animal Experimentation.' In Rupke, G. (ed.). *Vivisection in Historical Perspective* (Oxford University Press, Oxford): 14–47. Carson, G. (1972). *Men, Beasts and Gods: A History of Cruelty and Kindness to Animals* (Scribner, New York): 192. Orlans, B. (1993). *In the Name of Science* (Oxford University Press, Oxford): 3.
37. The RSPCA was formed in England in 1822. By 1860 international (European) conferences were being held regularly pertaining to the issue of animal cruelty. See Turner, J. (1980). *Animals, Pain and Humanity in the Victorian Mind: Reckoning with the Beast* (Johns Hopkins University Press, Baltimore, MD): 24–38. Elston, M. (1992). 'Victorian Values and Animal Rights.' *New Scientist*. May 22: 28–30. Festing, S. (1989). 'Animal Experiments: The Long Debate.' *New Scientist*. January 28: 51–3.
38. Animal experimentation is usually equated with vivisection. However, in the contemporary world, the practice of cutting up live bodies is just one facet of animal research. Approximately 60 per cent of all experiments involve no anaesthetic, although, of course, for many experiments this is not even necessary. See Garner, R. (1993). *Animals, Politics and Morality* (Manchester University Press, Manchester): 121–3, 135–7. See Botting, J. and Morrison, A. (1997). 'Trends in Animal Research.' *Scientific American*. February: 71, 76. In the 1990s, it was estimated that around 2.8 million animals were employed annually in the United Kingdom, perhaps 20 million per year in the United States, and 100 million globally. British Association Promoting Science and Technology (1997). *Animals and the Advancement of Science: Working with Animals in Medical Research* (London): 8. Mukerjee, M. (1997). 'Trends in Animal Research.' *Scientific American*. February: 70. Rowan, A.N. (1996). 'The Use of Animals in Experimentation: An Examination of the Technical Arguments.' In Garner, R. (ed.). (1996). *Animal Rights: The Changing Debate* (New York University Press, New York): 104. Festing, R. (2003). 'Animal Research.' *Ecologist*. November: 28–32.

39. See Gillespie, A. (1997). *International Environmental Policy, Law and Ethics* (Oxford University Press, Oxford). Chapters 1, 10.
40. See Regan, T. (1988). *The Case for Animal Rights* (Routledge, London): 243.
41. Singer, P. (1976), *Animal Liberation: Towards an End to Man's Inhumanity to Animals* (Cape, London).
42. Regan, T. (1982). 'Animal Experimentation: First Thoughts.' In Regan, T. (ed.). *All That Dwell Within: Animal Rights and Environmental Ethics* (University of California Press, California): 61, 65.
43. Singer, P. (1993). *Practical Ethics* (Oxford University Press, Oxford): 66–8. Singer, P. (1991) 'To Do or Not to Do?' In Baird, R.M. (ed.). *Animal Experimentation* (Prometheus, London): 145–50.
44. Francione, G. (1996). 'Animal Rights and Welfare.' *Rutgers Law Review*. 48: 397. Ryder, D. (1971). 'Experiments on Animals.' In Godlovitch, S. and Godlovitch, R. (eds). *Animals, Men and Morals* (Gollancz, New York): 46–56.
45. Loftin, R. (1992). 'Scientific Collecting.' *Environmental Ethics* 19: 253–70. Birkenhead, T. (1994). 'How Collectors Killed the Great Auk.' *New Scientist*. May 28: 24.
46. See Hampson, J. (1992). 'The Secret World of Animal Experiments.' *New Scientist*. April 11: 24–6. Anon (1991). 'Animal Experimenters Need Tough Police.' *New Scientist*. February 9: 9. Kleiner, K. (1997). 'Animal Advisors Forced into the Open.' *New Scientist*. January 25: 9. Nelken, D. (1978). 'Science as a Source of Political Conflict.' In Proceedings of a Nobel Symposium (ed.). *Ethics for Science Policy* (Pergamon, London): 9–23. Brown, L. (1988). *Cruelty to Animals: The Moral Debt* (Macmillan, London): 130–36.
47. Royal Society (1995). *Peer Review: An Assessment of Recent Developments* (London): 1–8.
48. The UNESCO Recommendation on the Status of Scientific Workers is reproduced in full in Dickinson, supra n9: 171–6. Section II (8).
49. Council for International Organisations of Medical Sciences (CIOMS) (1985). Guiding Principles for Biomedical Research Involving Animals. Basic Principle 7. 18.
50. Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean (1993). This is available at http://www.oceanlaw.net/texts/npas.htm. See the preamble.
51. Article III.
52. Article VII (6).
53. Convention on the Conservation of Antarctic Marine Living Resources B.H.883.txt A/CONF.129/15 (25 ILM. 543).
54. Conservation Measure 64/XII. The Application of Conservation Measures to Scientific Research. This was updated in 2001. See Conservation Measure 64/XIX. The Application of Conservation Measures to Scientific Research. In Commission for the Conservation of Antarctic Marine Living Resources. Report of the 19th Meeting of the Commission (2000). Resolutions, p. 7.
55. ACCOBAMS. Article II.2.
56. National Health and Medical Research Council (1997). *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes* (Australian Government Publishing, Canberra). Section 7.0–7.3. A very similar situation exists in New Zealand. See Animal Welfare Advisory Committee (1995). Code of Recommendations and Minimum Standards for the Use and Care of Animals in Scientific Purposes: Code of Animal Welfare Number 17 (Ministry of Agriculture, Wellington). Section 5.2.2. Bayvel, A. (1997). 'Animal Welfare in New Zealand: Concepts, Committees, and Codes of Practice.' ANZCCART (the Australian and NZ Council for the Care of Animals in Research and Teaching) News. 10(4): 5–6.
57. Act of Animal Experiments. Order on Act No. 726 of 9 September 1993, Ministry of Justice. Part 3.
58. In the UK an Animal Procedure Committee advises the Secretary of State on matters concerned with the 1986 Animal (Scientific Procedure) Act. Reprinted in 1973 *Halsbury's Laws of England* (4th Edn, Butterworths, London): Volume II: 215. See RSPCA (1996). *The Animals (Scientific Procedures) Act 1986: A Review of the First 10 Years of the*

Operation of the Act (RSPCA, Horsham): 10, 14–17, 24–5, 75. Vines, G. (1986). 'Experiments on Animals: A Balance of Interests.' *New Scientist*. April 24: 26–8.

59. Health Research Extension Act of 1985. Public Law 99-158, November 20, 1985. Section 495. Animal Welfare Act. Public Law 99-198. Section 495. (3) (a). See National Research Council (1996). *Guide for the Care and Use of Laboratory Animals* (NRC, Washington): 10–12. Brody, M. (1989). 'Animal Research: A Call For Legislative Reform.' *Harvard Environmental Law Review*. 13: 423–84. Gavaghan, H. (1992). 'Animal Experiments the American Way.' *New Scientist*. May 16: 32–4.
60. Animal Welfare Law (1995). Chapter 9. Article 28.
61. See Japan Experimental Animals Association (1987). Guidelines for Animal Experiments. Preamble & Article 10. See also Divisional Chief of the International Arts and Sciences Division, Ministry of Education (1987). *Animal Experiments in Universities and Other Institutions* (Ministry of Education Information Bulletin No. 141). Article 6.
62. Republic of Lithuania. Law on the Care, Keeping and Use of Animals. November 6, 1997. No VIII–500. Article 1. See Article 14(5).
63. Animal Protection Act. Swedish Code of Statutes. SFS 1998: 534. June 2. See Sections 19 & 21.
64. Stated in Hampson, J. (1989). 'Animal Experimentation: Practical Dilemmas and Solutions.' In Patterson, D. and Palmer. M. (eds). *The Status of Animals: Ethics, Education and Welfare* (CAB International, Oxford): 100.
65. Cruelties to Animals Act (1876). Section 3(1). Reprinted in *Halsbury's Laws of England*, supra n58. Volume 2: 190.
66. Basic Principle 3. CIOMS, supra n49: 18.
67. See Aldhous, P. (1992). 'Swiss Vote Sunday Could Restrict Animal Research.' *Nature*. 355: 575.
68. European Convention for the Protection of Vertebrate Animals Used for Experimental and Other Scientific Purposes. (1986). ETS. 123. Preamble. See also, MacKenzie, D. (1992). 'The Laboratory Rat's Guide to Europe.' *New Scientist*. May 16: 28–30.
69. Section 5 (4). Animals (Scientific Procedures) Act. See also Webster, J. (1994). *Animal Welfare: A Cool Eye Towards Eden*. (Blackwell, London): 229–34.
70. Animal Welfare Act, 1999, No. 142 (NZ Statutes, 1999, 3, 2030). Article 80(b). See also Animal Welfare Advisory Committee. Section 4. (a)(d) & (r).
71. National Health and Medical Research Council, supra n56. Sections 1.1 & 1.2.
72. The national policies of the USA do not impose such standards. The closest benchmark is the US Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training, which recognized that procedures involving animals should be performed with due consideration of their relevance to human or animal health, the advancement of knowledge, or the good of society. Principle II. Public Health Service Policy and Government Principles Regarding the Care and Use of Animals. Reprinted in National Research Council, supra n59: 116–17. Section 495 of the Health Research Extension Act of 1985. Public Law 99-158, November 20, 1985. See Orlans, supra n37: 121.
73. Guidelines for Animal Experiments, supra n61. Preamble.
74. Mayo, D. (1983) 'Against a Scientific Justification of Animal Experiments.' In Miller, H.B. (ed.). *Ethics and Animals* (Humana Press, New York): 343–9, 353–8. LaFollette, H. and Shanks, N. (1994). 'Animal Models in Animal Research: Some Epistemological Worries.' *Public Affairs Quarterly*. 7: 113–29. Fano, A. (1997). *Lethal Laws: Animal Testing, Human Health and Environmental Policy* (Zed Books, London): 50–68.
75. Sharpe, R. (1988). *Cruel Deception: The Use of Animals in Medical Research* (Thorsons, London): 72–3, 86–92, 105–7.
76. Ibid. 21–40, 49. Garner, supra n38: 140–41. Fano, supra n74: 7–18, 101–50, 206–27.
77. See Brown. Supra n46: 120–22.
78. British Association, supra n38: 1–2, 3–6.
79. Fox, M. (1986). *The Case for Animal Experimentation: An Evolutionary and Ethical Perspective* (California University Press, Berkeley, CA): 124–6.
80. See Goldman, L. (1979). 'Controversial Aspects of Current Experimentation.' In Patterson, D. and Ryder, D. *Animal Rights: A Symposium* (Centaur,. London): 187, 189–91.

81. Favre, D. (1996). 'Some Thoughts on Animal Experimentation.' *Animal Law*. 2: 161–5.
82. See Aldhouse, P. (1999). 'Let the People Speak.' *New Scientist*. November 12: 27–30.
83. Balls, M. (1992). 'Time to Reform Toxic Test.' *New Scientist*. May 2: 31–3. Motluk, A. (1999). 'Making Eyes.' *New Scientist*. December 19: 7.
84. Law on Animal Protection (1986). Amended. Article 7:(4) & 7:(5). For discussion, see MacKenzie, D. (1986). 'German Scientists Rail at Animal Welfare Law.' *New Scientist*. May 1: 20. MacKenzie, D. (1993). 'Tough Animal Law Could Force Research into Exile.' *New Scientist*. April 17: 10.
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86. Directive 86/609/EC. Article 7.2. See also Council Directive 76/768/EC.
87. Council Directive 93/35/EC.
88. Russell, W.M.S. and Burch, R.L. (1959). *The Principles of Humane Experimental Technique* (Allen & Unwin, London).
89. European Convention. Article 6 & 7. Anon (1985). *Scientific Procedures on Living Animals* (HMSO, London).
90. ISO Standard 10993-2. Biological Evaluation of Medical Devices: Part 2: Animal Welfare Requirements. Balls, M. and Hall, T. (1995). 'The Three R's: The Way Forward.' ATLA. 23: 838–66. Association for Assessment and Accreditation of Laboratory Animal Care International (1997). *Connection: Connecting Science and Responsible Animal Care*: Special International Issues Edition: 1, 6–7, 10–12.
91. Goldberg, A. (1989). 'Alternatives to Animals in Toxicity Testing.' *Scientific American*. August. 16–23. Balls, M. (1994). 'Replacement of Animal Procedures: Alternatives in Research, Education and Testing.' *Laboratory Animals*. 28: 193–211. See International Council for Laboratory Animal Science (1995). *Working Group on Complementary Methods* (ICLAS, Texas).
92. Cited in Orlans, supra n36: 8.
93. See, for example, US Congress Office of Technology Assessment (1986). *Alternatives to Animal Use in Research, Testing and Education* (Washington): 136–40.
94. Hegarty, T. (1989). 'Alternatives.' In *Animals, Men and Morals*, supra n44: 83, 84–6.
95. See Reines, B. (1990). 'The Relationship Between Laboratory and Clinical Studies in Psychopharmacologic Discoveries.' *Perspectives on Animal Research*. 2: 13–26.
96. Chapter 19. 'Environmentally Sound Management of Toxic Chemicals.' Agenda 21. A/CONF.151/26 (Volume II). Paragraph 19.21 (b).
97. In Annex II of the Protocol on Environmental Protection to the Antarctic Treaty, BH992.txt, it is stipulated that signatories must use non-lethal techniques where appropriate.
98. The 1990 Agreement on the Conservation of Seals in the Wadden Sea prohibiting the taking of seals from the Wadden Sea allows lethal scientific research only in so far as the information required for such research cannot be obtained in any other way. Article VI.2. The agreement is reprinted in Austen, M. and Richards, T. (eds) (2000). *Basic Legal Documents on International Animal Welfare and Wildlife Conservation* (Kluwer, Dordrecht): 292–6.
99. Article 2(2).
100. See ASCOBANS. COP 4 (2003). Resolution No. 8. 'Further Implementation of ASCOBANS'.
101. ASCOBANS. Action Plan. Part 2.
102. This can be found at http://www.oceanlaw.net/texts/sanctuary.htm. Article 7.
103. ICSU. (1996). *ICSU Statement of Principles for the Use of Animals In Research and Education* (ICSU, Geneva).
104. Order on Act of Animal Experiments. Article 6 (2).
105. Lithuanian Law on the Care and Use of Animals. November 6, 1997. No VIII–500. Article 14(1).
106. See Environmental Crimes Law of Brazil, 1999. Article 32.
107. Animal Welfare Act, 1999, No. 142 (NZ Statutes, 1999, 3, 2030). Article 80(2)(b)(iii).
108. In Japan, it is hoped that 'researchers ought to consider ways of carrying out research without animal experiments' and 'it is desirable to make efforts to explore the possibility of

using methods that do not require the use of experimental animals'. Guidelines for Animal Experiments, supra n61. Preamble. Animal Experiments in Universities. Article 1.

109. See Gandhi, M. (1996). *Animal Laws of India* (Universal Publishing, New York): 40.
110. In the United States, the Animal Welfare Act Amendments enacted in 1985 mandate the creation of an information service to promote alternative methods and the training in alternative methods for lab workers. Likewise, the Health Research Extension Act, passed in 1985, requires the federal government's largest funding source for biomedical research to promote alternative methods.
111. Section 21 of the project licence application set under the Animal (Scientific Procedure) Act. 1986, supra n58. Masood, E. (1997). 'UK Tightens Regime for Animal Research.' *Nature*. 389: 986.
112. Ball, S. M. and Southee, F. (1989) 'Reducing Animal Experiments by Questioning Their Necessity.' In *The Status of Animals*, supra n64: 111, 112.
113. Johns Hopkins University Centre for Alternative to Animal Testing (1997). *Regulation On Alternatives To Animal Experimentation* (JHUCAAT).
114. CIOMS, supra n49: 7.
115. Principle 4.1. CIOMS, supra n49: 21. This point was also recognized in the NIH Plan for the Use of Animals in Research. (1997). Reprinted by JHUCAAT, supra n113: 22; and by the International Council of Scientific Unions. See ICSU, supra n103.
116. A cosmetic product put on the market within the European Union must not cause damage to consumers' health under normal, reasonable, or foreseeable conditions of use. See Article 2, Directive 76/768EC. Amended by Directive 93/35/EEC. The relative test procedures are those reported in Commission Directive 84/449/EEC and in the Annex to Commission Directive 92/69/EC. OECD guidelines for testing chemicals are also suitable. However, this situation changed rapidly when the Sixth Amendment to Cosmetic Directive 76/768/EC inserted the new recital: 'Assessment of the safety of use of the ingredients employed in cosmetics and of the finished product, should take into account the requirement of Directive 86/609/EC which concerns the protection of animals used for experimental and other scientific purposes'. Article 7.2 of this dictate mandated that an experiment should not be permitted if another scientifically satisfactory method is reasonably and practically available that does not use animals. As a consequence of this position, Council Directive 76/768/EC was amended by Council Directive 93/35/EC, by imposing a ban of testing on animals of ingredients or combinations of ingredients from the beginning of 1998 (Council Directive 76/768/EC, amended Article 4(1)(i).
117. JHUCAAT, supra n113.
118. The dictate was moved back to the year 2000. (Council Directive 97/18/EC). Abbott, A. (1996). 'Delays in Alternative Tests Defer Animal Bans.' *Nature*. 383: 748. Note, the OECD has also not yet adopted pertinent guidelines on toxicity tests in the field of alternative testing methods. See Environmental Directorate Chemicals Group and Management Committee (1996). 'Final Report of the OECD Workshop on Harmonisation of Validation and Acceptance Criteria for Alternative Toxicological Test Methods.' ENV/MC/CHEM/TG (96) 9. Environmental Directorate Chemicals Group and Management Committee (1997). 'The Validation of Test Methods Considered for Adoption as OECD Test Guidelines.' ENV/MC/CHEM(98)6.
119. Principle III. Public Health Service Policy and Government Principles Regarding the Care and Use of Animals. Reprinted in National Research Council, supra n59: 116–7. Balls, M. (1994). 'Reduction of Animal Use: Experimental Design and Quality of Experiments.' *Laboratory Animals*. 28: 212–21.
120. See, for example, Animal Welfare Advisory Committee. Section 4 (g) & 6 (b) (iii). For a discussion of an aspect of this problem, see Cherfas, J. (1986). 'Chimps in the Laboratory: An Endangered Species.' *New Scientist*. March 27: 34–7.
121. BH992.txt.
122. 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles. Article IV.2.f.
123. 1991 Agreement on the Conservation of Bats in Europe. Treaty Series No. 9 (1994). HMSO. Cm 2472.

124. Resolution 4.6. 'Guidelines for the Issue of Permits for the Capture and Study of Captured Wild Bats.' Report of the Fourth Session of the MOP to EUROBATS, 2003. Available from the Secretariat, at http://www.eurobats.org/. pp. 44.
125. ACAP. Article III.2.
126. See IUCN (1989). *Research Involving Species at Risk of Extinction: Policy Statement* (IUCN, Geneva): 1–4. RSPCA (1995). *The Supply of Non-Human Primates for Use in Research and Testing* (RSPCA, London). Aldhouse, P. (1999). 'Let the People Speak.' *New Scientist*. September 8: 27–30.
127. Animals (Scientific Procedures) Act. 1986. Section 5 (6). Likewise, see Article 9 of the German Law on Animal Protection. (1986). Amended.
128. In the USA, it is believed that around 50,000 primates are used for scientific purposes. In the 1990s, close to 5,500 primates were used in Europe. See Abbott, A. (1993), 'Glowing Report May Not Avert Closure of Dutch Primate Centre.' *Nature*. 363: 4.
129. Somewhat perversely, it is the striking similarities between homo sapiens and other primates that provides justification for experimentation upon the latter. As such, research into epilepsy, vaccines, vision, Parkinson's, Alzheimer's, in-vitro fertilization, memory disorder and basic neuroscience are said to 'need' to utilize primates.
130. See Anon (2003). 'Fury Over Primate Decision.' *New Scientist*. November 29: 5. Coghlan, A. (2002). 'Animal Experiments on Trial.' *New Scientist*. November 23: 5, 16–17. Blum, D. (1994). *The Monkey Wars* (Oxford University Press, Oxford). Vines, G. (1993). 'Planet of the Free Apes?' *New Scientist*. June 5: 39–42. Nowak, R. (1999). 'Almost Human.' *New Scientist*. February 13: 20–21. Nowak, R. (1999). 'Dying So We Might Live.' *New Scientist*. February 20: 6.
131. For specific welfare requirements for primates, see Council of Europe (1997). 'Resolution on the Accommodation and Care of Laboratory Animals.' Reprinted in Council of Europe, *Working Party on the European Convention for the Protection of Animals Used for Scientific Purposes* (Strasbourg). GT 123 (98) 1. pp. 65. Special Care for the Humane Handling, Care and Treatment of Non-Human Primates. 56 FR 6495. February 15, 1991. This is within the Animal Welfare Act. 7. USC. 2131–57. Section 3.75–3.100. National Academy Press (1980). *Laboratory Animal Management: Non-human Primates* (NAP, Washington). Note, in New Zealand experimentation on primates was almost banned. See Editor (1999). 'The Great Divide.' *New Scientist*. February 13: 3. Anon (1999). 'Not Great Enough.' *New Scientist*. May 29: 21.
132. Flecknell, P. (1994). 'Refinement of Animal Use: Assessment and Alleviation of Pain and Distress.' *Laboratory Animals*. 28: 222–31.
133. Leahy, M.P.T. (1991). *Against Liberation: Putting Animals Into Perspective* (Routledge, London): 225. Compare Boyce, N. (2000). 'Ouch, that Hurts.' *New Scientist*. September 9: 12–13.
134. Section 3; 3 (2) & 3 (3). Cruelty to Animals Act (1876).
135. BH992.txt.
136. Basic Principle 7. CIOMS, supra n49: 18.
137. See, for example, Principle IV–VI. Public Health Service Policy and Government Principles Regarding the Care and Use of Animals. Reprinted in National Research Council, supra n59: 116–17.
138. Law Concerning the Protection and Control of Animals. Law No. 105, October 1, 1973. Article 11. This was reiterated in the Standards Relating to the Care and Management of Experimental Animals (Notification No. 6, March 27, 1980. Prime Minister's Office). Section V: 1–2. See also Article 4 of the Animal Experiments in Universities. Article 4 of the Guidelines for Animal Experiments.
139. Section 4(e) of the Experiment on Animal (Control and Supervision) Rules. 1968. These are reprinted in Gandhi, supra n109: 42.
140. Republic of Lithuania. Law on the Care, Keeping and Use of Animals. November 6, 1997. No VIII–500. Article 1. See Article 14(3).
141. For example, in 1986, Britain adopted a four-tier 'severity banding' and investigators are granted project licences to conduct experiments at one of the three lower bandings of mild, moderate and severe. However, Section 10 (2b) prohibits any procedures that would fall

into the fourth category – prolonged severe or beyond severe pain. New Zealand and Australia have adopted similar approaches.

142. National Health and Medical Research Council. Sections 1.18 & 1.23.
143. Animal Welfare Act, 1999, No. 142 (NZ Statutes, 1999, 3, 2030). See Article 80(2)(a).
144. European Convention. Article 8 & 9.
145. 'The 1937 International Agreement for the Regulation of Whaling'. In Ruster, B. and Simma, B. (eds) (1976) *International Protection of the Environment* (IPE) (Oceana, New York). Volume VII: 3475. Article 9.
146. See Schweder, T. (2000). 'Distortion of Uncertainty in Science: Antarctic Fin Whales in the 1950s.' *Journal of International Wildlife Law and Policy*. 3(1): 73–92.
147. IWC. 9th Report. (1958). 16.
148. '[R]ecent instances of special permits having been given by Contracting Governments for the taking of much larger numbers of whales under this Article than in the past'. IWC. 15th Report (1963). 20.
149. Paragraph 30 also sets out some basic requirements of the proposal, which are: 'A Contracting Government shall provide the Secretary to the International Whaling Commission with proposed scientific permits before they are issued and in sufficient time to allow the Scientific Committee to review and comment on them. The proposed permits should specify: (a). Objectives of the research. (b). Number, sex, size and stock of the animals to be taken. (c). Opportunities for participation in the research by scientists of other nations. (d). Possible effects on the conservation of the stock'.
150. Japan took 30 humpback whales, from three different schools in the North Pacific, two fin whales in the North Pacific, and two Sei whales in the North Pacific; Australia took 120 undersized sperm whales, the United States a 'harem' of sperm whales; and Canada 20 undersize (unspecified) whales. IWC. 16th Report. (1966). 8–9. In 1965, Canada took a further 20 undersize or lactating females; Norway took one blue whale and one humpback whale; the United States took 50 sperm and 40 grey; the USSR took six sei, three blue, four Byrde's and six fin. IWC. 17th Report. (1967). 9–10.
151. Gordon-Clarke, J. (1977). 'The Whaling Cabab.' *New Scientist*. June 23: 690.
152. See Scientific Committee Report (2002). IWC/54/4. 80. IWC. 52nd Meeting in 2000. (2001). 45.
153. See McKie, R. (2000). 'Japan Unleases Its Harpoons Again.' *Guardian Weekly*. August 3: 14. These figures were later in IWC. 52nd Meeting in 2000. (2001). 38.
154. Anon (2002). 'No Time To Recover.' *New Scientist*. March 9: 8.
155. Clinton, noted in Reuters (2000). 'US Bars Japan for Whale Hunt. *NZ Herald*.' September 15: B2. The UK added to this, by suggesting that with regard to the whalemeat and other products sold commercially, 'this loophole should be closed'. Noted in Anon. (2000). 'Still Hunting.' *New Scientist*. May 13: 7.
156. Clarke, noted in McKie, R. (2000). 'Japan Unleashes Its Harpoons.' *Guardian Weekly*. August 3: 18.
157. 'Resolution on Scientific Permits.' IWC. 36th Report. (1986): 26. Resolution 3.
158. Ibid. Resolution 4.
159. 'Resolution on Scientific Permits.' IWC. 37th Report. (1987): 25. Recommendation 4. 'Resolution on Scientific Research Programs.' IWC. 38th Report. (1988): 38: 27. Recommendation 4.
160 'Resolution on Whaling Under Special Permit in Sanctuaries.' IWC. 46th Report. (1996): 46.
161. 'Resolution on Whaling Under Special Permit.' IWC. 46th Report. (1996): 46–7.
162. Ibid. Recommendation 1.
163. Ibid. Request 1.
164. The Commission requested the SC with respect to special permit research programmes 'to provide advice to the Commission' on 'whether the Special Permit is . . . required for the purposes of management of the species or stock being researched; and . . . whether the information sought could be obtained by non-lethal means'. Appendix 3. IWC Resolution 1999–2. 'Resolution on Special Permits for Scientific Research.' IWC. 51st Meeting in 1999. (2000): 52.

165. IWC. 51st Meeting in 1999. (2000). 41.
166. See (proposed) 'Resolution on Scientific Whaling.' IWC/53/38. Agenda Item 11.2. Note, this resolution was withdrawn. For its discussion within the RMS, see Discussion Document: 'Further Work Required.' IWC/56/36.
167. Institute of Marine Research (1988). 'A Program to Study and Monitor Northeast Atlantic Minke, 1988–1992.' Paper SC/40/Mi7. Presented to the SC in 1988 (unpublished). Blix, A. and Oritsland, N.A. (1989). 'Norwegian Research Projects Involving the Harvest of 20 Minke Whales.' Paper SC/41/NHMi12. Also presented to the SC in 1988 (unpublished).
168. See IWC (1993). Report of the Scientific Committee, Annex M: 'Comments on the Norwegian Proposal for a Scientific Permit.' Report of the International Whaling Commission. 43:208–214. IWC (1989). Report of the Scientific Committee. IWC. 39th Report. (1989). 56–9.
169. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 40th Report. (1990). 36. Consideration 1. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 41st Report. (1991). 47. Invitation 1. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 44th Report. (1994). 33. Invitation 1. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 45th Report. (1995). Reiteration 1.
170. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 40th Report. (1990). 36. Consideration 1.
171. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 41st Report. (1991) 47. Invitation 1. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 44th Report. (1994). 33. Invitation 1. 'Resolution on Norwegian Proposal For Special Permits.' IWC. 45th Report. (1995). 48. Reiteration 1.
172. 'Resolution on Icelandic Proposal For Scientific Catches.' IWC. 38th Report. (1988) 28.
173. 'Resolution on Icelandic Proposal For Scientific Catches.' IWC. 39th Report. (1989). 30–31. Consideration 1. 'Resolution on Icelandic Proposal For Scientific Catches.' IWC. 40th Report. (1990). 35. Invitation 1. Anon (1989) 'Whale Reprieve.' *New Scientist*. August 12: 7.
174. 'Resolution on Whaling Under Special Permit.' IWC/55/7/ Agenda Item 12.2. Report of the Scientific Committee. IWC/55/Rep 1. 48–53.
175. 'Resolution on Republic of Korea's Proposal for Special Permits.' IWC. 38th Report. (1988). 28. For a discussion of the Korean programme, see Cherfas, J. (1985). 'More Whales Harpooned for Science.' *New Scientist*. July 18. 18. Cherfas, J. (1985). 'Subterfuge May Undermine Whaling Ban.' *New Scientist*. July 25: 16. Cherfas, J. (1987). 'With Harpoon and Pocket Calculator.' *New Scientist*. July 2: 30–31. Cherfas, J. (1987). 'Nations United to Condemn Research Whaling.' *New Scientist*. June 25: 32.
176. 'Resolution on the USSR Proposal For Scientific Catches.' IWC. 42nd Report. (1992). 47.
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6. Humane killing

1 INTRODUCTION

Japan and a number of like-minded countries argue that humane considerations have no place in the IWC. The basis of their argument is that humane considerations are both relative to different countries and invisible in international law. As such, forums such as the IWC should abandon any such discussions in favour of 'more pressing' issues before the Commission. When I first heard this argument in Oman at the 50th IWC meeting in 1998, I was taken aback and assumed that a mistake had been made in the presentation of their (and similar) interventions. This was not the case, and over the following years the argument has been reiterated. Unfortunately, it has now been repeated so many times that an increasing number of 'middle-ground' countries are beginning to believe it. Accordingly, when a country such as the United Kingdom tried to introduce simple data notation requirements into the revised management scheme for whale vessel inspectors,[1] with the inspection and observation regime intersessional meetings, they were directly challenged with assertions that their objective was somehow *ultra vires* because it was culturally relativistic and without precedent in international law. It is the aim of this chapter to show that the ideal of humane killing is neither culturally relative, nor invisible in international law. As such, it is a very legitimate topic within the IWC.

2 HUMANE KILLING AND THE INTERNATIONAL WHALING COMMISSION

In 1960, just after the issue of humane killing had appeared on the IWC agenda, it was noted that killing methods were best judged by the 'chief criterion [which] was the speed of the killing'.[2] As such, the objective of 'instant death'[3] was accepted as the humane goal with little question. Twenty years later, the 1980 Workshop on Humane Killing Techniques for Whales defined humane killing as:

> Causing its death without pain, stress or distress perceptible to the animal. That is the ideal. Any humane killing technique aims first to render an animal insensitive to pain as swiftly as is technically possible.[4]

The 1992 Workshop on Whale Killing Methods[5] and the 1999 follow-up workshop were based on 'improving whale killing techniques and minimizing times to irreversible insensibility and death' and therefore reducing 'the risk of pain caused to the animal'.[6] Likewise, the 2001 Resolution on Whale Killing Methods established a further workshop with the goal of 'reduc[ing] time to unconsciousness and death in all whaling operations'.[7] With this definition, it is important to note that humane considerations are limited to trying to achieve the quickest possible death, and not additional considerations such as stress caused from the hunt, which may have detrimental long-term effects for whales which are hunted but escape. This is an important omission, as the pursuit of a whale may range from a few minutes to 7 hours.[8]

From this history of discussions within the IWC, it is feasible to suggest that humane killing in this forum means seeking to achieve the least possible pain and the quickest possible death.[9] Moreover, it has been contended (by the UK) that the idea of 'a minimum of pain and suffering' is not unique to any one culture.[10] However, this suggestion has been at the centre of repeated contention for the last 20 years as Japan (Norway, Denmark and Antigua and Barbuda) have repeatedly suggested: 'what is considered humane is a subjective judgment'.[11] This debate came to a head in the late 1990s when even the word 'humane' (for the *Humane* Killing Working Group) was objected to because of its 'very subjective' background, which did not reflect 'differences in cultural and traditional backgrounds'. Japan suggested: 'there was not a common view of humaneness and . . . it should be dropped as this was not an ethics committee'.[12] Following intense debate the following year in 1999[13] the Solomon Islands spoke of 'the cultural differences and practices carried on over generations which exist' and 'regretted the imposition of values from others'.[14] After discussion, the offending word 'humane' was removed from the 'Working Group on Welfare Considerations of Whale Killing Methods' and the related 'Workshop of Whale Killing Methods'.[15]

Unfortunately, this debate is not merely academic. Rather, the campaign to confront 'humane' considerations at the IWC is linked to broader objections within the forum, that humane considerations should not be considered at all in decisions relating to the management of cetaceans. The broad contention is that 'humane' considerations are ultimately subjective, and as such, have no place in international forums such as the IWC. I believe that this contention is mistaken.

3 'HUMANE'

I have discussed overall ethical questions with regard to Nature generally[16] and cetaceans specifically (with regard to questions of overall killing and

killing under the auspices of science)[17] elsewhere. For this chapter, I intend to look at the more restricted ethical questions revolving around humane killing.

The word 'humane' (which derives from a common earlier spelling of human) can be traced back to a publication of Plutarch's *Moralia* in 1270. Today, the exhaustive *Compact Oxford English Dictionary* defines *humane* as 'characterized by such behaviour or disposition towards others as befits a human being'.[18] The emphasis upon humanitarianism is commonly linked with humane, and the idea of a consciousness or compassion which creates an empathy with the *pain* of others.[19] The desire to prevent the pain of others is the antithesis of *cruelty*.[20] This consciousness to prevent the pain of others often devolves into non-anthropocentric areas. As such, 'humane' may be considered as:

> Marked by sympathy with and consideration for the needs and distresses of others, feeling or showing compassion and tenderness towards human beings and the lower animals . . . [and] . . . Applied to certain weapons or implements which inflict less pain than others of their kind.[21]

In this context, this common-sense definition provides the yardstick for the word humane: a desire not to inflict unnecessary pain upon wild animals. As such, when the animals may be legitimately killed, it must be done with the objective of causing minimum pain and shortening their time to death wherever possible.

4 THE UNIVERSALITY OF THINKING ABOUT HUMANE KILLING

Irrespective of the debate about killing animals generally, a strong consensus can be seen throughout the history of comparative schools of thought that the humane treatment of animals is a desirable path to follow. Within the great schools of thought, the first scholar from Antiquity to advocate 'compassion upon all living things' was the Egyptian Kagamni Sage, writing in 2300BC.[22] This approach was later followed by more familiar classical scholars such as Pythagoras,[23] Plutarch,[24] Porphyry[25] and Seneca,[26] who have all argued for humane considerations when dealing with animals. Within the Scriptures, humane considerations can be adduced from both the Old[27] and New Testaments[28] and as well as some larger philosophical debates in related areas, the call for humane treatment was clearly echoed by important theologians such as Basil,[29] John Chrysostom,[30] Maimonides[31] and (of course) Francis of Assisi.[32] Within the scholarship which evolved from the Reformation to the Enlightenment, the chorus of pivotal theorists arguing for

humane considerations included, among many others, Thomas More,[33] Francis Bacon,[34] Montaigne,[35] Mandeville,[36] John Locke,[37] David Hume,[38] Alexander Von Humboldt,[39] Jeremy Bentham,[40] Jean Jacques Rousseau,[41] Thomas Paine,[42] Immanuel Kant,[43] Samuel Johnson,[44] Voltaire,[45] J.S. Mill,[46] Arthur Schopenhauer,[47] Charles Darwin,[48] Henry David Thoreau,[49] Albert Einstein,[50] Leo Tolstoy[51] and Albert Schweitzer.[52]

The interesting point from the viewpoint of comparative ethics, is that the importance of the humane treatment of animals is by no means restricted to the Western tradition. Rather, the converse would be the case and within many comparable ethical traditions, the injunctions are more commonly stronger in these non-Western schools. From the East, the schools of Jainism,[53] Hinduism[54] and Buddhism[55] all carry strong injunctions against the unnecessary infliction of pain on animals. From the Far East, Confucianism,[56] Taoism[57] and Shinto[58] often invoke similar injunctions and general environmental ethics. Finally, the later religious–ethical traditions of both Islam[59] and Sikhism[60] have contained clear injunctions against the causation of unnecessary suffering in animals.

5 HUMANE KILLING AND THE HUNTING OF WILDLIFE

There is a distinction to be drawn between humane considerations regarding the slaughter of captive animals, and the hunting of wild ones. As a general rule, it would appear that most countries of the world have general rules (and good intentions) with regard to minimizing the pain and shortening the time of death with the killing of commercial animals.[61] With regard to the hunting of wild animals, similar conclusions may be reached, although the process of consideration is somewhat more complicated.

Much has been written on the ethics of hunting.[62] Within these philosophical debates, decentralized arguments pertaining to multiple subjects have arisen. One of the more recent has had to do with the issue of hunting as a form of sustainable development, and the importance that the hunting culture can create in terms of forming meaningful bonds with nature.[63] Irrespective of the merits of these contentions, at no point do those who advocate the values of hunting suggest that the hunting is something that should be pursued without limits, suggest it. Plato was the first to realize this when he suggested that certain hunting methods should be forbidden because they could make hunters ‘cruel and lawless’.[64] For thousands of years since Plato made this suggestion, societies have debated over what ‘appropriate’ limits may be placed as caveats with hunting. Questions of appropriateness involve issues such as the status of the animal (that is, is it endangered),[65] the justification to kill the animal (that

is, is it for food or killing for pleasure),[66] was the law obeyed in the hunt (that is, was it licensed), was safety observed and was the case 'fair'. Finally, it must be done humanely. This chapter examines this last consideration.

The general rule is that 'when the time comes to kill an animal, your responsibility is to do it efficiently . . . the ethical hunter will constantly work toward the ideal of making all shots on target and instantly fatal'.[67] This principle is commonly affirmed by most of those who promulgate hunting ethics. As such, the pursuit of an 'anti-cruelty ethic' is an important part of the moral defence of hunting.[68] Accordingly, not only should the objective be instant death for the target, but pursuit of the wounded or the crippled so as to relieve them from pain if they have only been wounded.[69]

6 NATIONAL HUNTING LAWS

With such broad considerations in mind, it is possible to show that many countries, representing many different political and legal paradigms, have adopted a number of humane considerations both directly and indirectly (that is, they often overlap with intentions to restrict indiscriminate capture methods) into their wildlife hunting laws. For example, in the Lithuanian Law on Wildlife,[70] one of the measures is to 'prohibit cruel behaviour towards wild animals or torture thereof' and 'to develop a humane regard for wildlife'.[71] This is supplemented by the Law on the Care, Keeping and Use of Animals which has a strong purpose to protect animals from 'suffering, cruel treatment and other negative pressures'.[72] Likewise, the Polish Animal Protection Act,[73] which covers wild animals,[74] stipulates clearly: 'Every animal requires humane treatment [and] unjustified or inhumane killing of animals and their abuse is forbidden'.[75] The Norwegian Act Relating to Wildlife and Wildlife Inhabitants[76] also necessitates a licensing system for hunting[77] and states: 'Hunting and trapping shall be practised in such a way that wildlife is not exposed to unnecessary suffering'.[78] Following this principle, there are a number of clear limits on hunting periods (no hunting at Christmas or Easter)[79] and hunting methods.[80] This necessity to outlaw cruel practices is particularly strong in countries like Brazil, where it is an 'environmental crime' (which carries a penalty of between three months to a year in jail) to (unjustifiably) 'abuse, [mistreat] injur[e] or mutilate wild, domestic or domesticated animals, native or exotic'.[81]

In America, an overall federal approach to domestic and wild animal management provides a system where all fifty states and the District of Columbia have anti-cruelty laws. In most states, all animals, including wildlife, are protected, although certain exemptions commonly apply for various types of hunting and so on.[82] Despite this federal approach, a number of

pivotal species have been recognized at the national level. With these species, humane considerations are apparent. For example, the Wild Horses and Burros Act clearly states that should any such animals need to be destroyed, it shall be done 'in the most humane manner possible'.[83] With regard to the protection of eagles,[84] people may be found guilty for the 'wanton disregard for the consequences of [their] acts' in their dealings/treatment of Bald or Golden eagles.[85] Finally, with regard to the US migratory birds treaties,[86] a large number of prohibitions on various forms of hunting exist, and as the following section on birds in international law explains, the overlap between the prevention of indiscriminate capture and humane concerns is often intertwined.

In Australia, it is clear that there are 'community expectations regarding the proper use of animals'. As such, 'the humane use and care of animals is of fundamental concern to all members of the community'.[87] Thus, even though it is ultimately a federal approach to the management of wildlife and each state has it own wildlife laws, replete with systems of licences and restrictions for hunters,[88] the most efficient methods of killing are commonly adopted, with an emphasis on causing the minimum amount of pain possible. Accordingly, a number of killing (or trapping) methods – even with 'problem' species – are prohibited.[89] High focus issues are subject to special regulations. For example, the culling of kangaroos can only be done by licensed shooters using high-powered rifles. The (Australian) RSPCA considers not only that this is necessary, but also that it is 'the most humane way of killing kangaroos'.[90]

Across the Tasman in New Zealand, the intention to lay down rules to protect animals from pain and suffering is made clear[91] within the 1999 Animal Welfare Act,[92] which has a general purpose that those persons in charge of animals shall 'where practicable, alleviate any unreasonable pain or distress from which the animals are suffering'.[93] As such, when dealing with suitable conduct towards animals, certain traps and devices used to kill, entrap, capture (and so on) are prohibited.[94] With the Wildlife Act of Ireland[95] the necessity of humane killing is repeatedly incorporated into the provisions of the law,[96] and is then followed by the typical generalized restrictions on the types of gun that may be used, along with restrictions on fires, poisons, various nets, traps and snares and so on.[97] In the UK, the general obligation (with the exception of the anomaly of fox hunting)[98] of restricted hunting methods is found in the Wild Mammals (Protection) Act of 1996. Under this act, anyone who 'kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering'[99] is committing an offence.

China's wildlife law[100] introduces a licensing system and general restrictions on certain hunting methods,[101] and special humane considerations for endangered species are emphasized.[102] Likewise, in Taiwan, protected wildlife

shall not be 'disturbed or abused' (or hunted or killed), and strict hunting methods are proscribed.[103] In Malaysia, the licensing system is enforced, along with restrictions on targets (no killing of the young) and various killing methods (poisons, explosives and various traps).[104] Moreover, 'any person who, when hunting, wounds an animal and fails to kill it shall use all reasonable endeavors to kill it as soon as possible'.[105] Similar restrictions on the taking of the young and indiscriminate hunting methods are also prohibited in Laos.[106] The Philippine Animal Welfare Act[107] contains strict regulations to prevent all forms of unnecessary suffering and emphasizes humane killing. Moreover, with particular regard to wildlife, this law goes so far as to suggest that 'the destruction of habitat shall be considered as a form of cruelty to animals and its preservation is a way of protecting the animals'.[108] Japan's Wildlife Protection and Hunting Law[109] stipulates a strict system of licensing for hunters[110] and then prohibits a number of hunting methods.[111]

7 HUMANE CONSIDERATIONS WITHIN INTERNATIONAL LAW

Humane considerations within international law may be divided into three areas. The first area relates to international regimes, which have a large coverage. The second relates to the area of international law dealing with indiscriminate capture and the overlap of humane concerns. Finally, there are a series of species-specific examples.

Regime Specific: The Convention on Biological Diversity, Antarctica and CITES

The necessity of finding 'appropriate' culling methods is a common feature of international wildlife law.[112] This became very clear at the 2004 COP of the Convention on Biological Diversity, when the Principles and Guidelines for the Sustainable Use of Biodiversity were finally adopted. In addition to recognizing that non-consumptive use was a legitimate option for countries, they specifically recognized that when optimizing benefits from biodiversity, 'more efficient ethical and humane use of wild fauna and flora, within local and national contexts' should be promoted.[113]

With regard to treaties which deal with more specific issues (as opposed to the more generic principles that evolved from the CBD) the infusion of humane considerations into the ambit of 'appropriateness' can be seen with regard to the management of the species in and around Antarctica. This process began with the 1964 Agreed Measures for the Conservation of Antarctic Fauna and Flora,[114] which provide a comprehensive set of rules for

the conservation of wildlife including prohibitions and restrictions on the killing, taking, molesting and so on of any bird or mammal native to Antarctica. The general obligation is that the signatories shall 'prohibit' within the treaty area 'the killing, wounding, capturing or molesting of any native mammal or native bird or any attempt at such an act'.[115] The emphasis is clearly upon the prohibition of 'harmful interference' of such species.[116] Likewise, the 1991 Protocol on Environmental Protection to the Antarctic Treaty[117] in Annex II, which deals with the conservation of Antarctic flora and fauna, reiterates the prohibition against taking or 'harmful' interference, except in accordance with a permit. With regard to the issuing of permits, as well as strong considerations given to the status of the populations at hand, it is also necessary to utilize 'non-lethal techniques where appropriate'.[118] Moreover, 'all taking of native mammals and birds shall be done in the manner which involves the least degree of pain and suffering practicable'.[119]

Humane considerations are also clearly evident within the Convention on International Trade in Endangered Species (CITES). This convention, with its strong focus on the humane treatment of animals that are subject to international transport,[120] is supported by a number of other national, regional and international instruments detailing humane considerations in international transport.[121] For example, trade should only be conducted with the intention of 'minimiz[ing] the risk of injury, damage to health or cruel treatment'.[122]

Indiscriminate Capture and the Overlap of Humane Considerations

Preventing the capture of non-target species is something which the international community has been trying to deal with for over one hundred years.[123] At many points, the attempts to prevent indiscriminate capture methods have had clear overlaps with inhumane hunting methods. A foremost historical example of banning indiscriminate technology has been attempts to prohibit the use of poison, although this vastly indiscriminate fishing method continues to be a problem in a number of regions in the twenty-first century.[124] This is ironic given nearly 150 years of attempts by sections of the international community to confront this type of problem. For example, in 1869 the use of poisons or explosives was prohibited for fishing purposes on parts of jointly shared sections of the Rhine.[125] Eleven years later in 1880, explosives, poison, spears, forks and poles (except angling rods), guns or torches, were also banned for fishing purposes under the 1880 Convention between Prussia and the Grand Duchy of Hesse.[126] These prohibitions on indiscriminate methods, which often have distinct humane consideration overlaps, were followed in a number of bilateral and multilateral treaties that followed.[127] Some agreements adopted a somewhat broader approach. Accordingly, the 1892 Exchange of Notes Between Canada and the United States[128] created a joint

commission to examine: 'The prevention of destructive methods of fishing in the territorial and contiguous waters of the United States and Canada, and also in waters outside the territorial limits of either country'.[129]

Restrictions on poisons, explosives and methods which may 'frighten' (according to a 1920 agreement)[130] or 'stupefy' (according to a 1934 agreement) were prohibited.[131] The 1925 Convention Between Estonia and Latvia for the Protection of Fish[132] prohibited indiscriminate fishing methods 'likely to inflict external wounds on the fish'. Banning night fishing, or restrictions on the use of lights at night to attract fish were also later agreed restrictions.[133]

Following on the restrictions on these types of indiscriminate method, are the larger restrictions on various indiscriminate fishing devices. As with the above examples, the reasons why very blunt fishing methods, from national concerns to the global ban on large-scale driftnets,[134] the ideals of restricting bycatch and promoting humane killing methods have overlapped.

A strong linkage between indiscriminate capture and humane considerations is apparent with the evolving stipulations that every attempt should be made to keep wrongly captured individuals alive, and not harm them. As a practice, returning bycatch to the ocean (especially when still alive) is a well-established principle that may be traced back to a number of agreements at the beginning of the twentieth century which focused on target species.[135] With regard to non-target species, a number of principles and practices, which are designed to protect the non-target species, via the minimum infliction of harm possible are clear. For example, with marine turtles, the 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles[136] has an objective to reduce, to the greatest extent possible, among other concerns, 'harm' to sea turtles.[137] Other related conventions dealing with bycatch stipulate that turtles shall be 'released alive . . . to the maximum extent practicable'.[138] The Inter-American Tropical Tuna Commission (IATTC) in dealing with bycatch[139] in general and marine turtles in particular, stipulates that efforts shall be made to disentangle, release and resuscitate these creatures if necessary.[140] With regard to cetaceans, the 1998 Agreement on the International Dolphin Conservation Program[141] has as part of its objectives the development of 'techniques for the rescue and safety of dolphins' which are caught as bycatch.[142] Among the many requirements for this are the methods designed to avoid killing or 'injuring' dolphins in the course of releasing such trapped cetaceans.[143] The IATTC adds that dolphins shall be 'promptly released unharmed . . . to the greatest extent practicable'.[144]

With regard to large-scale terrestrial management regimes, similar principles relating to an overlap between the prevention of indiscriminate capture and humane considerations are clearly evident. This process began with the 1900 Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa,[145] which prohibited the utilization of various snares

and traps for the capture of land animals and the use of poison to capture fish. The 1933 Convention Relative to the Preservation of Fauna and Flora in Their Natural State,[146] which eclipsed the 1900 convention, extended the prohibition on various hunting methods.[147] The 1968 African Convention on the Conservation of Nature and Natural Resources[148] reiterated the prohibitions noted in comparable treaties,[149] and added the particularly cruel use of 'live animals used as decoys which are blind or mutilated'[150] to the prohibited list. The necessity of avoiding indiscriminate hunting methods was also iterated in the 1985 Protocol Concerning Protected Areas of Wild Fauna and Flora in the Eastern African Region,[151] and the 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources.[152] Within the European region, the 1979 Berne Convention on the Conservation of European Wildlife and Natural Habitats[153] explained:

> In respect of the capture or killing of specified wild fauna species, Contracting Parties shall prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species, and in particular, the means specified in the Appendix.[154]

Appendix IV then lists the prohibited means and methods of killing, capture and other exploitation. This covers the usual lists of explosives, poisons, various firearms, platforms, various traps and nets, and the use of live animals which are blinded or mutilated, and interestingly, 'electrical devices capable of killing'. In this theatre, the EC Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora complements the Berne Convention,[155] in which a number of the usual list of prohibited hunting methods are reiterated.[156]

The strongest example of the overlap between indiscriminate capture mechanisms and humane considerations is probably with leghold traps. Ethical concerns in this area date back to the second half of the nineteenth century, although it was not until the twentieth century that some European countries sought to control this type of killing and capturing method.[157] By the end of the twentieth century these prohibitions were not only European wide – the Community was also seeking to prohibit the importation into the EC of products made from animals caught in such traps or by other means that do not meet 'internationally agreed humane trapping standards'.[158] This law was to run parallel with ISO standards which were attempting to formulate an agreed-upon standard. However, the ISO standards ran into difficulties[159] and accordingly the EC initiated agreements with individual nations regarding humane trapping methods, with the understanding that the regulation would not be enforced against those nations with whom these negotiations were successful or that at least indicated progress towards agreement on humane trapping

standards.[160] Two agreements, one between the EC, Canada and Russia, and the substantially equivalent (but slightly different) agreement between the EC and the United States[161] emerged from these negotiations. The agreement with Canada and the Russian Federation[162] is very specific in its prescriptions of actual trap standards for performance with which the parties must comply. The agreement begins by recalling their 'deep commitment to the development of international humane trapping standards'.[163] The agreement explains:

> Although welfare can vary widely, the term 'humane' is used only for those trapping methods where the welfare of the animals concerned is maintained at a sufficient level, although it is acknowledged that in certain situations with killing traps there will be a short period of time where the welfare will be poor.[164]

With such yardsticks in mind, the agreement goes on to stipulate what the now established (yet evolving)[165] humane trapping methods are for the listed species. Conversely, traps not in accordance with these standards are prohibited.[166]

Species Specific: Seals, Birds and Cetaceans

The humane killing of seals was of great concern in the 1980s in Europe.[167] As the EC reacted,[168] although their prohibition of certain seal skins was linked to fears of overharvesting, its emphasis was also clearly upon the subject (young and baby seals) of the hunt[169] which were the recipients of the aesthetically disturbing culling methods. Moving more into international law, it is possible to suggest that humane killing of this species, when they need to be culled, is the required norm. For example, with regard to the sealing arrangements for the North Pacific (as dealt with under the 1976 Convention on the Conservation of North Pacific Fur Seals)[170] it is stipulated that: 'The respective Parties will seek to ensure the utilization of those methods for the capture and killing and marking of fur seals on land or at sea which will spare the fur seals pain and suffering to the greatest extent practicable'.[171]

Likewise, with the 1972 Convention for the Conservation of Antarctic Seals[172] clearly states that the parties shall promote studies on the 'humane use of seals'.[173] This was later interpreted to mean that the signatories shall proscribe 'limitations on . . . methods of sealing'[174] if necessary, and that scientific research should be directed to find culling methods that are 'quick, painless and efficient'.[175] With regard to the 1990 Agreement on the Conservation of Seals in the Wadden Sea,[176] the taking of seals from this area is generally prohibited. One of the very few limited exceptions to this rule was an inverse humanitarian consideration ('mercy killing'), which suggested that it might be permissible if, due to a number of possible scenarios, they 'are clearly suffering and cannot survive'.[177]

The prohibition of both indiscriminate and inhumane killing of birds began in a bilateral sense with the 1875 Declaration for the Protection of Birds Useful to Agriculture, which outlawed the use of poison and narcotics to catch birds.[178] This was soon eclipsed by the broader 1902 Convention on Birds Useful to Agriculture[179] which, despite its strong anthropocentric basis, contained the general prohibition against 'the construction and employment of traps, cages, nets, nooses, lime twigs or any other kind of instrument used for the purpose of rendering easy the wholesale capture or destruction of birds'.[180] A 1931 European Agreement on Migratory Game Birds added restrictions on the calibre of rifle allowed, as well as the types of platform available to shoot from and the use of allowable decoys.[181] The 1950 International Convention for the Protection of Birds[182] stipulated that certain methods were prohibited which would cause mass killing of birds 'or to cause them unnecessary suffering'. With such considerations in mind, it then proceeded to list a series of prohibited methods (noted in the earlier conventions) and added the particularly objectionable use of 'blinded decoy birds'.[183] Similar principles and restrictions on hunting methods were followed by the 1970 Benelux Convention Concerning Hunting and the Protection of Birds,[184] the 1979 European Council Directive on the Conservation of Wild Birds[185] and the 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds.[186] A subsequent international document, which adds a new dimension to bird agreements and the necessity to avoid both indiscriminate capture and inhumane treatment, is the FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Long-line Fisheries.[187] Under this plan, which was largely based on the practice and principles of a number of international fishery-related organizations such as the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR),[188] it is stipulated:

> If despite the precautions, seabirds are incidentally caught, every reasonable effort should be made to ensure that birds brought onboard alive are released alive and that when possible hooks should be removed without jeopardizing the life of the birds.[189]

This type of approach was later reinforced in the Agreement on the Conservation of Albatross and Petrels, which stipulated that when dealing with these species which could not be rescued: 'Humane killing, by duly authorized persons, to end the suffering of seriously injured or moribund albatrosses or petrels shall not constitute deliberate taking or harmful interference.' The key word is 'humane'.[190] Likewise, in the accompanying action plan, when dealing with non-native species, and the need to remove or eradicate them, it was suggested that such measures 'should satisfy to the extent feasible, humane and environmental considerations'.[191]

The International Whaling Commission

The practice of the IWC represents a superb example wherein despite debates about exactly what humane killing means, it has consistently aimed at (and succeeded in) achieving the axiomatic goal: reducing both pain and time to death. The ability of the IWC to pursue these goals of reduced pain[192] and reduced time to death[193] for captured cetaceans comes directly from the ICRW, which provides that the Commission may amend the schedule to prohibit or specify the types of gear and apparatus to be used in whaling operations.[194]

The possibility of changing the hunting methods used in commercial whaling first arose at its ninth meeting, when the subject of humane killing was first raised by the RSPCA (and has remained a foremost concern for many NGOs ever since)[195] and the following year with the resolution from the 1958 Second United Nations Conference on the Law of Sea which suggested that the killing of all marine life should be done with the intention of sparing them suffering 'to the greatest extent possible'.[196] The IWC accepted this resolution and noted that despite its belief that the current killing practices were adequate,[197] a special report[198] (which coincided with the IWC's status quo position)[199] was prepared on the subject which noted that better killing methods were under way.[200]

The topic of humane killing reappeared in the mid-1970s (at the 27th meeting) along with the decision to conduct research into improving existing methods.[201] This research was furthered by the recommendation that international observers within the inspection and compliance remit 'collect information regarding humane killing'.[202] This approach has subsequently been followed in other international forums which have international inspectorate systems. For example, with the North Atlantic Marine Mammal Commission (NAMMCO) control system, the objectives of the observers include, *inter alia*, observation of 'hunting equipment and its use, hunting procedures and killing methods'.[203] Likewise, the CCAMLR system of inspection is related to the compliance measures of the Commission, of which a strong concern pertains to the capture methods employed by members and especially their effect upon incidental species.[204]

By themselves, the pursuit of humane killing objectives, and the broad inclusion of mechanisms to further the study of these within inspection and observation (I&O) regimes, is not particularly controversial elsewhere. However, at the IWC this has not been the case. Rather, with the advent of the commercial moratorium, and overlapping debates about small cetaceans[205] and aboriginal subsistence hunting, the topic of humane killing became increasingly problematic, and attempts to update the I&O regime to allow the recording of information relating to humane killing have been repeatedly challenged.[206]

Against such a background, Japan began arguing that humane killing is outside the jurisdiction of the IWC generally, but especially so with regard to the consideration of small cetaceans.[207] The former USSR,[208] Denmark[209] and Norway have all concurred.[210] Despite this view, none of the four has opposed an examination of the issues, and each has often co-operated with IWC discussions on a 'good faith' basis.[211] Within this rubric of co-operation, a number of examples where the successful application of humane killing has been applied can be adduced with regard to both primary and secondary killing methods.

The foremost advance in the improvement of primary killing methods of commercial whaling began in the mid-1970s with the development of an 'alternative to the explosive [cold grenade] harpoon'.[212] This method, which was the subject of much criticism[213] eventually led to Commission recommendations for its use only on minke whales.[214] This in turn spurred the development of alternatives (the penthrite grenade) by Japan and Norway.[215] From the mid-1990s,[216] efforts have been under way to improve the penthrite grenade in terms of effectiveness.[217] Although the grenade is still being improved, since its utilization from the mid-1980s, the percentage of instantaneous deaths increased to 45 per cent in all commercial hunts utilizing this weaponry.[218]

A second area where advances have been made with primary killing methods has been with small cetaceans. The decision that humane considerations should be brought to bear on the killing of small cetaceans dates back to 1980.[219] The foremost catalyst of this overlap[220] between small cetaceans and humane killing was the pilot whale hunt in the Faeroe Islands,[221] which evoked a 'very strong concern' by the Humane Killing Working Group due to 'the use of the gaff and the spear'. Accordingly, the Commission 'urged the Danish government to encourage the Faeroese Government to make every effort to minimize the use of the gaff and spear'.[222] Denmark responded that the 'use of the gaff from a boat [has] been considerably reduced'.[223] This response was not sufficient for the Commission,[224] who reiterated their concerns in 1992[225] and 1993.[226] Although Denmark (and others) 'objected strongly' to these resolutions,[227] in 1995 the government of the Faeroe Islands did provide information on its hunt to the Workshop on Whale Killing Methods, and announced that they were 'considering introducing alternatives to the gaff'. They had also banned the use of the spear and harpoon.[228] However, exactly how far the alternative – a new type of knife inserted into the blowhole – is effective in reducing time to death, as opposed to blood from external wounds, is a matter of debate.[229]

The final area where progress has been made with regard to humane considerations and primary killing methods has been with aboriginal subsistence hunting. Here, although IWC signatories initially may have been sympathetic

to ASW claims,[230] they have rarely expressed support for traditional killing methods. As such, unlike comparable international wildlife conventions,[231] the development and pursuit of humane standards for the killing of wildlife by indigenous peoples within the IWC seems quite advanced. This is partly because the IWC urged that traditional practices be exchanged for more modern humane methods that are more efficient, in terms of the length of time that it may take a whale to die, and a number of countries have begun to (voluntarily) report on improvements in this area.[232] However, there is no set practice in this regard. As such, some ASW claimants utilize harpoons and floats, others use darting guns with specialist projectiles, and others use guns. With regard to the last utilization, the variations are wide, with the ASW hunt in Russia utilizing between three and 100 bullets (with an average of 52) bullets per whale.[233] Such diverse practices typically result in much longer times to death than commercial whaling operations. For example, with the Chukchi whalers, the average time of death was one hour (in 2000)[234] before falling to 43 minutes in 2001 (following an average of 54 bullets).[235] In 2003, individual mean times to death were put at 32 minutes for gray whales and 41 minutes for bowhead. For ASW off Greenland, the average time for a minke whale to die was 14 minutes, and the average time for a fin whale was 114 minutes. The worst case was 720 minutes.[236] With the St Vincent and the Grenadines hunt, the time to death was between 20 and 30 minutes.[237] With such considerations in mind, the IWC has continually attempted 'to strive . . . to reduce the pain and suffering of whales'[238] caught under the ASW category. These concerns were the subject of detailed discussion in the 1980s[239] and throughout the mid-1990s with regard to the Makah hunt,[240] the Chukotka request[241] and the applications by Denmark.[242] In 1997, in line with the earlier positions adopted with regard to this issue, the IWC once again called upon parties to achieve 'the least possible pain and distress to hunted whales'. Specifically, it spoke of a '[n]eed to ensure that aboriginal subsistence whaling causes the least possible pain and distress to hunted whales. . . . [Aboriginal subsistence whalers should] . . . do everything possible to reduce still further any unavoidable suffering caused to whales in such hunts.[243]

A similar call was reiterated the following year in 1999 when the Commission 'encouraged all contracting governments to provide appropriate technical assistance to reduce time to unconsciousness and death in all aboriginal subsistence whaling'.[244] Despite this quest for continual improvement, it would nevertheless appear that progress has been made in this area as traditional practices have been in part exchanged for more efficient modern methods, in relation to the Greenland hunt[245] and the Inuit hunt in Alaska[246] in particular. The broad principle to 'reduce time to unconsciousness and death in *all* whaling operations' (added italics) was reiterated in 2001, and broadly

again in 2004 when a further workshop seeking efficiencies in this area was established.[247]

Once a whale has been harpooned, it does not always die quickly. Accordingly, a secondary method for killing whales as quickly as possible is needed.[248] Broadly, the three options are further harpoons, the electric lance or rifles. In this area, the humane killing issue has primarily concerned the use of the electric lance, which was in use as early as the 1850s. This method has been the foremost secondary killing method for the Japanese since 1971. Its popularity has been due to a (mistaken) belief that the blubber constituted an electric insulating barrier, preventing current leakage. Thus, it was presumed that once an animal was electrocuted, its death would be quicker than any comparable secondary methods.[249]

In 2001, most secondary methods for scientific, commercial and aboriginal subsistence whaling were rifles, harpoons and darting guns. This is unlike in the past, where the electric lance was utilized as a secondary method.[250] The IWC began to focus on the possible unsuitability of this method in 1983.[251] This concern reappeared in the early 1990s with a general review of 'secondary killing methods with a view to reducing time of death in whales'[252] followed by a specific focus on the lance.[253] Studies were soon led by the UK[254] and New Zealand, which suggested that this method caused 'unnecessary pain and suffering to a whale already harpooned'.[255] Such concerns led to a further directed resolution on electric lances, which called for the development of alternative secondary killing methods that should 'lead to reduced times of death'.[256] The following year in 1995, despite contra contentions from the Japanese[257] the Commission passed a resolution, which noted that because 'alternative secondary methods [that is, rifles] are available', Japan should 'suspend the use of the electric lance as a method of killing whales'.[258] However, those primarily opposed to the electric lance could not gather the necessary three-quarters of the votes to list the prohibition of the lance in the schedule.[259] Nevertheless, in the late 1990s although Japan disagreed with the assumption that the electric lance was inhumane, it agreed to use rifles as the primary secondary source of killing[260] under normal circumstances.[261]

8 CONCLUSION

The humane ideal in dealing with animals is to cause as little pain as possible. With regard to any necessary killing of wild animals, the objective is to kill with minimum pain, and to reduce time to death as quickly as possible. This ideal is common in most (if not all) of the world's major philosophies, both Western and non-Western alike. As such, it is no surprise to find that the principle of humane killing is a very common international custom. With regard to

the killing of wild animals, it has been recognized since the time of Plato that ethical considerations are applicable in decisions over the moral legitimacy of hunting. Thousands of years later, this realization is clearly apparent in numerous national laws which seek to further humane objectives, and commonly prohibit various hunting methods.

Likewise, within international law, it is possible to see that humane considerations and the desire to prevent unnecessary cruelty to animals is increasingly commonplace. The CBD, the Antarctic regime and CITES all reflect aspects of this ideal. Multiple other conventions dealing with indiscriminate capturing methods also have strong humane consideration overlaps. Moreover, the international community has begun to deal with the specific areas of the indiscriminate capture of seabirds, turtles and cetaceans. In these instances, a clear emphasis to operate humanely (especially in dealing with release) is obvious. Conventions dealing with large-scale terrestrial management regimes from Africa to Asia have also commonly prohibited a number of capture methods which are both indiscriminate and cruel. A foremost example of a restricted trapping method because of its overt cruelty has been the banning of the trade in furs of animals caught in leg-hold traps (and subsequent agreements to find more humane methods of capture) between the European Union and a number of interested countries. Elsewhere in international law, species-specific regimes such as those dealing with seals and birds are also commonly hemmed in by requirements for the signatories to adopt humane practices wherever possible. In addition, the example of the IWC, despite assertions by some parties about uncertainty of what humane killing is, represents an exemplar of an acute awareness of the principles of humane killing. Finally, the efforts of the international community to further the objectives of humane killing may be seen in attempts to incorporate the monitoring of killing methods into the requirements for I&O regimes. This has been evident in a number of international forums, from NAMMCO, to CCAMLR through to the IWC when the recommendation was first made in 1980.

Quite simply, the necessity to pursue humane objectives is a common feature of many international laws which deal with wildlife. As such, the current suggestion before the IWC that humane considerations have no applicability in such international forums is remarkably ill-informed. This is not to suggest that inhumane practices do not continue in both national and international practices. This would be a foolish suggestion. Rather, it is to suggest that humane considerations are a large part of the recognized national picture of many sovereign countries, and many international forums. The fact that progress has (in places) been slow cannot negate the overall recognition that a concern with humane killing is an ethical epicentre which should not be taken lightly.

NOTES

1. See UK Paper on Collection of Whale Killing Data. IWC/53/WKM & AWI. 5. Agenda Item 4. See also Report of the Working Group on Whale Killing Methods and Associated Welfare Issues. IWC/53/3. Agenda Item 5.1. The debate ultimately became one of whether the collection of information was to be voluntary or compulsory. See Chapter 12 on compliance.
2. IWC. 12th Report. (1961). 19.
3. IWC. 13th Report. (1962). 22.
4. Anon. 'Report of the Workshop on Humane Killing Techniques for Whales.' Presented to the 33rd meeting of the IWC as paper IWC/33/15. This 1980 report was also noted in IWC. 43rd Report. (1992). 13–14.
5. Appendix 7: 'Terms of Reference for a Workshop on Whale Killing Methods.' IWC. 42nd Report. (1991). 49. Appendix 1: 'Resolution on Humane Killing.' IWC. 43rd Report. (1992). 38.
6. Appendix 2. IWC Resolution 1999–1. 'Resolution Arising from the Workshop on Whale Killing Methods.' IWC. 51st Meeting in 1999. (2000). 51. The second part of the quote is from Appendix 1: 'Terms of Reference for the Workshop on Whale Killing Methods.' IWC. 50th Meeting in 1998. (1999). 41–2.
7. 'Resolution on Whale Killing Methods.' IWC/53/28 Rev. Agenda Item 5.1.2.
8. Report of the Workshop on Whale Killing Methods and Associated Welfare Issues. IWC/55/Rep 5. 11. See Maas, B. (2002). 'The Potential Stress Effects of Pursuit and Their Implications for Whales That Evade Capture.' IWC/54/WKM&AWI.8.
9. This was actually pointed out by the UK in 1998 who argued that the meaning of the word humane 'was clear – to kill or render insensible with minimum suffering'. IWC. 50th Meeting in 1998. (1999). 8.
10. IWC. 51st Meeting in 1999. (2000). 13.
11. IWC. 42nd Report. (1992). 40.
12. IWC. 50th Meeting in 1998. (1999). 9.
13. IWC. 50th Meeting in 1998. (1999). 6. Japan 'deplored . . . the subjective use of the word humane'. IWC. 51st Meeting in 1999. (2000). 13.
14. IWC. 51st Meeting in 1999. (2000). 13.
15. IWC. 51st Meeting in 1999. (2000). 13–14. Note, the term 'animal welfare' is much harder to define than 'humane'. See Stafleu, F. and Saddler, L. (1996) 'Animal Welfare: Evolution or Erosion of a Moral Concept.' *Animal Welfare*. 5: 225–34.
16. Gillespie, A. (1997). *International Environmental Law, Policy and Ethics* (Oxford University Press, Oxford).
17. Gillespie, A. (2000). 'Whaling Under a Scientific Auspice: The Ethics of Scientific Research Whaling Operations.' *Journal of International Wildlife Law and Policy*. 3: 1–49. Gillespie, A. (1997). 'The Ethical Question in the International Whaling Debate.' 9 *Georgetown International Environmental Law Review*. 9: 355–87.
18. See *Compact Oxford English Dictionary* (2nd edn, Oxford University Press, Oxford): 794, Panel 8.
19. See also *Encyclopedia of Religion and Ethics* (2nd edn, Clark, Edinburgh, ed. J. Hastings). Volume 6: 836–40.
20. 'Cruel: Of persons disposed to inflect suffering, indifferent to or taking pleasure in another's pain or distress, destitute of kindness or compassion, merciless, pitiless, hard-hearted.' See *Compact Oxford*, supra n18: 369, Panel 6.
21. See *Compact Oxford*, supra n18: 794, Panel 8.
22. See Asante, M. (2000). *The Egyptian Philosophers* (African American Images, Chicago): 50.
23. Gorman, P. (1979). *Pythagoras: A Life* (Routledge, London): 36. See also 32–6, 60–61.
24. *Moralia* (Loeb, London). Volume 12: 537.
25. *On Abstinence from Animal Food* (trans. Taylor, Centaur Press, London): 25.
26. *Epistola* (Loeb, London). CVIII & CXXI.

27. Proverbs 12:10. For a full discussion see Schwartz, R. (1982). *Judaism and Vegetarianism* (Exposition Press, Pomparo Beach, Florida): 10–22. Hyland, J. (1999). *The Slaughter of Terrified Beasts: A Biblical Basis for the Humane Treatment of Animals* (Viatoris, Sarasota, Florida): 5–41.
28. See Linzey, A. (1991). *Christianity and the Rights of Animals* (Crossroads, New York). Chapters 1 & 2. Hyland, supra n27: 47–71.
29. Noted in Wynne-Tyson, J. (ed.). *The Extended Circle: An Anthology of Humane Thought* (Cardinal, London): 15. See also Linzey, supra n28: 32, 66.
30. 'Homilies.' Noted in Wynne-Tyson, supra n29: 76. Linzey, supra n29.
31. For a discussion of Maimonides on this, see Schwartz, supra n27: 10–11. Note that such approaches eventually led to the explicit Code of Jewish Law. See Ganzfried, S. (1961). *Code of Jewish Law* (Hebrew Publishing, New York). Book 4, Chapter 191: 84.
32. Hughs, J. (1996). 'Francis of Assisi and the Diversity of Creation.' *Environmental Ethics*. 18: 311–20.
33. Noted in Wynne-Tyson, supra n29: 327.
34. Advancements of Learning. Noted in Wynne-Tyson, supra n29: 10.
35. 'Apology for Raymond Sebond.' In *Essays of Montaigne* (trans. Trechman, Oxford University Press, Oxford, 1927): 464, 467.
36. Noted in Wynne-Tyson, supra n29: 290–95.
37. 'Some Thoughts Concerning Education.' In *The Works of John Locke* in Ten Volumes (10th edn, London, 1801). Volume IX: 112.
38. *An Enquiry Concerning the Principles of Morals* (Oxford, Clarendon, 1902 edn): 189.
39. 'Cosmos.' Noted in Wynne-Tyson, supra n29: 559.
40. *A Fragment on Government and an Introduction to the Principles of Morals and Legislation* (Blackwell, Oxford, 1948): 411.
41. See Wynne-Tyson, supra n29: 412.
42. 'The Age of Reason.' In Wynne-Tyson, supra n29: 347.
43. *Lectures on Ethics: Duties Towards Animals and Other Spirits* (Harper, New York, 1963): 239.
44. Noted in Wynne-Tyson, supra n29: 212.
45. 'Elements of Philosophy.' Noted in Wynne-Tyson, supra n29: 558.
46. *The Principles of Political Economy*. See also 'Three Essays on Religion.' In Robson, J. (ed.). *J.S. Mill: Essays on Ethics* (Routledge, London, 1969): 184–7.
47. *The World as Will and Idea* (Kegan Paul, London, 1909). I: 480–81.
48. *The Descent of Man*. Noted in Wynne-Tyson, supra n29: 100.
49. Walden. Noted in Wynne-Tyson, supra n29: 537.
50. Noted in Wynne-Tyson, supra n29: 119.
51. *The First Step*. Noted in Wynne Tyson, supra n29: 541.
52. *Civilisation and Ethics* (Unwin, London, 1923): 213.
53. See Dundas, T. (1992). *The Jains* (Routledge, London): 138–40, 152–3.
54. Chappie, C. and Tucker, M. (eds) (1999). *Hinduism and Ecology* (Harvard University Press, Cambridge, MA).
55. Chapple, C. (1993). *Nonviolence to Animals, Earth and Self in Asian Traditions* (Albany, New York): 21–48. Ingram, P. (1998). 'The Jeweled Net of Nature.' In Tucker, M. (ed.). *Buddhism and Ecology* (Harvard University Press, Cambridge, MA). 'Voices of Mountains, Trees and Rivers: Kukai, Dogen and a Deeper Ecology.' Also in Tucker: 111–28. For the important overlap between Buddhism and Japan, see Odin, S. (1991). 'The Japanese Concept of Nature in Relation to the Environmental Ethics of Aldo Leopold.' *Environmental Ethics*. 13: 345–60. Williams, D. 'Animal Liberation, Death and the State: Rites to Release Animals in Medieval Japan.' In Tucker: 149–62. Callicott, J. (ed.). (1998). *Nature in Asian Traditions of Thought* (State University of New York Press, New York): 153–213.
56. Ko Hunt (284–363) a Confucian scholar. Noted in Wynne-Tyson, supra n29: 86. See also Taylor, R. (1998). 'Companionship With the World.' In Tucker, M. and Bertrong, J. (eds). *Confucianism and Ecology* (Harvard University Press, Cambridge, MA): 67–72.
57. Goodman, R. (1980). 'Taoism and Ecology.' *Environmental Ethics*. 2: 73–94. Ames, R. (1986). 'Taoism and the Nature of Nature.' *Environmental Ethics*. 8: 317–334.

58. Herbert, J. (1967). *Shinto: The Fountainhead of Japan* (Allen & Unwin, London). Chapter 21. Picken, J. (1994). *Essentials of Shinto: An Analytical Guide* (Greenwood, London): 9, 348–50.
59. Foltz, R. (2000). 'Is There an Islamic Environmentalism?' *Environmental Ethics*. 22: 62–72. Dien, A. (1992) 'Islam and Ecology.' In Khalid, F. (ed.). *Islam and Ecology* (Cassel, London): 1, 16–19.
60. Morgan, P. (1996). *Ethical Issues in Six Religious Traditions* (Edinburgh University Press, Edinburgh): 126–7.
61. Attempts to find a common ground on defining humane considerations began within the IWC in the early 1980s when it was requested that the signatories submit their national laws on killing animals (especially wild ones). IWC. 38th Report. (1988). 24–5. To further this, a specific questionnaire on the killing of wildlife was distributed to signatories. See Appendix 6: 'Questionnaire on National Laws on Humane Killing.' IWC. 38th Report. (1988). 30. The core of these laws (as emphasized at the time by Japan and Iceland) was for as speedy and painless a process as possible. IWC. 35th Report. (1985). 21. Fifteen years later, New Zealand presented a study of the legislation in 53 countries to assess the legal requirements for slaughtering animals for meat consumption. The main conclusions were broadly comparable in that humane slaughter requirements apply to a wide range of species killed for meat consumption. IWC. 51st Meeting in 1999. (2000). 12. The report is by Gregory, N. and Lowe, T. 'Expectation and Legal Requirements for Stunning and Slaughter in Slaughterhouses.' IWC/51/WK1.
62. List, C. (1997). 'Is Hunting a Right Thing?' *Environmental Ethics*. 18: 405–16. Luke, B. (1997). 'A Critical Analysis of Hunters' Ethics.' *Environmental Ethics*. 19: 25–43. Causey, A. (1989). 'On the Morality of Hunting.' *Environmental Ethics*. 11: 327–43. King, R. (1991). 'Environmental Ethics and the Case for Hunting.' *Environmental Ethics*. 13: 59–86.
63. The strongest philosophical defender of this position was Aldo Leopold. See Leopold, A. (1991). 'The Ecological Conscience.' In Flader, S. (ed.). *The River of the Mother of God and Other Essays by Aldo Leopold*. (University of Wisconsin Press, Madison): 345. For discussion, see Rolston, H. (1988). *Environmental Ethics: Duties to and Values in the Natural World* (Temple University Press, Philadelphia): 68–73. Moriarty, P. (1997). 'Hunting-Predation.' *Environmental Ethics*. 18: 391, 396–8. Ortega, y Gasset (1972). *Meditations on Hunting* (Scribner, New York): 31, 53, 56–8, 75–7, 110–11, 137–8. Shepard, P. (1972). *The Tender Carnivore and the Sacred Game* (Scribner, New York): 117–18, 122–3, 152.
64. Plato, The Laws. VII: 824. In Jowett, B. (ed.). (1931). *The Dialogues of Plato* (Oxford University Press, Oxford). Volume V: 207.
65. Leopold, A. (1991). 'The Ecological Conscience.' In Flader, supra n63: 345. Leopold, A. (1970). *A Sand County Almanac* (Sierra, San Francisco): 211–12.
66. Rolston, supra n63: 68–73.
67. Posewitz, J. (1994). *Beyond Fair Chase: The Ethic and Tradition of Hunting* (Falcon Press, Montana): 35. Caras, R. (1970). *Death as a Way of Life* (Little, Boston): 101–2.
68. Wade, M. (1990). 'Animal Liberation, Ecocentricism and the Morality of Sport Hunting.' *Journal of the Philosophy of Sport*. 17: 17.
69. See Posewitz, supra n67: 135.
70. Republic of Lithuania, Law on Wildlife. November 6, 1997. No. VIII–498.
71. Article 5, points 9 & 10.
72. Republic of Lithuania. Law on the Care, Keeping and Use of Animals. 1997. No. VIII–500. Article 1.
73. Animal Protection Act. 1997. August 21. OJ No. 111, Item 724; of 1998 No. 106, Item 668.
74. See Articles 21–23.
75. Article 5 & 6.
76. Act Relating to Wildlife and Wildlife Inhabitants (the Wildlife Act). 1981. Act No. 38, May 29.
77. Section 3.
78. Section 19.

79. Section 9.
80. The latter restricts types of guns allowable, prohibited platforms, general prohibitions against using hunting dogs, chemicals or poisons and 'the use of trapping devices is prohibited unless otherwise prescribed by statutory law'. Sections 20–25.
81. See Environmental Crimes Law of Brazil, 1999. Article 32.
82. See Humane Society of the United States (1997). *Wild Neighbours: The Humane Approach to Living With Wildlife* (Fulcrum Publishing, Table Mountain, Golden, Colorado): 7–10. Grosse, W.J. (1997). *The Protection and Management of Our Natural Resources, Wildlife and Habitat* (Oceana, New York). Chapter 6.
83. Wild Horses and Burros Act. 16 USC. ss. 1331–1340.
84. Eagle Protection Act, Pub. L. No. 76–567, 54 Stat. 250. 16 USC. ss 668(a)–(d).
85. See section 668(a). For a full discussion of this, see Grosse, supra n82: 283–303.
86. Migratory Bird Act. 16 USC ss 703. For a full discussion of this and the four subsequent bilateral arrangements that stemmed from it, see Grosse, supra n82: 331–9.
87. National Consultative Committee on Animal Welfare, Position Statement No. 9. Codes of Practice and Animal Welfare Legislation (1991). Principle 1. See also National Consultative Committee on Animal Welfare (2001). 'Animal Welfare' Internet Edition. <http://www.affa.gov.au/docs/animalplant health>.
88. See Bates, G. (1995). *Environmental Law in Australia* (Butterworths, Sydney): 313–30.
89. For example, regarding the management of opossums – see Australia's Animal Welfare Act (93). In addition, the National Parks and Wildlife Act 1970 specifically prohibits certain methods which are considered to be cruel. See Environment Australia, Biodiversity Group (1996). 'Management Program for the Bushtail Possum.' <http://www.biodiversity.environment.gov.au/plants/wildlife/htm.>.
90. RSPCA (1985). *The Incidence of Cruelty to Kangaroos* (RSPCA, Sydney): 176. For discussion, see Ford, J. (1986). 'The Great Kangaroo Cull Begins.' *New Scientist*. February 6: 27. Anon. (1987). 'Conservationists See Red Over Kangaroo Meat.' *New Scientist*. January 29: 25.
91. See Ministry for Agriculture (2000). *Animal Welfare in New Zealand* (MfA, Wellington): 6–7.
92. Animal Welfare Act, 1999, No. 142 (NZ Statutes, 1999, 3, 2030).
93. Article 9.
94. Articles 27 & 32. The discussion of unreasonable traps within the statute is buttressed by the obligation that every trap is checked every day. See Article 36.
95. Wildlife Act, 1966 (Ireland).
96. See Section 22.
97. See Sections 32–39.
98. The Burns Inquiry into Hunting With Dogs in England and Wales concluded that shooting foxes with a rifle is considered to be a more humane option than hunting with dogs. 'Report of the Burns Inquiry Into Hunting with Hounds.' (2000) *Animal Welfare*. 9: 443–7. Anon. (2000). 'The End of Foxhunting?' *The Economist*. June 17: 44. For further discussions of this area, see Webster, J. (1994). *Animal Welfare: A Cool Eye Towards Eden* (Blackwell, Oxford): 216–28. Anon (1998). 'Necessary Suffering?' *New Scientist*. September 19: 3.
99. Article 1.
100. Law of the People's Republic of China on the Protection of Wildlife. November 8, 1988.
101. See Article 21. This was supplemented by China's Regulations for the Implementation of the People's Republic of China on the Protection of Terrestrial Wildlife. China Wildlife Regulation Law. February 12, 1992. Article 18.
102. Ibid. Article 9.
103. Wildlife Conservation Law (Taiwan, Republic of China). June 23, 1989. Article 19.
104. Wildlife Conservation Enactment (1997). Section 33.
105. Article 36 (Malaysia).
106. Wild Animals, Fisheries, Hunting and Fishing, Decree (COM Decree No.118/CCM, 1989).
107. See the Animal Welfare Act of 1998. Republic Act No. 8485.
108. Section 7.

109. Wildlife Protection and Hunting Law. Law No. 32 of 4 April 1918. Final Amendment, Law No. 85 of 22 June 1972.
110. Hunters are not only required to be licensed, but also to go to hunting schools before getting their certificates. See Article 7–2. See also Cabinet Order for the Implementation of the Wildlife Protection and Hunting Law. Cabinet Order No. 254 of 31 August, and Cabinet Order No. 219 of 30 June 1971.
111. 'No game shall be taken by means of explosives, dangerous medicine, poison, fixed rifle, dangerous trap or pitfall'. Article 15. This was later expanded in a specific ordinance on the taking of game, whereby the use of mist nets, pressure traps, fishing hooks and bird lime, bows and arrows, and various types of guns (from too big to too small) were prohibited. See Article 3 of the Implementation Ordinance of the Wildlife Protection and Hunting Act. Ministry of Agriculture and Forestry Ordinance No. 108. Ordinance of the Prime Minister's Office No. 72 of 27 November 1972. Note, this is not to suggest that net and trap hunting does not occur in Japan. Rather, its application is limited with regard to what species it may be practised upon. In 2000, the Environment Ministry issued Notice No. 39 which prohibited leg-hold traps larger than 12cm in diameter, as well as 31 other types of traps. For further discussion of this, see the Japanese Nature Environment Preservation Council.
112. For example, 1979 Convention for the Conservation and Management of Vicuna stipulates that where culling is required, 'appropriate methods'. (Article 9) must be utilized. The convention is reprinted in UNEP (1991). *Selected Multilateral Treaties in the Field of the Environment* (Cambridge University Press, Cambridge). Volume II: 74–5.
113. The Sustainable Use Principles (COP 7). UNEP/CBD/COP/7/L17.
114. Agreed Measures for the Conservation of Antarctic Fauna and Flora. Reprinted in Austen, M. and Richards, T. (eds) (2000). *Basic Legal Documents on International Animal Welfare and Wildlife Conservation* (Kluwer, Dordrecht): 3–10.
115. Article VI (1).
116. Article VII. Subsection 2 contains examples of harmful interference.
117. 1991 Protocol on Environmental Protection to the Antarctic Treaty. BH992.txt.
118. Article 3(5)(c).
119. Article 3 (6).
120. In 1983 the Gambia tabled a resolution at CITES to prohibit the trade in animal products deriving from inhumane methods. Leghold traps were central to this concern. The proposal failed on the basis that it was beyond the scope of the convention. This point is noted in Harrop, S. (2000). 'The International Regulation of Animal Welfare and Conservation Issues Through Standards Dealing with the Trapping of Animals.' *Journal of Environmental Law*. 12: 333–60.
121. Animals During International Transport, 1968. Council Directive 91/628/EEC of 19 November 1991 on the Protection of Animals During Transport. Reprinted in Austen and Richards, supra n114: at 340, 477–80.
122. Article III. (4)(b). See also III.5.c, III.(2)(c), IV.2.c; IV.5.b; IV.6.b & VIII.3. These requirements dealing with transport and cruel treatment were the subject of a number of conference resolutions, before being consolidated in Resolution 9.23. For a discussion of this resolution, see Wijnstekers, W. (1994). *The Evolution of CITES* (4th edn, CITES, Geneva): 59–63. See also Bowman, M. (1998). 'Conflict or Compatability? The Trade, Conservation and Animal Welfare Requirements of CITES.' *Journal of International Wildlife Law and Policy*. 1: 9–64.
123. See Chapter 4 on incidental catch.
124. See Victor, C. (1998). 'Poisons and Profit: Cyanide Fishing in the Indo Pacific.' *Environment*. 40(8): 4–10. Also, UNGA. Special Session. Resolution Adopted by the General Assembly for the Programme for the Further Implementation of Agenda 21. Reprinted in Osborn, D. (1998). *Earth Summit II: Outcomes and Analysis* (Earthscan, London) Appendix 4. Paragraph 39(f).
125. Convention Between the Grand Duchy of Baden and Switzerland Concerning Fishing in the Rhine Between Constance and Basel. 1869. Reprinted in Ruster, B. and Simma, B. (eds) (1976). *International Protection of the Environment* (IPE). (Oceana, New York). Volume XI: 4695.

126. The 1880 Convention between Prussia and the Grand Duchy of Hesse for the Protection and Promotion of Fishing, Berlin, January 19, 1880. Reprinted in IPE, supra n125: 5399.
127. 1880 Convention Between France and Switzerland Regulating Fishing in the Frontier Waters. IPE, supra n125: 4844. The 1882 Convention Between Italy and Switzerland Concerning Fishing in the Frontier Waters. Ibid. 5413. Convention Between Austria–Hungary, Baden, Bavaria, Liechtenstein, Switzerland and Wurttemberg Decreeing Uniform Regulations for Fishing in Lake Constance, 1893. Ibid. 4756. The 1897 Regulations Between Spain and Portugal for Fishing the Mino River. Ibid. 5429. Chapter VIII, Article 24.
128. Exchange of Notes Between the UK and the USA Respecting the Preservation of the Fisheries in the Waters Contiguous to Canada and the United States. IPE, supra n125: Volume XXI: 27.
129. Article 1.
130. The 1920 Exchange of Notes Between Finland and Norway on the Subject of Adoption of Rules for Fisheries at the Tana Watercourse. IPE, supra n125. Volume X. Articles 10 & 11.
131. Article 2.
132. 1925 Convention Between Estonia and Latvia for the Protection of Fish and the Regulation of Fishing. IPE, supra n125. Volume VI: 2599.
133. 1927 Convention between Germany and Poland Concerning Fishing in Frontier Waters and Water Courses. In IPE, supra n125. Volume XI: 5518. 1934 Agreement Between Hungary and Czechoslovakia Concerning a General Closed Season and Night Fishing. IPE, supra n125. Volume IX: 4463. Article 5.
134. See Chapter 4 on incidental capture within this book.
135. Agreement Regarding the Regulation of Plaice and Flounder Fishing in the Baltic Sea (Germany, Poland and Sweden). IPE, supra n125. Volume VI: 2632. 1932 Convention on Plaice Between Denmark, Norway and Sweden. Ibid. 2684. Article 4. The 1937 Convention for the Regulation of the Mesh Sizes of Fishing Nets and the Size Limits of Fish. Ibid. 2691. Article 8. 1937 Convention Between Denmark, Norway and Sweden Concerning the Preservation of Plaice. Ibid. 2697. Article 4. The 1946 Convention for the Regulation of the Mesh Sizes of Fishing Nets and the Size Limits of Fish. Ibid. 2710. Article 8.
136. The 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles. In Austen and Richards, supra n114: 318–24.
137. Article IV.2.h.
138. Article VI.3.
139. See IATTC. 'Resolution on Bycatch.' June 2000. Point 3.
140. See IATTC. 'Resolution on Bycatch.' June 2000. Point 5.
141. 1998 Agreement on the International Dolphin Conservation Program. Available from <http://www.oceanlaw.net/texts/aidcp.htm>.
142. Article 5 (b).
143. Annex VIII. 3.d.
144. See IATTC. 'Resolution on Bycatch.' June 2000. Point 3.
145. 1900 Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa. IPE, supra n125. Volume IV: 1605.
146. Convention Relative to the Preservation of Fauna and Flora in their Natural State. BH142.txt.
147. Article 10 (2).
148. The 1968 African Convention on the Conservation of Nature and Natural Resources. Reprinted in Kiss, A. (ed.) (1983). *Selected Multilateral Treaties in the Field of the Environment* (UNEP, Nairobi): 206–9.
149. Article VII.2.c.
150. Appendix IV. Reprinted in Austen and Richards, supra n114: 604.
151. Protocol Concerning Protected Areas of Wild Fauna and Flora in the Eastern African Region. In UNEP, supra n112: 331–7. Article 5.2.a.
152. ASEAN Agreement on the Conservation of Nature and Natural Resources. Reprinted in UNEP, supra n112: 343–52. Article 4.c.

153. Convention on the Conservation of European Wildlife and Natural Habitats. UNEP, supra n112: 509.
154. Article 8.
155. Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora. Reprinted in Austen and Richards, supra n114: 371.
156. Members shall 'prohibit the use of all indiscriminate means capable of causing local disappearance of, or serious disturbance to, population of such species, and in particular the use of hunting methods listed in Annex VI'. Article 15. These include (among other prohibited methods) blind or mutilated animals used as live decoys, electrical or electronic devices capable of killing or stunning, explosives, non-selective nets or traps, crossbows, poisons, gassing or weapons capable of holding more than two rounds of ammunition.
157. See Parkes, K. (1994). *Fair Game: The Law of Country Sport and the Protection of Wildlife* (Pelham, London).
158. Preamble, EC Regulation No. 35/97 of 10 January 1997. Laying Down Provisions on the Certification of Pelts and Goods Covered by Council Regulation No. 3254/91.
159. ISO failed to develop standards to measure the relative humaneness of traps after more than 9 years of work, and in 1995 decided to suspend the topic. See Harrop, supra n120: 338–40, 347–54. Vines, G. (1993). 'Humane Traps Let Traders Off the Hook.' *New Scientist*. February 6: 5.
160. For a criticism of this approach, see Bowles, D. (1996). 'Furs, Traps and Europe.' *Animal Welfare*. 5: 223–4. MacKenzie, D. (1996). 'Fur Flies Over European Pelt Ban.' *New Scientist*. April 13: 9.
161. The EC–US Agreement, Agreed Minute and Side Letter Relating to Humane Trapping Standards. (1998) 37 ILM. 534. The crux of the EC–US agreement, or 'Agreed Minute' as it is titled, is the parties' statement that they 'intend to encourage' research, development and promotion of 'humane methods of killing'. The US supporting letter of interpretation clearly shows that in the US opinion, the ultimate responsibility lies with individual states and tribal authorities.
162. Agreement on Humane Trapping Standards. (1998) 37 ILM. 532.
163. Preamble, Paragraph 1.
164. Principle 1.3.1.
165. The standards are subject to 'ongoing development'. Article 9.a.
166. Article 7.c. The annex specifies as a general principle: 'In the evaluation of whether or not a trapping method is humane, the welfare of a trapped animal must be assessed'. Principle 1.2.1. The yardstick for deciding that a trapping method is humane ('where the welfare of the animals concerned is maintained at a sufficient level'. Principle 1.3.1) is hemmed in by thresholds that related to the time until unconsciousness, insensibility or death (for at least 80 per cent of the animals caught) with divergent times (between 45 and 300 seconds) for the different species. See Annex 1. Part III: Requirements for Killing Trapping Methods.
167. Wilkins, D. (1997). *Animal Welfare in Europe: European Legislation and Concerns* (Kluwer, Dordrecht): 68–74.
168. Council Directive 83/129/EEC of 28 March 1983 Concerning the Importation Into Member States of Skins of Certain Seal Pups and Products Derived Therefrom.
169. This was very much focused upon commercial, and not traditional (Inuit) hunting practices. Preamble, and Article 3.
170. Convention for the Conservation of North Pacific Fur Seals. 1976. Reprinted in Kiss, supra n148: 460. Note that although it was the US intention to extend this convention (see Protocol Amending the North Pacific Fur Seals Convention, Congressional Testimony CT99-5, 99th Congress 1st Session, Senate Treaty Document 99-5), in 1984 the US Senate failed to ratify the protocol for extension, and the agreement lapsed. See MacKenzie, D. (1985). 'Sealing the Fate of the Pribilof Islanders.' *New Scientist*. October 10: 19.
171. Article IX (3). For debate, see Cherfas, J. (1978). 'Rationality and the Slaughter of Seals.' *New Scientist*. March 16: 724–6. Sitwell, N. (1981). 'Seals Skinned. Canada Disgraced.' *New Scientist*. May 28: 552–3.
172. The Convention for the Conservation of Antarctic Seals is reprinted in Austen and Richards, supra n114: 134–42.

173. Article 3.1.
174. Article 3.1.g.
175. Paragraph 7.A. of the Annex.
176. 1990 Agreement on the Conservation of Seals in the Wadden Sea. Reprinted in Austen and Richards, supra n114: 292.
177. Article VI.2.
178. Austria/Hungary/Italy 1875 Declaration for the Protection of Birds Useful to Agriculture. Reprinted in IPE, supra n125. Volume IV: 1561.
179. 1902. Convention on Birds Useful to Agriculture. 102 BFSP. 63.
180. Article 3.
181. 1931 Agreement Between Sweden and Denmark on Migratory Game Birds. IPE, supra n125. Volume IV: 1691.
182. International Convention for the Protection of Birds 1950. Reprinted in Austen and Richards, supra n114: 118–21. This convention begins with the assertion that 'all birds should as a matter of principle be protected'.
183. Article 5.
184. Article 4.
185. European Council Directive 79/409/EEC of 2 April 1979, on the Conservation of Wild Birds. Note in particular, Articles 5.d, 8(1) & Annex IV.
186. 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Reprinted in Austen and Richards, supra n114: 271–6. Annex 3. Action Plan. 2.1.1. Points 4.1.5 & 4.1.8.
187. FAO (1999) *International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries*. (FAO, Rome). Also available from <http://www.oceanlaw.net/texts/faoseabird.htm>.
188. Conservation Measure 29/XVI: Minimisation of the Incidental Mortality of Seabirds in the Course of Long-Line Fishing Research in the Convention Area. Point five.
189. FAO, supra n188. Operational Measures, III(4).
190. ACAP. Article III.5.
191. ACAP. Action Plan. 1.4.2.
192. In the Japanese Antarctic Commercial catch in 1983/84, the mean time to death was two minutes and 26 seconds. The 1984 Japanese coastal whaling had a mean time of one minute and 14 seconds. The Norwegian mean was six minutes and 34 seconds. IWC. 43rd Report. (1993). 13–14. In 2000, the Japanese suggested that the average time to death in this hunt was two minutes and 53 seconds. See Government of Japan (2000). 'Report on Whale Killing Methods in the 1999/2000 Japanese Whale Research Programme Under Special Permit in the Antarctic.' IWC/52/WKM&AWI. 10. In 1999, Norwegian data indicated that in 1984–86, 45% of whales were killed instantly. This is now believed to be closer to 60% (thanks to training programmes). In 1999, 62% (of the 591 taken) had instant death. New improvements in the penthrite grenade hope to take this to 72% in 1999, and 78.2% in 2001. The longest time to death for one animal was 86 minutes. See Oen, E. (2000). 'Norwegian Minke Whaling 1999.' IWC/52/WKM&AWI 1. IWC. 52nd Report. (2001). 17. In Denmark, the average time to death for minke whales is 16 minutes, and for fin whales 28 minutes. Only 15% of minke, and 17% of fin whales achieve instant death. IWC/53/WKM & AWI. Agenda Item 3.1. With the Japanese industry in 1999 only 30% get instant death. In 2000 this rose to 36.1%. Survival times for 50% of wounded whales is more than six minutes and some whales can survive for an hour or more. IWC. 51st Meeting in 1999. (2000). 12. In 2001, Japan suggested that the mean time to death (for whales caught under scientific permit) was three minutes and 25 seconds. See 'Report on Whale Killing Methods in 2000/2001.' IWC/53/WKM & AWI I. This was also reported in the Working Group on Whale Killing Methods and Associated Welfare Issues. IWC/53/6. Agenda Item 5.1. Of course, the interesting fact from the 2001 figures, is that it takes considerably longer to kill a whale under scientific whaling, than it did 15 years earlier under commercial whaling.
193. Note that scientific agreement of exactly when a whale is dead is far from certain, with at least 34 different approaches to calculate this in existence. See 'Report of the Workshop on Whale Killing Methods and Associated Welfare Issues.' IWC/55/Rep 5. 15–16.

194. Article V.1(f).
195. IWC. 9th Report. (1958). 19. For a contemporary example of NGO concern in this area, see Whalewatch (2004). *Troubled Waters: Why It Is Time to Watch Animal Welfare* (World Society for the Protection of Animals (WSPA), London).
196. See UN Doc. A/CONF.13/L. 56 (1958).
197. '[T]he Commission did not accept the charge that the present method was inhumane' and such charges against them represented judgments based on 'inadequate evidence and a lack of knowledge'. IWC. 10th Report. (1959). 16.
198. IWC. 11th Report. (1960). 19.
199. IWC. 12th Report. (1961). 19.
200. IWC. 10th Report. (1959). 7. This was done via researching into the electric lance, as opposed to then utilized explosive devices. IWC. 13th Report. (1962). 22. With such progress being made, it was decided that although the topic would be kept under review, the working group would be disbanded.
201. IWC. 27th Report. (1977). 10.
202. Appendix 8: 'Recommendations Adopted by the IWC At Its 31st Annual Meeting on New Observer Schemes.' IWC. 30th Report. (1980). 37–8. Note, the recommendation was that the countries involved in the scheme 'consider' this objective.
203. See Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals. NAMMCO/CS/1998 rev. Appendix 1. AD B.2.6: 'Duties and Tasks of the Observer.' In 1999, NAMMCO held a workshop on hunting methods, which focused on 'hunting ethics'. IWC/53/WKM & AWI 3. Agenda Item 3.2.
204. See n191. See also CCAMLR Scheme of International Scientific Observation, Annex 1. http://www.ccamlr.org/English/e_basic_docs/e_pt10.htm.
205. Appendix 6: 'The Humane Killing of Whales.' IWC. 30th Report. (1980). 36–7.
206. IWC. 53rd Meeting in 2001. (2002). 11.
207. IWC. 41st Report. (1991). 42. This was clearly reiterated in the IWC. 50th Meeting in 1998. (1999). 7–9.
208. IWC. 39th Report. (1989). 26.
209. IWC. 40th Report. (1990). 30–31. Greenland held a workshop on whale killing methods in 1999, with the aim of reducing time to death. The Greenland Action Plan on Whale Hunting Methods is reported in IWC/53/WKM & AWI. 2. Agenda Item 3.1.
210. IWC. 41st Report. (1991). 42.
211. IWC. 36th Report. (1986). 21; IWC. 43rd Report. (1993). 13–15.
212. IWC. 28th Report. (1978). 25. This was being assisted by a monitoring of the existing killing methods. See IWC. 30th Report. (1980). 13. When commercial whaling was at its peak, the whalers used 90mm cannons that fired an explosive harpoon. Although this may have been successful with the larger whales, when the hunts moved to the smaller ones, this method was far too powerful as harpoons often passed right through minke whales without exploding. The first response to this problem was the cold harpoon, which had a non-explosive head, whose main purpose was to secure the whale, so that it could be brought alongside the vessel before being dispatched via a secondary method. This commonly led to very protracted deaths. As such, the penthrite harpoon was developed; this is essentially a new type of explosive harpoon fired from a 75mm cannon. Thanks to Mike Donoghue for this explanation.
213. This method was deemed 'cruel and unacceptable to civilised societies'. The quote is from Australia. IWC. 32nd Report. (1982). 28. This reflected the view from the Frost Report. (1979). 'Whales and Whaling: Report of the Independent Inquiry'. (Australian Government Publishing, Canberra). Volume 2: 181–2. It was added in the IWC that: 'if the existing methods cannot be improved then whales should not be killed at all'. This was a UK suggestion. IWC. 32nd Report. (1982). 29. This was reiterated by India, Belize and St Lucia in 1983. IWC. 34th Report. (1984). 27. This conclusion appeared in 1981 with the RSPCA who concluded that 'Death or unconsciousness should be instantaneous. In the developed world it is entirely reasonable that if whales cannot be killed humanely they should not be killed at all'. See J. Barzdo/RSPCA (1981). *The Slaughter of Whales* (Horsham, London): 34, 36.

214. 'The use of cold grenades for killing all whale species larger than minke whales should be prohibited'. Appendix 6: 'The Humane Killing of Whales.' IWC. 30th Report. (1980). 36–7. This decision was followed up in the schedule. 'The killing for commercial purposes of whales, except minke whales, using the cold harpoon shall be forbidden from the beginning of the 1980/81 pelagic and coastal seasons'. Appendix 11: 'Resolution to Ban the Use of the Cold Harpoon.' IWC. 31st Report. (1981). 25, 32. In 1982 the Commission 'asked those states which have lodged objections . . . [with regard to the Cold Harpoon] to comply with . . . the Schedule'. Appendix 4: 'Resolution on the Use of the Cold Harpoon.' IWC. 33rd Report. (1983). 38. See Paragraph 6 & 25 (a)(i) of the Schedule.
215. Japan and Norway originally objected to the restriction of the cold harpoon due to an alleged lack of alternatives. IWC. 32nd Report. (1982). 28–9; IWC. 33rd Report. (1983). 31–2. Heneson, N. (1983). 'Norway Cold Shouldered Over Cold Harpoons.' *New Scientist*. July 7: 7. Initial objections were because the new exploding harpoons would damage the meat too much. Japan removed its objection in 1983 once the penthrite grenade was operative. IWC. 34th Report. (1984). 26. Norway followed in 1985. IWC. 36th Report. (1986). 11, 21–2.
216. In 1995, the Workshop on Whale Killing Methods noted that the design and delivery of the penthrite grenade could be improved. Appendix 1: 'Revised Action Plan on Whale Killing Methods.' IWC. 46th Report. (1996). 44–5.
217. In 1999, the Revised Action Plan on Whale Killing Methods sought to 'encourage continued cooperation between Japanese, US, Danish and Norwegian scientists to refine the design of penthrite grenades as far as possible'. Appendix 1: 'Revised Action Plan on Whale Killing Methods.' In IWC. 51st Meeting in 1999. (2000). 51. 'Report on the Use of the Penthrite Projectile in the 2000 and 2001 Bowhead Subsistence Hunt in Alaska.' IWC/54/WKM&AWI.9.
218. 'Report of the Workshop on Whale Killing Methods and Associated Welfare Issues.' IWC/55/Rep 5. 9.
219. '[E]very attempt should be made to investigate ways and means to shorten time-to-death of killing small whales such as minke whales'. Appendix 6: 'Recommendations Concerning the Humane Killing of Whales.' IWC. 30th Report. (1980). 36. For a useful discussion of this area, and the problems it has caused in Europe, see Wilkins, supra n168: 59–62.
220. Other examples including the hunts of Dall's porpoise, have humane considerations for a number of countries, IWC. 51st Meeting in 1999. (2000). 13, as do comparable hunts of small cetaceans around Japan. See United Kingdom (2000). 'Small Cetaceans' Killing Methods.' IWC/52/WKM&AWI 8. With regard to the bottlenose dolphin hunt in Japan, it was suggested after viewing video film that the overall duration of a badly executed hunt by 'inexperienced, untrained, nervous' hunters with an 'ineffective method of slaughter' and 'a complete lack of understanding of how to impose rapid loss of consciousness on the animals' not only caused 'great distress' to the hunted, but was 'well in excess of internationally acceptable times for loss of consciousness in slaughterhouses'.
221. IWC. 36th Report. (1986). 21. Anon (1986) 'All for the Love of the Whale, and Its Meat.' *New Scientist*. August 8: 17.
222. IWC. 37th Report. (1987). 21.
223. IWC. 39th Report. (1989). 26.
224. IWC. 39th Report. (1989). 25–6.
225. In 1992, the Danish government was again urged to encourage the Faeroese government to make 'every effort to minimise the use of gaff and spear, killing from boats, and to reduce the number of authorised bays, so as to limit those bays where pilot whales may be killed in a more humane manner' and invited to 'inform the Commission of the measures currently used for the killing of pilot whales'. Appendix 12: 'Resolution on the Killing of Pilot Whales.' IWC. 43rd Report. (1993). 52.
226. Here the Commission acknowledged: 'continuing concern about the humaneness of the pilot whale hunt' and 'express[ed] its concerns about the adequacy of the implementation of existing Faeroese legislation relevant to the pilot whale hunt'. 'Resolution on Pilot Whales.' IWC. 44th Report. (1994). 31.

227. IWC. 43rd Report. (1993). 37. The Faeroese representative responded in 1994 that the IWC did not have legal competence on this issue, and that questions concerning those species are more adequately dealt with by organizations such as NAMMCO. IWC. 45th Report. (1995). 16.
228. Appendix 2: 'Resolution on Killing Methods in the Pilot Whale Drive Hunt.' IWC. 46th Report. (1996). 42–3.
229. See Humane Society of the United States (2003). *Hunted: Dead or Still Alive* (HSUS, Washington): 13.
230. For a full discussion of this area, see Gillespie, A. (2001). 'Aboriginal Subsistence Whaling: A Critique of the Inter-Relationship Between International Law and the International Whaling Commission.' *Colorado Journal of International Environmental Law and Policy*. 21(1): 79–139.
231. For example, with the EC–US Legold Trap Agreement, Agreed Minute and Side Letter Relating to Humane Trapping Standards (1998) 37 ILM. 534), the US explanatory letter accompanying the text explains that with affected Indian communities, ultimate responsibility (for making their traps more humane) lies with individual states and tribal authorities. Likewise, with the EC–Canada/Russia Agreement, Agreement on Humane Trapping Standards with Standards (ibid. 532) an exception to the overall humane objectives of the exercise is via the 'case-by-case' basis for the 'using of wooden traps essential for preserving culture heritage of indigenous communities'. Article 10.1.d. Note however, the earlier EEC Council Directive on Seal Pups (Council Directive 83/129/EEC of 28 March 1983 Concerning the Importation Into Member States of Skins of Certain Seal Pups and Products Derived There-from) was very much focused upon 'the effect of non-traditional hunting on the conservation and population status of hooded seals'. In particular, it was noted that 'hunting, as traditionally practiced by the Inuit people, leaves seal pups unharmed and it is therefore appropriate to see that the interests of the Inuit people are not affected'. Accordingly, the Directive 'shall only apply to products not resulting from traditional hunting by the Inuit people'. Preamble, and Article 3. As such, the indigenous practices were clearly seen as being much more humane, due to their different choice of target.
232. The peculiarly ironic nature of this situation has not been lost on Norway, which has pointed out that the most efficient method of killing – that of a harpoon gun mounted on a bow – was 'excluded because it had a taste of commerciality attached to it'. IWC. 48th Report. (1998). 22–3. For some examples on improved methods in the ASW hunt off Greenland, see 'Report on Improvements in ASW in Greenland.' IWC/56/6; and 'Status of Greenland Action Plan on Whale Killing Methods.' IWC/56/8.
233. 'Report of the Workshop on Whale Killing Methods and Associated Welfare Issues.' IWC/55/Rep 5.
234. See Russian Federation (2000). 'Brief Report on Whaling in the Russian Federation.' IWC/52/WKM&AWI5. This was earlier noted at 30–40 minutes. See IWC. 51st Meeting in 1999. (2000). 12.
235. 'Brief Report About the ASW Hunt in the Russian Federation in 2001.' IWC/54/WKM&AWI. 7.
236. 'Greenland Home Rule Government.' (2004). Note Regarding Information Encompassed in the IWC Resolution 1999–1. IWC/56/7. 'Report of the Workshop on Whale Killing Methods and Associated Welfare Issues.' IWC/55/Rep 5.
237. IWC. 51st Meeting in 1999. (2000). 17.
238. IWC. 38th Report. (1988). 22.
239. IWC. 34th Report. (1984). 23. In 1984, the Working Group on Humane Killing specifically focused upon aboriginal subsistence whaling. IWC. 35th Report. (1985). 21. Soon after, the IWC focused upon the fact that 'cruel and inefficient methods continue'. See Resolution on Humane Killing in Aboriginal Subsistence Whaling. IWC. 36th Report. (1986). 26; IWC. 37th Report. (1987). 18; IWC. 38th Report. (1988). 22, 24–5.
240. IWC. 48th Report. (1998). 22–3, 28. With the Makah hunt, it appears that the whole process took eight minutes. See Report of the Working Group on Whale Killing Methods and Associated Welfare Issues. IWC/52/12. Paragraph 8.1.1. This was later reported in IWC. 52nd Meeting in 2000. (2001). 17.

241. Ibid. 28.
242. Ibid. 30–31.
243. Resolution on Improving the Humaneness of Aboriginal Subsistence Whaling. IWC Resolution 1997–1. IWC. 48th Report. (1998). 45.
244. Appendix 2: IWC Resolution 1999–1. 'Resolution Arising from the Workshop on Whale Killing Methods.' IWC. 51st Meeting in 1999. (2000). 51.
245. Greenland's traditional practices changed in the seventeenth century with the introduction of European whaling practices. However, it was only in the 1970s that 'fibreglass skiffs and outboard motors' and rifles became operative in 'community whaling'. In the mid-1980s, 'hand harpoons, float bladders and high powered rifles' were still being used. IWC. 36th Report. (1986). 21. Concern about these practices was expressed in 1986 'by the Working Group at the lack of information and the absence of programmes for training of crews and the development of more humane weapons'. IWC. 37th Report. (1987). 21. By 1989, Denmark had indicated that it was introducing detonating grenade harpoons and, in 1990, a number of 'particular problems' were being worked out. On the smaller hunting boats, rifles were used. IWC. 40th Report. (1990). 30; IWC. 41st Report. (1991). 32–3. By 1991, by order of the Danish government, vessels with harpoon guns were permitted to use penthrite grenade harpoons only for minke and fin whales. IWC. 42nd Report. (1992). 39. A short time later, the commercially used penthrite grenade was adopted in larger hunts because of its apparent demonstrated effectiveness in making a quicker kill. See Greenland Home Rule Government (1995). 'Greenland Action Plan on Whale Hunting Methods.' IWC/47/24.
246. By the mid-1980s, it was noted that 'significant improvements in time to death or loss of consciousness' were resulting from the adoption of more modern killing methods. IWC. 37th Report. (1987). 26. 'Remarkable progress' continued in 1989. See IWC. 40th Report. (1990). 30. Continued progress was noted in 1998 in this area with an improved fuse mechanism. IWC. 49th Report. (1998). 7; IWC. 51st Report. (1999). 7. United States of America (2000). 'Update on the Use of the Penthrite Projectile in the Bowhead Whale.' IWC/52/WKM&AWI/7. See also 'Report on the Use of the Penthrite Grenade in the 2000 & 2001 Bowhead Alaska Hunt.' IWC/54/WKM & AWI. 9.
247. Resolution 2001–2. 'Resolution on Killing Methods.' IWC 53rd Meeting in 2001. (2002). 55. Also, 'Resolution on Whale Killing Issues.' IWC/56/14.
248. In 1997, it was suggested that a secondary method of killing should achieve its goal within five seconds. IWC. 48th Report. (1998). 23.
249. The differences were suggested by Japan in the mid-1990s as an average 40-second death via the electric lance, as opposed to a comparable 4.7 minutes via the cold harpoon. IWC. 47th Report. (1997). 18.
250. See 'Summary of Data on Whales Killed.' IWC/53/WKM & AWI. 9.
251. IWC. 34th Report. (1984). 26.
252. Appendix 1: 'Resolution on Humane Killing.' IWC. 43rd Report. (1993). 38.
253. The resolution from 1993 did not condemn the electric lance specifically, but did resolve to reconvene, review and evaluate progress in all areas of the 1992 action plan. Appendix 1: 'Resolution on Humane Killing.' IWC. 44th Report. (1994). 30.
254. The UK stipulated: 'the electric lance is not an acceptable secondary means of killing whales'. IWC. 44th Report. (1994). 12.
255. IWC. 45th Report. (1995). 15. This is because the voltage applied had not been sufficient and the presence of salt water diverts current from the target organ by leakage through the skin. Electric lance densities of electricity put through were clearly insufficient to kill; rather, they were more 'likely to cause extra pain and suffering to an already distressed animal'. See Blackmore, D. (1997). 'Observations on the Electric Lance and the Welfare of Whales.' *Animal Welfare*. 6: 43–51. As such 'electric lancing, as a secondary method of killing whales, cannot be considered humane'. See Barnes, G. (2000). 'Concluding Studies on the Failures of Electric Lancing to Whales.' *Animal Welfare*. 9: 433–43.
256. Appendix 1: 'Resolution on the Use of the Electric Lance as a Secondary Method of Killing Whales.' IWC. 45th Report. (1995). 40–41.
257. IWC. 45th Report. (1995). 16–17.

258. Appendix 3: ‘Resolution on Methods of Killing Whales.’ IWC. 46th Report. (1996). 43.
259. IWC. 47th Report. (1997). 18.
260. IWC. 48th Report. (1998). 23.
261. The choice of either a large calibre rifle, a second harpoon or the electric lance depends on ‘the situation’. See Government of Japan (2000). ‘Report on Whale Killing Methods in the 1999/2000 Japanese Whale Research Programme Under Special Permit in the Antarctic.’ IWC/52/WKM&AWI 10.

7. Non-lethal utilization and the Irish Proposal

1 INTRODUCTION

In 1997 at the 49th meeting of the IWC, the 'Irish Proposal' was placed on the table. The essence of the Irish Proposal was a deal that would break the deadlock between those countries that wanted to stop all whaling, and those that wanted to resume pelagic commercial whaling, within the safety of suitable mechanisms operated by the IWC. The core idea of the Irish Proposal was a trade-off, whereby coastal whaling could resume, but the products could not be traded, and the international waters would become a global sanctuary. Despite the good will intended in putting this proposal forward, the issue has become deadlocked, and despite much talk over the last eight years, has refused to budge. In my opinion, one of the key reasons for this deadlock has to do with uncertainty over what one of the key proposals within the Irish Proposal stands for – the proposal not to hunt whales, irrespective of their conservation status – on the high seas.

2 EARLIER ATTEMPTS TO REORIENTATE THE ICRW

In the early years, it was possible for the signatories to reach agreement and actually change the convention via a protocol.[1] However, as the debates within the IWC quickly began to expand and a number of countries began to withdraw in the late 1950s, it was becoming evident that the convention was not working.[2] Similar concern continued[3] into the early 1960s as the convention almost broke up, and individual nations began to meet outside of the auspices of the IWC in the 1960s, so as to set their own quotas for pelagic whaling.[4] It was at this point that the proposal for a new convention, with a different perspective, was mooted. This idea arose in 1964, when Dr Sydney Holt from the FAO asked about the 'ownership' of cetaceans by the IWC, as it was at that point apparent that a small number of countries were actively destroying the entire cetacean resource, to the detriment of all other nations. Thus:

> Do they in effect belong to no-one or do they belong to everyone? Do they in effect belong to this generation or to future generations? Do they in effect belong to those who exploit them or to all the nations who in some way, however small and indirectly, depend on products from the sea for the nourishment of their people?[5]

Holt's comments did not shock the IWC into deeply rethinking its overall paradigm, although they did help force the IWC towards acting a little more responsibly in their continual overharvesting. Nevertheless, progress was very slow and by the early 1970s other commentators were arguing that the whale resource should be transferred to the United Nations, which could administer the stocks through an existing agency, or by establishing an independent whaling authority.[6] Soon after, at the 1972 Stockholm Conference, chairman Maurice Strong pointed out to the IWC that there was a growing international interest in whales 'as a world resource in a larger sense'.[7] The response of the Commission to this interest was not to agree to a commercial moratorium, but rather to reorganize its stock management methods and to strengthen the Commission via both increased staff and research effort.[8] Despite such window dressing, the push for the moratorium was slowly gathering pace. This was clearly evident in 1973 when the United States argued that '[w]hales come under no man's exclusive national jurisdiction and as such have to be an international trust in whose disposition all nations should have a voice', and further, it did not think that 'the world would any longer tolerate the view that only the nation or the industry which is in a position to exploit a marine resource should have full and final responsibility for it'.[9]

The following year, the United States tried to submit a new protocol to amend the ICRW, and change it into an 'International Cetacean Convention'.[10] Although this was strongly objected to by Japan, the USSR and South Africa,[11] a working group of representatives of interested member nations was set up under the chairman 'to review the Convention in the light of the changes in whaling and the stocks and the possible impact of the Law of the Sea Conference on the Activities of the Commission'.[12] The report of this working group in 1977 led to the decision to hold a 'preparatory conference' for a new convention in early 1978.[13] These discussions continued, but were submerged beneath the larger UNCLOS agenda.[14] Nevertheless, in 1979, alternative texts were distributed[15] before a preparatory meeting to 'improve and update the international convention for the regulation of whaling', was finally held in 1981. Although this was a 'successful session' it was far from concluded, and the key 'merit' questions – the object and purpose of the convention, the jurisdictional problem, decision making and membership of the organization – remained unanswered.[16]

The idea of revising the convention reappeared in 1985 following the establishment of a working group on the future activities of the Commission. Under the broad mandate of this group, a number of issues were examined.[17] At this

point the former USSR expressed the view that the best way forward for the IWC was to consider revision of the ICRW, in the light of the recently concluded UNCLOS.[18] This proposal was followed up at the 1986 meeting, where the USSR once more spoke of the 'need to bring the Convention into line with the UNCLOS'. Norway (supported by Japan and Iceland) also suggested a 'fresh look at the 1946 Convention'.[19] It later suggested that the ICRW was little more than a 'study society for whales'.[20] However, other countries 'questioned the need for such an exercise, given the way in which the Convention has been able to evolve over time to accommodate changing circumstances'.[21] Moreover, the topic was seen by many as a 'low priority and need not be seen as a matter of urgency'.[22] Despite this disagreement a working group was established in the following years,[23] and remained operative until 1993 when it was disbanded.[24] Nothing of substance was achieved from it.[25]

3 THE IRISH PROPOSAL

Apart from some small modifications such as reviews of the administration[26] and schedule,[27] the next serious attempt to broker some kind of compromise at the IWC began in 1997 at the 49th meeting. At this point, the 'Irish Proposal' was placed on the table of the IWC by the Commissioner of the Irish delegation, who suggested: 'If the IWC doesn't make some movement, it will break up'.[28] This proposal was unlike earlier attempts to find an overall consensus which reflected the preservation ethic (that is, no whaling at all) of the 1970s. Rather, the Irish Proposal was a compromise whereby there would be no whaling beyond sovereign exclusive economic zones. However, within these zones nations could whale, subject to the RMS requirements of the IWC. In 2003 the scientific committee reported that any such EEZ restriction upon areas whereby whaling is possible would actually reduce the risks to targeted cetaceans (beyond the already stringent limits of the RMP)[29] even further.

The core of the Irish Proposal also stipulated that there would be no international trade in whale products. Specifically, it was proposed:

> [Q]uotas should be restricted to existing coastal whaling and all other waters should be declared a global sanctuary. Products would be for local consumption only, with no international trade. Lethal scientific permit whaling would be phased out, and the impacts of whale-watching regulated.[30]

Following this proposal, the chairman concluded that there was 'a genuine wish to continue the dialogue'.[31] Accordingly, the signatories to the ICRW began to negotiate on an informal basis. 'An informal intersessional' was called for the following year, but the hopes of compromise were quickly

fading as the contrary antagonists on opposite sides of the table – Norway and Australia – ironically both explained that they could 'not accept the proposals as they stood'.[32] Part of what Australia could not accept relates to a central core of its current policy which is that it was not prepared to agree to a resumption of commercial whaling in any form, sustainable or otherwise.[33]

The same impasse was replicated in 1999[34] and 2000 as each side accused the other of not compromising.[35] Further complications like alleged vote-buying, and intense debates over reservations to the ICRW, only served to further poison the idea of any kind of overall compromise solutions to the difficulties of the IWC. These new moves led to renewed calls from outside the organization to try to find some way forward.[36] These calls coincided with the various discussions which aimed to conclude the RMS, and the inspection and compliance consideration in particular. Indeed, within these discussions, the Irish Proposal was clearly placed upon the agenda, as part of a possible 'overall package'. However, as the negotiations progressed, and an eventual 'RMS package' was put forward for consideration, the Irish Proposal had been relegated to a five-year period of coastal whaling, as a phase-in period to build public confidence before allowing a resumption of commercial whaling on the high seas.[37]

4 THE BIG QUESTION: HUNTING UNENDANGERED WHALES ON THE HIGH SEAS

Although there are numerous issues related to the Irish Proposal, such as what is left out of the picture,[38] as well as some serious questions about whether the RMS will ever be completed and trade can be adequately restricted, a broader philosophical question comes to mind as the main debating point. This pertains to the legitimacy to create a global sanctuary on the high seas in which whales, irrespective of their conservation status, are not hunted.[39]

5 TWO VIEWS OF WHALES

No members of the IWC argue that they should have the right to continue taking an endangered species to the point of extinction. However, some nations continue to argue that *provided* it is theoretically possible to whale without threatening the overall conservation status of a species, then the hunt should proceed. This view is, however, seen as unacceptable by many other nations.

Apart from the assumption that it may be possible to whale on a level which does not endanger a species, an ethical argument evolves. The background to

the ethical argument – that there is something special about cetaceans – can be traced back thousands of years to the great polymath of Antiquity, Aristotle (384–322BC), who made some of the earliest recorded notations on the topic of whales.[40] These creatures, which were deemed possibly 'the fastest of all animals both on sea and on land',[41] were a bit of an enigma to Aristotle. The problem was that they seemed to exist in two different ecologies. That is, they lived in the water, but they breathed like land animals.[42] They had a unique vocal ability,[43] and displayed mating and social patterns that were remarkably similar to humans.[44] The relationship between a mother and her offspring demonstrated to Aristotle 'evidence of mildness and gentleness'[45] that was also displayed by humanity.[46] With such considerations in mind, other Greeks contributed to the issue, such as the second-century AD poet Opian of Cicilia, who suggested that 'the hunting of dolphins is immoral . . . for equally with human slaughter the gods abhor the death doom of the monarchs of the deep'.[47]

By the end of the twentieth century, this idea had become common currency in a number of countries as environmental issues mushroomed, and whales often became a symbol of human mismanagement of nature. Because of this broader debate, and changing views about the utilization of nature, whales are often believed to be in a separate category from both humans, and other animals that are harvested. As Victor Scheffer, the former chairperson of the US Marine Mammal Commission wrote, 'Whales are different'.[48] That is, whales are seen as something special. This idea has appeared in a number of documents. For example, in 1993, a resolution from the EU parliament, expressing opposition to *all* commercial utilization of marine mammals stated, 'Whales are sentient mammals with a high level of intelligence and complex social and cultural activities'.[49] At times, such characteristics are seen generically, and as such are believed to encompass *all* types of whales. Thus, some commentators assert that the unique qualities of each type of whale have been grouped together to create a mythical 'super-whale'[50] by which it and all others are majestic, gentle, warm-blooded mammals that mate for life, travel in family groups, feel pain, and are incredibly intelligent.

This question of intelligence (or awareness and consciousness),[51] has become a foremost consideration for many, and has even been argued at the IWC. Thus, in 1979, at the 31st meeting, in arguing for a moratorium on all commercial sperm whaling, Panama suggested that the 'high intelligence potential in the sperm whale' should be an additional consideration for deliberation on the (then) proposed sanctuary.[52] This suggestion coincided with an IWC co-sponsored conference on cetacean behaviour and intelligence.[53] The conference could not reach a conclusion on the question of whale intelligence as there are 'widely differing views'.[54] The differing views break down into two camps – those who think that whales are intelligent[55] (often linked to their

communication abilities[56] and social networks)[57] and those who dismiss these claims of cetacean intelligence,[58] communication[59] and sociability,[60] especially at the generic level.[61] The extreme of these dismissing views have come from the members of those governments that wish to go hunting whales. For example, in 1993, the Norwegian commissioner called minke whales 'rats of the sea'.[62] Seven years later, a senior Japanese whaling official suggested that the minke whales were the 'cockroaches of the ocean'.[63]

Unsurprisingly, after such polemics, there is *no conclusion* with regard to the above argument that whales are somehow special – and therefore it is not possible to categorically assert whether whales can be differentiated from other species *on biological grounds*. This failure to reach a conclusion is problematic, since if whales were biologically special, then some would suggest that we could draw a distinguishing argument for why they, like humans, should not be harvested. Searching for this touchstone has become important for some commentators, as a way to try to counter Japanese claims that many of the anti-whaling nations are acting inconsistently, as they routinely harvest (assuming no meaningful biological differentiation) similar species in their sovereign jurisdictions. Thus:

> The west is suffering from double standards. Wildlife is for them to see and admire, and you should only eat animals such as cows and pigs that are reared. But Australia kills three to four million kangaroos a year, and in the US they catch 5.6 million wild deer. How would Britons react if Hindus tried to ban the eating of cows they consider holy? The west are trying to force their values on us. It is cultural imperialism.[64]

Apart from some interesting arguments about consistency in ethical thinking with regard to all animals,[65] this position is mistaken on two grounds. The first pertains to the fact that discussions relating to whales are concerned primarily with international issues, and not domestic ones. This is of the utmost importance, as the so-called anti-whaling countries are not telling the pro-whaling countries what to do in their sovereign territories. Rather, the anti-whaling countries are asserting that decisions about how to manage whales are as much theirs as they are those of countries who want to hunt whales, because although whales may migrate through some territorial seas, in essence, they exist in the oceanic commons and belong to no nation. The second mistake relates to the assumption that whales must be exploited if it will not cause their endangerment. To suggest otherwise is 'cultural imperialism'. As such, the questions arise – must we exploit something to really utilize it, and are there any precedents in international law to justify a non-exploitative approach? The answers may be found in the international community's treatment of Antarctica.

6 ANTARCTICA AND THE PRECEDENT OF NON-EXPLOITATION

Although no commercially exploitable deposits of minerals are known to exist in Antarctica, it is likely that 'the possibility that exploitable mineral resources may exist in Antarctica'[66] is real.[67] From the early 1970s until 1988[68] the signatories to the ATS worked to develop a mechanism to both protect the environment yet facilitate the exploitation of these, and keep the system within the treaty scheme (that is, the exploitation of the minerals was not passed to the United Nations through some form of common heritage principle).[69] The resultant document was the Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA).[70] This convention, which took six years and 12 meetings to achieve, was pushed through by a number of states with both strong (primarily the United States, Germany and Japan) and moderate interests (the UK, France, Australia and South Africa) in exploiting the minerals in Antarctica. Against this coalition, a number of other countries (such as New Zealand, Argentina and Chile) argued for suitable environmental protections to be factored into the convention. The resultant treaty was designed to 'govern the conduct of such Antarctic mineral resource activities as may be found acceptable', and make sure it was consistent with the ATS and the environmental protections included in CRAMRA.[71] Although this treaty had (arguably) quite strong environmental provisions to mitigate the worst effects of mining in Antarctica,[72] within a year a number of key countries (France and Australia) broke the consensus of the ATS and signalled that they were not going to sign the CRAMRA. The essence of their position was that due to the special status of Antarctica, no mining should be conducted there at all. Former Australian Prime Minister Bob Hawke talked in terms of 'seeking stronger protection for what remains the world's last great resource . . . [There is a] changing world climate of opinion . . . which is a function of the general concern and awareness of the responsibilities of governments in this generation to protect the planet generally'.[73]

Together, Australia and France formed a coalition and argued that Antarctica should be turned into a 'wilderness reserve'.[74] In essence, they became diametrically opposed to the idea that the utilization of the wilderness via mining was either desirable or necessary. This call was instantly the source of contention, with key signatories such as the United States, the UK and New Zealand who clearly wanted the CRAMRA. However, within two years, first the middle ground, and later the reluctant Japan, Germany, United States and UK came to repudiate the CRAMRA[75] and adopt the 1991 (Madrid) Protocol on Environmental Protection to the Antarctic Treaty.[76]

The 1991 Madrid Protocol represented a sea-change of ideas and values within the Antarctic regime specifically, and international environmental law

in particular. The protocol establishes a comprehensive framework which provides the basis for more effective environmental protection both in terms of law – and the fundamental philosophical values behind it – than anything before it. Its 'environmental principle' stated:

> The protection of the Antarctic environment and dependent and associated ecosystems and the intrinsic value of Antarctica, including its wilderness and aesthetic values and its value as an area for the conduct of scientific research, in particular research essential to understanding the global environment, shall be fundamental considerations in the planning and conduct of all activities in the Antarctic Treaty area.[77]

Then, in appreciation of the above objective, the signatories agreed that '[a]ny activity relating to mineral resources, other than scientific research, shall be prohibited'.[78] These two provisions are monumental for two reasons. First, the continent of Antarctica was recognized in terms of its 'intrinsic value . . . including its wilderness and aesthetic values'. These values were clearly evident in the statements of the signatories to the protocol. For example, Chile talked of the 'special status' of Antarctica,[79] while the Republic of Korea saw it as 'the ultimate pristine continent of the world'.[80] Spain labelled Antarctica as the 'last remaining virgin continent'[81] while Sweden suggested that Antarctica represents 'as we all know, the aesthetic and almost spiritual values of man's dream of unspoilt nature'.[82]

Second, these values were clearly rated more highly than any utilitarian values that may have been extracted through mining. Chile saw the protocol as deflecting 'the pressures to engage in the economic exploitation of Antarctica'.[83] In its place, the protocol represented what Uruguay called 'a mechanism of adaptation in response to the current concern that this world, which no longer is vast and unknown, be preserved'.[84] This was not to suggest that activities could not occur on Antarctica. Far from it. It has been, and remains dedicated to the pursuit of scientific ventures, and of late (controlled) tourism.[85] As such, a type of utilization has occurred, which has consciously chosen to follow a clearly less destructive path than that offered by mining (despite the fact that mining was probably containable – when viewed from conventional sovereign development paradigms – within CRAMRA). That is, the signatories to the ATS distinctly chose not to utilize Antarctica in certain ways, even if it were 'sustainable'. Nevertheless, this decision was clearly seen as one which Brazil characterized as reflecting 'the expectations of a world opinion . . . to manage the world in a more rational and safer way'.[86] The Chinese suggested that the protocol represented 'a better and sustainable use'[87] of Antarctica than did opening up the continent to the more destructive practices of mining.

From the conclusions of the Madrid Protocol, the signatories were clearly

aware that they had created something unique, and had broken out of the conventional sustainable development mode of compromising between developmental objectives over environmental ones. With the Madrid Protocol, the latter clearly triumphed, for largely philosophical reasons. Brazil and Poland[88] saw this situation as representing an 'evolution in international relations'.[89] Finland classified it as 'a major international breakthrough in the increasingly important environment protection'.[90] Spain saw it as 'the outset of a new period',[91] as did Sweden.[92] Italy saw it as 'mankind behaving with maturity',[93] and Peru[94] and China[95] concurred. Finally, the Swiss suggested:

> [T]he Protocol now adopted is a herald of hope. Its importance will lie not only within the strict context of the Antarctic, but more importantly still in the extent to which it provides a model and an inspiring example whenever actions need to be taken in other fields concerning global protection of the environment.[96]

7 A NON-LETHAL UTILIZATION OF CETACEANS

The Antarctic example represents a unique situation in which one type of more damaging utilization was rejected in favour of a more benign type of development. As such, utilization still occurred (as a de facto world park, with ecotourism, and important scientific research within it), but in a much different way from that suggested by those who wanted to allow mining. The question that this raises, is whether it is possible to have a comparable alternative to a conventional paradigm (such as lethal hunting of cetaceans) or the signatories to adopt it. It is necessary for an alternative to be available because the ICRW stipulates that the convention is designed for the 'optimum utilization' of cetaceans, and the 'interests of the whaling industry' and 'consumers' or whale products. Traditionally, these terms were seen to preclude any non-lethal interpretations.[97] However, there have been significant changes in the attitudes of some IWC members on this question.

Within the IWC literature, the approach to the non-lethal utilization of cetaceans can be clearly traced back to 1983 and the independent Conference on the Non-Consumptive Use of Cetacean Resources. The report of this meeting, which was commended to the IWC by St Lucia, led to the creation of a working group to discuss the implications of the conference for the IWC.[98] Although the report was examined in 1984, no recommendations concerning the non-consumptive uses of whales were made by either the working group, or the IWC generally.[99] Nevertheless, even countries such as the former USSR[100] and Japan accepted that non-consumptive values could exist (in a limited capacity).[101] Other countries have come to take this approach further, and have suggested that non-consumptive values may now be the dominant considerations. Accordingly, since the early 1990s, the United States has

clearly articulated its view that 'the goal of optimum utilization is not limited to lethal utilisation'.[102] Although Japan disagreed,[103] the United States reiterated this approach in 1994 by suggesting that 'sustainable use of marine living resources as set forth in Agenda 21 of UNCED . . . does not require consumptive us'.[104] This was later reinforced by the 2002 WSSD which called upon participants at the conference to '[p]romote sustainable tourism development, including non-consumptive and eco-tourism'.[105]

Finally, at the 2004 CBD, the Principles and Guidelines for the Sustainable Use of Biodiversity, were, after a long process,[106] finally adopted. The principles established a number of key terms with regard to the definition of sustainable use. Notably, 'use' is understood to be both consumptive and non-consumptive. As such, use can be described in economic, social and cultural terms. Further, in applying the principles: 'there is considerable variability in the ethical standards between cultures, and hence, it is difficult to articulate an all encompassing principle on ethics related to sustainable use'.[107] Nevertheless, it was recommended that international and national policies should take into account, *inter alia*, intrinsic and other non-economic values of biodiversity. Most importantly, non-consumptive uses of biodiversity were considered as equally legitimate as consumptive uses (and equally in need of regulation, as they too can destroy the resource).[108]

The foremost example of the non-lethal utilization of cetaceans is with whalewatching. This practice, which began as early as 1974[109] is, as New Zealand suggested, 'an acceptable form of benign exploitation'.[110] In the early 1990s, the total annual global revenue from whalewatching was estimated at US$320 million per year.[111] In terms of economics, it was seen as 'a commercial enterprise still in its infancy'.[112] By 2001, the whalewatching industry was worth an estimated US$1 billion per year, and was being practised in 65 countries, attracting more than 9 million participants per year.[113] In some small countries, such as Tonga, whalewatching has become the single most important tourist attraction. In 2003, within Australia more than 1.6 million visits were made to watch whales. This is more than double the number five years earlier. This increase in numbers translates to an annual percentage growth rate of 15 per cent between 1998 and 2003.[114]

This financially lucrative, rapidly growing industry, has been considered by the Commission since 1993 (despite objecting Japanese arguments that the Commission had no jurisdiction on this matter)[115] via recommendations to make sure that the practice is carried out properly[116] so as to support 'further development of whale-watching as a sustainable use of cetacean resources'.[117] This desire was repeated in 1996, along with the recognition of the 'importance of the contribution which whale-watching makes to education, economic and social development of the wider community, and the advancement of scientific knowledge'.[118]

The above example of whalewatching as non-lethal utilization is one instance by which the non-whaling countries have sought to protect and preserve whales. For these non-whaling countries, the terms 'whaling industry' and 'interests of consumers' have been interpreted through the views of their constituencies, which comprise everything from individuals with anti-whaling bumper stickers, to professional anti-whaling NGOs, through to commercial whalewatching industries. In many instances, these examples are now considered to be part of the 'whaling industry'. Indeed, the 1993 Resolution on Whale-watching recognized that the ICRW included provisions for the Commission to 'take into consideration the interests of the consumers of whale products and the whaling industry' in providing for the 'conservation, development and optimum utilisation of the whale resources' and then went on to discuss the merits of whalewatching within this ambit.[119] Likewise, even the 1997 (Japanese-sponsored) legal workshop suggested 'whalewatching and other non-lethal uses of whales might be considered as part of a whaling industry'.[120]

For countries which are pursuing whalewatching (and often countries who just do not like the idea of whaling), the best way to achieve their legitimate concerns in the IWC in relation to the optimal utilization of a common resource is to pursue non-lethal objectives. The majority of countries within the IWC are already doing this. Thus, they promote the interests of their 'consumers' and their 'industries' interested in the whaling debate by interpreting optimal utilization from the perspective of a preservationist ethic rather than that of the so-called 'sustainable use' approach. This conclusion is hard to avoid when it is remembered that the Southern Ocean Sanctuary, like the Indian Ocean Sanctuary, and the moratorium on commercial whaling before it, all prohibit the lethal taking of whales '[i]rrespective of the conservation status of . . . [the] . . . whale stocks' in question.

In concluding this section, it is possible to assert that a non-lethal paradigm exists for the utilization of whales, in as much as an alternative form of developmental future for Antarctica existed in the 1990s. International society can refuse to follow traditional patterns when dealing with international resources – if it chooses to.

8 AN EVOLVING ETHIC OF NON-LETHAL UTILIZATION

Attempts to break the gridlock at the IWC date back nearly 30 years. The most recent proposal before the IWC on this question is contained in the Irish Proposal. The key question in this proposal is whether it is a legitimate choice for countries to pursue an alternative form of development and utilization of

the whale stocks that does not involve the killing of whales on the high seas. The answer to this, when taken from the international precedent of the mining ban in Antarctica, is yes. Conventional development paradigms can quite legitimately be discarded, if the signatories to the Convention have a broader vision they wish to adopt. This option of the broader vision was reflected at the WSSD, and specifically at the CBD. In the case of the ICRW, it is possible to suggest that non-lethal alternatives, such as whalewatching, represent part of this paradigm. A number of the signatories to the ICRW already recognize this. However, the critical mass necessary to make the jump from the current moratorium on commercial whaling, to a more permanent arrangement that would allow the non-lethal alternative to be adopted has not yet occurred because there is uncertainty over whether it is a legitimate choice to make. The answer is in the affirmative.

NOTES

1. IWC. 10th Report. (1959). 13. The 1956 Protocol was minor in nature.
2. IWC. 11th Report. (1960). 16.
3. See Chapter 1.
4. IWC. 12th Report. (1961). 16–17; IWC. 13th Report. (1962). 17. IWC. 18th Report. (1967). 19.
5. IWC. 16th Report. (1966). 18.
6. Birnie, P. (1985). *The International Regulation of Whaling* (Oceana, New York): 407.
7. IWC. 24th Report. (1974). 21.
8. IWC. 23rd Report. (1973). 20.
9. IWC/25/13–1. Verbatim Record. 23 (Statement by Mr White).
10. IWC/ 26/14. United States Proposal of a Protocol to the ICRW.
11. IWC. 25th Report. (1975). 33.
12. IWC. 26th Report. (1976). 14, 32.
13. This group was made up of the commissioners of the United States, the USSR, Japan, Australia and Canada. IWC. 28th Report. (1978). 23.
14. IWC. 27th Report. (1977). 9–12. See also Birnie, supra n5: 461.
15. IWC. 30th Report. (1980). 32.
16. IWC. 32nd Report. (1982). 26.
17. These included the socioeconomic considerations of the commercial moratorium, small cetaceans, scientific whaling and so on.
18. IWC. 36th Report. (1986). 11–12.
19. IWC. 37th Report. (1987). 11.
20. IWC. 41st Report. (1991). 11.
21. IWC. 37th Report. (1987). 11.
22. IWC. 38th Report. (1988). 10.
23. IWC. 38th Report. (1988); 10; IWC. 40th Report. (1990). 11–12.
24. IWC. 44th Report. (1994). 11.
25. IWC. 39th Report. (1989). 10. See IWC. 41st Report. (1991). 12.
26. Appendix 9: IWC Resolution 1997–9. 'Resolution on the Need for an Administrative Review.' IWC. 48th Report. (1998). 50.
27. Minor modifications to the workings of the ICRW have occurred through continual modification of the schedule. This process, which requires a three-quarters majority, began as soon as the Commission met. See Section E of the Rules of Procedure and Financial

Regulations (IWC). Apart from an early systematic rearrangement (IWC. 5th Report. (1954). 5), it was not until 1980 that a working group was established to examine the schedule and 'Non-Contentious Items'. IWC. 32nd Report. (1982). 29. This continued into the 34th meeting (with definitions on things such as 'local consumption' and so on). IWC. 33rd Report. (1983). 32. This finished soon after. See IWC. 34th Report. (1985). 26. The schedule was again reviewed in the 1990s but no important changes were achieved; the most important aspect, the inspection and observation regime, was being dealt with elsewhere within the Commission. See Appendix 1: 'Terms of Reference for the Working Group to Review the Schedule to the International Convention for the Regulation of Whaling.' IWC. 42nd Report. (1992). 46; IWC. 43rd Report. (1993). 12–13.

28. Canny, noted in Motluk, A. (1997). 'Sharpen the Harpoons.' *New Scientist*. October 25: 12.
29. Report of the Scientific Committee. IWC/55/Rep 1. 11.
30. IWC. 48th Report. (1998). 35.
31. IWC. 48th Report. (1998). 35. Motluk, A. (1997). 'Beached Whaling.' *New Scientist*. November 1: 12.
32. IWC. 50th Meeting in 1998. (1999). 35–6.
33. See Motluk, A. (1996). 'Blood on the Water.' *New Scientist*. June 22: 12.
34. IWC. 51st Meeting in 1999. (2000). 42–3.
35. IWC. 51st Meeting in 1999. (2000). 58–9.
36. Editor (2001) 'Cruel to Be Kind.' *New Scientist*. August 4: 3.
37. See 'Discussion Document: Further Work Required.' IWC/56/36.
38. The Irish Proposal does not cover other important considerations such as small cetaceans or the financing of the organization.
39. For an examination of the UNCLOS question, see Chapter 10.
40. Aristotle's focus was strongest upon dolphins. Aristotle. *Historia Animalium*. ('HA') (Loeb Classical Library, 1965, Harvard, Trans. A.L. Peck and D.M. Balme). HA. 566. b. 10–15.
41. HA. 631. a. 25–35.
42. 'But the oddest condition of all animals is that of the dolphin and any other of those that are similar among both the water animals and the other creatures that have this character, such as the whale and all others with a blow-hole. For it is not easy to class each of these either as solely water animal or land animal, if one is to class those that take in air as land animals and those that take in water as water animals by nature. For they have a share in both: for they take in sea water, and discharge it by the blow-hole, and they take in air by their lungs. For they possess this part and breathe. That is why when caught in the nets, the dolphin quickly suffocates for lack of breathing'. HA. 589. b. 5–15. An example of an animal which 'takes in sea water and has a lung . . . is the dolphin'. HA. 506. b. 2–5.
43. 'The dolphin too makes a squeak and moans when it is out of the water and exposed to the air, but not in the same way as the examples mentioned above [citing a number of fish species]. The difference is that this animal possesses a voice, since it has both lungs and a windpipe; but as its tongue cannot move freely, as it has no lips, it cannot utter any articulated voice'. HA. 535. b. 32–536. a. 1–5.
44. Dolphins 'spend their time with each other in pairs, males with females'. HA. 631. b. 2–3. 'And it was around Caria . . . that a large crowd of dolphins is said to have come into the harbor after a dolphin had been captured and wounded, until the fisherman let it go, and then they all went away again together. And the small dolphins are always accompanied by one of the bigger ones for protection. There have been seen before now a crowd of dolphins, big and small together, of which two were seen to have been left behind a little way, swimming beneath a little dead dolphin whenever it was sinking to the depths, and bringing it up on their backs, as though out of pity, with the result that it was not devoured by some other wild creature'. HA. 504. b. 17–26; 521. b. 20–27; 540. b. 20–24; 566. b. 10, 15–24; 631. a. 15, 17–20.
45. HA. 521. b. 20–27.
46. Aristotle noted that similar relationships existed between humans and dolphins and 'in particular their loves and passions towards boys around Tarentum and Caria and other places'. HA. 631. a. 16–17.

47. Noted in Scarff, J. (1977). 'The International Management of Whales, Dolphins and Porpoises: An Interdisciplinary Assessment'. *Ecology Law Quarterly*. 6: 343.
48. Scheffer, V. (1976). 'The Status of Whales.' *Pacific Discovery*. 29: 2, 8.
49. Paragraph B. Joint Motion for a Resolution. 1993. May 26. DOC.EN/RE/228/228125. This echoes an earlier proposal for a Motion on Resolution on Whaling before the Council of Europe in 1991 which suggested 'the great whales are intelligent, warm blooded social creatures'. 1991. April 25. ADOC6428. 1403-25/4/91-4-E.
50. See Kallard, A. (1994). 'Super Whale: The Use of Myths and Symbols in Environmentalism.' *11 Essays on Whale and Man.* High North Alliance, Oslo, (Norway): 5, 7.
51. See McIntyre, J. (1974). 'On Awareness.' In J. McIntyre (ed.) *Mind in the Water* (Scribner, New York): 69–70.
52. IWC. 30th Report. (1980). 27.
53. Appendix 5: 'Proposal for Meeting on Cetacean Behaviour and Intelligence.' IWC. 30th Report. (1980). 35.
54. IWC. 31st Report. (1981). 24.
55. See Jacobs, M. (1974). 'The Whale Brain: Input and Behaviour.' In McIntyre, supra n51: 78, 83. Nowark, R. (ed.) (1991).*Walker's Mammals of the World* (5th edn), Johns Hopkins University Press, London). Volume 2: 970. Grzimek's *Encyclopedia of Mammals* (1990) (McGraw-Hill, New York). Volume 4: 338. Griffin, D.R. (1992). *Animal Minds* (University of Chicago Press, London): 211.
56. Hecht, J. (2000). 'Blind to the Big Blue.' *European Journal of Neuroscience*. 13: 1520. Bright, M. (1991). *Masters of the Ocean* (Prion, London): 23–25. Norris, K.S. (1994). 'Beluga: White Whale of the North.' *National Geographic*. June: 8, 9, 15, 30. Whitehead, H. (1995). 'The Realm of the Elusive Sperm Whale.' *National Geographic*. November: 57, 59, 62. Sample, I. (2000). 'Why Humpbacks Sing High in Winter.' *New Scientist*. September 16: 8–12. Anon (2000). 'Whales Go Crazy for a Song.' *New Scientist*. December 2: 11. Copley, J. (2000). 'Speaking in Whistles.' *New Scientist.* September 2: 17–21. Howlett, R. (1997). 'Flipper's Secret.' *New Scientist*. June 28: 34–7. Seife, C. (1999). 'Deep Message.' *New Scientist*. February 27: 24. Bunney, S. (1993). 'The Amphibious Past of Whales.' *New Scientist*. March 20: 17. Hecht, J. (1998). 'Rhythm of Blues.' *New Scientist*. June 20: 19. Cohen, P. (1998). 'Song Lines.' *New Scientist*. December 5: 15.
57. This position is commonly supplemented by the cetacean practice of nurturant and succorant behaviour which may even be cross-species, and include humans. Wursig, B. (1988). 'The Behaviour of Baleen Whales.' *Scientific American*. April: 78–85. Harrison-Matthews, L. (1978). *The Natural History of the Whale* (Weidenfeld, London): 57, 59, 62, 164, 172–4. Whitehead, H. (2004). 'A Way With Whales.' *New Scientist.* May 15: 43–5.
58. See Klinowska, M. (1988). 'Brains, Behaviour and Intelligence in Cetaceans.' *New Scientist*. October 29: 23–9. Gaskin, D.E. (1982). *The Ecology of Whales and Dolphins* (Heinemann, Ontario): 150. McPhail, E.M. (1982). *Brain and Intelligence in Vertebrates* (Clarendon Press, Oxford). Klinowska, M. (1986). 'The Cetacean Magnetic Sense.' In Bryden, M. (ed.). *Research on Dolphins* (Oxford University Press, Oxford): 401, 413. Gould, J.L. (1994). *The Animal Mind* (Scientific American, New York): 17, 20. Wursig, B. (1979). 'Dolphins.' *American Scientist*. March: 108–20.
59. Winn, L.K. and Winn, H.E. (1985). *Wings in the Sea: The Humpback Whale* (University Press of New England, Hanover): 94, 97–8.
60. Morton, A. (2002). 'Call of the Wild.' *New Scientist*. September 21: 46–8. Nowark, supra n55: 970, 994–5, 999, 1022. Grzimek's, supra n55: 395. Anderson, I. (1997). 'Games Whales Play.' *New Scientist*. August 16: 5.
61. Skåre, M. (1994). 'Whaling: A Sustainable Use of Natural Resources or a Violation of Animal Rights.' *Environment*. 36: 31. Lynge, F. (1992). *Arctic Wars: Animal Rights and Endangered Peoples* (Dartmouth, New England): 24. Lynge, F. (1994). 'Some Primitive Reflections on People's Attitudes to People's Attitudes.' In *11 Essays*, supra n50: 46–7.
62. MacKenzie, D. (1993). 'Norway Declares War on the Minke Whale.' *New Scientist*. February 13: 9.

63. This was originally reported in a radio interview of July 18, 2001. It was later reported in the *Independent*. July 19, 2001: 6. See also Browne, A. (2001). 'Global Ban on Whaling Faces Its Severest Test.' *Guardian Weekly*. July 26: 17. And Editorial. 'Bloody Whaling.' In the same edition: 13.
64. Browne, A. (2001). 'Japan Harpoons West's Double Standards.' *New Zealand Herald/Observer*. July 30: 13.
65. This is an interesting argument, and I have long argued with many friends that they have got the equation round the wrong way. My contention is that it may be possible to see that the protection of whales is higher than with comparable species. However, this inconsistency does not suggest to me that we should 'downgrade' whales to the treatments accorded to other species, but rather, we should upgrade the other species to the way we treat cetaceans. Indeed, philosophically, the animal rights argument is very strong. See Gillespie, A. (1997). *International Environmental Law, Policy and Ethics* (Oxford University Press, Oxford). Chapter 8.
66. Preamble, Convention on the Regulation of Antarctic Mineral Resources. Reprinted in the back of Elliot, L. (1994). *International Environmental Politics: Protecting the Antarctic* (Macmillan, London).
67. See Suter, K. (1991). *Antarctica: Private Property or Public Heritage?* (Zed, London): 46–69. Joyner, C. (1998). *Governing the Frozen Commons* (South Carolina University Press, New York): 70–77. Thomson, M. (1985). 'The Prospects for Antarctic Minerals.' *New Scientist*. August 1: 31–5. Fifield, R. (1982). 'Antarctic Resources Beyond the Falklands.' *New Scientist*. May 27: 561–5.
68. This history is very well retold in Elliot, supra n66. Chapter 5.
69. I have dealt with this issue extensively in an earlier research paper 'Antarctica: Environmentalist's Victory or Hidden Agendas.' Available from <http://www.nottingham.ac.uk/~llzweb/TEXTAG.HTM>.
70. 27 ILM. 968.
71. See Article 2.
72. See Elliot, supra n66: 135–62. Joyner, supra n67: 149–51.
73. Hawke. Cited in Elliot, supra n66: 167–8.
74. Hawke and Rocard. Cited in Elliot, supra n66: 174.
75. See Elliot. Supra n66: 174–95.
76. Protocol On Environmental Protection To The Antarctic Treaty (1991). BH992.txt.
77. Article 3(1).
78. Article 7.
79. Opening Address from Chile. In Antarctic Treaty: Final Report of the Sixteenth Antarctic Treaty Consultative Meeting (Bonn, October 7–18, 1991). 158–9.
80. Opening Address from the Republic of Korea. In Antarctic Treaty, supra n79: 174.
81. Opening Address from Spain. In Antarctic Treaty, supra n79: 190.
82. Opening Address from Sweden. In Antarctic Treaty, supra n79: 192.
83. Opening Address from Chile. In Antarctic Treaty, supra n79: 158–9.
84. Declaration by Uruguay. In Antarctic Treaty: Final Report of the Eleventh Antarctic Treaty Special Consultative Meeting (Madrid, 3–4 October, 1991): 193.
85. See Joyner, supra n67: 181–220.
86. Opening Address from Brazil. In Antarctic Treaty, supra n79: 156–7.
87. Declaration by China. In Antarctic Treaty, supra n84: 171.
88. Poland saw 'this great achievement' as coinciding with 'rapidly evolving' international environmental law. Opening Address from Poland. In Antarctic Treaty, supra n79: 186.
89. Opening Address from Brazil. In Antarctic Treaty, supra n79: 156–7.
90. Opening Address from Finland. In Antarctic Treaty, supra n79: 163.
91. Opening Address from Spain. In Antarctic Treaty, supra n79: 190.
92. Sweden saw it as a breakthrough which represented the new 'requirements of the 21st century'. Declaration by Sweden. In Antarctic Treaty, supra n84: 185.
93. Declaration by Italy. In Antarctic Treaty, supra n84: 177.
94. Peru saw the protocol as a transendence of the previous 'empty and at times counterproductive rhetoric'. Opening Address from Peru. In Antarctic Treaty, supra n79: 182.

95. China talked about how after years of criticism of the ATS, the protocol showed 'self-development and self-improvement'. Opening Address from China. In Antarctic Treaty, supra n79: 160.
96. Declaration by the Swiss. In Antarctic Treaty, supra n84: 201.
97. Gillespie, A. (2000). 'The Southern Ocean Sanctuary and the Evolution of International Environmental Law.' *International Journal of Marine and Coastal Law*. 15(3): 293–316.
98. IWC. 34th Report. (1984). 26. The working group examined values via benign research, the value of protected areas, ecological value of cetaceans, recreational value of whale-watching, cetaceans in captivity, educational and cultural values, conflicts of use and moral questions.
99. IWC. 35th Report. (1985). 20.
100. IWC. 35th Report. (1985). 20.
101. IWC. 35th Report. (1985). 20.
102. IWC. 44th Report. (1994). 24.
103. Japan suggested that this view involved 'selective interpretations of the concept of sustainable use'. IWC. 44th Report. (1994). 24.
104. IWC 45th Report. (1995). 31.
105. WSSD. Plan of Implementation. Paragraph 41.
106. Report of the 4th Open Ended Workshop on the Sustainable Use of Biological Diversity. UNEP/CBD/WS-Sustainable Use/4/4. June 13, 2003. Annex 1. pp.7.
107. Recommendation IX/7. Draft Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity. UNEP/CBD/COP/7/4. pp.12.
108. Sustainable Use. UNEP/CBD/COP/7/L17.
109. See Anon (1984). 'Whales Flock to the Tourists.' *New Scientist*. October 18.
110. IWC. 50th Meeting in 1998. (1999). 5.
111. IWC. 44th Report. (1994). 23.
112. IWC 45th Report. (1995). 32.
113. Hoyt, E. (2001). *Whalewatching 2001: Numbers, Expenditures and Socio-Economic Benefits* (IFAW, London): 3. IWC. 48th Report. (1998). 19.
114. IFAW. (2004). 'The Growth of the Whalewatching Industry in Australia.' IWC/56/16. IWC. 52nd Meeting in 2000. (2001). 12. Orams, M. (1999). *Economic Benefits of Whale Watching in Vava'u, Kingdom of Tonga* (Centre for Tourism Research, Massey University at Albany, Auckland).
115. IWC 45th Report. (1995). 33; IWC. 46th Report. (1996). 32; IWC. 50th Meeting in 1998. (1999). 6; IWC. 51st Meeting in 1999. (2000). 10.
116. Appendix 15: 'Resolution on Whalewatching.' IWC. 45th Report. (1995). 49–50; IWC. 47th Report. (1997). 20. Appendix 2: 'Resolution on Whalewatching.' IWC. 47th Report. (1997). 48; IWC. 50th Meeting in 1998. (1999). 5; IWC 45th Report. (1995). 32; IWC. 51st Meeting in 1999. (2000). 8–9; IWC. 52nd Meeting in 2000. (2001). 12. For some of the problems in this area, see Scheidat, M. (2002). 'Behavioural Responses of Humpback Whales to Whalewatching.' SC/54/WW4/. Englundia, A. (2002). 'The Impacts of Tourism on Indo-Pacific Bottlenose Dolphins.' SC/54/WW1.
117. Appendix 9: 'IWC Resolution on Whalewatching.' IWC. 44th Report. (1994). 33–4.
118. Appendix 2: 'Resolution on Whalewatching.' IWC. 47th Report. (1997). 48. These points were later recognized in IWC. 50th Meeting in 1998. (1999). 6.
119. Appendix 9: 'IWC Resolution on Whalewatching.' IWC. 44th Report. (1994). 33–4. This approach may be built upon recognition that the ICRW includes 'scouting' vessels within its definition of 'whale catcher' and the 1956 Protocol extended this further, listing aeroplanes and helicopters as possible whale spotters. Vessels used for spotting whales are the core of whalewatching. Thanks to Wally Stone for pointing this out.
120. Executive Summary of the International Legal Workshop, which was hosted by the Institute for Cetacean Research, was introduced as IWC/48/27. Agenda Item 13.3. At 4.

8. Aboriginal subsistence whaling

1 INTRODUCTION

Aboriginal hunting of whales protected as endangered species under the ICRW has proved to be an 'extremely difficult problem'[1] for the IWC.[2] Although aboriginal whaling may occur outside of the IWC's jurisdiction,[3] the IWC has been the primary organization involved with the issue of aboriginal subsistence whaling (ASW). This category of whaling has traditionally been exempted from the stricter prohibitions on whaling imposed by the IWC.

To date, the IWC has dealt with five separate requests to hunt whales under the special provisions of the ASW category. These requests were made by the Russian Federation (for the peoples of the Chukotka peninsula),[4] the United States (for the Makah[5] and indigenous people in Alaska),[6] Denmark (for the peoples of Greenland),[7] St. Vincent and the Grenadines,[8] and Japan.[9] Each claim has been controversial in some way. Difficulties have arisen regarding the role of the specialist body examining the ASW applications, the Steering Committee of the Ad-Hoc Working Group on Subsistence Whaling (steering committee), and with ASW criteria themselves. Specific concerns with the criteria include the debate surrounding the definition of 'aboriginal' for ASW purposes, the issue of choice of technology as it affects the potential for 'humane killing', caveats of local use and nutritional need, the issue of commercial versus subsistence whaling, and concerns regarding endangered species. Defining the role of culture in the aboriginal whaling debate has also proved problematic.

2 HISTORY OF THE ASW SPECIAL EXEMPTION

The concept of a special exception for ASW emerged with the initial formulation of the 1931 Convention on the Regulation of Whaling (CRW). Article 3 stipulated that this convention would not apply:

> to aborigines dwelling on the coasts of the territories of the High Contracting Parties provided that . . . [t]hey only use canoes, pirogues or other exclusively native craft propelled by oars or sails . . . [t]hey do not carry firearms . . . [t]hey are not in the employment of persons other than aborigines . . . [and] [t]hey are not under contract to deliver the products of their whaling to any third person.[10]

When the new ICRW was concluded in Washington in 1946, the ASW exception contained in the 1931 CRW was not included in the main text of the revised convention. Rather, the exemption first appeared in the schedule to the 1946 convention. However, it was explicitly noted at the conclusion of the 1946 Washington meeting (from which the ICRW emerged) that:

> the International Whaling Conference supports and considers justified the request of the Delegation of the Union of Soviet Socialist Republics that the taking of gray whales in the Bering and Chukotsk seas should be permitted when the meat and products of such whales are to be used exclusively for local consumption by the aborigines of the Chukotsk and Korjaksk areas.[11]

In 1950, the issue of ASW arose under the auspices of the new ICRW when the IWC adopted the 1931 prohibition of the CRW on the taking of right whales. However, this prohibition 'did not apply to aborigines' provided that they acted in accordance with the 1931 rules for ASW.[12] A further requirement was that 'the meat and products of such whales are to be used exclusively for local consumption by aborigines'.[13] Despite these requirements, from 1956 the SC was seeking 'more information' on the recent catches of whales by the 'aborigines' of the signatories.[14] A similar exception for indigenous peoples arose in 1960 when Greenland sought guidance over small-type coastal whaling taking place off Greenland's coast.[15] The following year, the Commission agreed to allow a take of ten humpbacks per year, taken from vessels 'less than 50 tons'.[16] Finally, in 1964, a further amendment to the schedule stated: 'it is forbidden to take or kill Gray whales or Right whales except by Aborigines or a Contracting Government on behalf of aborigines and only when the meat and products of such whales are to be used exclusively for local consumption by aborigines'.[17]

The ASW exception was extended in time to cover the American Eskimo, the Soviet Aleut, and the Canadian Inuit catches.[18] Throughout the late 1960s and early 1970s, ASW was not considered an important issue at the IWC. This lack of concern was broadly due to the overshadowing effects of the larger debates within the IWC regarding the unsustainable nature of the much greater commercial catch and the perceived necessity by some contracting governments to establish a global moratorium on commercial whaling. Nevertheless, ASW concerns continued to arise. Accordingly, with regard to the proposed global moratorium on whaling in the early 1970s, it became clear that: 'the proposed ban would apply only to the commercial taking of whales. The present exception granted in the Schedule to the small scale whaling from Greenland and the Faroe Islands, where the whales are taken for consumption by the local population, would not be affected'.[19]

Although the proposed moratorium was not intended to affect ASW, it was, none the less, indirectly drawn into the debate as a result of the general failure

of the original management regimes to commercial whaling. As these regimes were deemed to be clearly inadequate, a new management procedure (NMP) was adopted by the IWC.[20] The NMP debate was accompanied by suggestions that a separate and specific management regime for ASW should be developed to complement the new regime.

In addition to the NMP question and the question of the unsustainable nature of the commercial catch, there was a growing concern about the potentially unsustainable nature of ASW. This concern first emerged in 1973 when the scientific committee proposed that Denmark, the United States and the USSR collect and collate information on the aboriginal kill of bowhead, gray and other whales.[21] The United States, in particular, had been asked to reduce the waste in its aboriginal whaling due to the fact that so many whales were being struck but not killed and were being subsequently lost.[22]

This concern with the American hunt rapidly became significant as it became apparent that a critically endangered species could be taken to the point of extinction.[23] Accordingly, a special working group was established at the 30th meeting of the IWC to examine the entire aboriginal whaling issue and to develop proposals for a regime for aboriginal hunting.[24] The group was divided into three separate panels consisting of specialists in wildlife science, nutrition and cultural anthropology. These three panels drew up the basic principles with regard to ASW that were considered at the 1982 meeting.[25] These principles were subsequently formalized in 1983 by the following resolution, which stated in part:

> Whereas the Commission also recognizes the importance and desirability of accommodating, consistent with effective conservation of whale stocks, the needs of aboriginal people who are dependent upon whales for nutritional, subsistence and cultural purposes . . . the Commission believes it appropriate and desirable to establish principles and guidelines for the management of aboriginal subsistence whaling which recognize and seek to accommodate conservation, nutritional, subsistence and cultural needs.[26]

Further, the IWC established a specific ASW sub-committee (ASWSC) to examine ASW applications brought before the IWC.

Despite the clarity of the new regime, a further difficulty soon emerged relating to 'small scale coastal operations with similar characteristics to [ASW]'[27] which were not necessarily easily distinguishable from the latter. Unease about this potential for an overlap continued throughout the mid-1980s and into the early 1990s, in addition to a concern that the ASW exemption could be open to abuse. [28]

Regardless of these concerns, the ASW category remained unexamined[29] until 1987, when the adequacy of the ASW exemption was questioned by a

number of the IWC member states which wanted the category to be reviewed.[30] In 1988, the ASWSC responded to this review, recommending: 'that there be no change to the definitions of Aboriginal Subsistence Whaling, Local Aboriginal Consumption and Subsistence Catches as currently applied by the International Whaling Committee . . . [and that] . . . [n]o additions be made to the category of Aboriginal Subsistence Whaling'.[31] This decision was controversial because a number of countries, notably Japan, Norway and Iceland, had all tried to demonstrate the similarity between small-type coastal whaling (STCW) and aboriginal subsistence whaling.[32]

The contentions of these countries were largely accepted by the IWC, which acknowledged: 'community-based whaling in Japan [had] many characteristics in common with . . . aboriginal/subsistence whaling'.[33] Recognition of such similarities resulted in the Commission establishing a working group to examine the STCW category.[34] However, despite over a dozen requests, the majority of the IWC have concluded that STCW cannot be established as a separate category between ASW and commercial whaling.[35] The primary cause of this inability was the commercial linkages[36] which characterized both small-type coastal and large-type commercial whaling. This linkage has proved detrimental to Japan's case, and accordingly a number of countries have gone on record as stipulating that they 'could not accept a new category of commercial whaling'.[37]

In addition to the increased scrutiny of the categories of small- and large-scale whaling, a number of IWC members continued to question the adequacy of the ASW criteria throughout the 1990s.[38] Within that same period, the ASWSC itself requested guidance with regard to the extent to which the 1981 ASW criteria still applied.[39] Despite these requests, the IWC decided not to review the ASW debate until yet another new alternative management procedure, the revised management procedure, had been established.[40] However, as progress on the completion of the RMP slowed in the mid-1990s the IWC recommended to the SC that it should 'begin work on an aboriginal whaling management scheme before the completion of the RM[P]'.[41] Accordingly, the IWC instructed the SC as follows:

> [I]nvestigate potential management regimes for aboriginal subsistence whaling, including regimes based on the approach taken in the Revised Management Procedure . . .
>
> The objectives of any potential regime shall continue to be those accepted at the 34th Annual Meeting, which are to:
>
> (a) ensure that the risks of extinction to individual stocks are not seriously increased by subsistence whaling;
> (b) enable aboriginal people to harvest whales in perpetuity at levels appropriate to their cultural and nutritional requirements, subject to the other objectives; and

(c) maintain the status of stocks at or above the level giving the highest net recruitment and to ensure that stocks below that level are moved towards it, so far as the environment permits.

Highest priority shall be accorded to the objective of ensuring that the risk of extinction to individual stocks are not seriously increased by subsistence whaling.[42]

The SC responded to this resolution by establishing a steering committee focused on technical considerations and the communities' needs for such whales.[43] In recognizing the difficulties inherent in considering the concept of need, the SC noted: 'the question of need is the responsibility of . . . the Aboriginal Subsistence Whaling Sub-Committee'.[44] These concerns were echoed by the United Kingdom the following year: '[In order to] adopt the Aboriginal Whaling Management Procedure (AWMP) there will need to be substantial changes to the Schedule. That will be an opportune time to look at a number of other issues such as the definition of aboriginal whaling . . . and perhaps other aspects of management which are not strictly speaking scientific'.[45]

3 CONSIDERATION OF ASW WITHIN THE FRAMEWORK OF THE IWC

The ASW Sub-Committee of the Technical Committee

In 1982, the Report of the Steering Committee of the ad hoc Working Group on Subsistence Whaling[46] reiterated the earlier suggestion of the technical committee working group 'that a standing Sub-Committee or Working Group be established to consider the cultural and nutritional requirements of indigenous (aboriginal) people engaged in aboriginal/subsistence whaling'.[47] In 1983, the terms of reference for the ASWSC of the technical committee were published and codified into the schedule of the ICRW.[48] Paragraph 13 of the schedule stated that the role of these terms was:

to consider relevant information and documentation on nutritional, subsistence and cultural needs relating to aboriginal subsistence whaling . . . and to provide advice on the dependence of aboriginal communities on specific whale stocks to the Technical Committee for its consideration and determination of appropriate management measures.[49]

This approach to examining the merits of each ASW application must be seen as a mechanism unique within the IWC. Its unique status derives from the fact that since the 1970s, the IWC has steadfastly opted to examine considerations relating to whales on a stock-by-stock basis. As such, the ASW navigates

between the stock-by-stock approach and the needs of individual claimants by examining the merits of each ASW application.

The Effectiveness of the ASW Sub-Committee

Despite the clear mandate of the sub-committee to consider the legitimacy of ASW requests, this mandate has at times been frustrated by member states. The most significant example of this was the 1997 American Makah request.

The Makah request process began in 1995 (and ended in 1999 when whaling was resumed), when the United States noted that the Makah Indian tribe had 'expressed an interest in taking five gray whales for their aboriginal needs'[50] and that accordingly 'the USA might therefore wish to submit a formal proposal for this at a future date'.[51] At the same meeting, the Russian Federation also suggested that it would request an aboriginal quota of five bowhead whales. Although the Russians reiterated this request in 1996[52] and 1997,[53] they did not pursue the request as a single agenda item. Rather, they suggested that 'decisions on aboriginal subsistence whaling should be taken by consensus, not vote'.[54] As such, all of the ASW claims before the IWC could be decided together on the basis of the overall stock – not on the individual merits of each ASW claim.

The tentative approach adopted by the Russian Federation was followed by the United States, which deferred its 1996 request until the following year when the existing gray whale quota expired and the eastern North Pacific gray whale stock for the inhabitants of the Chukotka peninsula would be determined. At this point, it became apparent that the two countries were working in tandem, as: 'discussions were underway regarding a joint Russian–USA proposal that would be presented as an amendment to the Russian bowhead request'.[55] Apparently, the aim of this approach was to give the Commission the chance to deal with both requests at the same time, in addition to reflecting 'the desire of the Alaskan natives to accommodate the immediate needs of the Chukotka people'.[56]

In essence, this meant that the separate quotas for the bowhead, which provided the basis of the Alaskan ASW, and the gray whale, for which the Chukotka entered their request, would be factored so as to allow an effective trade of whale quotas between the two countries. Effectively, the United States had a quota for bowhead whales, part of which the Russians wanted for their own aboriginal needs. Conversely, the Russians held a quota for the gray whales, part of which the Americans wanted. Rather than approach the IWC with separate, additional quota requests which were clearly controversial, the existing quotas were simply reorganized and traded between the parties. As such, the two countries reached 'a broad consensus . . . to accept the amendment of the Schedule' with relative ease, given the interdependence of the requests.[57]

This strategy contravened the earlier American position on ASW allocations (and was called off in 1996)[58] and clearly frustrated the evaluating role of the ASWSC, as no decision was made on the legitimacy of the specific Makah application. However, because of the displeasure at the situation (the claim was eventually satisfied by the block grant split between groups) the words 'aborigines whose traditional aboriginal subsistence and cultural needs have been recognized'[59] were added. Although the ideal of the block quota was not overturned, it was clear that each individual claim should be considered on its merits.

By 2002, this policy of two separate applications being dealt with under one stock was utilized again with the claims for the respective indigenous peoples of Russia and the United States. The virtues of this approach were challenged by both Mexico and New Zealand as possibly inappropriate due to the very different nature of each indigenous community. However, the United States and Denmark argued that this stock-by-stock approach was required by the convention. Although this argument was accepted by most members of the IWC, Mexico argued that the Makah request had only been joined to the Russian Federation's request because this was the only way to get sufficient support for it (that is, countries would not vote down the Russian claim, due to its clear merits).[60] Although Mexico decided not to pursue this agenda item in the plenary, Japan attempted to take the matter to a further level, by arguing that the decision on all ASW claims should be taken as one block vote, which should cover not only the five ASW claims (the Alaskan Eskimos, the Makah, the two claims for the Russian Chukotka, and St Vincent and the Grenadines) but also its own STCW claim. When this approach was objected to by the majority of the IWC, the Japanese proposal for a quota for its STCW was rejected, by way of retribution, and so too was the joint Russian and American request for quotas of bowhead whales for their respective communities. This voting down was described by the US commissioner as: 'the most unjust, unkind and unfair vote ever taken' at the IWC.[61] This issue was of such concern, that a special meeting of the IWC was called for later in 2002 to deal with it. At this meeting, the joint quota for the Russian and American indigenous peoples was accepted by consensus.[62]

Although the immediate difficulty was resolved by the special meeting, the Russian government become so incensed at the fact that this problem had occurred in the first place that it persuaded the IWC to agree to the formation of a small working group which was tasked with reworking aspects of the ASW criteria, so that, *inter alia*, the Russian ASW claim would not be dealt with in a discriminatory way when compared to other ASW claims from other countries. The upshot of the discussions was that the wording added to the schedule following the Makah application ('aborigines whose traditional aboriginal subsistence and cultural needs have been recognized') was removed in 2004.[63]

4 THE CONCEPT OF ABORIGINAL/INDIGENOUS PEOPLE

Defining Aboriginal/Indigenous People

The word 'aborigine' derives from the Latin, meaning 'from' (*ab*) and 'beginning/creation of the world' (*origine*). As its roots suggest, it has commonly been used to mean 'original inhabitants of a place, commonly before the arrival of "others" ', typically, Europeans. The word aborigine is commonly used as a synonym for the word 'indigenous'. This word, of Latin and French origin (*indigene*/*indigena*) has a slightly larger ambit by having the term 'native' at its core. 'Indigenous' is therefore a more comprehensive category than 'aboriginal'. Further, the word 'native' represents something or someone 'born or produced in a particular land or region, or belonging naturally to a region, soil etc., as in it is not introduced'.[64]

Although these terms mean slightly different things, they are often used interchangeably. This is especially true in the context of changing political connotations attached to certain phrases. In this area, the term 'indigenous' is more commonly used than 'native' or 'aborigine'. Nevertheless, these alternative words remain in common usage.

Despite the somewhat common overlap and usage of all three of these words, it would be a mistake to assume that their definitions, or more importantly, the connotations implied by the use of each of the three terms, are the subject of agreement in the world of international law and policy. Nevertheless, the attempt to define what constitutes 'indigenous' from a legal perspective has become a significant debate in international law and policy. Defining and appreciating indigenous cultures has become important in the international community's attempt to avoid repeating a history littered with examples of governments refusing or failing to recognize and take account of the distinctive histories, needs, vulnerabilities and aspirations of minority peoples. This failure has resulted in immense destruction, dispossession, misery and the untimely death of millions. In some cases, such non-recognition has formed part of a deliberate pattern of violations of clear standards of national and international law.[65]

There have been a number of attempts to implement specific legal and policy initiatives to address the distinctive needs of indigenous peoples. However, recognition of such people has been hampered by a number of difficulties. The most basic of these has been an inability to arrive at a universally acceptable definition of 'indigenous'. This failure is reflected in the different working definitions employed by the United Nations,[66] the International Labour Organization,[67] and the World Bank.[68] This failure to establish a uniform working definition for 'indigenous' has resulted in the unwillingness

of many states to sign documents such as the United Nations Draft Declaration on the Rights of Indigenous Peoples.[69] Conflicts between international and domestic conceptualizations of social identity, cultures, histories, and needs further complicates the debate regarding the definition.[70]

The failure to adequately recognize and deal with indigenous peoples and their claimed rights has been a problem in both northern and southern, liberal and non-liberal states. Liberal theory provides a basis for these failures because it works on assumptions based on individual, rather than group-orientated, rights.[71] Conversely, non-liberal states, which favour ideological unity, are prone to make generalizations regarding indigenous people that fail to account for individual variation. These problems tend to occur more frequently when non-state groups within state territory have sought self-determination. Accordingly, few countries have committed themselves fully to the ideals of a separate status for indigenous peoples because of the unclear implications attendant on such recognition.[72]

There are several reasons for states' general reluctance to grant separate status for indigenous peoples. The first reason relates to the previously discussed definitional difficulty inherent in establishing, as a policy, which peoples are to be regarded as indigenous. A typical view of some southern countries has been that indigenous peoples are only those peoples subjected to European colonialism. As such, any original inhabitants of lands not incorporated into European colonies, or which subsequently became independent and ruled by non-Europeans, may not be classified as being indigenous.[73] The second argument commonly made in support of state refusal to grant separate status to indigenous minorities has been based upon the fear that grants of separate status for certain infra-state groups leads to chauvinism, racism and unwarranted favouritism towards certain groups. As a Ukrainian government representative put it: 'claims for preferential treatment for indigenous peoples would not contribute to inter-ethnic peace and understanding in any society'.[74]

Definitions of Indigenous People in International Environmental Law

In spite of the above concerns, a number of conventions in international environmental law have overcome the definitional problems aforementioned, and recognized specific rights for indigenous peoples. The nature and extent to which these rights have been recognized none the less varies from treaty to treaty. Broadly speaking, international environmental law has determined three ways of recognizing indigenous people.

The first approach requires that signatories to a treaty agree upon which peoples qualify as indigenous for the purposes of the treaty. For example, the 1957 Interim Convention on the Conservation of North Pacific Fur Seals has provided that 'due consideration must be given to the subsistence needs of

Indians, Ainos, Aleuts or Eskimos . . . dwelling on the waters mentioned in Article III'.[75] Likewise, with regard to migratory bird life, exceptions to general conservation principles for aboriginal peoples have specifically listed which peoples may operate within the exception. Examples include the conventions for the protection of migratory birds between the United States and Canada,[76] Japan,[77] and Russia.[78]

A second way in which peoples may be identified as indigenous is through identification with the territories they inhabit. For example, the 1911 Convention Between the United States, United Kingdom and Russia for the Preservation and Protection of Fur Seals[79] specifically excluded 'Indians, Ainos, Aleuts or other aborigines dwelling on the coast of the waters mentioned in Article 1'.[80] Likewise, the original 1931 CRW provided an exception for 'aborigines dwelling on the coasts of the territories of the High Contracting Parties'.[81] The 1987 Agreement Between the Government of Canada and the Government of the United States on the Conservation of the Porcupine Caribou Herd[82] was for the benefit of 'certain indigenous people of Yukon territory and the Northwest Territories in Canada'.[83] In a similar vein, the 1974 Agreement for the Protection of Migratory Birds and Birds in Danger of Extinction did not specify the type of people who could take birds and eggs of otherwise protected species, but it did indicate that they could be 'the inhabitants of certain regions'.[84]

A third way to identify indigenous peoples emerged in 1992 during the UNCED. Some of the agreements reached during this conference, which dealt in part with issues connected to indigenous peoples, took an approach by which the signatories themselves determined the manner in which such agreements were to be interpreted. That is, the criteria for recognition as indigenous are not defined in the treaties. Rather, it is ultimately a matter for the signatories of the treaties to decide on a case-by-case basis.

A foremost example of this approach is seen in the 1992 Convention on Biological Diversity. Although the CBD has incorporated considerations pertaining to 'indigenous and local communities embodying traditional lifestyles'[85] and has developed a series of resolutions[86] seeking to further the rights of indigenous peoples, it has none the less maintained a strong respect for state sovereignty, as any interpretations regarding the classification of a group as indigenous remain 'subject to national considerations'.[87] As such, it would appear that the definition of which peoples are to be regarded as indigenous may well be determined by sovereign boundaries. In part, such determinations and their implications have contributed to the large level of disagreement surrounding indigenous issues within the CBD.[88] Similarly, the Forest Principles have adopted the language of 'indigenous peoples, their communities and other communities of forest dwellers'.[89] However, like the CBD, the Forest Principles have tended to be strongly linked to the primary objective of maintaining sovereign determination.[90]

Each of these three approaches is quite similar in that ultimately, it is for the sovereign state to decide whether certain peoples are or are not indigenous, and therefore entitled to any special considerations that may accompany such status. Although this approach may work satisfactorily when dealing with rights and privileges within sovereign boundaries, it may prove inadequate when the rights and privileges granted by one state to a group of its inhabitants (such as the right to hunt endangered whales), have an impact on the rights and interests of another state (such as an interest in protecting endangered whales).

Given such supra-sovereign concerns, it may be more useful either to have an established definition against which all applications must be examined, or to have direct discussion among the signatories on the status of the peoples applying under the ASW exception on a case-by-case basis.

The Problem of the Definition of Indigenous Peoples within the IWC

The inability of the international environmental legal community to arrive at a singular definition of indigenous peoples has been mirrored in the history of the IWC. Both the 1931 CRW and the 1946 ICRW failed to define the term 'indigenous'. The question of the appropriateness of the label 'aborigine' was raised in 1962[91] but dismissed the following year.[92] The question of whether racial or ethnic considerations could form the basis of the definition[93] was raised by the Cultural Anthropology Panel in 1979, but it was neither followed up nor critically examined. Rather, identification of indigenous peoples has been taken to be axiomatic and has been assisted by external characteristics, such as subsistence means.[94] However, a definition based on these categories has proved elusive. Accordingly, it would be very useful for the IWC signatories to adopt a suitable method by which indigenous peoples may be identified. Failure to adopt such a mechanism has caused two problems for the IWC.

It would appear that the inclusion of the word 'aboriginal' in IWC discussions pertaining to ASW has resulted in the assumption that the term applies only to pre-colonial peoples. However, the larger question of whether this division is generally acceptable to the signatories has never been directly examined. Broadly speaking, the question that may be raised is one of whether it is desirable that people, because of the fact that they were earlier colonized, should be given different rights from those who were colonized at a later date or not colonized at all – or, alternatively, whether all peoples should be treated the same.

This question concerns the distribution of rights and privileges. The issue first emerged in the 1981 Preparatory Meeting on the Improvement and Updating of the ICRW by the IWC members. Specifically, 'concern was expressed that non-industrial whaling should not be considered as being different from other forms of exploitation for management purposes'.[95]

Concerns about the distribution of benefits as it is affected by the way in which the indigenous term is defined have appeared in other international environmental contexts.[96] These treaties do not necessarily single out indigenous or aboriginal groups as deserving specific rights that other members of similar communities do not possess. As such, signatories may prefer to focus upon traditional users of the environment without drawing any distinction as to who was there first.

With regard to the whaling debate, any argument that indigenous and non-indigenous peoples should be treated alike could have two possible outcomes. The first would be a contention that whaling moratoriums and limitations on whaling should be applied to all people who whale, irrespective of ethnicity. This approach would advocate the provision of no exceptions to whaling limitations for anyone, regardless of status as indigenous or otherwise. A second approach could provide that if an exception was to be made for one group of people, it should be applied consistently to those who are very similarly situated. For example, although Norway was not colonized, it has an unbroken whaling history of whaling dating back hundreds, if not thousands, of years.[97] However, the Norwegians cannot claim the same rights proffered by the ASW exception, because they are not designated aboriginal or indigenous, due to the commonly held belief that such peoples must have been colonized. Accordingly, the question may be asked, why should the question of colonization determine the rights and status of peoples with equally old and meaningful whaling traditions as those who were colonized?

One result of this lack of uniform, objective parameters by which to identify qualifying indigenous people for ASW purposes has been that in the domestic processing of ASW applications, member states have used different standards by which to determine which groups are indigenous and therefore entitled to apply for ASW consideration. As such, applications have been accepted by the IWC under the ASW category by applicants who may not have been considered indigenous by all member states. For example, St Vincent and the Grenadines has made claims on behalf of people who are not pre-colonial inhabitants, but the descendants of slaves who were introduced into the Caribbean in the early stages of colonization. Most indigenous groups in Central and Meso-America and the Caribbean did not survive the arrival of the Europeans. In the West Indies, only remnants of the original inhabitants, the Caribs, exist in Dominica. The indigenous peoples of this region were almost totally destroyed in many places by the Spaniards, English, Dutch, Scots and French.[98]

In the light of these concerns relating to both the definition and overall status of indigenous people in the context of international law and policy generally, it would be useful for the IWC to have a fixed definition of the term for the purposes of determining eligibility for ASW consideration. The signatories are

working with a concept which has broad political implications and which is currently defined in several different and inconsistent ways. A single definition for the purposes of the treaty may permit justifiable distinctions to be drawn between the claims of competing groups with similar whaling traditions.

Traditional Hunting Practices as a Means of Defining Indigenous Peoples

A typical characteristic by which indigenous peoples may be identified has been the utilization of 'traditional' hunting practices. For example, the 1973 Polar Bears Agreement allows the taking of polar bears by indigenous people if they use 'traditional methods'.[99] Some conventions have gone further than this, and stipulated what traditional methods are. For example, the 1911 Convention for the Preservation and Protection of Fur Seals[100] excluded coverage of various indigenous groups 'who carry on pelagic sealing in canoes not transported by or used in connection with other vessels, and propelled entirely by oars, paddles, or sails and manned by not more than five persons each, in the way hitherto practiced and without the use of firearms'.[101] The 1931 CRW stipulated that aborigines could only take whales if they used 'canoes, pirogues or other exclusively native craft propelled by oars or sails [and] . . . they do not carry firearms'.[102] Likewise, the 1957 Interim Convention on the Conservation of North Pacific Fur Seals specifically limited the methods which could be used by a group claiming indigenous status by excluding from consideration groups who used 'canoes . . . transported by or used in connection with other vessels, and propelled entirely by oars, paddles, or sails, and manned by not more than five persons each, in the way hitherto practiced and without the use of firearms'.[103]

Conversely, more recent treaties, such as the CBD, have adopted an approach that is in complete contrast with earlier conventions regarding the linkages between indigenous people and technology. The CBD recognizes that indigenous peoples and their knowledge and methods of utilizing biodiversity have a strong role to play in the conservation of that biodiversity. As such, their traditional knowledge and methods should be protected. Moreover, there is the overt necessity that the benefits extracted from biodiversity, when based on such indigenous knowledge or methods, must be equitably shared.[104] This debate about equity has become very difficult within the CBD forum.[105] Inherent in this difficulty is the problem of technology transfer and the assumption that indigenous peoples (and developing countries) will be able to share and ultimately utilize the latest technologies.[106] With the question of the relationship between technology and indigenous peoples, the CBD values traditional knowledge, but steers a clear path towards the suggestion that

indigenous peoples not be restricted to traditional technology. The CBD advocates indigenous access to and utilization of the latest and most modern technologies in this field.

The current approach within the IWC is closer to the approach exemplified by the CBD than that found in the 1931 CRW. That is, the use of traditional technologies is not required to establish a group's claim to ASW rights. However, the reasoning behind this approach is unique.

The 1946 ICRW contains no specifications with regard to indigenous peoples having to employ original practices. Although the issue of original methods emerged briefly in the 1950s,[107] this restriction had been eliminated by 1964 when a scheduled amendment which allowed 'contracting Governments [to catch whales] on behalf of aborigines'[108] was passed. This amendment allowed the indigenous people of the Chukotka peninsula[109] to move away from hunting from small boats and to employ a specialized modern catcher vessel.[110]

The issue of modern technological methods re-emerged in 1979 before the Cultural Anthropology Panel,[111] which suggested that 'the definition of subsistence whaling [did] not prevent the use of modern technology'.[112] Although this conclusion was disputed by several countries,[113] the use of modern hunting technologies has not been revisited.

The primary reason why member states abandoned any insistence upon the use of traditional hunting methods for ASW consideration was unpopularity of the often inhumane killing methods that these methods involve.[114] This has meant that the category 'traditional methods', formerly a useful indicator of aboriginal status, has been eliminated. Despite this movement within the IWC, some groups making applications for ASW consideration in the 1990s have done so seeking to revive certain traditional whaling practices.[115] Accordingly, it is possible that in the future, the IWC will have to decide which principle – humane killing, or traditional killing methods – it values more. As it stands, the IWC has made recommendations to pursue humane killing objectives over the preservation of traditional killing methods when these have involved pain levels which could easily be reduced.

5 ESTABLISHING NEED FOR ASW: NUTRITION, SUBSISTENCE AND CULTURE

The difficulty in defining the indigenous category for ASW purposes is highlighted when the three inter-related problems which lie at the root of most ASW applications are examined: nutrition, subsistence and culture. In the following pages I shall analyse these three issues as they relate to the *raison d'être* for the ASW exception, indigenous need.

Nutrition

The question of nutrition is one of the primary difficulties associated with managing ASW. The preamble of the ICRW stipulates that the IWC should safeguard 'whale stocks . . . as rapidly as possible, without causing widespread . . . nutritional distress'.[116] Signatories to the IWC were quick to realize this mandate in the early years of the convention, and Chile[117] and Japan[118] argued in favour of utilizing whales for food purposes, despite the fact that the quotas being set for the whales were far too high, and a number of the whale stocks were crashing.[119] Accordingly, when the issue of nutrition reappeared later in the ASW debate, it was not surprising that a number of signatories argued that greater attention should be paid to the question of nutrition.[120] This approach is broadly consistent with comparable international treaties on the conservation of wildlife. For example, a number of treaties pertaining to the protection of bird life contain specific exemptions for subsistence hunting for nutritional reasons.[121]

In the ASW debate, it has long been accepted that nutrition is a very important justification for indigenous whaling. Indigenous groups often have to prove that there are few other nutritional alternatives to whalemeat. This idea of alternatives was formulated during the proceedings of the 1979 Nutrition Panel, which examined the Eskimo request for the bowhead. The panel focused upon two considerations: the 'importance of the Bowhead in the traditional diet'; and the 'possible adverse effects of shifts to non-native foods . . . and acceptability of other food sources'.[122] This two-pronged approach has persisted, and has meant that applicants under the ASW category have been required to demonstrate nutritional need using either biological criteria (hunger and lack of nutritional alternatives), or social and psychological criteria (culture and poverty).

Nutrition as Determined by Biological Criteria: Hunger and Nutritional Alternatives

There have been only two examples of successful biologically justified nutritional claims for ASW consideration. The first of these came from Greenland, where it was argued that although a multi-species hunting strategy has been adopted, the nutritional needs of the indigenous people '[do] not easily permit the substitution of other species'.[123] As such, whalemeat is necessary to 'provide for the basis of existence'.[124] This claim 'clearly identified the significance of whale meat in the nutrition of Greenlanders . . . as a substantial part of the household diets in most communities'.[125]

The second example of a nutrition claim substantiated by biological need is that of the ASW hunt of the native population of Chukotka. In this instance,

'extreme natural conditions of the Asian Far North determine rigid and extremely specific specialization of food needs of the native population. Meat and blubber of marine mammals are basic food of the local population'.[126] It is suggested that this diet may also have a particular importance to the physiology of the indigenous peoples in this area. In this case, a lack of alternative food source is evident, thereby justifying a claim for ASW consideration based on biological need. Moreover, since the break-up of the Soviet Union, it has been suggested that the economic hardship imposed upon the Chukotka has increased exponentially. Thus: 'the present day food situation regarding indigenous people of eastern Chukotka is virtually disastrous, and under these hard conditions the harvest of the gray whale is, perhaps, the only way to help starving people'.[127] The impossibility of substitution of the whalemeat for other food sources and overt economic difficulties was underscored in 2002.[128]

The key point about both the Greenland and Chukotka examples is that hunger would result if these ASW claims were not satisfied. That is, there would appear to be few other alternative food sources available to these people. However, at least in the case of the Chukotka claim, the legitimacy of the pure biological need has been open to question. This questioning first occurred in 1962 when the countries who were then hunting the fully protected gray and right whales, were asked to make sure that they were only being consumed by aborigines on a local basis, as opposed to being used for 'human and animal food' generally.[129] The second, and more substantial, concern pertained to the former Soviet Union overtly manipulating the ASW system by directing large sections of the ASW harvest to state-owned farms to be used as feed in fox farming for fur.[130] The result of this was that 'humans got only crumbs from the total supply of whale skin, meat and blubber'.[131] However, by the late 1990s, the Russian Federation had assured the IWC that this practice had stopped.[132] Thus, 'all edible parts of Bowhead and Gray whales are for human consumption'.[133]

This incident was not just an example of a member state deliberately trying to undermine the objectives of the IWC. This is very problematic as people who are starving should never be allowed to go hungry if reasonable alternatives are available. Nevertheless, this justification should be used with caution. More importantly, it also demonstrated the possibility that the continued survival of the Chukotka people was not solely contingent upon the consumption of whalemeat. It would seem that only a small section of the Chukotka quota was originally used for human nutritional purposes. This issue was further highlighted when the Russian whaling ships ceased operations and alternative sources such as seal and reindeer were subsequently utilized for subsistence purposes.[134] This incident demonstrated that alternatives to whalemeat for subsistence purposes did in fact exist.

In the cases of many other failed nutrition-based ASW claims, it would appear that alternative food sources exist. In the case of the Arctic Eskimo, the Nutrition Panel concluded:

> Arctic Eskimos have no unusual nutritional requirements as a result of their long-time occupancy of the Arctic environment. Their nutritional needs can be met by either local subsistence foods or Western-type foods if appropriate food choices are made. Any risk to the survival of the bowhead whale [that] may be posed by the continuance of aboriginal whaling cannot be justified on nutritional grounds.[135]

When biological justifications for ASW are not forthcoming, a second set of psychological and social criteria may justify the request.

Nutrition as Determined by Psychological and Social Criteria: Culture and Poverty

Biological need criteria are stringent and very few ASW claimants have been able to satisfy them. It has also been the case that there is often a long historical break in the consumption of whalemeat prior to submission of an ASW application. Such a break usually indicates that other nutritional options have been available. The Japanese and the Makah requests have been cases in point.[136]

The psychological and social criteria centre on guidelines established by the Nutritional Panel in the Alaskan Eskimo claim to examine nutritional claims not only in biological terms, but also in terms of 'possible adverse effects of shifts to non-native foods . . . and [the] acceptability of other food sources'.[137] The application of this approach to the question of nutritional need is particularly attractive to ASW claimants who clearly have nutritional alternatives at their disposal. For example, the 'acceptability of other food sources' premise has been argued in the Japanese STCW proposals which suggest that nutritional need could be linked to the cultural importance of eating whalemeat.[138]

In terms of 'possible adverse effects of shifts to non-native foods', the Makah request followed closely an earlier ASW application from Greenland which contended that 'any deviation from present dietary requirements could risk introducing diseases of civilization'.[139] The Makah request built on this approach by attempting to illustrate the interactions of genetics, physiological processes, population characteristics, and a wide variety of nutrition-related diseases.[140] It was suggested that with the onset of colonialism and the replacement of the traditional diet with modern Western foods, the Makah, who were once largely dependent on a whalemeat diet, were now at greater risk from health problems than other sections in the national population.[141] Therefore, they contended that 'the re-introduction of whale products . . .

[could] produce dramatic results in the health of the Makah people'.[142] In 2002, it was added that the economic vulnerability of the tribe, combined with unreliable fishing meant that '[g]ray whales are a reliable resource that can offset subsistence pressures from other sources'.[143] Although this issue never came to a specific vote at the IWC due to block quotas effectively avoiding IWC consideration on the merits of each individual case, it is possible that it would not have been favourably received.

Another approach to interpreting 'possible adverse effects of shifts to non-native foods' came in the form of an ASW claim advanced by St Vincent and the Grenadines. Although the applicants originally suggested that their hunt was 'cultural rather than nutritional in character',[144] they later claimed: 'whale meat is a significant contribution to the diet of St. Vincent and the Grenadines . . . in a developing country any additional food source is important'.[145] A similar plea based on poverty was made in the Makah request where it was argued that 'the people now live in poverty and the whale meat will help their nutrition'.[146] In 2002, St Vincent and the Grenadines added that the agricultural limits of its island economies, food dependence on foreign sources (which are vulnerable to outside trade pressures) meant that food substitution on imported animal protein (that is, hunting whales) should be pursued.[147] This aspect of 'need' proved controversial in 1999 and 2002. However, due to the overlapping politics relating to the other ASW claims, it was not pursued, and the quota actually rose from two to four whales.

At this point, it should be apparent that there are very different views on how nutritional needs may be satisfied and how the need for ASW exceptions is very difficult to establish. Arguably, the question of biological need and the possible availability of physical alternatives is a relatively straightforward one. However, the justification of nutrition in terms of social or psychological need, and in terms of the cultural importance of whalemeat is far from a simple matter.

I shall further address the question of the psychological, social and cultural need approach to the nutrition question in Section 7. However, with regard to the social need approach, I conclude that such an avenue may provide an open door for claims from almost any group occupying a lower socioeconomic position. Moreover, given that the IWC does not have a mechanism by which all the signatories can evaluate economic status of applicant groups, psychological, social and cultural need-based claim evaluation could become a very arbitrary process. In addition, claims of low socioeconomic status do not even address the possibility of alternative food supplies. Rather, claimants rely on the unproven assumption that low economic status means no alternative food sources. Finally, even if there is a connection between socioeconomic status and the availability of food alternatives, that in itself does not necessarily imply that relief from such a situation is the responsibility of the IWC, as

opposed to national governments. Member states have raised this point in IWC practice.

6 SUBSISTENCE WITHIN THE FRAMEWORK OF ASW

Subsistence has proved to be an important term in the discourse surrounding ASW. It was defined by the 1980 Cultural Anthropology Panel as: 'the personal consumption of whale products for food, fuel, shelter, clothing, tools, or transportation by participants in the whale harvest'.[148] This definition has subsequently been interpreted to mean two things: first, that ASW hunts must be non-commercial, and second, that they must be local in orientation.

The Non-commercial Nature of ASW

It has not been unusual for indigenous exceptions in international environmental law to contain stipulations that hunts must be non-commercial in nature. These caveats began with the 1911 Convention for the Preservation and Protection of Fur Seals[149] which provides an exception for certain indigenous people provided 'that such aborigines are not in the employment of other persons or under contract to deliver the skins to any person'.[150] Likewise, the 1931 CRW stipulated that whaling by indigenous people would be allowed only if 'they are not in the employment of persons other than aborigines . . . [and] they are not under contract to deliver the products of their whaling to any third person'.[151] Similar restrictions have been applied to polar bear,[152] seal,[153] bird[154] and Caribou[155] hunting.

More recently, this insistence on the non-commercial nature of the hunt within the IWC has been emphasized because of continued concern over threatened stocks, and the possibility that the current moratorium may be eroded if a commercial element were introduced into ASW. Accordingly, most ASW applications have sought to exclude all commercial elements from their requests to hunt, or at the very least minimize them.[156]

In contrast, the Japanese proposals have been open about the fact that their hunts have contained some 'commercial elements, and [have] had for hundreds of years'.[157] The Japanese argue that 'a significant proportion of the products is distributed through non-commercial channels including gifting throughout many elements of the community . . . the activity . . . is not totally market orientated'.[158] Nevertheless, they have admitted that the commercial element was important for both economic and cultural reasons.[159] Since the late 1980s, Japan has continually tried to refine the commercial aspects of this hunt, going so far as to 'give formal assurances that the meat of Minke whales to be taken within the framework of community-based whaling shall not

become the object of any commercial distribution but rather [shall be used] exclusively for subsistence purposes'.[160]

However, the action plans that were later presented by Japan to the IWC have been repeatedly refused because of continuing concern that 'not all commercial elements [have] been eliminated'.[161] In other words, the IWC continued to believe that such an approach could undermine the overall moratorium on commercial whaling.[162] Nevertheless, the IWC has reaffirmed its commitment to work expeditiously to alleviate the distress caused by the cessation of minke whaling to the four Japanese STCW communities.[163]

This issue became prominent in 2002 when Japan tried to link its STCW claim to the joint bowhead ASW quota for Russia and the United States. When this attempt failed, it facilitated the failure of the acceptance of the bowhead quota. According to the Japanese IWC commissioner, the justification for this was that: 'Every year the US votes against Japan's small type coastal whalers' request for a relief quota of 50 minke whales . . . [Japan could no longer tolerate the] hypocrisy'.[164] When this issue was revisited at the special meeting in late 2002, Japan put forward a new resolution, tied to a new action plan with a view for the commission to look favourably on such a request at the next annual meeting in 2003.[165] However, other countries remained concerned about the implicit attempt to bind future IWC meetings on this. Accordingly, although it was accepted that this resolution was better than some of the earlier ones (due to a promise to act in accordance with the SC's recommendations) it was still felt that the claim did not fit within the overall ASW rubric.[166] Likewise, when Japan presented its proposals in 2003 for a take of 150 Bryde's whales from the western stock of the North Pacific[167] and 150 minke whales from the Okhotsk Sea,[168] both were defeated.

The Utilization of Whales on a Local Scale

The political importance of confining the ASW hunt to a local scale was first highlighted in 1959 by the technical committee, which suggested:

> Local consumption is to be interpreted as meaning that the meat is to be consumed in the country in which the relevant land station or land stations are located, and is not to be exported.[169]

Five years later, the United States sought to nail this issue down even further due to a fear that the ASW exception could become a loophole for commercial whaling. The schedule was amended to state that 'such whales [were] to be used exclusively for local consumption by aborigines'.[170] This decision was advanced 15 years later by the Cultural Anthropology Panel which stated that 'the meat and products of such whales are to be used exclusively for local

consumption by the aborigines'. The panel went even further and advanced a definition of what it considered to be local. It defined local use as 'the barter, trade, or sharing of whale products in their harvested form with relatives of the participants in the harvest, with others in the local community or with persons in locations other than the local community with whom local residents share familial, social, cultural, or economic ties'.[171]

Although this definition appears quite clear, in practice the panel's definition has been expanded to include utilization of the whales caught under ASW auspices in international, national, and regional contexts. Indeed, with the possible exception of the Makah request,[172] the meaning of a strictly local distribution remains far from clear. Thus, as the United States suggested in 1982, 'the local consumption provision now serves as a margin of error'.[173]

An attempt at expanding the definition of local to include the international arena would appear to create something of a contradiction in terms. This point was illustrated by the request by St Vincent and the Grenadines for an ASW quota. Despite earlier stipulations that its ASW quota would be 'exclusively for local consumption in St Vincent and the Grenadines',[174] evidence subsequently emerged which suggested that its local quota of humpback whales could have formed part of the island's international trade. This potential loophole in the definition of local may have resulted from the reservations entered with CITES by St Vincent and the Grenadines.[175] These reservations may have allowed the islands to trade in those whale products obtained through the ASW exemption. Unsurprisingly, the islands were the subject of a swift rebuke from the IWC.[176]

Although the IWC clearly recognized St Vincent and the Grenadines' linkage to the international market as illegitimate, there were also other questionable uses of the term 'local' by Greenland, Alaska and the St Vincent and the Grenadines applications.[177] With regard to the American exception whalemeat has allegedly been transported from the small communities where it was caught to food stores in Anchorage many miles away. Such a practice would appear closer to regional, rather than local, utilization.[178] This problem has become particularly highlighted with the Greenland example, which has been the subject of investigation since the mid-1980s.[179] Indeed, it would appear that Greenland[180] in 2002, this concern was expanded when it was revealed that some whale products (up to 8 tons) were being transferred between Greenland and Denmark. These products were being sent to students from Greenland residing in Denmark or Greenlanders undergoing treatment in Danish hospitals. This practice could become problematic for, as the UK pointed out, this process could in theory allow the export of whale products from Greenland to Greenlanders living anywhere in the world. Indeed, no sooner had Greenland's explanation of this process been explained, than it was added that the option of 'moving whalemeat' around the Caribbean to Bequians who no longer live on St Vincent and the Grenadines (where the hunt

is permitted) was being examined.[181] This problem reappeared in 2003, when the UK pointed out that Denmark also appeared to be involved in the export of 3,500 carved sperm whale teeth for commercial purposes between 1983 and 2001.[182]

This expansion of the concept of local to include what appear to be national or large regional distributions is not in accordance with other IWC stipulations with regard to the Japanese STCW application. This application emphasized the Japanese intention to keep the distribution process 'small scale and locally centered'[183] so that there would be 'negligible non-local distribution of minke whale meat'.[184] Nevertheless, the IWC was of the opinion that the Japanese interpretation of local distribution was both qualitatively different and based on a much larger scale than other ASW cases on the grounds that the whale-meat was to be 'sold commercially and [would enter] complex wholesale and retail chains at inter-regional and national level'.[185]

The above considerations indicate that the IWC may be acting inconsistently in the way it calculates the importance of the local utilization of the whales caught under the ASW category. Although the IWC has been clear on the question of international trade in ASW-obtained products, it has not been consistent in its treatment of national or regional trade. That is, the IWC drew a relatively straight line by refusing the Japanese STCW request because it was linked to both national and regional networks. Conversely, with the applications from Greenland, Alaska, and St Vincent and the Grenadines, the question of regional or national distribution networks does not appear to have been critically examined.

7 CULTURE AND THE ASW DEBATE

Culture and International Society

Culture is one of the most basic elements of social order.[186] A useful definition of culture was provided by the 1982 Mexico City Declaration on Cultural Policies which stated that culture is 'the whole complex of distinctive spiritual, material, intellectual, and emotional features that characterize a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs'.[187]

The notion of respect for cultural particularism has been an ideational feature of treaties among European powers since the Peace of Westphalia in 1648.[188] The recognition accorded culture continued in an inconsistent manner until the Second World War, when overt efforts were made to eradicate cultures deemed offensive.[189] Since then, a number of anthropologists

and philosophers have argued in favour of the importance of preserving diverse cultures, especially in the face of the worst kinds of direct threats such as racial hatred,[190] and the often indirect threat posed by development and globalization.[191] These arguments have been addressed in part by national and international laws designed to assist discrete cultures in surviving as distinct cultural entities. Accordingly, there are a number of human rights instruments containing provisions that seek to protect rights of cultural integrity and the desire to pursue pluralistic societies.[192] As such, the protection of cultural rights has become recognized by many (in theory, if not practice) in international law and policy.[193]

More specifically, it has become widely recognized (although it is not entrenched) in international policy that the culture of indigenous people is to be protected. For example, the 1994 United Nations Draft Declaration on the Rights of Aboriginal People states: 'indigenous people have the right to maintain and strengthen their distinct political, economic, social and cultural characteristics'.[194]

Culture and International Environmental Law

The interrelationship between culture and the environment is well established in both Western and non-Western traditions.[195] It is also a notion which often forms part of the discourse surrounding indigenous peoples.[196] Against this background, it should not be surprising that a number of international conferences and commissions have made note of the significance of the relationship between culture and environmental protection.[197]

This relationship has also been recognized in a number of international environmental laws. For example, the preamble to the Convention on International Trade in Endangered Species of Fauna and Flora refers to 'the ever growing value of wild fauna and flora from . . . cultural points of view'.[198] This concept is also reflected in the Convention on Wetlands of International Importance (RAMSAR),[199] the CMS,[200] the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere,[201] the 1975 South Pacific Conference on National Parks and Reserves,[202] and the 1982 Declaration of the World National Parks Congress.[203] In particular, the preamble of the World Heritage Convention states that 'the deterioration or disappearance of any item of cultural or natural heritage constitutes a harmful impoverishment to all nations of the world'.[204] Consequently, the signatories to this convention recognized the importance of preserving 'exceptional combinations of natural and cultural elements'.[205] Moreover, since 1992, the importance of linking sustainable practices and the rights of indigenous peoples has been advocated in a number of international documents, such as the CBD[206] and the RAMSAR.[207] Finally, in 2002 the WSSDO recognized

that the 'respect for cultural diversity' and the 'vital role of indigenous peoples' were both essential elements of sustainable development. Accordingly, they concluded it was necessary to:

> Develop policies and ways and means to improve access by indigenous people and their communities to economic activities . . . [and] . . . Recognize that traditional and direct dependence on renewable resources and ecosystems, including sustainable harvesting, continues to be essential to the cultural, economic and physical well-being of indigenous people and their communities.[208]

Culture and the IWC

The IWC has clearly recognized the importance of culture in the debate surrounding ASW. The contemporary interest in culture at the IWC began in preparation for the 1979 bowhead whale debate, when the IWC requested that the Cultural Panel analyse 'the cultural activities and cultural identity of the aboriginal people and the relationship of this harvest to their well-being'.[209] In response to this request, the report of the Cultural Anthropology Panel concluded that the AWS hunt was of 'vital importance'.[210] Specifically, the panel reported:

> [W]haling and associated activities [are] perhaps the most important single element in the culture and society of north Alaskan whale hunting communities. It provides a focus for the ordering of social integration, political leadership, ceremonial activity, traditional education, personality values, and Eskimo identity . . . the position of whaling as a pivotal, cultural activity and the extremely high valuation placed on bowhead whale products as food makes such replacement impossible.[211]

The cultural importance of hunting whales has also been argued strongly by other ASW applicants. A particularly forceful argument has been made in relation to the Japanese request for minke for their small coastal communities. The Japanese have contended that this take would be 'intended primarily to meet direct cultural needs'.[212] They have claimed that these cultural needs have derived from 'centuries of tradition'[213] that allegedly[214] date back to the Middle Ages.[215] Moreover, the hunt has been regarded as having 'a socio-religious basis'[216] linked to the Japanese practices of both Buddhist and Shinto religious rituals and ceremonies.[217] This practice also apparently ties into a number of secular festivals and practices, such as the localized ritual of sharing and distributing the whalemeat.[218] Japanese concerns have been clearly recognized by the IWC, which noted that: 'the cessation of Minke whaling in these communities has affected individuals economically, socially, spiritually and culturally, in a manner that threatens the vitality and viability of the communities'.[219]

In Greenland, 'the widespread sharing and exchange of whale products that

reinforce Inuit identity and promote social cohesion in an unsettled and rapidly changing world . . . whalemeat . . . [is] central to kin-based practices of sharing and . . . [binds] hunters, extended families, and communities together. Whales also figured predominantly in Greenlandic spiritual life'.[220] In the case of the Chukotka, the 'ceremonial and cultural'[221] needs of whaling have derived from a very long tradition, which assists social cohesion, sharing, respect and the support of traditional non-commercial values.[222] Within this tradition, there is allegedly an 'ancient cultural relationship . . . [with] the bowhead whale'[223] which has: 'culturally important differences . . . from the Gray whale'.[224] This relationship has involved a 'whale festival', considered to be the 'single most important yearly event in the cultural life of the tribe'.[225] As such, '[bowhead] whaling . . . is . . . extremely important [in terms of its] economic, social and cultural consequences'.[226]

The ASW hunt by St Vincent and the Grenadines has always been recognized as 'cultural rather than nutritional in character'.[227] The cultural content is allegedly found in the 'great excitement' caused by the hunt, which is a 'cherished segment of West Indian Heritage'.[228] This may be because 'the people of Bequia, including their relatives, share in the take'[229] or, perhaps, because the process is associated with folk tales, chants and a large ceremony to celebrate and distribute the whale products.[230]

Finally, in seeking to justify the Makah hunt, it was suggested in the supporting documentation to the request that 'whaling . . . has been of central importance to their culture'.[231] This importance is said to be due to the fact that: 'whale hunting and its associated components have important ceremonial and social functions for the Makah community. . . . Elders and anthropologists trace the decline of the social and physical health of the tribe to the elimination of the whale hunt and its associated ceremonial and social rigors'.[232]

It should be apparent from the above contentions that the role of culture has been broadly valued in international society. Moreover, lately the importance of the supposed beneficial link between culture and environmental protection has become pronounced in international environmental law.[233] In a similar vein, within the IWC, the importance of culture has also been recognized. However, this cultural focus has largely been placed upon the importance of the lethal utilization of whales to indigenous cultures, as opposed to the non-lethal utilization of whales, which is favoured by many non-indigenous cultures,[234] as well as some indigenous ones. This point was clearly made at the 52nd meeting of the IWC in Adelaide in 2000. At this meeting, Sandra Lee, the then leader of the New Zealand delegation explained:

> I stand here today, as the Minister of Conservation of the Government of New Zealand, and the Associate Minister of Maori Affairs, and also as an indigenous person of the South Pacific, a Maori from Aotearoa New Zealand . . .
>
> Maori people had benign contact with whales for more than a thousand years of

> coastal and ocean-going travel before European colonization. All whales, but especially sperm whales were regarded as chiefly figures of the ocean realm. High ranking Maori were often praised and revered by being likened to whales and indeed, some Iwi tribes acknowledge that their descent comes down from ancestor whales.
>
> Whales also served as guardians during my people's long voyages of discovery throughout Polynesia. My own tribe, from the great canoe Takitimu, hold that a guardian whale accompanied my ancestors to our new homeland in Aotearoa. . . . The Guardian remained with us and became the revered ancestor of my people.[235]

With such considerations in mind, it is not surprising that cetaceans were (and remain) commonly recognized as *taonga* (or treasure). Moreover, given such importance and perhaps reverence of cetaceans, it appears that prior to contact with Europeans, Maori did not hunt large whales.[236] Thus, as Sandra Lee explained at the IWC:

> I have observed with interest the comments made by a number of delegations of historical traditional relationships many indigenous peoples have with whales. I would point out however, that many traditional relationships for my people are not simply based on the linear argument of harvesting whales.[237]

This point should not be seen to suggest that the cultural importance of hunting whales is not important to some cultures, but rather, that to many other cultures, not hunting whales is equally important. This being so, the philosophical question may need to be asked of why one cultural importance is valued more highly than the other.

Universalism, Culture and International Society

Just as international law and policy has come to recognize the importance of cultural rights, it has become equally clear that not all cultures are of equal merit (that is, discriminatory cultures) and they may not be worthy of enhancement. Evidence of this may be seen in the common objective of international policy which has been to achieve a universal standard of ethics.[238] Consequently, although cultural 'pluralism' is generally recognized as important for both national and international society, 'ethical relativism' – whereby each culture is deemed legitimate and equal and which has been the usual corollary to cultural pluralism – has been steadfastly avoided.[239] This debate has been the subject of extensive discourse within the field of international human rights law.[240] In this regard, anthropologists, sociologists and philosophers from the schools of phenomenology, cultural anthropology, structuralism and critical theory have continued to clash for over fifty years over what exactly constitutes culture, and what should or should not be protected in the name of culture.[241]

Many of the criticisms that have emerged from such debates have effectively undermined earlier anthropological ideas with regard to culture.[242] The

distinctive nature of culture gives rise to a whole series of problems for the universalist seeking to reconcile cultural relativism and unified policy. The internal consistency or inconsistency of cultural values and norms, internal dissent from the dominant modes of thinking and the particularly vexatious issue of cultural isolation[243] all provide obstacles in the creation of unified approaches to the treatment of culture under international environmental law.

The Limits of Culture in International Environmental Law

Arguably, it is a mistake to suggest that all culture should be protected because of its link to environmental concerns; although cultural considerations can be used to protect the environment, they can also be used to justify its exploitation. In such situations, it could be unwise to assume automatically that the cultural right should be protected. For example, a large amount of climate change is caused by the United States, and a substantial fraction of this contribution may be linked to the excessive culture of over-consumption that North Americans (and many other industrialized countries) would seem to possess.[244] However, few would suggest that this cultural practice should be preserved, irrespective of its external costs.

In a similar way, cultural culinary delicacies have meant that both Asiatic and North American black bears and a number of species of sea turtles have been taken to such an extent that they are now endangered. Through the fashion industry, tigers, ocelots, sea and giant otters, black bears, crocodiles, alligators and caymans, lizards and snakes have all been taken for their skins. Vicunas have been taken for their highly prized wool; elephants for their ivory to be made into jewellery. Parrots and raptors have been taken as pets. Tigers, musk deer, black bears and the rhino[245] have all been taken for use in folk medicine, which in turn derives its justification from cultural bases.[246]

The idea that all traditional cultures generally are environmentally benign is misplaced. This notion has been directly challenged by a combination of numerous historical records and contemporary practices which, when combined, have revealed that in a number of instances indigenous cultures have been the antithesis of environmental sustainability.[247] This assertion has been linked with the whaling practices of the indigenous peoples of Greenland.[248] This is not to suggest that indigenous communities should never be regarded as exemplars of environmental sustainability. Rather, the point is that no generic claims should be made which suggest that all indigenous cultures are environmentally benign. Any claims that the protection of culture should automatically take precedence over environmental concerns should always be questioned, irrespective of which culture is at hand.

Questioning Culture within the IWC

Given that the debate surrounding the notion of culture has been such a problematic area, it should not be surprising that the IWC has largely tried to sidestep the issue in its deliberations.[249] The function of the IWC has been to regulate the catching of cetaceans, not to affect the focus of anthropological discourse. This lack of expertise, particularly with regard to issues of culture, has led to the suggestion that the IWC 'would find it most helpful if the [Cultural Anthropology] panel might propose objective criteria, if any exist, to measure the importance of the hunt to the culture'.[250]

However, the Cultural Anthropology Panel has been unable to offer more than a few broad objective markers to the IWC. Instead, the panel provided a detailed examination of the application for the Alaskan Eskimo hunt that came before the Commission and which contained two important points. The first point was that 'the complex of whaling and associated activities is perhaps the most important single element in [Eskimo] culture and society'.[251] The second related to the breakdown of Eskimo society and referred to issues such as violence, drug abuse and alcohol dependence, suicide and so on, and which was traced to the changing nature of modern Eskimo society. In contrast, according to the panel, 'smaller native communities' which continued to hunt the most highly valued animals were believed to represent 'the most rewarding . . . preferred mode of living'.[252] Accordingly, the panel concluded that if the ability to hunt was removed altogether it would have 'a significant impact on the culture of these whaling communities'.[253]

Within the IWC the definition of culture has proved to be largely elusive and only two broad markers have been laid to date. The first is that the act of whaling must be central to the culture, as in the Alaskan Inuit example in which the hunt was 'the single most important event'.[254] The second is that the loss of the practice would be likely to have a significant detrimental impact upon the society in question. Unfortunately, these two broad markers have left a number of questions unanswered and a number of ambiguities have consequently resulted.

Culture as an Unbroken and Established Practice: The Problem of New Traditions

Cultural traditions are typically recognized as such if they have been both long-standing and unbroken. With regard to ASW, some claimants have unbroken hunting traditions dating as far back as 8,000,[255] 4,000,[256] 2,500[257] or 1,500 years.[258] It is very odd to think that a figure, for example the length of time that a practice has been utilized, should play a part in the determination of whether a cultural practice is legitimate or not. However, such a proposition

may be necessary in the cases of some of the more recent ASW applications, such as that submitted by St Vincent and the Grenadines.

St Vincent and the Grenadines currently argues that its hunt is culturally important despite previous claims that it '[did] not wish to encourage its continuation'.[259] At that time, St Vincent and the Grenadines argued that no proactive measures to end whaling were necessary, as 'the phasing out of whaling would take place naturally as the single harpooner was 67 years of age'.[260] Moreover, it claimed that 'no young people [were] interested in continuing the tradition'.[261] However, over time, St Vincent and the Grenadines has changed its approach and has come to argue that the ASW hunt is culturally important and as such should be preserved.

Apart from the curious nature of the cultural importance that has suddenly been attached to a hunt that was of no interest to anyone ten years previously, is the equally vexing question of the nature of the hunt they were seeking to protect for cultural reasons. That is, the St Vincent and the Grenadines ASW claim for large whales[262] has a history of only about 150 years and the hunt derives from 'the Yankee whaling technique'[263] when local seamen enlisted (in 1860) aboard such whalers.[264] When New Zealand asked in 2002 how this contemporary claim based on a relatively recent tradition reflected traditional indigenous practices, the retort was effectively that the question was inappropriate, and that reminding Caribbean countries of their history of slavery and colonialism should be cautioned against.[265]

Despite the attempt to deflect this issue in 2002, the question of a learned colonial practice, adopted by predominantly non-indigenous people, is something which deserved serious consideration. If it is suggested that such practices should be preserved, then a distinct problem may arise as the ASW exception may come to mean nothing more than one whereby any people who worked on whaling ships in colonial times should still be allowed to go whaling on the grounds that it is their cultural tradition. Although this may be a cultural tradition of sorts, it leads to the as yet unanswered question of whether it is desirable that colonial, any more than commercial or aboriginal whaling, should be preserved as a cultural practice.

Culture as an Unbroken and Established Practice: The Problem of Revitalization

Similar to the problem of new cultural traditions in whaling is the difficulty of the revitalization of cultures that used to hunt whale. These claims have been made by peoples who were once whalers but who subsequently either totally stopped whaling or stopped whaling those species that they once considered to be culturally important. For example, the Chukotka have attempted to re-establish their 'ancient cultural relationship . . . [with] the bowhead whale'[266]

– which had been 'greatly interferred with' by the former Soviet Union.[267] This was in spite of the fact that 'many . . . [had] never tasted whale meat'.[268] Their request was in part an attempt to 'repair [their] damaged culture'.[269] Similarly, the Makah have also attempted to 'foster cultural revitalisation'[270] of a practice which had not been carried out for over 70 years.[271] Similarly, at least one Alaskan community stopped whaling in 1937 but restarted the practice in 1993.[272]

This problem of cultural revitalization is particularly problematic for two reasons. First, it has not been considered a sufficient justification under the original ASW applications. However, by retrospectively stretching the precept advanced by the Cultural Anthropology Panel that the loss of the whaling practice did (as opposed to was likely to) have a significant detrimental impact upon previously whaling indigenous cultures, it could then be suggested that revitalization could be a sufficient justification.

A second, greater problem presents itself, however, even if one accepts this reworking of the cultural justification. This is that the IWC may be held if not responsible, then at least liable (in terms of being able to partly rectify the problem) for damage done to indigenous cultures as a result of the cumulative impact of colonialism. However, as the next subsection will attempt to demonstrate, this is a responsibility the IWC has already declined to accept in a slightly different setting, with regard to the social (and economic) costs of reducing commercial whaling that may have social consequences within individual countries.

The Limits of Cultural Responsibility within the IWC

The IWC appears to be drawn into an increasingly difficult and slippery debate, in which it is not only being asked to protect relatively newly established cultures (such as that presented by the St Vincent and the Grenadines claim) and re-emerging cultural claims (such as the Makah claim) but also claims in which a strong part of the justification for ASW is that the whaling group was damaged by the cessation of whaling and other activities associated with colonialism. However, the extent to which the IWC is obliged to recognize this last concern is a matter of debate. Indeed, the IWC has already dealt with this issue on a number of occasions, and in such instances, has declined to make recommendations that would relieve the cultural or economic hardship.

The first time this approach was seen was in the early 1960s when the former whaling countries, New Zealand, Australia[273] and Canada,[274] as well as the still whaling countries, the USSR and Japan,[275] all argued that the then necessary and proposed stronger conservation measures were unacceptable because of the economic damage they would cause to the whaling industry.

Their objections extended to the resultant social cost that heightened restrictions on whaling would involve. However, despite the social and economic costs imposed on these countries, eventually the dwindling stocks received the protection they needed.

A more powerful example of this approach appeared in the 1980s, when the issue of the social cost of not whaling arose for Japanese coastal communities. From that point forward, Japan claimed: 'the cessation of these [commercial whaling] operations has caused hardship to the affected communities in the form of socio-cultural, dietary, religious, occupational and psychological stresses'.[276]

This contention was supported by detailed studies of the socioeconomic implications on countries that used to rely upon whaling[277] – before the commercial moratorium was imposed. With such concerns in mind, the Japanese presented their plan for STCW and they have repeatedly asked for an interim relief from restrictions on whaling to help alleviate the alleged social problems that resulted from the cessation of whaling. In response to these demands, a working group was established to examine the problem.[278] This group subsequently acknowledged that: 'some of the socio-economic effects [were] serious'. Nevertheless, it concluded ultimately:

> Governments at times have to take painful actions that affect their citizens. While these decisions are painful . . . it is the responsibility of the government to take mitigating actions. Though governments can successfully take actions to mitigate change, some are permanent and cannot be remedied. Under such conditions no consequences of government action can prevent or reverse changes to certain cultural, traditional and religious lifestyles.[279]

The IWC reiterated this conclusion in its reports for 1990[280] and 1991.[281] As such, the overall approach adopted by the IWC has been one whereby if hardships resulted from the Commission's actions, it would not necessarily be the responsibility of the IWC to alleviate them. This approach has continued despite a wide variety of problems experienced by cultures damaged since the onset of colonialism. Ironically, however, although the IWC has recognized that dealing with the social consequences of the commercial moratorium was the responsibility of national governments, it has not necessarily adopted this approach in relation to ASW.

8 EXISTING LIMITATIONS ON INDIGENOUS CULTURE WITHIN THE IWC

In spite of social cost, the IWC has placed distinct limitations upon the ASW category in three distinct areas: the type of prey that may be hunted (in terms

of its age and sex); the method by which it may be killed (in terms of humane considerations); and the overall level of the endangered status of the species of cetacean in question.

Sex and Age

The IWC has explicitly limited the prey that indigenous people may hunt by specifying which whales may or may not be hunted within a species. This prohibition on hunting dates back to the 1931 CRW which forbade any hunting of calves or suckling whales, immature whales, or female whales which were accompanied by calves.[282] The IWC has continued to impose similar restrictions in subsequent years,[283] in spite of the fact that specific prohibited prey may have long been the preferred choice of the indigenous people claiming the ASW quota. The examples of the Chukotka,[284] as well as St Vincent and the Grenadines, in which a long list of infractions has developed,[285] are cases in point.

The second area where progress has been made in moving away from traditional hunting practices has been with the development of humane killing alternatives. As discussed in Chapter 6, a distinct evolution has occurred in this area, as traditional practices have largely been left behind.

Endangered Species Generally

Although there is no specific law stating that all species which are endangered must be preserved, it is arguable that such a mandate is part of customary international environmental law. Although a large corpus of international treaties exists in support of this contention, there are only a few which deal with the overlap between the protection of endangered species and the taking of such species for indigenous needs. Examples of this overlap, where indigenous rights are only recognized up to the point of sustainable practices, may be found in the CMS,[286] the Berne Convention on the Conservation of European Wildlife and Natural Habitats,[287] the Protocol Concerning Protected Areas of Wild Fauna and Flora in the Eastern African Region,[288] and the 1990 Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region.[289] The 1974 Agreement for the Protection of Migratory Birds and Birds in Danger of Extinction[290] and the Agreement on the Conservation of African-Eurasian Migratory Waterbirds,[291] both allow exceptions for indigenous peoples, but only providing that their practices are sustainable. The 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles[292] has the same approach.

Endangered Species of Whales

The above limitations ensure that indigenous needs do not drive a species towards extinction, but the IWC has been slow to adopt such rules. Quite clearly, the IWC has allowed takes in the past against scientific advice, and has given quotas from stocks as to which there has been manifest uncertainty regarding status. Although this may now be a largely historical issue, it none the less provides another clear example of limitations being imposed upon indigenous practices.

It is now implicit in the ASW exception that cultural and subsistence whaling has to be 'consistent with effective conservation of whale stocks'.[293] Therefore, since the objective has been to 'enable aboriginal people to harvest whales in perpetuity', it has been necessary 'to ensure that the risks of extinction to individual stocks are not seriously increased by aboriginal whaling'.[294] Accordingly, the 1994 technical review[295] of ASW guidelines stipulated that 'highest priority shall be accorded to the objective of ensuring that the risk[s] of extinction to individual stocks are not seriously increased by subsistence whaling'.[296] These have been followed through into the AWMP. Secondary considerations following the primary consideration that the risk of extinction must not be seriously increased are to enable the communities to harvest whales in perpetuity appropriate to their cultural and nutritional requirements, and to maintain and improve the status of the stocks, seeking to give the highest recruitment level.[297]

This problem has arisen because many of the stocks that indigenous people wish to hunt are currently below the level of maximum sustainable yield (MSY).[298] This is primarily due to overexploitation caused by commercial whalers in earlier times. In an attempt to rectify this problem, catch levels are currently set in an attempt to help raise or maintain stock levels at or around the MSY level. Accordingly, the SC advises on both the rate of increase towards an MSY level and the recommended minimum stock levels below which no whale hunting should be permitted.[299]

As discussed in Chapter 2, whale stocks below the MSY levels have not been of particular concern in the recent hunts involving St Vincent and the Grenadines,[300] the Makah hunt,[301] and the indigenous people of Russia.[302] Nor has Japan's STCW proposal presented MYS level conflicts.[303] In contrast, the threats to extinction rendered to certain species of whale by ASW hunts in the United States and Greenland have been very serious. This was especially so with the Alaskan Inuit hunt of various bowhead whale stocks, and the West Greenland takes of humpback, fin and West Greenland minke, which have all operated in an area of extreme stock uncertainty.

9 CONCLUSION

With regard to ASW, there are six substantive issues that may need to be addressed.

First, a broad procedural issue is that when ASW applications are presented to the IWC, it should be considered essential that the ASWSC is regarded as being the legitimate mechanism within the IWC to examine, and make the first recommendations on the merits of each individual ASW application. However, with the utilization of the block quota (through which individual claims are impossible to separate), and the eventual removal of the language of the recognition of individual claims in 2004, this area is becoming increasingly difficult to disentangle.

The second issue that needs to be addressed concerns the definition of indigenous peoples within international law and policy which may be in need of an overall re-examination. Within the IWC, it would be useful to have a fixed definition of exactly which groups are to be regarded as being 'indigenous' or 'aboriginal' people. This is necessary, as not only are IWC signatories dealing with a concept which has much broader political implications (both nationally and internationally), it is also possible that some signatories are employing definitions that they consider to be axiomatic but which are, in actual fact, different from those used by other signatories.

An agreed definition of indigenous people would help exclude the applications that would not fit within the ASW category. It would also be a useful tool in justifiably distinguishing between the claims of competing groups that may possess similar characteristics.

Contemporary practice within both international environmental law and the practice of the IWC, whereby signatories effectively nominate those whom they consider to be indigenous, may not be applicable in relation to the issue of whaling. Unlike other contemporary examples, such as biodiversity, the signatories are effectively dealing with a consideration which has supra-sovereign considerations. As such, the definition of indigenous peoples should be decided collectively.

The third area of concern focuses upon the utilization of traditional killing methods. For a long time, one of the methods which has been utilized with regard to ASW, or in other settings of international environmental law, has been the identification of indigenous people by their use of traditional hunting practices. However, the IWC abandoned this approach because of the often 'inhumane' killing methods that these practices involved. Despite this movement within the IWC, some ASW applications in the 1990s have sought, in part, to revive their 'traditional' methods. At this point, the IWC may wish to consider which approach is more valuable.

Nutritional need and local utilization comprise the fourth area of contention that may need to be examined. The central caveat with regard to the ASW exemption is that it must have a strongly non-commercial nature. To achieve this overall goal, two further caveats have been added: the take must be necessary for nutritional needs, and the take must be utilized locally. Although these secondary caveats appear straightforward, both have become problematic. With regard to the definition of nutritional need, a difficulty has arisen as the category has devolved into two separate meanings, centred on biological versus cultural parameters. The first, based upon simple biological need where there are no alternative food sources available is certainly more straightforward than the cultural need category. However, only two ASW claims (Greenland and Chukotka) have been able to successfully substantiate a claim using the biological need criteria.

A cultural approach to nutritional need, in which nutrition is considered in terms of social need (in terms of poverty) or psychological need (in terms of the cultural importance of eating whalemeat), carries with it implications that are far from clear. This category may provide an open door for any claimant group that is regarded as occupying a lower socioeconomic position. Moreover, given that the IWC does not have an accepted mechanism by which all the signatories can agree on whether an ASW applicant is poor, it could become a very arbitrary classification. In addition, the claim of lower socioeconomic status does not even address the possibility of alternative food supplies. Rather, it works on the unproven assumption that economic status, by presumption, proves that no alternatives exist. Finally, even if there is a connection between lower socioeconomic status and lack of alternatives, that in itself does not necessitate that relief is the responsibility of the IWC, as opposed to national governments.

The second important caveat for ASW is that the whale must be utilized locally. With regard to this consideration, the IWC has acted in an inconsistent manner. Although the IWC has been direct on the question of international considerations (which are clearly not local) in this category, it has not been consistent with regard to that of national or regional ones. In other words, the IWC has drawn a relatively straight line under the Japanese application for small-type coastal whaling which was (in part) refused because of a distribution linkage to both national and regional networks. Conversely, with the applications from Greenland, Alaska, and St Vincent and the Grenadines, the question of regional or national distribution networks does not appear to have been critically examined.

The fifth difficulty concerns the way the concept of culture is dealt with. Culture is broadly valued in international society. Moreover, of late, the importance of the link between culture and environmental protection has become pronounced in international environmental law. Within the IWC, the

importance of culture has also been recognized. However, this recognition has largely focused upon the importance of hunting whales to indigenous cultures as opposed to the preservation of the whales. This is a conceptually different argument from that linking culture and environmental protection. It is also in contra-distinction to many cultures who do wish whales to be utilized in lethal ways, but have not been privileged in the same way.

With regard to the cultures that may merit assistance under the ASW category, it would be useful for the IWC to have an accepted definition of culture. This is necessary as, to date, only two broad markers have been laid. However, these have left a number of questions unanswered, and a number of ambiguities have resulted. The first marker has been that the act of whaling must be central to the core of a culture (or in the Alaskan Inuit example, the 'single most important event'). The second has been that the loss of this practice would likely have a significant detrimental impact upon such societies.

Also, within the consideration of the broad 'cultural' question, it may be useful to examine two further factors. First, within the framework of ASW, a claim of cultural history must be supported by a long and uninterrupted history in order to prevent current ASW claims (such as that of St Vincent and the Grenadines, which is based upon a tradition that dates back merely 150 years) from being successful. Moreover, the practice in question was not 'indigenous' as such, but derived from 'the Yankee whaling technique' learned by local seamen who enlisted on such whalers.

This begs the question of how to evaluate whether a cultural practice is worth saving. If no distinction is drawn between traditions that pre-date colonialism and those that arose during that time, then a distinct problem may arise. That is, a 'cultural tradition' worth protecting under ASW auspices may come to mean nothing more than one whereby peoples who have been deemed to be indigenous and which at one point worked on whaling ships should still be allowed to go whaling on the grounds that it is their cultural tradition. The questions of why it should be afforded favoured status over other forms of whaling, and why it should be deemed worthy of preservation simply on the basis of its status as a pre-colonial practice and without regard to other metrics, remain unanswered.

A second approach to the cultural consideration is that the loss of the traditional practice of whaling would likely have a significant detrimental impact upon whaling peoples. This approach was not retrospective. That is, it was initially taken to refer to indigenous communities that used to engage in whaling but which were subsequently forced to stop and suffered as a result of the stoppage. It did not encompass indigenous communities that stopped whaling decades ago and whose subsequent decline was traced to the decision to stop whaling. However, this approach has been used before the IWC and ASW

claimants have sought to 'revitalize' their societies which were supposedly damaged by their much earlier decisions to cease whaling.

If this reworking of the cultural consideration to incorporate revitalization is accepted, then a twofold difficulty may arise. First, the IWC may become responsible for damage done to indigenous cultures which were more the result of the cumulative impact of colonialism than that of an international body which did not even exist at the time. Second, the IWC has already concluded elsewhere, with regard to the social costs of reducing commercial whaling for example, that it is not directly responsible for having to deal with the social consequences of such a decision. Rather, this responsibility lies with individual sovereign countries.

Apart from the recognition that the IWC is ultimately not to be held responsible for alleviating social costs associated with a cessation of whaling, is the fact that the IWC has already openly accepted the job of limiting ASW in three areas. These are the type of prey that may be hunted, in terms of its age and sex; the method in which whales may be killed, in terms of 'humane considerations'; and the endangered status of the species of cetacean in question. As such, it should be apparent that the IWC has already shown an indirect willingness to circumscribe aspects of indigenous traditional cultures by carefully proscribing what they can, and cannot, do.

The final consideration which must be considered within the ASW rubric concerns endangered species. There is currently no specific international law stating that all such species must be preserved. Nevertheless, it is arguable that such a mandate is part of customary international environmental law. Within some of the treaties designating certain species as endangered and therefore protected, there are exceptions made to accommodate indigenous needs. However, the general rule is that such exceptions for indigenous peoples must not be detrimental to the survival of the population of the endangered or threatened species.

Despite these clear limitations – that indigenous needs may not drive a species towards extinction – this rule has been slow to take hold at the IWC. The IWC has allowed takes in the past which went directly against scientific advice, and has granted quotas from stocks in which there has been manifest uncertainty over their status. Although this may now be a largely historical problem, it remains another clear example where future vigilance may be necessary. This vigilance should not only always err on the side of preserving species at risk of extinction, but should also explicitly incorporate the precautionary principle which states that no stock allocations should be made if manifest uncertainty over the possibly detrimental impacts of such allocations are present. In the face of such uncertainty in the cases of endangered species, no quotas should be given.

NOTES

1. Gambell, R. (1982). 'The Bowhead Whale Problem and the International Whaling Commission.' In IWC (ed.). *Aboriginal/Subsistence Whaling: Report of the International Whaling Commission*: Special Issue 4 (IWC, Cambridge): 1.
2. The charge of 'cultural imperialism' has been made by more than one country against another in this debate. IWC. 49th Report. (1998). 11, 18, 29.
3. For example, the Portuguese, who have continued to whale in the Azores region, have claimed that their whaling operations are also of a subsistence nature. However, Portugal is not a current member of the IWC. See Stoett, P. (1998). *The International Politics of Whaling* (UBC Press, Vancouver): 69. Likewise, aboriginal whaling has been practised by Canada, although Canada is not a member of the IWC, either. See Gambell, R. (1997). 'Recent Developments in the IWC Aboriginal Subsistence Whaling Category.' In Petursdottir, G. (ed.). *Whaling in the North Atlantic* (Fisheries Institute, University of Iceland): 122, 128. Nevertheless, Canada has been directly challenged on two occasions by the IWC, in spite of the fact that it is no longer an IWC member. See Appendix 11: 'Resolution on the Directed Take of White Whales and Narwhals'. IWC. 43rd Report. (1993). 52. Appendix 12: 'Resolution on Canadian Whaling'. IWC. 47th Report. (1997). 55. See Anawak, C. and Milani, D. (1997). *Bowhead Whale Hunt Review* (Nunavut Wildlife Management Board, Canada).
4. As far back as the foundation of the new ICRW in 1946, distinct recognition has been accorded to the ASW hunt of the former Soviet Union. For more recent commentary, see Appendix 3: 'Proposals from the Technical Committee Sub-Committee on Aboriginal/Subsistence Whaling.' IWC. 35th Report. (1985). 28.
5. The Makah request is dealt with in detail in Section 3.
6. The history of the Alaskan request can be seen in Chapter 2, Section 2 on bowheads.
7. The ASW by Greenland, under the 1946 ICRW first appeared as a separate category in 1961. See IWC. 14th Report. (1962). 21.
8. IWC. 37th Report. (1987). 19.
9. This is discussed in notes 39–45.
10. Convention for the Regulation of Whaling. (1931). LNTS CLU. No. 3586. Reprinted in Birnie, P. (1985). *The International Regulation of Whaling* (Oceana, New York). Volume II: 681–5.
11. Resolution 10 of the International Whaling Conference, Washington, 1946. Reprinted in Birnie. Ibid. 695, 697.
12. See Gambell, supra n1: 1
13. Noted in ibid.
14. IWC. 8th Report (1957). 16.
15. IWC. 12th Report. (1961). 20–21.
16. IWC. 13th Report (1962). 21.
17. IWC. 14th Report. (1963). This amendment was achieved at the urging of the United States. Apparently, there was a fear that unless this exception was specified, it would quickly provide a loophole for commercial whaling.
18. Gambell, supra n2: 1.
19. IWC. 23rd Report. (1972). 25; IWC. 25th Report. (1974). 26; IWC. 24th Report. (1973). 25.
20. See Chapter 1 of this book.
21. IWC. 23rd Report. (1973). 6, 42.
22. IWC. 23rd Report. (1973). 42; IWC. 25th Report. (1975). 29.
23. See Chapter 2, Section 2 on bowheads.
24. IWC. 29th Report. (1979). 21–37. Also IWC. 31st Report. (1981). 17.
25. IWC. 30th Report. (1980). 13.
26. 'Resolution Concerning Aboriginal Subsistence Whaling.' IWC. 33rd Report. (1983). 38. Appendix 3.
27. IWC. 34th Report. (1984). 21.

28. IWC. 36th Report. (1986). 19; IWC. 37th Report. (1987). 18.
29. IWC. 38th Report. (1988). 20.
30. In response to this problem, the ASWSC was requested 'to examine the terms and definitions of whaling for commercial purposes, aboriginal subsistence whaling, and other categories'. Ibid. 22.
31. IWC. 39th Report. (1989). 19.
32. The Norwegians were the first to introduce this 'third category' in 1985. See Cherfas, J. (1985). 'New Moves May Scupper Whaling Ban.' *New Scientist*. February 21: 5. For the way this played out in the IWC, see IWC. 36th Report. (1986). 19; IWC. 37th Report. (1987). 18; IWC. 38th Report. (1988). 21, 23, 39, 44; IWC. 40th Report. (1990). 26; IWC. 41st Report. (1991). 32–3; IWC. 42nd Report. (1992). 29; IWC. 44th Report. (1994). 13; IWC. 49th Report. (1999). 4; IWC. 52nd Report. (2001). 10.
33. 'Resolution on Japanese Community-Based Minke Whaling.' IWC. 44th Report. (1994). 31. Appendix 3.
34. Of particular note was the IWC resolution wherein 'the majority resolve[d] to work expeditiously to alleviate the distress to these communities which has resulted from the cessation of minke whaling at its next Annual Meeting'. 'Resolution on Japanese Community-Based Minke Whaling.' Ibid. The Commission's 'commitment to work expeditiously to alleviate the distress caused by the cessation of minke whaling' for Japanese communities was reiterated in 2000. See IWC 'Resolution 2000–2. Resolution on Community Based Whaling in Japan.' IWC. 52nd Meeting in 2000. (2001). 64.
35. The Working Group on Small-Type Whaling accepted this approach, which, after 'extended discussion' came 'to the conclusion that it was not possible . . . to reach a consensus on descriptions or definitions of small type whaling'. IWC. 40th Report. (1990). 27. Following this conclusion, a number of delegations contended that 'it was not clear in what essential respects the Japanese small-type coastal whaling differed from large-type coastal whaling except in respect of the sizes of whales taken and the corresponding sizes of vessels and cannon used'. Ibid. 26. In the following year, Japan suggested that the essence of the difference centred on the 'ownership and management, scale of assets, recruitment and career plans and other aspects of the whaling operations'. The significance of the co-operative and cohesive nature of STCW in the local community was emphasized as hunting was an important source of materials valuable in gift exchange, religion, symbolism and diet. IWC. 41st Report. (1991). 33–4.
36. See Section 6.
37. IWC. 51st Meeting in 1999. (2000). 7.
38. Notably, the UK IWC. 42nd Report. (1992). 30–31. IWC. 48th Report. (1998). 21.
39. IWC. 43rd Report. (1993). 19.
40. IWC. 41st Report. (1991). 31. Reiterated by the SC in 1991. IWC. 42nd Report. (1992). 29; IWC. 44th Report. (1994). 16.
41. The SC was instructed to begin to examine 'possible alternative regimes'. IWC. 45th Report. (1995). 22.
42. Appendix 4: 'IWC Resolution 1994–4 on a Review of Aboriginal Management Procedures.' IWC. 45th Report. (1995). 42–3.
43. IWC. 46th Report. (1996). 21.
44. IWC. 48th Report. (1998). 25–6.
45. IWC. 49th Report. (1999). 4, 12.
46. See Appendix II. IWC. 31st Report. (1981). 29.
47. See IWC. 33rd Report. (1983). 28–9.
48. IWC. 34th Report. (1984). 21.
49. Ibid.
50. IWC. 46th Report. (1996). 22. For the 1999 completion of this claim, see Walker, M. (1999). 'Back in Business.' *New Scientist*. May 29: 12.
51. Ibid.
52. IWC. 47th Report. (1997). 25.
53. IWC. 48th Report. (1998). 27.
54. IWC. 47th Report. (1997). 28.

55. IWC. 48th Report. (1998). 27.
56. Ibid.
57. Ibid.: 29–30. As such: '[T]he taking of gray whales from the Eastern stock in the North Pacific [was] permitted, but only by aborigines or a Contracting party on behalf of aborigines, and then only when the meat and products of such whales [were] to be used exclusively for local consumption by the aborigines whose traditional aboriginal subsistence and cultural needs have been recognized'. Appendix 11. Ibid. 51.
58. In these statements 'the USA put on record that it is not requesting and will not in future years request an allocation or use of . . . gray whales [from Russia]'. IWC. 42nd Report. (1992). 32. Initially, the USSR requested the earlier quota of 179 gray whales. It suggested that '10 were subject to mutual consideration with the USA'. However, after the United States distanced itself from this figure, the USSR dropped its request to 169 whales. Ibid. 33. The United States stated earlier that ASW considerations should be considered individually, not as part of overall stock considerations. The basis of this approach was to be found in the US concern that its ASW quota should be taken as a sovereign total and not one which was to be worked out in accordance with the amount that Canada could take. The Americans made it clear that the Canadian take should not be counted against its ASW quota. Stoett, supra n3: 115–20. For the 1996 turn around, see Anon (1996) 'Call off the Hunt.' *New Scientist*. July 6: 3.
59. Appendix 11: 'Amendments to the Schedule Adopted at the 49th Meeting.' IWC. 48th Report. (1998). 51.
60. Report of the ASW Sub-Committee. (2002). IWC/54/5. 9. IWC. 54th Meeting in 2002. (2003). 16–17.
61. Schmitten, R. Noted in Young, E. (2002). 'Cut To Pieces.' *New Scientist*. June 1: 9. For the vote, see IWC. 54th Meeting in 2002. (2003). 18–22.
62. See 'Introductory Statement for the Bowhead Quota by the USA.' IWC/SPEC.02/7. Statement by the Russian Federation. IWC/SPEC.02/6. For confirmation of the quota, see IWC (2002). 'Summary of outcomes of the 5th Special Meeting of the Commission, 14–17 October 2002, Cambridge, UK.' Section 2.
63. See 'Report of the Small Working Group Reviewing Paragraph 13.' IWC/56/4. 'Proposed Amendment to the Proposal to Amend Paragraph 13.' IWC/56/33.
64. *Shorter Oxford Dictionary*. (1998) (Oxford University Press, Oxford). Volume 1: 6–7, 1350.
65. The foremost examples of this involve genocide. See Shaw, M. (1997). *International Law* (Cambridge University Press, Cambridge): 209–12. Tennant, C. (1994). 'Indigenous Peoples, International Institutions and the International Legal Literature from 1945–1993.' *Human Rights Quarterly*. 16: 1.
66. The working definition that has been used by the United Nations is as follows: '[I]ndigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territory, consider themselves distinct from the sectors of the societies now prevailing in those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories and their ethnic Identity, as the base of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems'. Definition of Indigenous Persons. United Nations Sub-Committee on Prevention of Discrimination and Protection of Minorities 1983. E/Cn.4/Sub.2/1983/21/Add. 8.
67. The ILO Convention (No. 169) Concerning Indigenous and Tribal Persons in Independent Countries applies to: '[T]ribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions . . . Peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, cultural and political institutions . . . Self Identification as indigenous or tribal shall be

regarded as a fundamental criterion for determining the groups to which the provisions of the Convention apply'. This convention was adopted at the 76th Session of the ILO. Reprinted in Wallace, R. (1998). *International Human Rights: Text and Materials* (Sweet & Maxwell, London): 197–204.

68. The World Bank has dispensed altogether with criteria based on historical continuity and colonialism. Instead, it prefers to view indigenous people as being 'groups with a social and cultural Identity distinct from the dominant society that makes them vulnerable to being disadvantaged'. Operational Directive 4:20. Reprinted in International Working Group for Indigenous Affairs (IWGIA). Newsletter. November/December 1991: 19.
69. Although no governments voted against the text, a number abstained. See Guruswamy, L.D. (1996). *International Environmental Law and World Order* (Case West, New York): 831–3.
70. See Kingsbury, B. (1998). 'Indigenous Peoples in International Law.' *American Journal of International Law*. 92: 414–57.
71. See generally, Dworkin, R. (1977). *Taking Rights Seriously* (Oxford University Press, Oxford); Rawls, J. (1971). *A Theory of Justice* (Oxford University Press, Oxford).
72. See generally, Poynton, P (1996). 'Indigenous Peoples and the Inalienable Right to Self-Determination.' In Howitt, R. and Connel, J. (eds). *Resources, Nations and Indigenous Peoples* (Oxford University Press, Oxford): 112–36.
73. For example, China 'believes that the question of indigenous peoples is the product of European countries recent pursuit of colonial policies in other parts of the world'. Statement from the Peoples Republic of China to the UN Commission on Human Rights in 1995, with regard to consideration of a draft declaration on the rights of indigenous peoples, UNDoc. E/cn.4/wg.15/2. (1995). Such an approach by countries like China means that their own policies and detrimental impacts upon the local inhabitants in countries such as Tibet, cannot be questioned by any indigenous rights these peoples may possess, if they are not deemed indigenous.
74. In 'Report of the Second Working Group Established in Accordance with Commission on Human Rights.' Resolution 1995/32 of 3 March 1995, UN doc. E/cn.4/1997/102. Paragraph 187. For further discussion of this point, see Kingsbury, supra n70: 424–6.
75. Articles V(2)(d) and VII. Interim Convention on the Conservation of North Pacific Fur Seals 1957. Reprinted in Lyster, S. (1996). *International Wildlife Law* (Grotius Publications, Cambridge): 323, 328.
76. Convention for the Protection of Migratory Birds 1916. 39 Stat. 1702. Treaty Series, no. 628. This convention allows the taking of certain listed birds and their eggs 'by the indigenous inhabitants of the State of Alaska and Indians and Inuit of Canada'. Article 1 of the Protocol Amending the Convention of 1916. Reprinted in Lyster, supra n75: 82.
77. Convention for the Protection of Migratory Birds and Birds in Danger of Extinction 1972. 25 UST. 3329; TIAS no. 7990. This treaty allowed Eskimos, Indians and 'indigenous peoples of the Trust territory of the Pacific Islands to take any species of migratory bird provided that the taking is for their own food and clothing'.
78. The 1976 Convention Concerning the Conservation of Migratory Birds and Their Environment (between the United States and former USSR) made allowances for Eskimos, Indians and 'indigenous inhabitants' within specified areas. 29 UST. 4647; TIAS no. 9073.
79. The 1911 Convention Between the United States, United Kingdom and Russia for the Preservation and Protection of Fur Seals. Reprinted in Ruster, B. and Simma, B. (eds) (1976). *International Protection of the Environment* (IPE). (Oceana, New York). Volume VIII. 3682.
80. Article IV.
81. 1931 Convention for the Regulation of Whaling. Article III, supra n10.
82. The 1987 Agreement Between the Government of Canada and the Government of the United States on the Conservation of the Porcupine Caribou Herd. July 17. Reprinted in Austen, M. and T. Richards (eds) (2000). *Basic Legal Documents on International Animal Welfare and Wildlife Conventions* (Kluwer, London): 78–83.
83. Preamble.

84. 1974 Agreement for the Protection of Migratory Birds and Birds in Danger of Extinction (between Australia and Japan). Article II(1)(d). ATS. 1981. Number 6.
85. Convention on Biological Diversity 1992. 31 ILM. 818. Article 8(j).
86. Decision III/14. Implementation of Article 8(j). UNEP/CBD/COP/3/38. 90. Decision IV/9. Implementation of Article 8(j). UNEP/CBD/COP/4/27. 111. Decision V/16. Article 8(j) and Related Provisions. UNEP/CBD/COP/5/23. 139. Decision VI/10. Article 8(j) and Related Provisions. UNEP/CBD/COP/6/20. 151. Decision. Article 8(j) and Related Provisions. UNEP/CBD/COP/7/WG2/CRP3. 25.
87. See Article 15. The authority to determine access to genetic resources rests with national governments. Ibid.
88. See Gillespie, A. (2000). 'Indigenous Peoples, Biodiversity and International Law.' *New Zealand Journal of Environmental Law*. 3: 109–57.
89. Principle 5(a). Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests 1992. 31 ILM. 830.
90. Principle 2(a). Ibid.
91. IWC. 14th Report (1964). 18.
92. Canada and the United States responded that they had no problem with the word, and Denmark withdrew its concern. IWC. 15th Report. (1965). 19–20.
93. Gambell, supra n1: 1.
94. One of the definitions that the Cultural Anthropology Panel used for 'aboriginal peoples' was that of 'product end-use (e.g. whaling for subsistence)'. See ibid.
95. Report of the Preparatory Meeting to Improve and Update the International Convention for the Regulation of Whaling. (1981). Reykjavik. Reprinted in Birnie, supra n10. Volume II: 744, 747.
96. For example, the 1979 Convention on Migratory Species allows the taking of certain species if such actions are necessary 'to accommodate the needs of traditional subsistence users of such species'. Convention on Migratory Species of Wild Animals. 19 ILM. 15. Article III(5)(c). Likewise, the 1973 Agreement on the Conservation of Polar Bears employs terminology such as that of 'local people . . . in the exercise of their traditional rights'. Agreement on the Conservation of Polar Bears. 13 ILM. 13. Article III(1). Such rights have clearly been accorded because of the traditional use in question – irrespective of whether they were utilized by indigenous or other peoples.
97. IWC. 40th Report. (1990). 26.
98. See Chalk, F. and Jonassohn, K. (1990). *The History and Sociology of Genocide* (Yale University Press, New Haven): 173–94. See also Brain, R. (1976). *The Last Primitive Peoples* (Crown Publishers, New York): 243–54.
99. Article III(1). Agreement on the Conservation of Polar Bears, supra n96.
100. Supra n78.
101. Article IV.
102. Convention on the Regulation of Whaling 1931, supra n10.
103. Article VII. Interim Convention on the Conservation of North Pacific Fur Seals 1957. Reprinted in Lyster, supra n75: 23, 328.
104. Article 16. See Gillespie, supra n88.
105. See Gillespie, A. (1995). 'Common Property, Private Property and Equity: The Clash of Values and the Quest to Preserve Biodiversity.' *Environmental and Planning Law Journal* 12(6): 387–400.
106. See Article 16 of the CBD. For discussions of this, see IUCN (1994). *A Guide to the Convention on Biodiversity* (IUCN, Gland): 84–91.
107. In 1955, a special exemption was incorporated into the schedule to allow for the take of whales by Greenlanders using small vessels. In 1961, the special exemption was tied to catching from boats, if the boats from which they were caught were below 50 tons. See Gambell, R. (1995). 'Management of Whaling in Coastal Communities.' In Blix, A. (ed.). *Whales, Seals, Fish and Man* (Elsevier Science, Oslo, Norway): 699, 702.
108. IWC. 15th Report. (1964). 12.

109. '[F]or thousands of years the native hunters . . . used large walrus skin boars and toggle-head harpoons made from bone and stone'. Russian Federation (1997). 'Feasibility Study on the Bowhead Whale Quota for Indigenous People of Chukota in 1998–2002.' IWC/49/AS1.
110. This allowed them to take enough whales to meet the needs of the ten villages to which the whales were towed to for processing. See Krupnic, I. 'Gray Whales and the Aborigines of the Pacific North West.' In Jones, M. and Wilbur, D. (eds) (1984). *The Gray Whale*. (Academic Press, Orlando): 103–20.
111. Noted in Gambell, supra n1: 1.
112. The panel also noted that 'there is good reason to recommend improvement in weapons, powder and bombs currently employed to further reduce the struck but lost rate'. Report of the Panel Meeting of Experts on Aboriginal/Subsistence Whaling. In IWC, supra n1: 7.
113. India, for example, suggested that aboriginal subsistence whaling should be defined 'in terms of 19th century or earlier methods, equipment and utilisation of products'. IWC. 36th Report. (1986). 19.
114. See Chapter 6 on humane killing.
115. For example, with the Chukota, the modern whaling ship which had used the more humane commercial killing method of 'exploding harpoons' stopped operating in the early 1990s. IWC. 36th Report. (1986). 21. The revived method involved using 'whaleboats' (open wooden boats about 20 feet in length), and 'skin boats and [small] motor boats at their disposal'. Russian Federation (1999). 'Whaling of Gray Whales in the Northern Part of the Pacific Ocean and Needs of the Native Population of Chukotka for Food Whale Products in 1997–1998.' SC/51/AS 29 Rev. At 3. The return to 'traditional' boats was accompanied by the use of rapid firing, semi-automatic rifles and hand harpoons. Bogoslovskaya, L. (1995). 'The Truth About Harvesting Gray Whales Off Chukotka.' In Russian Federation (1997). 'Feasibility Study for Aboriginal Gray Whaling in 1998–2002.' IWC/49/AS2. Supplement 2: 3–4. By 1999, this method meant that an average catch took 77 minutes. However, 'darting guns', as received by Alaskan Eskimos, had reduced these catches to 36 minutes on average. IWC. 49th Report. (1999). 7.
116. Preamble, Paragraph 4, ICRW.
117. Chile initially withdrew because the IWC would not allow it 'to obtain a sufficient catch to satisfy its minimum domestic consumption'. IWC Paper No. 28. (1949). 'A Chilean Paper on the Special Difficulties of Chile.' Chile reiterated this concern the following year, stressing it was 'a country poor in fats' and accordingly, wanted relaxation of the IWC quotas on sperm whales. IWC Doc. 13 (1950). Noted in Birnie, supra n10: 214.
118. In 1959, Japan, in arguing against any further restriction in the total whaling quota, protested that it needed the whalemeat as food, and could not reduce its whaling fleet. IWC. Doc. XIV. (1959). 24.
119. See Chapter 2.
120. With regard to the 'confines of the IWC' it is necessary to recognize a common mistake that has frequently appeared in the ASW debate. This is the assertion that indigenous people may not be deprived of their means of subsistence. This provision has been recognized in international law. Article 1 of both the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights have stated that '[I]n no case may a people be deprived of their means to subsistence'. UNGA Resolution 21/22004. GAOR. 21st Session. Supp. 49. UN Doc. A/631. (1966) 993 UNTS. 3. Likewise, the Draft Declaration talks of not allowing them to be deprived of 'their lands, territories or resources'. Res. 1994/45. UN Sub-Commission on Prevention of Discrimination Against Minorities. 46th Session 1994. Article 7. Article 26 contains a similar provision. However, it is a categorical mistake to suggest that those whales that are subject to IWC regulation may belong to any one group. Nor should it be suggested that whales are to be regarded as being free in the sense that they may be considered to be un-owned common property. Conversely, whales should be regarded as 'belonging' to the community of nations, as represented by the IWC. Accordingly, since aboriginal peoples do not 'own' these whales, it is contended that they may not in fact be deprived of them. Rather, it is for the IWC to decide how best to 'utilize' the whales that come under its auspices.

121. See the 1936 Convention for the Protection of Migratory Birds and Game Animals (between the United States and Mexico). 837 UNTS. 125; the 1973 Convention for the Protection of Migratory Birds and Birds Under Threat of Extinction (between Japan and the former USSR). The convention is not yet in force, although it has been discussed in Lyster, supra n75: 74–5. Specific examples of the take for nutritional purposes include those provided for in the 1979 Protocol to the Convention for the Protection of Migratory Birds (between the United States and Canada). 9 Stat. 1702. Treaty Series, no. 628. This convention has allowed the taking of the requisite birdlife by the given indigenous people 'for their own nutritional and other essential needs'. Article 1 of the Protocol Amending the Convention of 1916. Reprinted in Lyster, supra n75: 82. A similar convention between Japan and the United States has contained similar provisions also 'provided that the taking is for their own food and clothing'. 1916 Convention for the Protection of Migratory Birds. 25 UST. 3329; TIAS no. 7990. The 1974 Agreement for the Protection of Migratory Birds and Birds in Danger of Extinction (between Australia and Japan) has allowed 'the hunting and gathering of specified birds or their eggs by the inhabitants of certain regions who have traditionally carried on such activities for their own food, clothing or cultural purposes'. Article II(1)(d) ATS. 1981. Number 6. Finally, the 1976 Convention Concerning the Conservation of Migratory Birds and Their Environment (between the United States and former USSR) has allowed Eskimos, Indians, and 'indigenous inhabitants' within specified areas to take migratory birds and their eggs 'for their own nutritional and other essential needs'. 29 UST. 4647; TIAS no. 9073.
122. Appendix 4: 'Resolution on Bering Sea Bowhead Whales.' IWC. 30th Report. (1980). 35.
123. IWC. 32nd Report. (1982). 26.
124. In 1990, the ASWSC recommended to the technical committee that the need for aboriginal populations in West Greenland is for 670 metric tons of whalemeat per year (with a minke being worth two tons, a humpback eight, and a fin at ten). IWC. 41st Report. (1991). 31. New Zealand objected to this classification in 1992, suggesting that 'it would prefer to think in terms of numbers of whales rather than tons of meat'. Ibid. 30.
125. IWC. 40th Report. (1990). 25. Also, Caulfield, R.A. 'Whaling and Sustainability in Greenland.' IWC/46/AS1. At 8.
126. Russian Federation. (1999), supra n115: 1.
127. Russian Federation. (1997), supra n115: 15. Likewise, it was noted elsewhere that 'the indigenous human population lacks meat and uses the whale meat for sustenance'. IWC. 48th Report. (1998). 28. In 1996, the Russian Federation also requested, in addition to the gray whale quota, ' "five bowhead whales" for the nutritional purposes of the native people of the Chukota region'. IWC. 47th Report. (1997). 157.
128. Callway, D. (2002). 'Documenting the Impact of Marine Mammals, especially Whales to Three Chukotka Communities.' IWC/54/AS6/. Kozlou, A. (2002). 'Whaling Products As Essential Element of Indigenous Diet of Chukotka.' SC/54/025.
129. IWC. 14th Report. (1964). 18.
130. Given this usage, serious questions with regard to 'the real needs' of this request arose at the IWC. Ibid. 26. In an attempt to answer these concerns, the Russian Federation suggested, in 1995, that although 'the bone and blubber from the North Pacific Eastern Stock of Gray whales were used in fur farms . . . the meat was for human consumption'. IWC. 46th Report. (1996). 21–2. See Sander, E. (1992). 'Whales for Foxes.' Inuit Circumpolar Conference. June 1992. Available from the High North Alliance N-8390. Reine-I-Lofoten, Norway. Two years later, when the issue arose once more, the Russian Federation pointed out that the number of fox farms in the area had fallen from 20,000 in 1991 to 1,000 in 1997. At the same time, they admitted that 'a considerable portion of the production of the harvest of the Gray whale was sent to the polar fox farms'. Russian Federation. (1997), supra n115: 15.
131. Bogoslovskaya, supra n115. Supplement 2: 2.
132. The Russians stated that 'now, only those parts of the gray whale inedible to man (blubber and entrails) were fed to farmed foxes'. IWC. 48th Report. (1998). 28. Likewise, with the request for bowhead for the local indigenous population, the Russians assured the Commission that the bowhead 'would not be used in fox farms and was solely for human consumption'.

133. Borodin, R. (2002). 'Cultural, Traditional and Nutritional Needs of Chukotka for Gray and Bowhead Whales.' IWC/54/AS/5.
134. IWC. 45th Report. (1995). 22–3.
135. Report of the Nutritional Panel. In IWC, supra n1: 23, 30.
136. With regard to the Makah request, France 'asked how subsistence requirements could arise after 70 years of non-whaling'. IWC. 47th Report. (1997). 26.
137. Appendix 4: 'Resolution on Bering Sea Bowhead Whales.' IWC. 30th Report. (1980). 35.
138. In 1992, Japan emphasized the importance in Japan for some communities 'of eating a meal as an intensely social event suffused with social, cultural and emotional meaning'. IWC. 43rd Report. (1993). 28. For specifics, see IWC. 39th Report. (1989). 22; IWC. 38th Report. (1988). 21.
139. IWC. 40th Report. (1990). 25.
140. Renker, A. (1997). 'Whale Hunting and the Makah Tribe: A Needs Statement.' IWC/49/AS 5.
141. Over 1,500 years ago, whale products provided a substantial (perhaps 85 per cent) part of the Makah diet. Renker. Ibid. 14. It was suggested that 'since [the Makah] started to buy much of our food in the grocery stores, illnesses like heart diseases, cancer and diabetes have been introduced to our society. These illnesses were not common before'. Sones, David (Mach spokesperson) (1995). In 'The Makah Indians: Keeping their Culture Alive.' *The International Harpoon*. 4.
142. Renker, supra n140: 121 32.
143. United States (2002). 'Whale Hunting and the Makah.' IWC/54/AS2.
144. IWC. 41st Report. (1991). 31.
145. 'Report of the Aboriginal Subsistence Whaling Sub-Committee.' IWC/51/13. Agenda Item 11.2.1.1.
146. IWC. 48th Report. (1998). 29.
147. St Vincent and the Grenadines (2002). 'Bequian Whaling: A Statement of Need.' IWC/54/AS7.
148. 'Report of the Cultural Anthropology Panel.' In IWC, supra n1: 35, 49.
149. Supra n78.
150. Article IV.
151. Article 4 of the 1931 Convention on the Regulation of Whaling, supra n10.
152. For example, the 1973 Agreement on Polar Bears, despite allowing an exception for the taking of polar bears by local people using traditional methods, specifies that the skins must not be sold for profit. Article III(2). Lyster, supra n75: 57–8.
153. The 1957 Convention on the Conservation of North Pacific Fur Seals permits such hunting provided that the hunters are not in the employment of other persons or under 'contract to deliver the skins to any person'. Article VII. Interim Convention on the Conservation of North Pacific Fur Seals. In Lyster, supra n75: 323, 328.
154. The 1916 Convention for the Protection of Migratory Birds (between the United States and Canada) allows Eskimos and Indians to take certain listed birds and their eggs, at any time, provided that they are neither sold, nor offered for sale. Articles II(1) and (3).
155. The 1987 Agreement Between the Government of Canada and the Government of the United States on the Conservation of the Porcupine Caribou Herd. July 17. The agreement clearly states that 'The Parties will prohibit the commercial sale of meat from the Porcupine Caribou Herd'. Point 3.h.
156. Examples include applications from Alaska, Makah, Greenland and Russia. With regard to the Alaskan applications, see Wolfe, R.J. 'The Economic Efficiency of Food Production in a Western Alaska Eskimo Population.' In Langdon, S.J. (ed.) (1986). *Contemporary Alaskan Native Economies* (University Press of America, London): 101–20. See also Wolfe, R.J. (1986), *Resource Use and Socio-Economic Systems in Alaskan Communities* (Alaska Department of Fish and Game, Division of Subsistence, Technical Paper Number 61). With respect to the Makah applications, see IWC. 47th Report. (1997). 26, in which the 'non-commercial nature of the proposal' from the Makah was emphasized. In 1986, in relation to the Greenland hunt, it was recognized that 'all whales are used for local consumption and do not enter into commercial trade'. IWC. 37th Report. (1987). 18.

However, elsewhere it was suggested that 'the present Greenland hunting may be characterized as mainly subsistence hunting with only a minor commercial element'. Kapel, F. (1982). 'Subsistence Hunting: The Greenland Case.' In IWC, supra n1: 38. This comment about a 'minor commercial element' is also reported in IWC/35/AB1. This was later clarified as: '[T]his is not a commercial activity but the income just covers the cost of the operations'. IWC. 48th Report. (1998). 31. See also Lynge, F. (1992). *Arctic Wars: Animal Rights and Endangered Peoples* (Dartmouth, New England): 44–6. Caulfield. Supra n125. '[S]ome hunters sell meat locally'. At 3. See also Caulfield, R. (1994) 'Development of West Greenlandic Markets for Country Foods Since the 18th Century.' *Arctic*. 49(2): 113–32. In 1996, the Russian Federation reassured the Commission that there would be 'no commercial use of the whale products' with regard to their new request for bowheads.

157. IWC. 48th Report. (1998). 11.
158. IWC. 39th Report. (1989). 22.
159. The workshop recognized that 'some commercial elements remain in the Action-Plan, such as the sale of whale meat in traditional guest houses and inns, and these commercial elements are important to the STWC communities for cultural as well as economic reasons'. IWC. 48th Report. (1998). 11.
160. 'Resolution on Japanese Community-Based Minke Whaling.' IWC. 44th Report. (1994). 31. Appendix 3. Earlier, Japan promised that there would be 'no commercial distribution of the products of these whales'. Ibid. 13. In 1994, in recognition of this resolution, Japan approached the IWC with an 'Action Plan' which sought to utilize 'a non-market distribution system to remove profit motivation from production and distribution of whale products . . . [and] . . . ensure that the edible whale products would be exclusively consumed in the local communities specified'. IWC. 45th Report. (1995). 17. Japan later presented a revised plan which attempted to reinforce further a non-profit operation. Within this new plan, it was explained that there would be 15 local and central government and community members, who would distribute the meat in conformity with traditional practices and priorities. IWC. 46th Report. (1996). 22.
161. As early as 1987, there was 'concern over the introduction of commercial distribution of whale products into the aboriginal subsistence whaling category'. IWC. 38th Report. (1988). 21. All of the plan(s) were rejected in the following years. IWC. 42nd Report. (1992). 33. Concerns were especially voiced by the United States, the UK and New Zealand. Ibid. 33–6. IWC. 43rd Report. (1993). 17. Later concerns included the continued sale of whalemeat, the lack of controls against resale, and the economic incentives to try to buck the system. Such concerns, which were believed to threaten the overall moratorium, meant that the Japanese action plan was rejected. IWC. 45th Report. (1995). 17–18. For the action plans, see Government of Japan (1995). 'Summary Statement: Action Plan for Japanese Community-Based Whaling.' (Institute of Cetacean Research, Tokyo, Japan).
162. It was felt that the Japanese proposals 'would compromise the moratorium'. IWC. 40th Report. (1990). 27–9. A very similar pattern emerged in 1995, when: '[F]undamentally, a substantial number of delegations found the Action Plan to be incompatible with the moratorium on commercial whaling, because it contained elements of commerciality'. IWC. 46th Report. (1996). 17, 18; IWC. 48th Report. (1998). 19; IWC. 49th Report. (1998). 4. Other objections revolved around 'an unwillingness to allow the take until the new revised management scheme overall had been established'. IWC. 44th Report. (1994). 14. The elements of commerciality continued to be recognized in their subsequent applications, although it was later described as being in accordance with 'traditional practices associated with the sale of whale meat'. Proposed Schedule Amendment for Whaling Targeting Minke Whales From the Okhotsk Sea of the North Pacific. IWC/55/14. Agenda Item 14. 2.
163. Resolution 2001–6. 'Resolution on Japanese Community Based Whaling.' IWC. 53rd Meeting in 2001. (2002). 56.
164. Komatsu, M. Noted in Young, E. (2002). 'Cut To Pieces.' *New Scientist*. June 1: 9.
165. 'Resolution on Japanese Coastal Whaling.' IWC/SPEC.02/4.
166. Summary of outcomes of the 5th Special Meeting of the Commission. 14–17 October 2002, Cambridge, UK. Section 3.

167. Proposed Schedule Amendment for Whaling Targeting Bryde's Whales From the Western Stock of the North Pacific. IWC/55/13. Agenda item 9/11.
168. Proposed Schedule Amendment for Whaling Targeting Minke Whales From the Okhotsk Sea of the North Pacific. IWC/55/14. Agenda Item 14.
169. IWC. 11th Report. (1960). 19–20.
170. IWC. 14th Report. (1964). 16.
171. 'Report of the Cultural Anthropology Panel.' In IWC, supra n1: 35, 49. Gambell, supra n1: 1.
172. The Makah application pointed out that it was 'exclusively for local consumption and cultural purposes'. IWC. 47th Report. (1997). 26.
173. IWC. 33rd Report. (1983). 32.
174. IWC. 38th Report. (1988). 21.
175. See Article XXIII, Convention on the International Trade in Endangered Species. (1973) 12 ILM. 1055. For a discussion on the overlap between the IWC and CITES, see Chapter 11 on primacy.
176. In 1989, Australia brought to the IWC's attention that 'St Vincent and the Grenadines had entered a specific reservation in CITES which would allow it to engage in [the] international trade in humpback whale products'. IWC. 40th Report. (1990). 26. This concern led the Commission to reiterate that 'IWC regulations require the meat and products to be used exclusively in St. Vincent and the Grenadines'. Ibid. St Vincent and the Grenadines answered this concern, in 1990, when it suggested that its CITES reservation 'did not affect the commitment made to the IWC'. IWC. 41st Report. (1991). 31.
177. Traditionally, this whalemeat was 'consumed locally and the remainder is exported'. Moreover, in the 1970s, pilot whales were 'sold at the dockside to local hucksters or to individuals for home use. The hucksters, in turn, sell the meat in the capital'. See Price, S. (1985). 'Whaling in the Caribbean: Historical Perspective and Update.' IWC. 35th Report. (1985). 413–16.
178. It is important to note that this example was related to beluga, not bowhead.
179. However, this clearly applied only within national boundaries. Consequently, 'the products are for local consumption and it is illegal to make them available outside Greenland'. IWC. 48th Report. (1998). 31.
180. It should be noted that, in 1985, India expressed concern that the humpback taken off Greenland be identified as for local consumption. IWC. 36th Report. (1986). 19. Greenland quickly responded with evidence, recognized by the TCAWSC, that 'all whales are used for local consumption and do not enter into commercial trade . . . the villages are subsistence communities'. IWC. 37th Report. (1987). 18.
181. Report of the ASW Sub-Group. IWC/54/5. 9.
182. Report of the ASW Sub-Group. IWC/55/Rep 3. 6.
183. IWC. 41st Report. (1991). 33–4
184. IWC. 43rd Report. (1993). 16.
185. IWC. 41st Report. (1991). 35.
186. See Carrithers, M. (1994). *Why Humans Have Cultures: Explaining Anthropology and Society Diversity* (Oxford University Press, Oxford).
187. Mexico City Declaration on Cultural Policies. World Conference on Cultural Policies, Mexico City, 26 July–6 August, 1982. Available from UNESCO, Paris. See also in Honderich, T. (ed.). (1995). *The Oxford Companion to Philosophy* (Oxford University Press, Oxford): 172.
188. The peace of Westphalia, or more specifically, the subsidiary treaty, the peace of Osnabruck, recognized with regard to the all-important question in the 30-year war – that of religion – that 'subjects whose religion differs from that of their prince are to have equal rights with his other subjects'. Reprinted in Reddaway, W. (1930). *Select Documents of European History*. (Methuen, London). Volume II. 1492–1715: 129–34.
189. See Chalk, F. (1990). *The History and Sociology of Genocide* (Yale University Press, New Haven): 323–77.
190. 1948 Genocide Convention. UKTS (1970). Cmnd. 4421.

191. See, in particular, Horkheimer, M. and Adorno, T.W. (1998). 'The Concept of Enlightenment.' In Kearney, R. (ed.) (1998). *The Continental Philosophy Reader* (Routledge, London): 194–215.
192. See Articles 20, 28–32 of the Vienna Declaration from the World Conference on Human Rights. UN Doc. A/49/688. 25 June 1993.
193. For example, Article 27 of the International Covenant on Civil and Political Rights affirms in universalist terms the rights of persons belonging to 'ethnic, linguistic or religious minorities . . . to enjoy their own culture'. See also the United Nations Resolution on the Importance of Cultural Values. UNGA Res. 31/39.1976, and the Preservation and Further Development of Cultural Values. UNGA Res. 3148 xxviii. '[T]he international community considers it its duty to ensure that the cultural Identity of each people is preserved and protected'. Mexico City Declaration, supra n187. Point 5.
194. Article 4 United Nations Draft Declaration on the Rights of Indigenous Peoples 1994. Resolution 1994/45. (1995) 34 ILM. 541. Article 12 provides that they 'have the right to practice and revitalize their cultural traditions and customs'. See also Article 7 of the Declaration.
195. For a full examination, see Gillespie, A. (1997). *International Environmental Law, Policy and Ethics* (Oxford University Press, Oxford). Chapter 8.
196. See Gillespie. Ibid. For a more detailed examination of the 'indigenous' view, see Gillespie, A. (1998). 'Environmental Politics in New Zealand/Aotearoa: Clashes and commonality between Mäoridom and Environmentalists.' *New Zealand Geographer*. 54(1): 19–25.
197. For example, in 1972, the Declaration of the United Nations Conference on the Human Environment recognized that the preservation of the environment through cultural considerations was important. See Recommendation 95 of the Declaration of the United Nations Conference on the Human Environment. 1972. UN Doc. A/CONF. 48/14/Rev. 1. In 1987, the WCED also recognized that cultural justifications were important to environmental preservation. World Commission on Environment and Development (1987). *Our Common Future* (Oxford University Press, Oxford): 155. This idea was repeated and expanded upon in the 1994 Programme of Action for the Sustainable Development of Small Island States. A/CONF.167/9. 1994. March 18. Paragraphs 1, 10, 40 and 43.
198. Convention on International Trade in Endangered Species of Fauna and Flora. UNTS Vol. 973 243.
199. Preamble, Convention on Wetlands of International Importance. UKTS 34 (1976) Cmnd. 6465.
200. Preamble, Convention on the Conservation of Migratory Species. British Command Paper Cmnd. Misc 11 (1980) and Cm. 1332 TS 87 (1990). 15.
201. The preamble recognizes the 'historic' value of natural objects. Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. UNTS Vol. 161 193.
202. See the preamble of the Convention for the Protection of the Marine Environment and Coastal Area of the South East Pacific. 1981. In Rummel-Bulska, I. (ed.) (1991). *Multilateral Treaties in the Field of the Environment* (Grotius, Cambridge): 130. Also, see the preamble of the 1986 Convention for the Protection of Natural Resources and the Environment of the South Pacific Region. Ibid. 386. Recommendation 4. South Pacific Conference on National Parks and Reserves 1975. In IPE, supra n79. Volume 5: 22538.
203. Preamble, Declaration of World National Park Congress. In (1983) 10 *Environmental Policy and the Law*. 62. See also McNeely, J. (1982). 'Protected Areas are Adapting to New Realities.' In McNeely, J.A. (ed.) *National Parks, Conservation and Development* (IUCN, Geneva): 1, 4.
204. Preamble, Convention for the Protection of World Cultural and Natural Heritage. 1972. UNTS. Vol. 1037 151. See also Slater, R. (1982). 'The World Heritage Convention: Introductory Comments.' In McNeely, supra n203: 734, 735, 746.
205. See Listing Criteria and Article 4 of the Convention for the Protection of World Heritage. Ibid.
206. For a full discussion of this area, see Gillespie, supra n88.
207. See Resolution VII.8 On Local Communities and Indigenous People. (RAMSAR, 1997).

208. World Summit on Sustainable Development. Plan of Implementation. A/CONF.199/L1. Paragraph 6 (e). The 'vital role' quote comes from paragraph 25 of the Johannesburg Declaration on Sustainable Development.
209. Gambell, supra n1: 4.
210. IWC. 34th Report. (1984). 22.
211. Report of the Cultural Anthropology Panel. In IWC, supra n1: 35. See also Bockstoce, J. (1980). 'Battle of the Bowheads.' *Natural History*. May: 53–61. Cherfas, J. (1987). *The Hunting of the Whale: A Tragedy that Must End* (Bodley Head, London): 151–4.
212. IWC. 41st Report. (1991). 34. Kalland, A. (1990). 'Endangered Culture: Japanese Whaling in Cultural Perspective.' In Nordic Institute of Asian Studies. Monograph Series Number 61. (Copenhagen).
213. IWC. 39th Report. (1989). 22.
214. Japanese whaling may not be as old as it makes out. See Kalland, supra n212: 97–9. Compare Moreby, C. (1982). 'What Whaling Means to the Japanese.' *New Scientist*. December 9: 661–3.
215. IWC. 38th Report. (1988). 21. See also Government of Japan (1988). *Small Type Coastal Whaling in Japan* (Institute of Cetacean Research, Tokyo).
216. IWC. 39th Report. (1989). 22.
217. Workshop on Community Based Whaling (1997). 'Report on Community Based Whaling.' (Institute of Cetacean Research, Tokyo).
218. IWC. 48th Report. (1998). 11.
219. 'Resolution on Japanese Community-Based Minke Whaling.' IWC. 44th Report. (1994). 31. Appendix 3.
220. Caulfield, supra n156: 1–3. '[W]haling provides . . . opportunities for expressing Inuit culture and Identity'.
221. IWC. 47th Report. (1997). 25.
222. IWC. 35th Report. (1985). 19. This contention was later added to with the assertion that this tradition stretched back 'at least 2,000 years'. IWC. 47th Report. (1997). 25; IWC. 38th Report. (1988). 20. Borodin, R. (2002). 'Cultural, Traditional and Nutritional Needs for Gray Whales and Bowhead Whales.' IWC/54/AS5. Callway, D. (2002). 'Documenting the Importance of Marine Mammals to Three Chukotka Communities.' IWC/54/AS6.
223. Yetylin, V. (1997). 'Importance of Re-establishing the Ancient Cultural Relationship between the Native People of Chukotka and the Bowhead Whale.' IWC/49/AS6.
224. Ibid.
225. Ibid. 4–5.
226. Russian Federation (1997), supra n115: 8.
227. IWC. 41st Report. (1991). 31.
228. Statement of Need for the Aboriginal Subsistence Whaling By Bequians. IWC/51/41. Rev. The government of St Vincent and the Grenadines emphasized the findings of Ward, N. (1995). *Blows Mon, Blows!* (Gecho Productions, Boston, Massachusetts): 30, 31, 33 and 40.
229. Report of the Aboriginal Subsistence Whaling Sub-Committee. IWC/51/13. Agenda Item 11.2.1.1.
230. Ward, supra n228: 37–43.
231. IWC. 48th Report. (1998). 28.
232. Renker, supra n140.
233. See Gillespie, supra n195: 92–7.
234. There are many examples of other cultures, both indigenous and non-indigenous who do not hunt whales for cultural reasons. See *The Encyclopedia of Religion and Ethics* (Clarke Printers, London). Volume 1: 530–32.
235. Lee, S. (2000). 'Conservation Minister's Speech on South Pacific Whale Sanctuary Proposal to the International Whaling Commission Annual Meeting in Adelaide.' Press Notes. In the possession of the author.
236. For a full discussion of this, see Gillespie, A. (2002). 'The Evolving Bicultural Relationships with the Management of Cetaceans in New Zealand.' *Journal of Asia Pacific Environmental Law*. 6(1): 25–42.

237. See n228.
238. World Commission on Culture and Development (1995). *Our Creative Diversity* (UNESCO, Paris): 16.
239. Ibid. 17.
240. See Devine, P. (1996). *Human Diversity and the Culture Wars* (Praeger, New York).
241. See Wuthnow, R. (ed.) (1984). *Cultural Analysis* (Routledge, London). Applebaum, H. (ed.) (1987). *Perspectives in Cultural Anthropology* (SUNY, New York). Bauman, Z. (1998). *Culture as Praxis* (Sage, London).
242. See, for example, Malik, K. (1996). *The Meaning of Race: Race, History and Culture in Western Society* (Macmillan, London): 150–67.
243. Ibid.
244. For some general discussions about climate change, and its related issues, see Gillespie, A. (1997). *Burning Follies, Climate Change and the New Zealand Response* (Dunmore Press, Palmerston, New Zealand). See also Gillespie, A. and Burns, W. (eds) (1999). *Climate Change in the South Pacific: Impacts and Responses in Australia, New Zealand and Small Island States* (Kluwer Academic, Dordrecht).
245. With regard to CITES recommendations on this, see 1981 CITES. Doc.COP.Conf.3.11 and 1987 CITES. Doc.COP. Conf.6.10. See also CITES Doc.SC.28.15.
246. See Fitzgerald, S. (1989). *International Wildlife Trade: Whose Business Is It?* (WWF, Washington): 32–3, 38, 51, 70–72, 115, 122–3, 149–51, 157, 170–71, 187–9, 203, 227. TRAFFIC (1994). *Endangered Species and Patented Oriental Medicines in Trade* (Cambridge, UK).
247. See Martin, C. (1978). *Keepers of the Game: Indian Animal Relations* (University of California Press, Los Angeles): 71, 77, 116, 186–7. Diamond, J. (1991). *The Rise and Fall of the Third Chimpanzee* (Radius, London): 287–98. Lewis, M.W. (1992). *Green Delusions: An Environmentalist's Critique of Radical Environmentalism* (Duke University Press, London): 43–73. Buege, D.J. (1996). 'The Ecologically Noble Savage Revisited.' *Environmental Ethics*. 18: 71–88. Kessell, J.L. (1973). 'Spaniards, Environment and the Pepsi Generation: An Historian's View.' *Historian*. 36: 82–9. Regan, T. (1982). 'Environmental Ethics and the Ambiguity of the Native American Relationship with Nature.' In Regan, T. (ed.). *All That Dwells Therein: Essays on Animal Rights and Environmental Ethics* (University of California Press, Berkeley, CA). 231–8. Grande, S. (1999). 'Beyond the Ecologically Noble Savage: Deconstructing the White Man's Indian.' *Environmental Ethics*. 21: 306–20. Buege, D. (1996). 'The Ecologically Noble Savage Revisited.' *Environmental Ethics*. 18: 71–88. Compare Callicott, J.B. (2000). 'Many Indigenous Worlds or the Indigenous World? A Reply to My "Indigenous" Critics.' *Environmental Ethics*. 22: 291–309.
248. Hansen, K. (2002). *A Farewell to Greenland's Wildlife* (Garamond, Copenhagen): 86–94.
249. Nevertheless, some commentators around the IWC are questioning it. Stroud, C. (1996). 'When Cultures Clash with International Pressure: Continued Hunting by Aboriginals is Becoming Less Acceptable in the Modern World.' *The Scotsman*. June 18: 17.
250. Gambell, supra n1: 4.
251. Report of the Cultural Anthropology Panel. In IWC, supra n1. 35. See also Bockstoce, supra n211. Cherfas, supra n211: 151–4.
252. Report of the Cultural Anthropology Panel. In IWC, supra n1: 39–40.
253. Report of the Panel Meeting of Experts on Aboriginal/Subsistence Whaling. In ibid. 7.
254. Supra n1: 3.
255. Report of the Cultural Anthropology Panel. In IWC, supra n1: 40.
256. Caulfield, supra n156: 2.
257. Russian Federation (1997), supra n109: 7.
258. IWC. 48th Report. (1998). 28.
259. IWC. 40th Report. (1990). 30–31. The same defence was raised in 1990. IWC. 41st Report. (1991). 41.
260. IWC. 39th Report. (1989). 22; IWC. 41st Report. (1991). 30–31, 41.
261. IWC. 41st Report. (1991). 31.

262. It is contested that the original Carib inhabitants used small cetaceans as a source of meat. See Bequian Whaling: A Statement of Need. IWC/54/AS7.
263. Statement of Need for the Aboriginal Subsistence Whaling By Bequians. IWC/51/41. Rev.
264. Bequian Whaling: A Statement of Need. IWC/54/AS7.
265. Report of the ASW Sub-Committee. IWC/54/5. 9. IWC. 54th Meeting in 2002. (2003). 19.
266. See Yetylin, supra n223. IWC/49/AS6.
267. Ibid. 2.
268. Bogoslovskaya, supra n131. Supplement 1. At 2. IWC. 47th Report. (1997). 26.
269. Yetylin, supra n223: 3.
270. IWC. 47th Report. (1997). 26.
271. This was set to be a key issue with regard to the Makah request but it was never settled. The Netherlands 'asked how the Makah request could be based on a continuing tradition after a 70 year lapse.' IWC. 47th Report. (1997). 26. China also suggested that 'the request was not completely in accordance with the IWC definition of aboriginal subsistence . . . the long period of no whaling suggested there was now no dependence on whaling. The key issue was continuity in practice'. Ibid. 27. Earlier, Australia, the Netherlands, Mexico, Spain, Switzerland and Oman all suggested that they 'looked forward to examining the assessment of need on which the proposed catch may be based after 50 years without whaling by the Makah tribe'. IWC. 46th Report. (1996). 22. Motluk, A. (1996). 'US Retreats on Tribal Whaling.' *New Scientist*. July 6: 4.
272. IWC. 43rd Report. (1993). 19.
273. In 1960, New Zealand and Australia could not accept the proposed bans on humpbacks 'in areas on which whalers from remote regions of their territories were dependent for a living'. IWC/12/11/1960. 97.
274. Canada asked for the minimum size for whales caught from land stations on the Northeast Pacific to be removed for the requirement of 'local consumption' in order to preserve the economic viability of local whale fisheries. IWC. 12th Report. (1962). 20.
275. In 1963, when it was recommended that blue whales and humpback receive total protection because of chronic overwhaling, the USSR and Japan pleaded that such approaches would have adverse effects on their industries IWC/15/17. Verbatim Record, Plenary Session. 66. Japan reiterated this view in 1964, with regard to the general drive to conserve whales at this time. They responded that the whaling industry played a very important role in the national economy of Japan, and therefore they could not discuss the problem only in terms of the conservation of stocks. Likewise, the USSR argued that they had 'made tremendous investments in the whaling industry, and . . . do not want them to be in vain'. IWC/16/15. Verbatim Record. 72–4.
276. IWC. 39th Report. (1989). 22.
277. For the socioeconomic impact on Japan, see IWC. Ibid. 22–3. Government of Japan (1990). 'The Socio-Economic Impact and Countermeasures in the Four Japanese STCW Communities.' IWC/41/21. In this report, Japan contended that 'serious social and economic hardships' existed. IWC. 40th Report. (1990). 26. Although Japan continued with this argument throughout the 1990s, the Japanese evidence was ultimately challenged with the allegation that the Japanese communities were not suffering but were, in fact, 'economically prosperous'. IWC. 47th Report. (1997). 19–20; IWC. 48th Report. (1998). 11, 18.
278. IWC. 36th Report. (1986). 11. This was formalized in 1986 with specific terms of reference that were contained in Appendix 1: 'Terms of Reference for Use in Evaluating the Socio-Economic Implications of a Zero Catch Limit.' IWC. 37th Report. (1987). 11, 24. See also Appendix 5: 'Terms of Reference for a Technical Committee Working Group on Socio-Economic Implications and Small-Type Whaling.' IWC. 40th Report. (1990). 37.
279. Working Group on Socio-Economic Implications and Small Type Whaling. IWC. Ibid. 12–13.
280. IWC. 41st Report. (1991). 32–3.
281. IWC. 42nd Report. (1992). 33.
282. See Article 5 of the 1931 Convention for the Regulation of Whaling, supra n10.
283. For example, in relation to the Bering Sea Bowhead whale, the IWC 'urge[d] them [the USA] to restrict the existing quota to sexually immature whales'. 'Resolution to the

Government of the United States on the Bering Sea Bowhead Whale.' IWC. 32nd Report. (1982). 36. Appendix 4. Such restrictions have also been accepted by governments claiming ASW quotas. The Greenlandic hunt explicitly prohibits the taking of females with young. Caulfield, supra n156: 9.

284. The Chukotka have preferred 'young and immature individuals'. Russian Federation, supra n109: 7.
285. It has been suggested that females with calf are the preferred quarry since they offer comparatively little resistance and are more approachable as the calf cannot swim very quickly. See Price, supra n177: 413, 414. IWC. 33rd Report. (1983). 29; IWC. 34th Report. (1984). 15; IWC. 36th Report. (1986). 13; IWC. 37th Report. (1987). 19; IWC. 38th Report. (1988). 21; IWC. 39th Report. (1989). 17, 27; IWC. 40th Report. (1990). 30–31; IWC. 41st Report. (1991). 41; IWC. 44th Report. (1994). 15. IWC. 49th Report. (1999). 14. Report of the Aboriginal Subsistence Whaling Sub-Committee. IWC/51/13. Agenda Item 11.2.1.1.
286. The treaties provide for indigenous or traditional peoples to take certain endangered species. The Convention on Migratory Species specifies that 'such taking should not operate to the disadvantage of the species'.
287. The Berne Convention requires that 'the exception will not be detrimental to the survival of the population concerned'. Convention on the Conservation of European Wildlife and Natural Habitats 1982. ETS. No. 104. UKTS. No. 56 (1982). Cmd. 8738. Article 9(1).
288. 1985 Protocol Concerning Protected Areas of Wild Fauna and Flora in the Eastern African Region. Reprinted in Austen and Richards, supra n82: 186–1931. Article 12 stipulates: 'The Contracting Parties shall, in promulgating protective measures, take into account the traditional activities of their local populations in the areas to be protected. To the fullest extent possible, no exemption which is allowed for this reason shall be such as: (a) to endanger either the maintenance of ecosystems protected under the terms of the present Protocol or the biological processes contributing to the maintenance of these ecosystems. (b). To cause either the extinction of, or any substantial reduction in, the number of individuals making up the species of animal and plant populations within the protected ecosystems'.
289. Article 14, exemptions for Traditional Activities: 'Each party shall, in formulating management and protective measures, take into account and provide exemptions, as necessary, to meet traditional subsistence and cultural needs of its local population. To the fullest extent possible, no exemption which is allowed for this reason shall: (a). Endanger the maintenance of areas protected under the terms of this Protocol, including the ecological processes contributing to the maintenance of those protected areas; or cause either the extinction of, or a substantial risk to, or substantial reduction in the number of, individuals making up the populations of species of fauna and flora within the protected areas, or any ecologically inter-connected species or population, particularly migratory species and threatened, endangered or endemic species.' The 1990 Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region'. In Austen and Richards, supra n82: 252.
290. '[T]he population of each species [be] maintained in optimum numbers and that adequate preservation of the species is not prejudiced'. Agreement for the Protection of Migratory Birds and Birds in Danger of Extinction 1974. Article II(1)(d). ATS. 1981. Number 6.
291. 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Reprinted in Austen and Richards, supra n82: 271–6. The attached Action Plan makes an exception for 'long established cultural practice' where it is 'sustainable'.
292. An exception was allowed to the taking of sea turtles 'to satisfy economic subsistence needs of traditional communities . . . provided that such exceptions do not undermine the efforts to achieve the objectives of this Convention'. Article IV.3.
293. 'Resolution Concerning Aboriginal Subsistence Whaling.' IWC. 33rd Report. (1983). 38. Appendix 3.
294. For the 1981 criteria, see IWC. 43rd Report. (1993). 19.
295. IWC. 45th Report. (1995). 22.
296. Appendix 4: IWC Resolution 1994–4. 'A Review of Aboriginal Management Procedures.' IWC. 45th Report. (1995). 42–3.

297. See AWS Sub Committee. Draft Report of the Scientific Committee. Item 8. IWC/53/4.
298. Where stocks are above the MSY level, aboriginal subsistence catches are permitted up to 90 per cent of MSY.
299. See Gambell, supra n1: 122, 125.
300. In 1990, the SC, in relation to the St Vincent hunt, 'agreed that a catch limit of up to 3 animals was unlikely to harm the stock'. IWC. 41st Report. (1991). 30.
301. The taking of gray whales had been a concern in the early 1980s. This stock of grays had in part been taken by the former Soviet Union. However, by the 1990s, concern over the status of this stock had declined. In 1996, the SC was of the opinion that, with regard to the Makah request, 'the take of five extra whales would not have any significant impact'. IWC. 46th Report. (1997). 155.
302. Throughout the 1980s, an average of 179 Siberian gray whales were being taken annually by the Soviet Union for its aboriginal people. IWC. 32nd Report. (1982). 109. However, in the early 1990s, it was suggested that the overall rate of the kill (179) was possibly higher than the annual growth rate of the stock (174). Despite this uncertainty over the status of the stock, the Russian Federation agreed to reduce its request to 169 only after it became apparent that the United States did not wish an extra ten for their own usage. IWC. 42nd Report. (1992). 28, 33. Although the downward trend has continued in the 1998–2002 period with the annual quota being taken back to 140 (strikes) per year. (See Appendix 11. IWC. 48th Report. (1998). 51), this figure may still become contentious as it would now appear that the annual replacement yield is approximately 611 whales. See Gambell, supra n1: 122, 127–8. In relation to the northeastern stock of gray whales, it was believed throughout the 1990s that this stock was 'well above its minimum population size'. IWC. 39th Report. (1989). 20. Accordingly, by the late 1990s, a take of up to 482 whales per year was deemed sustainable by the SC. Report of the Aboriginal Sub-Committee. IWC/51/13. Agenda Item 11.2.
303. It has been estimated that they are seeking to hunt a stock that stands at over 25,000 whales. As such, they seek to exploit an 'un-endangered species'. IWC. 39th Report. (1989). 22. Accordingly, the Resolution on Japanese Community-Based Minke Whaling noted that 'a small take of minke whales from the North Pacific [was] not liable to endanger the stock in question'. IWC. 44th Report. (1994). 31. Appendix 3. In 1990, Japan highlighted the issue that 'if aboriginal subsistence whaling is recognized and allowed, at times even on Protection stocks as low levels, small-type coastal whaling (STCW) should also be recognized'. IWC. 41st Report. (1991). 33.

PART III

The Mechanics of International Environmental Law

9. Sanctuaries

1 SANCTUARIES IN INTERNATIONAL ENVIRONMENTAL LAW

By definition, sanctuaries are 'holy places or places of refuge.' This definition is commonly applied to animals as well as to humans. As such, they may represent 'a place where birds, wild animals, etc. are bred and protected'.[1] The practice of sanctuaries and/or the commonly associated 'protected areas' reaches a long way back into the Western (and probably human) psyche. From the biblical Garden of Eden to the era of Classical Greece[2] the sanctity of certain areas and what they contain has been well recognized. The importance of sanctity is uppermost. As such, no disturbing activities should take place in the enclosed area. For example, with the Japanese Wildlife Protection and Hunting Laws, no hunting is allowed in a sanctuary.[3]

Despite this very long history, and cross-cultural recognition of sanctuaries, areas of space protected from human interference are remarkably few and small as a percentage of the global total. With regard to marine environments, the existing number of marine protected areas (1,324) are estimated to cover less than 1 per cent of the planet's marine areas. Almost all of these have been nominated by national authorities in sovereign waters. A recent break in this trend was in 1993 when France, Italy and Monaco established a 70,000 square kilometre sanctuary for marine mammals in the Western Mediterranean, including areas of the high seas.[4] The other exception in this area has been the IWC's attempts to establish significant marine sanctuaries.

With regard to environmental considerations, establishment of sanctuaries for animals and ecosystems dates back to the Middle Ages, when certain forests were set aside for use by the general population. In a modern context, the notion of environmental sanctuaries can be traced to 1791 and the West Indian island of St Vincent.[5]

Within an international environmental focus, it is not clear where or when the idea of 'sanctuaries' fully developed. Nevertheless, it is possible to recognize that closed seasons for the replenishment of fish can be clearly seen in at least 16 bilateral and multilateral agreements between the 1850s and 1940.[6] This facility to create closed seasons has been followed in the majority of international fishery agreements.[7] It was also in currency within multilateral

attempts to protect birds[8] and in generic (terrestrial) wildlife treaties between 1900 and 1940.[9] After the Second World War this practice was replicated in a number of broad regional conservation agreements in Africa (in general)[10] and East Africa (in particular),[11] the South Pacific,[12] Southeast Pacific,[13] Southeast Asia,[14] Europe,[15] the Mediterranean[16] and the Wider Caribbean Region.[17]

An important development to note in these regional, post Second World War agreements, is the broad purposes by which sanctuaries/protected areas should be established. That is, whereas the earlier agreements tended to focus on the threatened status of species alone, the post-war agreements placed their focus on not only the status of species, but also a number of (non-exclusionary) considerations. A foremost example of this approach is with the World Heritage Convention (WHC)[18] which creates World Heritage Protected Areas on the grounds of a site's geological, aesthetic, ecological (especially in terms of endemic biodiversity) and/or containment of endangered species. That is, consideration of whether a site contains endangered species or not is only one (non-definitive) consideration.[19]

This approach of the WHC is also mirrored in many other of the international (such as RAMSAR or the Antarctic Treaty) regional conservation agreements, and that takes a broad approach (of which species status is but one consideration) with regard to its considerations of why to create protected areas.

2 SANCTUARIES WITHIN THE IWC

The first attempts to facilitate the creation of sanctuaries for whales began with the 1937 Convention for the Regulation of Whaling[20] which set aside certain areas from whaling factory ships and the 1938 Protocol to this convention which created a distinct whale sanctuary.[21] Similar mechanisms were incorporated into Article V of the 1946 International Convention for the Regulation of Whaling. Within this provision, it is noted that:

> The Commission may amend from time to time the provisions of the Schedule by adopting regulations with respect to the conservation and utilization of whale resources, fixing . . . open and closed waters, including the designation of sanctuary areas.[22]

Article V requires that amendments to the schedule shall take into consideration, *inter alia*, the factors set out in Article V(2). These are that the sanctuaries 'shall be such as are necessary to carry out the objectives and purposes of the Convention and to provide for the conservation, development and optimum utilisation of the whale resources'; shall be based on 'scientific findings',[23] and

that they also 'take into account the interests of the consumers of whale products and the whaling industry'.[24] Apart from the provisions in the convention, a series of recommendations from the Commission have also added to the body of guidance offered on the consideration of sanctuaries.

The First Antarctic Sanctuary

Almost as soon as these provisions of the ICRW were agreed, a sub-committee was established to consider, *inter alia*, 'the question of sanctuaries'.[25] This was an important question as a sanctuary had been designated in the first schedule to the ICRW.[26] Although this was quickly over-ridden (and opened) the first Southern Ocean Sanctuary (SOS) coincided with growing concerns about the sustainability of the pelagic whale catches around Antarctica. As such, it was being mooted in some corners that a sanctuary around this area may be necessary. Accordingly, at its second meeting, it was decided that 'the question of closing further areas as sanctuaries, should be kept under constant review'.[27] Discussions were carried on at the third meeting, with a view to putting some 'concrete proposals' on the agenda for the fourth meeting.[28] However, throughout this time, the proposals to close off the area were avoided.[29] This became problematic in the late 1950s as the SC began arguing that 'from a purely biological point of view' the sanctuary around Antarctica should be made operative. However, the Commission voted against this advice for the following few years.[30] By the mid-1960s, the operation of a sanctuary was being urged as 'this might save certain species from eventual extinction'.[31] This plea, like the ones before it failed, and the area remained open to pelagic whaling.[32]

The Indian Ocean Sanctuary

Further discussion of sanctuaries within the IWC did not occur until the IWC's 31st Meeting, when the idea resurfaced.[33] At this meeting, the Seychelles proposed the establishment of an Indian Ocean Sanctuary (IOS).[34] In spite of a number of objections,[35] the majority of the parties to the ICRW accepted the conservation value and potential of the sanctuary. Accordingly, a new paragraph was introduced into the schedule which prohibited whaling in this area.[36] This sanctuary was renewed in 1992 and reviewed in 2002 (discussed in the following pages).

The South Pacific Whale Sanctuary

In 1999, Australia and New Zealand reported that they had been conducting 'extensive consultations' on their joint proposal for a South Pacific Whale

Sanctuary (SPWS). [37] This proposal was formally promoted at the IWC in 2000, 2001, 2002, 2003 and 2004. The basis of the argument was that it would adopt a precautionary, holistic (ecosystem-based) approach and would strongly support regional objectives[38] to fully protect many species that were severely depleted in the nineteenth and twentieth centuries (and any other species which may not be dangerously depleted). [39] It also strongly complements regional programmes and objectives.[40] However, following contra arguments by Japan and like-minded countries,[41] (which were largely the same as those discussed below regarding the SOS), although the SPWS has consistently received over 50 per cent support of the Commission for the proposal, it has failed to receive the three-quarters majority necessary to amend the schedule.

The South Atlantic Whale Sanctuary

In 2001,[42] 2002, 2003 and 2004 Brazil proposed a South Atlantic Whale Sanctuary (SAWS). The primary objectives of the SAWS are:

1. To stimulate research in the regions, especially by developing countries and through international co-operation with the active participants of the IWC, aimed, among other topics to monitor the recovery of species, analysis of environmental threats, development of projects and initiatives to survey historical open ocean whaling grounds and obtain a better understanding of cetacean migratory routes.
2. To promote the conservation of large whales in their breeding, calving and for some species, feeding areas and migratory paths.
3. To develop the sustainable and non-lethal economic use of whales for the benefit of local communities in the region, through eco-tourism and educational activities such as whale-watching and to provide scientific background to the management of such activities in order to ensure its sustainability over time.[43]

The SAWS proposal has consistently met the same fate as the SPWS proposal.

3 THE DEFINITION OF A SANCTUARY WITHIN THE IWC

At the same meeting that the IOS was established, the examination of the general concept and characteristics of whale sanctuaries was initiated by the IWC in the belief that it was important to develop basic principles for the future.[44] Soon

after, a technical committee working group (TCWG) was established. The TCWG issued a series of guidelines,[45] to which it hoped the Commission would pay 'full regard'.[46] The TCWG defined a sanctuary as 'an area closed to whaling for a specified period of time in which whales are afforded protection in order to provide for their long-term conservation'.[47] According to the TCWG, 'sanctuaries should be established to provide necessary and desirable protective measures which are not available to conserve whales under other regulatory measures of the Convention'.[48] The primary objective of sanctuaries was 'to provide for the conservation and utilisation of whale resources in accordance with the Preamble of the Convention and as provided in Article V of the ICRW'.[49] Additional objectives were:

> to establish reference areas for the present and future management with a view to providing the following.
>
> 1. Information on levels and trends within unexploited whale populations.
> 2. Comparative information on biological characteristics and changes in them for comparison with those from exploited populations.
> 3. Areas within which research might be undertaken on the behavior and social structure of populations not disturbed by whaling.[50]

The critical point about these extra objectives is that they are clearly intended to cover non-endangered species of whales. This point, which had been earlier recognized in the UNEP review of the IOS[51] was also forcefully argued by Australia at the 1994 Intersessional Working Group on a Sanctuary in the Southern Ocean (IWG).[52] Similar points later arose, in light of the difficulties with the review of the SOS in 2004 and the IOS in 2002. With the latter, despite the agreed objective to review the sanctuary, the review became contentious as a number of countries began to argue that sanctuaries may have multiple purposes which go beyond strict scientific-based arguments on the endangered status of whales. Thus: 'sanctuary reviews should not be restricted to narrow scientific debate and that account should be taken of the increasing debate and use of sanctuaries by other international, for example, for cultural and regional considerations'.[53]

When the review on the IOS began in 2002, it was shown that in addition to providing added protection to some threatened cetaceans, it also provided an important buffer zone against environmental threats and bycatch of cetaceans.[54] Such views were objected to by Japan, who argued that the IOS should be repealed as it gave protection coverage to a number of species, irrespective of their conservation status.[55] Due to such opposing desired purposes for sanctuaries during the proposed review, no agreement could be reached.[56] This deadlock led to a resolution being passed by the Commission which stipulated three important principles. First, that sanctuaries are established and

maintained for a number of reasons, of which scientific considerations, although important, should not be definitive of the validation process. Second, temporary overlap in the management measures cannot invalidate in any way the longer-term scientific and conservation values of a given sanctuary. Third, if there is no consensus on specific issues within sanctuaries, the precautionary principle (as determined in accordance with Principle 15 of the Rio Declaration) shall be applied.[57]

4 THE 1995 SOUTHERN OCEAN SANCTUARY

In 1990, the International Union for the Conservation of Nature and Natural Resources (IUCN) passed a resolution at its 18th General Assembly, which not only called upon the IWC to continue to support the IOS, but also to 'consider the creation of other sanctuaries within a comprehensive system for the conservation of whales'. In 1992, the French government adopted the idea, and proposed that a new SOS be established. In 1994, following a long-drawn-out process lasting a few years,[58] a vote was called for in the technical committee. This was despite the fact that only a majority, and not a consensus (within the technical committee) existed for the establishment of the SOS. Being only a simple majority meant that the requisite three-quarters majority necessary to amend the schedule (by the parties to the ICRW) was unlikely.[59] However, by 1995, the three-quarters majority was achieved, and the sanctuary was formally created by a vote of 23 for, one against, and six abstentions. Accordingly, the SOS was designated in paragraph 7(b) of the schedule. This paragraph states:

> In accordance with Article V(1)(c) of the Convention, commercial whaling . . . is prohibited in a region designated as the Southern Ocean Sanctuary . . . This prohibition applies irrespective of the conservation status of baleen and toothed whale stocks in this Sanctuary . . . this prohibition shall be reviewed . . . at ten year intervals . . .[60]

5 THE CHALLENGE TO THE SANCTUARY

In 1998, at the 50th meeting of the IWC, Japan put forward a resolution arguing for the immediate abolition of the SOS[61] on the grounds that the SOS was without scientific justification, and that it was against the objectives and purposes of the ICRW. This line of argument was reiterated in 1999[62] and thereafter, and is often linked to a proposed schedule amendment from Japan to abolish the SOS.[63] There are three grounds for this contention, each of which will be examined in turn.

Scientific Basis for the Sanctuary

Although the 1982 TCWG recommended that 'scientific findings' should be part of the justification for the establishment of sanctuaries, exactly what they meant by 'scientific findings' was undefined. Multiple considerations were listed, direct mandates were not. Moreover, the issue of whether scientific findings must be based on consensus, majority or any evidence at all was not established. This point is of particular concern, as within the IWC, the position of the scientific evidence has for a long time been an issue of difficulty.

This difficulty of using 'scientific findings' as the final decision-making mechanism (within the IWC and elsewhere) has also been challenged by a further two considerations. The first difficulty is that scientists and other epistemological communities are often at loggerheads within the IWC (and elsewhere) and, as a result, consensus in such settings is a rare achievement. Moreover, despite this lack of scientific consensus, decisions may have to be made because of the necessities of the situation.[64]

Second, even where consensus is achieved, there is no guarantee that the actual policy makers will implement it. Indeed, science and the interpretation of scientific material is not value free, and policy makers may choose to accept or reject such material for a multitude of ethical, social and/or political reasons. That is, scientific consensus does not (and should not) necessitate a move from the fact (the 'is') to the value (the 'ought').[65] Such a common misconception has in the past caused confusion within the IWC, since on occasions when scientific advice has been proffered, it has not always been utilized by the policy makers in the way that certain scientists would have hoped for.[66] However, such an approach (that all scientific judgements should be followed) is based upon the naïve assumption that science alone should guide decisions. This is not to deny the importance of scientific guidance. Rather, it must always be hemmed in by greater philosophical considerations which only the elected and representative should decide.

The end result of the above considerations in this context is that the scientific basis for the sanctuary is, like other issues within the IWC, debatable. One commentator has suggested that the SOS is 'innately political but shrouded in science.'[67] Accordingly, it is not uncommon to find statements by protagonists within the debate that the SOS is 'devoid of scientific findings on which to base the establishing of a sanctuary'.[68] Conversely, it has also been suggested that the SOS is fully justified on scientific grounds. This broad divide on the scientific merits of the SOS has been recorded within a number of the bodies within the IWC which have examined the issue. For example, the Subcommittee on Southern Hemisphere Baleen Whales noted:

> One view held is that the proposal had no scientific elements to justify its implementation . . . Another view is that . . . the sanctuary needs to be considered in the context of a broader scheme for the conservation of whales both in the Southern Hemisphere and globally. In this global context the proposed sanctuary would limit the impacts of unforeseen problems in the RMP to the other regions where it was applied . . . therefore a sanctuary could be a prudent complement to the RMS until experience proved the RMP to be satisfactory.[69]

This situation of 'two main views' was replicated in 1993, when the SC made no recommendations of findings regarding the necessity or appropriateness of the sanctuary.[70] In 1994, the chairman of the SC stated that the committee had neither seen nor discussed the latest amended proposal for the SOS. Rather, it decided that further issues needed to be considered by the technical committee. When the issue arose in the technical committee, the scientific justification for the SOS was supported by a number of delegations 'demonstrat[ing] much support for the proposal as a precautionary measure and safety net for the RMP'. This view was also replicated at the IWG.[71] Accordingly, the IWG put forward the merits of the SOS on a scientific basis as:

> Recognising the need for broader understanding of environmental changes . . . and environmental threats affecting whale stocks in the Antarctic marine ecosystem . . . furthermore, the Commission should apply the precautionary principles in discussions regarding the Southern Ocean Sanctuary.[72]

Another area of scientific debate with regard to the effects of the sanctuary pertained to the Japanese allegation that establishing a sanctuary may actually be counter-beneficial and could harm the ecosystem. This would supposedly happen as the smaller cetaceans came to populate and exploit the previous niche created by the overexploitation of the largest cetaceans. The SOS, it was suggested, could 'perpetuate th[e] imbalance in the ecosystem' and 'the recovery of Blue and other large whales' might be 'hampered by the rapid increase of fast-breeding minke whales'.[73] Moreover, it was contended that: 'Establishment of a sanctuary will obstruct access to knowledge on changes of the earth environment'.[74]

The SC effectively rejected this argument when it noted that, although protected species may be affected, the impacts will be 'relatively small' and 'it is unclear whether these small differences will be positive or negative for the depleted species'.[75]

A final area arising in this debate involved the fact that some of the IWG members of the committee clearly felt that 'a number of specific ecological issues requir[ed] clarification'.[76] These related to feeding and breeding, migrations, inter-species competition and global environmental factors effecting the SOS. It has been alleged that such questions have been interpreted to mean

that the SOS lacked scientific support.[77] Such a view is problematic as these concerns would ultimately appear to be of a secondary nature, as opposed to ones which have a substantive basis. It is probably much more plausible to argue that such concerns were loose ends that required action, rather than a challenge to the inherent scientific validity of the process.

This split approach with regard to the support of the SOS has also been mirrored with the SPWS. As such, at the 2000 meeting in Adelaide, the SC 'was unable to reach a consensus view on the proposal and referred arguments for and against sanctuary proposals for consideration by the Commission'.[78] In 2001, Japan and others sought a further scientific review of all the existing sanctuaries. This request soon became a source of contention, and although a working group attempted to define a series of suitable questions to put to the SC to help with evaluation, they were unable to reach a consensus of what questions should be set. When the SC did eventually attempt to review the sanctuary, it emphasized the difficulties in this area as the overall objectives of the sanctuary and appropriate associated performance measures and monitoring were in need of work. Nevertheless, the committee ventured that whales were not effectively protected within the SOS because such sanctuaries only apply to commercial whaling and because whales also migrate outside of the SOS boundaries. As such, not all stocks were necessarily adequately covered.[79]

In sum, with regard to the scientific justifications of the SOS and the SPWS, it may be contended that a broad consensus exists which may have scientific value. It is certainly not without scientific merit, although it would be incorrect to suggest that a consensus is anywhere near appearing in a non-partisan way on this issue.

Necessity

Article V suggests that sanctuaries should only be created when they 'are necessary to carry out the objectives and purposes of the Convention'. A second criticism of the SOS has arisen from this stipulation in the form of a suggestion that a sanctuary should only be declared when IWC regulations do not otherwise accomplish the end in view.[80] Specifically, it is contended that the SOS is not necessary for the ICRW's principles to be observed for two reasons.

The first contention suggests that the current moratorium on whaling already covers the oceans around Antarctica. Thus, as William Burke argued for the SOS and later for the SPWS:[81]

> For conservation purposes, a sanctuary adds nothing to the moratorium. Of course, the moratorium itself is inconsistent with the concurrent development of the whaling industry when there are whale species which are sufficiently abundant to permit a sustainable commercial harvest.[82]

The axiomatic answer to this is that it is possible that the moratorium will not continue indefinitely. Thus, when the moratorium lapses the objection will fail. It also needs to be recognized that even with the moratorium in place, it has been possible for some members of the IWC to undermine it through so-called 'scientific whaling.'[83] Although this activity does not as yet constitute a serious threat to any whale species, it does raise the awareness that the moratorium is hardly as watertight as some contend.

The second contention is that even without the moratorium, the implementation of the RMP should guarantee the protection of sustainably managed whale stocks. Indeed, the RMP 'represented the culmination of several years of extensive development and had been tested against uncertainty with a rigor unparalleled in the management of any biological resource'.[84] The alleged problem is that the SOS could supplant the RMP in this area,[85] and since the RMP should already guarantee the sustainability of taking certain whales, it is not 'necessary'.

Apart from the problem that the RMP has not yet entered into force and that a number of difficulties remain which may prevent it doing so for a number of years,[86] a series of other justifications have also arisen in contention to the allegation that the SOS is not 'necessary'. For example, the French proposal has countered this charge by suggesting that the SOS 'is intended to supplement, rather than supplant, still less invalidate the RMP'.[87] As such, it is necessary because it is fulfilling a different role from that of the RMP, and is not trying to replicate any of the functions of the RMP alone. Hence, its necessity is derived from its separate, supporting functions.

In order to support this contention, the French proposal had detailed various justifications relating to the possible failure and fallibility of the RMP, and how the SOS could counteract these.[88] The central justification was that the SOS could act as a 'safety net' in conjunction with the RMP in case parts of the RMP failed. This was said to be the application of the precautionary principle (which the IWC has come to consider as important).[89] It was also a recognition of past abuses of the ICRW within the IWC membership by members (such as the former USSR) which had secretly and blatantly violated previous management regimes, which were regarded as foolproof.[90]

Despite the French contention that the RMP would not be supplanted by the sanctuary, the SC suggested that 'the sanctuary proposal constituted a replacement of the RMP in the Southern Ocean'. Nevertheless, some members deemed this to be useful as 'in this global context the proposed sanctuary would limit the impacts of unforeseen problems in the RMP to the other regions where it was applied'.[91] Likewise, most members of the IWG emphasized the importance of both the precautionary principle and the idea of the SOS as a safety net, as also did the earlier technical committee.[92] The IWG also decided:

> [T]he Southern Ocean sanctuary . . . could provide an opportunity to members of the IWC to promote further research activities in the Southern Ocean . . . [specifically, it could be useful in helping to] monitor and compare the management of whale stocks to which an RMS may be applied with a situation where no whale catch would occur.[93]

Therefore, with regard to the issue of the 'necessity' of the sanctuary, it is open to question that it might be necessary in the sense that it may achieve objectives that are important to the IWC which other mechanisms could not achieve. That is, the SOS may accord with a broad view of the precautionary principle and may act as a good buffer against unforeseen and even greater environmental threats.

6 THE CORE ISSUE: INTERPRETATION

It is my contention that the central issue that is at stake is one of statutory interpretation of international legal instruments. Arguments relating to questions of the scientific justification and/or the necessity of the SOS can be put forward with satisfactory answers provided in support of the SOS. However, it is in the larger issue that the epicentre of the problem lies. This is because, unfortunately, partisan scientific interpretations, both pro and contra, will always be produced as long as there are monied and interested protagonists involved in this arena. This is unlike the area of interpretation which has brought about a distinct change in emphasis over the last five decades. This is not to suggest that consensus will ever be achieved on the direction through which international environmental law may evolve, but rather that the way that it is evolving in this context is both novel and perhaps illustrative of a much larger paradigm shift within the international community on similar issues. This change, I contend, is the heart of the debate.

All protagonists within the SOS debate agreed at the IWG that 'there are no irreconcilable objections to establishing a sanctuary in conformity with Article V of the 1946 Convention'.[94] What they have disagreed upon is the interpretation of Article V and its related stipulations.

Article V of the treaty stipulates that it is necessary to achieve the 'conservation, development *and* optimum utilisation' (added italics) of whales.[95] Likewise, the preamble speaks of trying to achieve 'the optimum level of whale stocks as rapidly as possible'. Closely tied to these provisions, are the requirements that the 'interests of consumers of whale products and the whaling industry'[96] be taken into account, and the 'orderly development of the whaling industry'[97] be considered.

From these provisions it has been asserted that the SOS was/is clearly against the 'optimum utilisation of whales'. For example, the Norwegian

paper on the sanctuary submitted at the IWG stated: 'The proposed sanctuary is neither necessary for the optimum utilisation, nor does it provide for it'.[98] Likewise, the legal workshop sponsored by the Cetacean Institute in Japan suggested that '[a] total ban does not foster utilisation'.[99] Even Patricia Birnie implicitly concurred with this point when she noted: 'Clearly it is not possible, if stocks are depleted and thus closed to whaling for conservation purposes, simultaneously for them to be open to optimum utilisation'.[100] With regard to the interests of the traditional whaling industry, Burke added that with the SOS, [W]hat is [also] significant is that no consideration was given to any possible consumer or industry interest'.[101] Moreover, '[i]t is more likely that the provision for a sanctuary of indefinite duration would prevent further (or any) development of that industry'.[102] As such, the SOS 'conflicts directly with the objectives and purposes of the ICRW'.[103]

These contentions go to the epicentre of the debate, which is ultimately a question of interpretation. Burke himself has recognized: 'Whether a sanctuary provides for optimum utilisation depends in part upon the definition of the latter term'.[104]

The traditional interpretation of this term has been based upon the assumption that optimum utilization requires the harvesting of whales using lethal methods. In addition, the conservative interpretation of the 'whaling industry and the consumers of whale products' has been taken to mean those who have an interest in the dead whale. However, within the last thirty years the context of the debate has slowly evolved. In the light of this evolution, it is quite possible to contend that the interpretation of these terms by the majority of the parties to the ICRW has changed. Specifically, it is agreed that it is possible to optimally utilize a resource without destroying it, or, as in this case, killing it. Indeed, a large amount of material has been produced with regard to both domestic and international environmental concerns to establish that achieving optimum utilization of a resource does not necessarily require killing or destroying it. This argument has been amply demonstrated in evidence relating from rainforests to elephants, and for multiple reasons ranging from ethics to economics.[105]

This contention may be supported by the other important words in the ICRW which require the 'conservation' and 'development' of the whale resource and the 'orderly development of the whaling industry'. In this sense, the development of the whale resource has clearly progressed over the last thirty years from killing individual specimens to promoting multiple non-lethal interests.

The view set out above suggests that in the past not only has linear thinking detrimentally dominated the debate, but also in discussion of most issues within the IWC, a number of stakeholders in the debate have been excluded. Thus, it may be necessary to broaden the ambits of the traditional focus so that

those with a legitimate stake in the debate may be given an equal voice. The preamble of the ICRW has already recognized 'the *common* interest to achieve the optimum level of whale stocks as rapidly as possible' (added italics). Moreover, the first principle cited in the preamble of the ICRW has 'recognis[ed] the interests of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks'.

The principle that all nations have an interest in whaling has been evidenced by the membership of the IWC, which includes a number of countries which have never sought to utilize traditional whaling interests that involved the killing of whales. Instead, their interest in the debate, like the current majority of members of the IWC, has been to oppose whaling in the traditional sense. Thus, they have had their own reasons for actively supporting mechanisms to either reduce traditional whaling (by seeking a very strong RMP) or eliminate it in places altogether (through the moratorium and sanctuaries). These countries have clearly interpreted their 'interest' in the debate concerning a common resource which is 'owned' by *all* humanity to be one where optimum utilization does not involve killing.

Although I discussed this position further in Chapter 6, I shall briefly outline the argument here. Within the IWC literature, the approach of the non-lethal utilization of cetaceans can be clearly traced back to 1983 when there was an independent Conference on the Non-Consumptive Use of Cetacean Resources. This report, which was commended to the IWC by St Lucia, led to the creation of a working group to discuss the implications of the conference for the IWC.[106] Although this was examined in 1984 by the working group, no recommendations concerning the non-consumptive uses of whales were made by either the group, or the IWC generally.[107] Nevertheless, even countries such as the former USSR[108] and Japan accepted that non-consumptive values could exist. Nevertheless, they '[could not] go along with any allegation that non-consumptive utilisation has a higher priority than consumptive utilisation'.[109]

The recognition of non-consumptive values reappeared strongly in the 1990s, as the whalewatching industry developed, and a clear economic alternative to the lethal utilization of whales emerged.[110] In accordance with this, the United States, in clearly recognizing the ambiguous nature of the language of the convention, argued in 1993 that 'the goal of optimum utilisation is not limited to lethal utilisation'.[111] They reiterated this approach in 1994, by suggesting that 'sustainable use of marine living resources as set forth in Agenda 21 of UNCED . . . does not require consumptive use'.[112] This argument was repeated in 1997 by the United States, when it again emphasized that whalewatching is a good example of sustainable use.[113] Likewise, in 1998 New Zealand suggested that 'whalewatching is an acceptable form of benign exploitation'.[114]

The above example of whalewatching as non-lethal utilization is one instance by which the non-whaling countries have sought to protect and preserve whales. For these non-whaling countries, the terms 'whaling industry' and the 'interests of consumers' have been interpreted through the views of their constituencies, comprising everything from individuals with anti-whaling bumper stickers, to professional anti-whaling NGOs, through to commercial whalewatching industries. In many instances, these examples are now considered to be part of the 'whaling industry'. Indeed, even the 1997 legal workshop suggested that 'whalewatching and other non-lethal uses of whales might be considered as part of a whaling industry'.[115]

For these non-whaling countries, the best way to achieve their legitimate concerns in relation to the optimal utilization of a common resource is to pursue non-lethal objectives. The majority of countries within the IWC are already doing this. Thus, they promote the interests of their consumers and their industries interested in the whaling debate by interpreting optimal utilization from the perspective of a preservationist ethic rather than that of the so-called 'sustainable use' approach. This conclusion is hard to avoid when it is remembered that the SOS, like the IOS and the moratorium before it, all prohibit the lethal taking of whales '[i]rrespective of the conservation status of . . . [the] . . . whale stocks in this Sanctuary'.

The rejoinder to the above arguments which may be invoked to justify the sanctuary may be that the SOS 'give[s] a highly expansive meaning to conservation which enormously restricts the rights of members to conduct the sustainable harvest of whales'.[116] Moreover, 'the difficulty with these and similar interpretations is that they turn the terms of the ICRW completely upside down and defeat the major purpose of the original agreement'.[117] As such, 'the feat of changing the treaty's major purpose through interpretation is sought'.[118] This contention may be correct as the interpretation of the ICRW, and its subsequent designated purpose, may not be as immovable as the antagonists of the SOS suggest.[119]

Interpretation may be regarded as part of the process of the clarification of the content of a treaty. It may apply either to the treaty as a whole or to its individual articles. The desired outcome of the process is for the treaty to be applied correctly. This subject, which has generated a large amount of scholarly research[120] is far from settled.[121] The reality is far from the implicit assertions that there is only one correct way to interpret the ICRW.

Broadly speaking, there are three schools of thought which have focused upon the subject. The first, the so-called 'subjective school', has suggested that when facing issues of interpretation, the inquirer ought to seek to ascertain the intention of the parties and give effect to those intentions.[122] This may be done by looking at the course of negotiations leading up to the conclusion of the treaty, and establishing its overall purpose.[123] The second school of

interpretation is known as the 'textual school'. This approach contends that interpretation should be in accordance with the 'ordinary and apparent signification of its terms'.[124] Burke would probably support this interpretation of the ICRW. Accordingly, 'the overwhelming tenor of the Whaling Convention, and the . . . preamble . . . make it incongruous . . . [to suggest that it supports] the SOS'.[125]

The textual approach has been the subject of increasing attack on the grounds that it may be a dangerous deception because words have no fixed or natural meaning which the parties to an agreement may rely on permanently. Indeed, the meaning of words may be multiple and ambiguous, and agreements may be incomplete and may also be full of complementarities. As such, the meaningful sense may often only be made clear by reference to the factual circumstances of their current uses. Linguistic usage may change,[126] as may methods of textual interpretation.[127] Without the ability to adapt provisions an 'unacceptable, strait-jacket, dictionary made conformity upon the freedom of the choice of the parties would be imposed'.[128] Such an approach may restrict treaty interpretation and may have the result that a majority of parties are held hostage by outdated interpretations.

Such concerns gave rise to the development of the third school of interpretation. Accordingly, the 'teleological approach'[129] has sought to provide an understanding of interpretation as a process of the general tenor and 'atmosphere' of a treaty, the circumstances in which it was concluded, and the place it may currently occupy in the international community. This approach has sought to establish 'the closest approximation to the genuine shared expectations of the parties to the agreement'.[130] Moreover, it allows subsequent developments to also be taken into account in order to determine the traditional and emergent objectives and purposes of the treaty.[131] The idea of emergent purpose suggests that the object or purpose of a treaty may not be static, but rather, may be liable to change or to develop as experience is gained in the operation and working of the convention. Thus, teleological interpretation may be seen to be concerned with matters at hand at the time of the interpretation, not at the time of the conclusion of the treaty in question.[132] As such: 'International agreements are best understood, not as mere texts, but as continuous processes of communication and collaboration in a larger community context'.[133]

Judge Alvarez, in an advisory opinion in the International Court of Justice (ICJ), suggested that this approach may allow for 'the natural consequences of the dynamism of international life'.[134] Judge de Castro, in an opinion over 20 years later, added: 'When a declaration made a considerable time ago has to be construed it will always be necessary to verify how the words should be understood at the present time. The meaning of words may change with time'.[135]

The recognition that the meaning of words may change with time has been affirmed by the Appellate Body of the World Trade Organization, in the dispute over the United States Prohibition of Certain Shrimp and Shrimp Products.[136] In this dispute, it was argued by India, Pakistan, Thailand and Malaysia that the exception that the United States sought to rely on, to justify their import prohibition could not be supported because the US interpretation of the provision was 'unreasonable'. The exception that the US sought to invoke was Article XX(g) of the GATT which allows trade restrictions for (among other considerations) 'the conservation of exhaustible natural resources'. Those opposing the US suggested that the protection of 'living' resources, such as the sea turtles at the centre of the dispute, could not fall within this section, as the section was meant for '*non*-living exhaustible natural resources' (added italics) – such as petroleum, iron ore, or other non-living resources.[137] Moreover, they contended that this was the intention of the parties at the time when Article XX was created in 1946. The Appellate Body rejected this argument because:

> Textually, Article XX(g) is not limited to the conservation of 'mineral' or 'non-living' natural resources . . . The words of Article XX(g) 'exhaustible natural resources,' were actually crafted more than 50 years ago. They must be read by a treaty interpreter in the light of contemporary concerns of the community of nations about the protection and conservation of the environment . . . we note that the generic term 'natural resources' in Article XX(g) is not 'static' in its content or reference but is rather, by definition, evolutionary.[138]

This approach is broadly in congruence with the Vienna Convention on the Law of Treaties (VCLT) 1969 which was concluded in part, as an attempt to resolve difficulties of treaty interpretation. Strictly speaking, the VCLT cannot be regarded as retroactive. Thus, it does not necessarily apply to the ICRW which was created substantially earlier and interpretation may have to be taken through the earlier pre-VCLT principles. Nevertheless, the provisions of the VCLT are regarded by leading commentators as constituting the general expression of the principles of customary international law on the subject.[139]

Under the VCLT provisions, despite the general preference for traditional textual modes of interpretation,[140] it may still be possible to determine the 'context' of a treaty by examining the 'subsequent practice' or 'subsequent agreement' of the parties to the convention. According to international law, therefore, the language of a treaty must be interpreted in the light of the rules of general international law in force at the time of its conclusion, and also in the light of the contemporaneous meaning of its terms.[141] This is pertinent to the question (at hand) pertaining to the meaning of 'optimum utilisation' and the 'whaling industry'.

The VCLT suggests that: 'A treaty should be interpreted in good faith in

accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose'.[142] In determining the context, as well as looking at the text, preamble and annexes, it may also be possible to look at: '[a]ny instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty',[143] 'any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions',[144] or: 'any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its application'.[145]

Taken together, the VCLT and the earlier modes of possible interpretation may be presumed to suggest that it may be legitimate to interpret a treaty's provisions in the light of subsequent practices or agreement. Thus, in order to support my contention (that 'optimum utilisation' and the 'interests of the whaling industry' can be read legitimately as preservation focused) the question, therefore, needs to be asked: has any other subsequent practice of the IWC supported this?

7 THE SUBSEQUENT PRACTICE OF THE IWC

The focus of subsequent practice must be viewed *within* the workings of the convention concerned, and not from outside. As such, Burke may have been correct[146] when he suggested that none of the Vienna principles supports the use of subsequent developments derived from *other* agreements with other parties, or from non-binding agreements to negate the purpose of the ICRW.[147] Burke's suggestion was in response to Birnie's opinion that:

> Contracting governments will now be required to take into account in good faith the UNCED Rio Declaration and Agenda 21 which require application of the precautionary principle . . . and emphasise the rights and needs of future generations.[148]

The difficulty with Burke's suggestion with regard to this issue is twofold. The first difficulty is that the precautionary principle has already been recognized *within* the IWC and does not need to be inferred from external sources.[149] The second difficulty may be that the acknowledgement of the precautionary principle is not being invoked to 'authorise interpretations that actually amend a treaty's fundamental purpose'.[150] Rather, it was suggested as a consideration among others to be examined in good faith to reflect a changing context.

In my opinion, this changing context, and not the status of the precautionary principle is the epicentre of the debate before us. Thus, the real issue may be one of subsequent practice within the IWC which demonstrates a preservationist

approach. Such an approach would demonstrate that 'optimum utilisation' had been interpreted in a non-consumptive way. Simple examples of this, such as the increasing recognition of non-consumptive uses for cetaceans which have been on the agenda of the IWC for the last 15 years[151] although powerful, are not the strongest exemplars. Rather, the best examples are to be found in both the establishment of the IOS and the moratorium. In both of these earlier actions, protection was clearly granted to non-endangered species. This is clearly within the objectives of the SOS. Indeed, in 1999 when Japan wanted it made clear that the sanctuary 'does not apply to Minke whales',[152] France clearly stipulated that it 'wished to protect all whales regardless of their stock status and did not want to break the global approach'.[153] The United States followed this up in 2000, with its suggestion that 'the prohibition on commercial whaling in these areas was considered appropriate by the majority of the members of the Commission, no matter how depleted or abundant the stocks were'.[154]

This approach is clearly consistent with the IOS and the moratorium. For example, with the IOS, after setting out the relevant geographical boundaries, it stated: 'This prohibition applies irrespective of the classifications of baleen or toothed whale stocks in the Sanctuary'.[155] Likewise, the moratorium stipulated that 'catch limits for all the killing for commercial purposes of whales from *all* stocks for the 1986 coastal and the 1985/1986 pelagic seasons and thereafter shall be zero'.[156] (added italics).

This moratorium, in applying to all stocks, in as much as both the IOS and the SOS have applied to all stocks, sparked another wide-ranging debate within the IWC at that time. A large part of the antagonism related to the scientific justifications for such an action.[157] Nevertheless, Japan did eventually agree to the moratorium and withdrew its initial objection to it. It is not my intention, nor is it necessary, to deviate into an examination of the IOS or the moratorium within the IWC. Instead, these measures need only to be shown to exist as evidence of subsequent practice of the members of the agreement. These practices implicitly reflect how the key terms in question are interpreted by the majority of the parties of the IWC.

At this point it has commonly been contended that 'sustainable use' rather than preservation (as demonstrated above) has been the norm of international environmental law[158] and that this position may be regarded as that of the ICRW.[159] In order to bolster this argument, multiple examples external to the IWC may be adduced as evidence of this contention.[160]

The contention that 'sustainable use' rather than preservation is the norm of international environmental law runs afoul of two concerns. The first is that the option of non-consumptive use, as opposed to consumptive sustainable use, is an option which is well established in international environmental law.[161] The second problem has been that the IWC has long been recognized

as a distinctly separate body with its own particular mandate and philosophy. Article 65 of the UNCLOS explicitly recognized this in stating that the competent international organization (the IWC) may 'prohibit, limit or regulate the exploitation of marine mammals more strictly than provided for in this part'.[162] In other words, Article 62 of UNCLOS, which called for the 'utilisation of living resources' in the traditional sense, could be over-ridden.

8 CONCLUSION

Sanctuaries have a long and distinguished history within international law. In the last fifty years, the reasons for their creation have expanded into more holistic considerations. However, when the ICRW was drafted, this broader approach was not in currency. The establishment of sanctuaries has had to be achieved within the much narrower bounds of the text of the convention. On a prima facie level, arguments may be adduced that there is a scientific basis for the SOS and the SPWS, and that they have a purpose to play alongside the RMP. As such, the strict requirements of Article V of the ICRW can be fulfilled. On a secondary and somewhat deeper level, it is possible to justify both the SOS and the SPWS via the teleological method of statutory interpretation of the convention text which reflects that although the language of the convention has not changed, the way it has been interpreted has. Via a teleological approach, it is possible to construe the terms 'optimum use', 'best interests of the whaling industry' and the 'interests of the consumers of whale products' in non-consumptive ways. This type of interpretation may be supported under the VCLT if examples of previous practice demonstrating interpretative usage within such a context can be cited. Clearly, the earlier IOS and the moratorium do this. As such, the SOS may be regarded as being both a legal and an authoritative example of the way in which the majority of the international community has viewed one area of global environmental concern.

NOTES

1. *The Concise Oxford Dictionary* (1990) (Clarendon, Oxford): 1060.
2. The sanctity of certain areas at all times such as places of religious worship in times of war, from the Classical Greeks onward, has been well recognized. See Dawson, D. (1996). *The Origins of Western Warfare: Militarism and Morality in the Ancient World* (Westview, Boulder, CO).
3. Article 11 of the Wildlife Protection and Hunting Law Wildlife Protection and Hunting Law. Law No. 32 of 4 April 1918. Final Amendment, Law No. 85 of 22 June 1972.
4. See Scovazzi, T. (1993). 'The Declaration of a Sanctuary for the Protection of Marine Mammals in the Mediterranean'. *International Journal of Marine and Coastal Law*, 18:

510. Scovazzi, T. (2001). 'The Mediterranean Marine Mammal Sanctuary.' *International Journal of Marine and Coastal Law*. 16: 132. The Agreement Concerning The Creation Of A Marine Mammal Sanctuary In The Mediterranean can be found at http://www.oceanaw.net/texts/sanctuary.htm.

5. See Grove, R.H. (1992). 'The Origins of Western Environmentalism.' *Scientific American*. July: 22, 25.
6. 1858 Fishing Regulations for the Bidassoa River. Reprinted in In Ruster, B. and Simma, B. (eds) (1976). *International Protection of the Environment* (IPE). (Oceana, New York). Volume IX: 4321. Convention Between France and Great Britain on Fisheries. 1867. IPE. XXI. 1. Article XXIX. Convention Between the Grand Duchy of Baden and Switzerland Concerning Fishing in the Rhine. 1869. IPE. X. 4695, 4730. The 1880 Convention between Prussia and the Grand Duchy of Hesse, for the Protection and Promotion of Fishing. 1880. IPE. XI. 5399. 1880 Convention Between France and Switzerland Regulating Fishing in the Frontier Waters. IPE. X. 4844. 1882 Convention Between Italy and Switzerland Concerning Fishing in the Frontier Waters. IPE. XI. 5413. 1889 Regulation Between Korea and Japan Respecting Fisheries. IPE. XXI. Article 5. Exchange of Notes Between Great Britain and the United States of America Respecting the Preservation of the Fisheries in the Waters Contiguous to Canada and the United States. IPE. XXI. 27. Article 3. The 1897 Regulations Between Spain and Portugal for Fishing the Mino River. IPE. XI. 5431. Chapter 3. The 1920 Exchange of Notes Between Finland and Norway on the Subject of Adoption of Rules for Fisheries at the Tana Watercourse. IPE. X. Article 2. 1921 Agreement Between Italy, and the Kingdom of Serbs, Croats and Slovenes for the Adriatic. IPE. VI. 2582. 1925 Convention Between Estonia and Latvia for the Protection of Fish. IPE. VI. 2599. 1927 Convention between Germany and Poland Concerning Fishing. In IPE. XI. 5518. Agreement Regarding the Regulation of Plaice and Flounder Fishing in the Baltic Sea. IPE. VI. 2632. Article 2. Convention Between the United States and Canada for the Preservation of the Halibut Fishery. 1930. IPE. VI. 2636 & 1937. IPE. VI. 2639, 2651. 1934 Agreement Between Hungary and Czechoslovakia Concerning a General Closed Season. IPE. IX. 4463.
7. For some examples among many, see North East Atlantic Fisheries Convention. 486 UNTS. 157. Article 7.1.c. These broad powers to control the catch on targeted species were reiterated in Article 7 of the 1982 Convention on Future Multilateral Co-operation in North East Atlantic Fisheries. BH794.txt. 1973 Convention on Fishing and Conservation of Living Resources in the Baltic Sea. In Kiss, A. (ed.) (1983). *Selected Multilateral Treaties in the Field of the Environment* (UNEP, Nairobi): 317. Article X. Convention on the Conservation of Antarctic Marine Living Resources.B.H.883.txt A/CONF.129/15 (25 ILM. 543). Article IX.g. Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. Available from <http:www.oceanlaw.net/texts/westpac.htm>. Article 10(2)(d). The 2000 Framework Agreement for the Conservation of Living Resources of the High Seas of the South Pacific. Available from http://www.oceanlaw.net/texts/galapagos.htm. Article 6(d).
8. Austria/Hungary/Italy 1875 Declaration for the Protection of Birds Useful to Agriculture. IPE, Supra n6. IV. 1561. The 1897, 1907, 1914 and 1927 Convention(s) Concerning Hunting (waterbirds) on Lake Constance and the Rhine Between Baden and Switzerland. In IPE. IV. 1599. 1916 Convention Between the United States and Great Britain for the Protection of Migratory Birds. IPE. IV. 1638. Article 2. 1936 Convention Between the United States and Mexico for the Protection of Migratory Birds. IPE. IV. 1723.
9. 1900 Convention Designed to Ensure the Conservation of Various Species of Wild Animals in Africa. IPE. IV. 1605. 1933 Convention Relative to the Preservation of Fauna and Flora in Their Natural State. IPE. IV. 1693. Articles 3, 7 & 8. The 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. 161 UNTS. 485. Article II.
10. 1968 African Convention on the Conservation of Nature and Natural Resources. Reprinted in Kiss, Supra n7: 206–9. See Article III.
11. 1985 Protocol Concerning Protected Areas of Wild Fauna and Flora in the Eastern African Region. Reprinted in Austen, M. and Richards, T. (eds) (2000). *Basic Legal Documents on International Animal Welfare and Wildlife Conservation* (Kluwer, London): 186–93.

12. 1976 Convention on Conservation of Nature in the South Pacific. In Austen and Richards, ibid. 167–71. Article II.
13. Protocol for the Conservation and Management of Protected Marine and Coastal Areas of the South East Pacific, 1989. Reprinted in Austen and Richards, supra n11: 241–7.
14. 1985 ASEAN Agreement on the Conservation of Nature. In Austen and Richards, supra n11: 193–205.
15. The 1979 Convention on the Conservation of European Wildlife and Natural Habitats. Reprinted in Austen and Richards, supra n11: 171–81. This convention has a particular focus on endangered species. See Art. 2.
16. 1982 Protocol Concerning Mediterranean Specially Protected Areas. In Austen and Richards, supra n11: 181–6. Article 4. The 1995 Protocol adds to this wide focus. The 95 Protocol is also in Austen and Richards: 213–25.
17. The 1990 Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. Protected areas. Reprinted in Austen and Richards, supra n11: 252–66.
18. Convention For The Protection Of The World Cultural And Natural Heritage. (16 November 1972). BH605.txt.
19. See Gillespie, A. (forthcoming). Protected Areas and International Law. See UNESCO. 'Changes to the World Heritage Natural Heritage Criteria.' Available at <http://www.unesco.org/whc/whoswho.htm>.
20. The 1937 International Convention for the Regulation of Whaling. (1940) *American Journal of International Law*. Supp. 34:16. Also in LNTS. CEX. 79. See Article VII. This prohibition on whaling factory ships was in all seas between South 40 degrees South, and all seas North of 40 degrees North.
21. The 1938 (London) Protocol Amending the International Whaling Agreement. LNTS. CXCVI. 131. Articles 1 & 2.
22. Terms like 'sanctuary area' were not defined in the 1946 ICRW or its first schedule.
23. V(2)(c).
24. V(2)(d).
25. IWC. 1st Report. (1950). 4.
26. In 1952, South Africa pointed out that the Antarctic Sanctuary area was designated as such not on scientific criteria but because no commercial whaling took place there. IWC. 4th Report. (1953). 12–13.
27. IWC. 2nd Report. (1951). 5.
28. IWC. 3rd Report. (1952). 16.
29. IWC. 9th Report. (1958). 14.
30. IWC. 10th Report. (1959). 15; IWC. 11th Report. (1960). 17; IWC. 15th Report. (1964). 19.
31. IWC. 16th Report. (1965). 56.
32. IWC. 18th Report. (1968). 19; IWC. 19th Report. (1969). 19; IWC. 20th Report. (1970). 16; IWC. 21st Report. (1971). 18; IWC. 22nd Report. (1972). 21; IWC. 23rd Report. (1973). 21.
33. It also became popular in individual states. Indeed, many countries have now established national whale sanctuaries. Some of the earlier national legislation has been reprinted in Birnie, P. (1985). *The International Regulation of Whaling* (Oceana, New York). Volume II: 898, 987, 992. Stoett, P.J. (1998). *The International Politics of Whaling* (UBC Press, Vancouver): 70.
34. IWC. 30th Report. (1979). 27; IWC. 31st Report. (1981). 25; IWC. 32nd Report. (1982). 20.
35. 'Some members considered that the proposal of a sanctuary should have been supported by reliable scientific information'. IWC. 30th Report. (1980). 49. This was opposed by other scientists who argued the opposite way. Overall, 'no firm conclusions were reached'. In the same volume, at 27. In 1987, at the 39th meeting Japan reiterated its objection to the sanctuary. Partly in response to these concerns, the importance of research was heightened in the IOS. IWC. 38th Report. (1988). 16–17.

36. 'In accordance with Article V(1)(c) of the Convention, commercial whaling, whether by pelagic operations or from land stations, is prohibited in a region designated as the Indian Ocean Sanctuary'. Reprinted in IWC. 30th Report. (1980) 27.
37. IWC. 51st Meeting in 1999. (2000). 10. IWC. 52nd Meeting in 2000. (2001). 19. See, for example, the proposed South Pacific Sanctuary. See The Need For and Benefits of South Pacific Sanctuary For Great Whales. IWC/51/21. Agenda Item 7.1.3.
38. Australia and New Zealand (2004). 'A South Pacific Whale Sanctuary'. IWC/56/9. In 2000, the South Pacific Regional Environment Programme (SPREP) added to the force of the NZ and Australian argument by speaking on behalf of the 16 Pacific Island countries who would be within the SPWS area, who had endorsed the plan in 1998. SPREP (2000). Opening Statement of the South Pacific Regional Environment Programme to the 52nd Meeting. IWC/52/OS SPREP. This was reiterated in 2001. See 'Apia Meeting Major Boost for South Pacific Whale Sanctuary.' NZ Parliament, Press Release. April 21.
39. 'This prohibition applies irrespective of the conservation status of baleen or toothed whale stocks'. IWC. 52nd Meeting in 2000. (2001). 15.
40. See Governments of Australia and New Zealand (2001). 'A South Pacific Whale Sanctuary: A Proposal'. IWC/53. Agenda Item 7.4.
41. IWC. 51st Meeting in 1999. (2000). 10; IWC. 52nd Meeting in 2000. (2001). 15–16; IWC. 54th Meeting in 2002. (2003). 33–4.
42. IWC. 53rd Meeting in 2001. (2002). 19.
43. A South Atlantic Whale Sanctuary. IWC/53/7. For the full proposal, see Governments of Brazil and Argentina. (2003). 'The South Atlantic: A Sanctuary for Whales.' (Rio). Brazil and Argentina (2004). 'The South Atlantic: A Sanctuary for Whales.' IWC/56/10.
44. See 'Resolution in Relation to the Establishment of a Whale Sanctuary in the Indian Ocean.' IWC. 30th Report. (1980). Appendix 3. IWC. 31st Report. (1981). 20.
45. IWC. 34th Report. (1984). 22.
46. See 'Report of the Technical Working Group on Whale Sanctuaries.' IWC Doc. IWC/34/14 (1982). 4–5.
47. Ibid. 1.
48. Ibid. 4.
49. Ibid. 1.
50. Ibid. 2.
51. The report, submitted to the IWC at its meeting in 1988, provided the following scientific objectives for the sanctuary: '1. It should provide sufficient information to assess stocks of large whales and small cetaceans. 2. It should permit direct comparison of the status of species and/or populations protected by the sanctuary provisions and exploited or non-exploited stocks of the same species in other areas'. UNEP. (1988). *The Indian Ocean Whale Sanctuary* (Nairobi).
52. Australia (1994). 'Objectives for a Sanctuary in the Southern Ocean.' IWC/WGSAN/F94/6. The IWG was established to address 'the outstanding legal, political, ecological, geographical, management, financial and global environmental issues relating to such a sanctuary'. 'Resolution on a Sanctuary in the Southern Ocean.' IWC. 44th Report. (1994). 32.
53. IWC. 53rd Meeting in 2001. (2002). 16.
54. De Boer, M. (2002). 'Cetaceans in the Indian Ocean Sanctuary.' SC/54/05.
55. Morishita, J. (2002). 'Review of the Scientific Aspects of the Indian Ocean.' SC/54/020.
56. Report of the Scientific Committee. IWC/54/4. Annex N. Report of the Working Group to Review Sanctuaries.
57. IWC. 54th Meeting in 2002. (2003). 31. Application of this principle was the subject of uncertainty with the SC in 2003. See Report of the Scientific Committee. IWC/55/Rep 1. 54.
58. In May 1993, in a resolution on whaling, the European Parliament supported the creation of an international sanctuary to protect whales. Likewise, the 1993 Heads of Government of South Pacific Forum States (including Australia and New Zealand) did the same. See MacKenzie, D. (1994). 'Whalers Change Tack on Southern Sanctuary.' *New Scientist*. March 5: 4. MacKenzie, D. (1994). 'Whales Win Southern Sanctuary.' *New Scientist*. June 4: 7.

59. IWC. 45th Report. (1995). 26–7.
60. IWC. 46th Report. (1996). 28.
61. Japan. (1998). 'Resolution Concerning the Southern Ocean Sanctuary.' IWC/50/29. Agenda Item 13.3.
62. In 1999, Japan argued that the Southern Ocean Sanctuary was not based on scientific grounds and 'was legally contrary to the convention'. IWC. 51st Meeting in 1999. (2000). 10.
63. Proposed Schedule Amendment for the Abolition of the Southern Ocean Sanctuary. IWC/56/25. IWC. 52nd Meeting in 2000. (2001). 13.
64. This situation is doubly complicated with the introduction of the precautionary principle into international environmental law. This principle, in essence, suggests that lack of scientific consensus should not necessarily be used as a justification to stop acting on an issue. A good recent example of this was with the Southern Bluefin Tuna Case, where the International Tribunal for the Law of the Sea faced a situation where there was 'scientific uncertainty regarding measures to be taken to conserve the stock'. As such, 'the tribunal cannot conclusively assess the scientific evidence presented by the parties'. Nevertheless, they found that 'measures should be taken as a matter of urgency . . . to avert further deterioration of the southern bluefin tuna stock'. International Tribunal for the Law of the Sea. Southern Bluefin Tuna Cases. ITLOS/PV. 99/18. 27 August 1999. Paragraphs 79 & 80. For a useful discussion of difficulties between scientific communities, see Princen, T. (ed.) (1994). *Environmental NGOs in World Politics* (Routledge, London).
65. For a discussion of this philosophical problem, see Gillespie, A. (1997). *International Environmental Law, Policy and Ethics* (Oxford University Press, Oxford). Chapters 10–11.
66. See, for example, Butterworth, D. (1995). 'Sustainable Utilisation of Marine Mammal Resources.' In High North Alliance. *Additional Essays on Whales and Man* (High North Alliance, Oslo, Norway): 11–14.
67. Stoett, supra n33: 71.
68. Burke, W.T. (1998). 'The Legal Invalidity of the IWC Designation of the Southern Ocean Sanctuary.' Tabled as IWC/50/27. Item 13. At 9. Burke, W. (1997). 'Memorandum on the IWC Decision Adopting the Southern Ocean Sanctuary.' IWC/49/24. Agenda Item 13.2. At 3. Executive Summary of the International Legal Workshop. This was hosted by the Institute for Cetacean Research. See IWC/48/27. Item 13.3. At 7.
69. Subcommittee on Southern Hemisphere Baleen Whales. Report of the Scientific Committee (1994). IWC. 44th Report. (1994). 58. However, other members believed that unforeseen problems could be dealt with by the RMP. Despite this, and the following quotes, it was still suggested by Burke that 'the gist of the Subcommittee discussion is that the scientific basis for the SOS was not established'. Burke, W.T. (1995). 'Memorandum of Opinion on the Legality of the Designation of the Southern Ocean Sanctuary by the International Whaling Commission.' This was affixed to Government of Japan, Consideration of the Legality of the Southern Ocean Sanctuary. IWC/47/38. Agenda Item 13. At 7.
70. IWC. 45th Report. (1995). 20.
71. Recommendations to the Commission by the Norfolk Island Intersessional Meeting of the Working Group on a Sanctuary in the Southern Ocean. IWC/46/19. IWC. 45th Report. (1995). 46.
72. Recommendation 6. Intersessional Meeting. Ibid. 46. Like almost every other issue in this area, such as the impacts of climate change, ozone loss and toxins within the marine environment, which have been endorsed by some participants, they have also been challenged. See WWF (1994). 'The Southern Ocean Whale Sanctuary'. Discussion Paper (WWF, Gland): 9. Compare Singer, S.F. (1994). 'Scientific Shallows of Whale Sanctuary Idea.' *The Washington Post*. May 5. A18. Elsewhere, it has been suggested that not being able to lethally take whales in the sanctuary area, may actually retard scientific study of these problems. Comments of the Government of Japan, Norfolk Intersessional. WGSAN/F94/2 Rev. 16–17.
73. Burke has also suggested that the sanctuary could be 'counter-beneficial for Southern Hemisphere Minke whale stocks'. See Burke, supra n69: 6. Institute of Cetacean Research

(1995). *The Antarctic Whale Sanctuary* (Fisheries Agency, Tokyo): 8–9. Comments of the Government of Japan, Norfolk Intersessional. WGSAN/F94/2 Rev. 2–3,8.

74. Institute of Cetacean Research (1995), supra n73: 14.
75. IWC. 44th Report. (1994). 58–9. Elsewhere, other scientists have rejected this idea. See Holt, S. (1993). 'Annex L2. A Response to Annex L1.' IWC. 43rd Report. (1993). 206–7. Intersessional Meeting. IWC/46/19. 3.–4. WWF, supra n72: 6–7.
76. Recommendation 7. Intersessional Meeting, supra n72: 46. Specifically, information was sought on: the input required to maintain existing scientific research or to provide information necessary for comparative management, and new research activities considered essential; identification of levels of research needed where trends in whale population numbers of biological characteristics would provide management information, together with an assessment of possible programmes and costs; identification of any requirements for scientific catches; provision of the time scale for any research activity and the application of any results obtained; information on manpower requirements, existing or proposed, and possible funding sources.
77. See, for example, Burke, supra n68: 9.
78. IWC. 52nd Meeting in 2000 (2001). 14. The arguments in favour were, it supported regional co-operation, it was based on non-lethal research, it would help the Commission ensure the effective conservation of the stocks in a region undisturbed by whaling activities, and it would provide an 'insurance' against unforeseen problems with the RMP. Against the sanctuary were suggestions that the RMP was an adequate protection, protected species would remain protected irrespective of a sanctuary, research methodologies were irrelevant to sanctuary considerations and having a sanctuary may actually deflect from 'necessary' (lethal) scientific research. All on page 14. See also Australia/New Zealand. Science and the South Pacific Whale Sanctuary.' IWC/52/20. Compare Japan. 'Review of the Scientific Validity of the Proposal on the South Pacific Whale Sanctuary.' IWC/52/22. A very similar document (of the same name) was produced in 2001. IWC/53/21.
79. The working document, which was not concluded, was Instructions from the Commission to the SC for the Review of Sanctuaries and Sanctuary Proposals. IWC/53/42. Agenda Item 7.1.2. For the SC report, which utilized independent experts, see Report of the Scientific Committee. IWC/56/Rep 1. 57–8.
80. Technical Working Group, supra n46.
81. See Japan. 'Legal Expert Faults Proposed South Pacific Ocean Whale Sanctuary.' IWC/52/23. (Opinion by William Burke).
82. Burke, supra n68.
83. See Chapter 5.
84. IWC. 43rd Report. (1993). 72.
85. 'It is impossible to avoid the conclusion that supplanting the RMP is exactly what is intended'. Burke, supra n68: 3. Government of Japan (1997). 'Legal Aspects of the IWC Decision on the Southern Ocean Sanctuary.' IWC/48/33. 7–11, 13–15. Whether this is, or is not the case, the charge against the SOS in this context, is that it would not be as beneficial as the RMP. For a discussion concerning this, see Butterworth, D. 'Estimating the Natural Growth Rate of Baleen Whale Populations – Is the Sanctuary a Help or a Hindrance?' SC/45/0 21.
86. Such as the necessity of considerations for enforcement and control under the RMS. See Intersessional Meeting, supra n71: 2.
87. Paragraph 3.
88. Burke answered this contention by suggesting: 'Of course it is true that the RMP is not likely to be infallible. Nothing is infallible'. As such, if infallibility was the test, then sanctuaries could be justified in all cases. Burke, supra n69: 5.
89. Gillespie, A. (1997). 'Whalewatching and the Precautionary Principle' *New Zealand Universities Law Review*. 17: 254–72.
90. MacKenzie, D. (1994). 'Whalers Change Tack on Southern Sanctuary.' *New Scientist*. March 5: 4. Holt, S. (1993). 'Annex L2. A Response to Annex L1.' IWC. 43rd Report. (1993). 206–7.
91. IWC. 44th Report. (1994). 58–9.

92. Intersessional Meeting, supra n71: At 2.
93. Recommendation 5. Intersessional Meeting, supra n71: 46.
94. Recommendation 4. Intersessional Meeting, supra n71. Despite the stipulation that the IWC could establish sanctuaries in accordance with Article V, the working group did not consider that it could recommend specific action on the proposal to establish a sanctuary in the southern hemisphere. IWC. 45th Report. (1995). 21. At the 1996 meeting, Chile strongly rejected Japan's claims about the legality and scientific basis for the decision. Mexico, Spain, Australia, the United States, Brazil, Austria, Germany, Oman, South Africa and the UK shared this view. In addition, New Zealand (supported by Monaco, the Netherlands and France) added that, 'the sanctuary . . . satisfied the requirements of the Convention'. IWC. 47th Report. (1997). 36–7.
95. Article V(2)(a).
96. Article V(2)(d).
97. Paragraph 7, preamble.
98. Paper submitted by Norway: 'Legal Aspects of a Southern Ocean Whale Sanctuary.' WGSAN/F94/11. 2.
99. Legal Workshop, supra n68: 6.
100. Birnie, P. (1997). 'Are Twentieth-Century Marine Conservation Conventions Adaptable to Twenty First Century Goals and Principles.' *International Journal of Marine and Coastal Law*. 12(4): 488, 505.
101. Burke, supra n68: 10.
102. Burke, supra n69: 2
103. Burke, supra n68: 3.
104. Burke, supra n69: 4.
105. See Gillespie, supra n65. Chapters 3 & 4.
106. IWC. 34th Report. 26.
107. IWC. 35th Report. (1985). 20.
108. Ibid.
109. Ibid.
110. See Chapter 7.
111. IWC. 44th Report. (1994). 24.
112. IWC. 45th Report. (1995). 31.
113. IWC. 48th Report. (1998). 19.
114. IWC. 50th Meeting in 1998. (1999). 5.
115. Legal Workshop, supra n68: 4.
116. Burke, supra n68: 4.
117. Burke, supra n69: 11.
118. Burke, supra n68: 2, 5.
119. Burke made the same mistake when he suggested: 'None of the Vienna principles can be used to negate the purposes of the ICRW'. Burke, supra n68: 2. The axiomatic problem is that it is necessary to look at the Vienna principles as the purpose is in debate. They would not need to be invoked if it was as obvious as Burke contends.
120. For a useful list of most of the pertinent works, see Menon, P.R. (1992). *The Law of Treaties Between States and International Organisations* (Edwin Mellen Press, Lewiston): 69–70. See also Haraszarti, G. (1973). *Some Fundamental Problems of the Law of Treaties* (Akademiai, Budapest).
121. Even the International Legal Workshop in Tokyo in 1996 noted: 'It was not a case of one side having all the relevant legal principles to back its "case" while another had none. The underlying problem was a clash of principles'. Legal Workshop, supra n68: 3.
122. Or as Lauterpacht suggested: 'intention of the parties must be the paramount factor in the interpretation of treaties'. Lauterpacht, H. (1949). 'Restrictive Interpretation and the Principle of Effectiveness in the Interpretation of Treaties'. 26 *British Yearbook of International Law*. 49.
123. 'A treaty is to be interpreted in the light of the general purpose which it is intended to serve. The historical background of the treaty, travaux preparatoires and the circumstances of the parties at the time of the treaty and the conditions prevailing at the time interpretation is

being made, are to be considered in connection with the general purpose which the treaty is intended to serve'. See Harvard Law School (1935). 'The Draft Convention on the Law of Treaties'. 29 *American Journal of International Law*. 937.

124. See Fitzmaurice, T. (1951). 'The Law and Practice of the ICJ: Treaty Interpretation and Certain Other Treaty Principles.' 28 *British Yearbook of International Law*. 3. This school traces its roots back to Emerich de Vattel who suggested: 'It is not permissible to interpret what has no need of interpretation . . . when a deed is worded in clear and precise terms, when its meaning is evident and leads to no absurdity, there is no grounds for refusing to accept the meaning'. See Le Droit des Gens. Book II. Chapter XII. Section 263.
125. Burke, supra n68: 6.
126. See Falk, R. (1968). 'On Treaty Interpretation and the New Haven Approach: Achievements and Prospects'. 8 *Virginia Journal of International Law*. 332–3.
127. This latter concern refers explicitly to the debate of textual deconstruction. See Mitchell, W. (ed.) (1983). *The Politics of Interpretation* (Columbia University Press, New York). Weisberg, T. (1988). 'The Law-Literature Enterprise.' 1 *Yale Journal of Law and Humanities*. 1, 46–7.
128. McDougal, M.S., Lasswell, H. and Miller, J.C. (1994). *The Interpretation of International Agreements and World Public Order: Principles of Content and Procedure*. (Nijhoff, New Haven, CT): xxxii.
129. Which, like the textual approach, has also been the subject of attack. See Fitzmaurice, G. (1971). 'Vae Victis or Woe to the Negotiators: Your Treaty or Our Interpretation.' 65 *American Journal of International Law*. 358, 363. Gross, L. (1969). 'Treaty Interpretation: The Proper Role of an International Tribunal.' *Proceedings of the American Society of International Law*. 108, 120.
130. McDougal, supra n129: xxxii.
131. The use of subsequent developments was utilized by the ICJ in the Corfu Channel Case (Merits). [1949]. ICJ Reports. 4, 25, 28. See also, the ICJ Opinion on the International Status of South West Africa. [1950]. ICJ Reports. 128, 135–6. Such cases have made it possible to suggest that the ICJ has shown both an 'effective' and an 'evolutionary' approach to interpretation of the constitutive instruments within treaties. See Brownlie, I. (1990). *Principles of Public International Law* (Clarendon, Oxford): 632. Burke has retorted that none of the ICJ cases suggested that the intention of 'effectiveness' with interpretation were to be used to defeat the treaty's purpose. Burke, supra n68: 6. However, such a contention has missed the point, which is that the idea of 'effectiveness' is utilized to determine what the purpose is. If that was settled beforehand, the principle would not need to be invoked in the first place.
132. See Jacobs, F.G. (1969). 'Varieties of Approach to Treaty Interpretation.' 18 *International and Comparative Law Quarterly*. 318, 320. Menon, supra n121: 76–7.
133. McDougal, supra n129: xxix.
134. ICJ Reports. (1950). 229.
135. Aegean Sea Continental Shelf (*Greece* v. *Turkey*). 1978 ICJ Reports. 3, 62–3. Compare 71. See 'Legal Consequences for States of the Continued Presence of South Africa in Namibia.' 1971 ICJ Reports. 16, 157. Note, this approach has by no means been exclusive.
136. World Trade Organization. United States – Import Prohibition of Certain Shrimp and Shrimp Products. WT/DS58/AB/R. 12 October 1998.
137. Ibid. Paragraphs 127–8.
138. Ibid. Paragraphs 129–30.
139. Sinclair, I. (1984). *The Vienna Convention on the Law of Treaties* (Manchester University Press, Manchester).
140. McDougal, supra n129: lxii–lxx.
141. Brownlie, supra n132: 629.
142. Article 31 (1). The commentary suggested that the text shall be 'the starting point of interpretation'. See United Nations Conference on the Law of Treaties. First and Second Sessions, 1968 & 1969. Doc.A/CONF.39/11/Add 2.
143. Article 31 (2)(b).
144. Article 31 (3)(a).

145. Article 31 (3)(b). Given these very direct points in the VCLT, it is curious that Burke suggested: 'None of the Vienna principles can be cited to justify an interpretation supporting . . . the SOS based on events occurring decades after the agreement'. Burke, supra n68: 2.
146. Although he himself falls foul of this rule. This is because a paradox has developed in that all the evidence that Burke and others contend in a contemporary context, 'sustainable use', comes from external sources. When the use of the precautionary principle was mentioned, and seen as coming from external sources, this was supposedly illegitimate in the view of Burke and others.
147. Burke, supra n68: 11. He also alleged in the same opinion: 'No international law principle is cited to support this view. There is no such principle'. at 2.
148. Birnie, P., 'Opinion on the Legality of the Designation of the Southern Ocean Whale Sanctuary by the International Whaling Commission.' IWC/47/41/ Agenda Item 13. Elsewhere, she has stated: 'It could now (after UNCED) be argued that the "best utilisation" as well as a precautionary approach to conservation does require, given the history of whaling before the IWC and during it from 1945–82, that at least some be left undisturbed by commercial activity and be reserved to research purposes'. Birnie, supra n101: 508.
149. See Gillespie, supra n65.
150. Burke, supra n68: 8.
151. See 'The Non-Consumptive Utilisation of Cetaceans.' IWC/35/19. Such usage has covered benign research, the value of protected areas, the ecological value of cetaceans, recreational whalewatching, cetaceans in captivity, educational, cultural and various moral issues. For a discussion of this area, see Birnie, supra n33. Volume II: 631–5.
152. IWC. 51st Meeting in 1999. (2000). 10.
153. Ibid. 11.
154. IWC. 52nd Meeting in 2000. (2001). 13.
155. Paragraph 7. Reprinted in IWC. 30th Report. (1980). 27.
156. Paragraph 10(e), IWC Schedule, February 1983. p.13.
157. For a useful description of the scientific debate, see Birnie, supra n33: 615–17.
158. The International Legal Workshop has suggested: 'Preservation as a value is not well supported as a principle of international law . . . sustainability, or sustainable use is'. Legal Workshop, supra n68: 4.
159. Burke, supra n68.
160. Specifically, the Rio Declaration, the Law of the Sea, Agenda 21, CCAMLR, and the 1995 Kyoto Declaration and Plan of Action for Sustainable Contributions of Fisheries to Food Security (this last one is an odd choice, as whales are not fish). See, Government of Japan (1996). 'Opinion on the Legality of the Southern Ocean Sanctuary.' IWC/48/34. Agenda Item 13.3. 1. See also Burke, supra n69: 4. Institute of Cetacean Research (1995), supra n73: 2–3. It is useful to note that a number of these, such as Agenda 21, have also been interpreted, through similar, selective use of passages to be in concordance with a preservationist approach. Moreover, both Agenda 21 and the Law of the Sea have deferred such ultimate decision-making considerations to the IWC, and not necessarily to the more general principles they have contained.
161. See Chapter 7 on the Irish Proposal.
162. The United Nations Law of the Sea. (1982) 21 ILM. 1261.

10. Small cetaceans

1 INTRODUCTION

Small cetaceans (small whales – porpoises or dolphins) are currently struggling for adequate protection in international law. This is despite being on the agenda of a number of international forums since the early 1970s. This argument has become increasingly strong in recent years as a number of countries argue that the most obvious body to supervise such species – the IWC – should not have jurisdiction over these creatures. The primary argument in support of this contention is that small cetaceans were not included in the original nomenclature of the ICRW, and to subsequently add them would require the consent of all the signatories to the convention.

I believe that this view is mistaken for a number of reasons. These relate to the actual language of the convention, a simplistic view that the nomenclature was somehow a pivotal dividing mechanism within the convention, and a general misunderstanding of the way that treaties evolve and change through the mechanisms within them which allow entrenched majorities to modify treaties within the realms of what was broadly agreed originally (that is, it is *not* an amendment of the treaty), if necessary.

Closely aligned to the argument that the IWC does not have competence over small cetaceans, is the assertion that coastal states have near absolute competence over them. This contention is typically bolstered by the United Nations Convention on the Law of the Sea. However, I contend that this view is also mistaken as the UNCLOS does not accord to coastal states a complete sovereignty in territorial seas. Rather, it affords them a limited sovereignty. It is limited in the sense that nations can waive their rights under the UNCLOS and freely consent as nations have historically done, to the authority of overlapping international organizations such as the IWC. Under UNCLOS, even if a nation does not wish to join the IWC, it is still necessary to co-operate with the relevant overlapping international organizations when dealing with critically endangered species, migratory species or cetaceans in general. The primacy of the IWC with regard to cetaceans in these discussions was furthered in Agenda 21 in 1992, in which the IWC was clearly identified as the primary international agency for the management of whales, and thus any ambiguity was removed.

2 DEFINING SMALL CETACEANS

Whales, dolphins, and porpoises are known collectively as whales – or, to be more precise, as cetaceans. The word cetacean comes from the Latin *cetus* (a large sea animal) and the Greek *ketos* (sea monster). At least 79 species of cetaceans are currently recognized. Broadly, the order of cetaceans can be subdivided into two parts – large and small (or toothed and baleen). However, trying to define exactly which species are contained within each category is a difficult task, as there are no accepted definitions that encompass both biological and political viewpoints.

In terms of international law, 'small cetaceans' are a focus of concern in a number of international conventions, although the reason why they are listed is not often because they are 'small'. Rather they are listed because they happen to possess certain characteristics that fall within various relevant categories, such as they may migrate,[1] they may be endangered,[2] or they inhabit a certain region.[3] However, such characteristics do not describe 'the nature' of what defines a small cetacean.

The definition of a small cetacean usually proceeds from the most common basis of distinction, which is built around the misplaced assumption that small cetaceans are limited in size. The common imagination typically places the broad families of dolphins (usually of the *Delphinidae* family) and porpoises (usually of the *Phocoenidae* grouping) in this camp. However, this type of classification is simplistic and soon falls apart as consideration turns to the multitude of other species, which are clearly not anywhere near the size of the larger whales, yet which seem to possess some of the characteristics of the smaller whales. That is, while it is true that some species of 'small cetaceans' are no more than 1.2–1.5 metres in length at full maturity (such as the smallest, being the Hector's dolphin found off New Zealand or the black dolphin found off Chile), other 'small' cetaceans may reach close to 10 (such as the Killer Whale at 5.5–9.8) or 13 (Baird's beaked whale at 10.7–12.8) metres in length.[4] In itself, this creates problems as it is generally accepted that the IWC has the authority to regulate minke whales (which are deemed 'large') yet in biological fact, the minke is smaller in size (at between 7 and 10 metres) than Baird's beaked whale (which is deemed 'small').[5]

Due to such difficulties, marine mammal scientists have sought more definitive biological yardsticks to establish the division between the various suborders of cetaceans – which typically transfer into the groupings of 'large' and 'small'. The first division is the *Odontoceti*, which includes individuals that have teeth (generally of only one kind) and an asymmetrical skull. This order comprises the families *Iniidae*, *Lipotidae*, *Pontoporiidae*, *Platanistidae*, *Delphinidae*, *Phocoenidae*, *Monodontidae*, *Ziphiidae* and *Physeteridae*. Conversely, the second order is the *Mysticeti*, which are individuals that have

plates of baleen, instead of teeth, and a symmetrical skull. The families *Eschrichtidae*, *Balaenopteridae*, *Balaenidae* and *Neobalaenidae* are included in this grouping.[6]

The IWC did not originally base its work around such biological niceties. Indeed, no such dividing line between toothed and baleen whales can be found within the document that has been the source of much controversy – the original nomenclature that was annexed to the 1946 ICRW. In fact, the nomenclature mixes toothed and baleen whales, as well as listing typically 'small' cetaceans such as the northern and southern bottlenose whales.[7] However, the schedule to the ICRW (which is amended over time) does work on an assumption that baleen whales[8] and toothed whales[9] are different suborders.

Unfortunately, the debate over whether these categories transfer into large and small cetaceans does not end here. The difficulty is that many of those toothed species are big in size and are typically thought of as 'large cetaceans' such as the sperm whale. Moreover, within the IWC, this species, which can mature to a length of 18 metres, has never been thought of as 'small' in any sense of the word. With such considerations in mind, the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS) has defined small cetaceans as: 'Any species, subspecies or population of toothed whales *Odontoceti*, except the Sperm whale *Physeter macrocephalus*'.[10]

With the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area[11] (ACCOBAMS), cetaceans are defined as animals, 'including individuals, of those species, subspecies or populations of *Odontoceti* or *Mysticeti*'.[12] With the 1998 Agreement on the International Dolphin Conservation Program, dolphin was defined as meaning 'species of the family *Delphinidae* associated with the fishery for yellowfin tuna in the Agreement area'.[13] Elsewhere, although the word 'dolphin' appears in regional treaties, the word itself has remained undefined.[14]

Such types of definition have not appeared in the IWC. Rather, in this forum, excepting for administrative reasons,[15] the debate has moved away from biological distinctions towards political ones, whereby the signatories have wrestled with jurisdictional questions of whether the IWC has competence to manage stocks of small cetaceans. Within this broader debate, the answer to whether a species is 'small' or not, and the interlinking question of whether that grants the IWC jurisdiction over them, will often depend on which side of the jurisdictional debate the protagonist falls.[16]

3 THE SPECIES WITHOUT SUPERVISION

In the early 1970s, the SC of the IWC began to examine the stocks of minke and other small whales that were essentially still underexploited,[17] but which

certain nations were beginning to exploit.[18] At this interim stage the SC requested information on the 'status and catches' of small cetaceans by member countries. In addition, the SC recommended that a 'sub-committee on small cetaceans be set up to improve data collection on all world catches of these animals and to review species and stock identification and other problems'.[19] The intention was to keep watch on them and provide an early warning system if required – thus avoiding the IWC's earlier mistakes on larger species.[20] However, after reviewing the problem at hand, the SC recommended (among other concerns) that the Commission 'considers initially the management of those small cetaceans which are taken in deliberate, direct fisheries',[21] as there was an urgent need for an international body to effectively manage stocks of small cetaceans not covered by the present IWC schedule.[22] In its report, the sub-committee on small cetaceans concluded:

> There is an urgent need for an international body to effectively manage stocks of all cetaceans not covered by the present IWC schedule. This body should concern itself with all types of exploitation of cetaceans, both incidental and deliberate. All nations involved in such exploitation of small as well as large cetaceans should be included in such a body . . . The sub-committee therefore recommends that the present Convention for the regulation of whaling should be revised so that that Convention covers all cetaceans and all forms of exploitation.[23]

The following year, on a resolution on small-type coastal whaling, it was noted:

> [T]he Commission is at the present time the sole international authority exclusively concerned with the regulation of major species of cetaceans . . . [and] . . . the Commission has under study proposals for the revision of the International Whaling Convention to include all species of Cetacea.[24]

Over the following years, although the IWC urged that attention should remain focused on this issue[25] direct involvement with the substance of the suggestion was avoided as a series of working groups examined the problem both indirectly, as part of an overall reworking of the complete convention,[26] and directly, with the creation of specific working groups and steering committees to address the specific problem of small cetaceans. These groups continually tried to 'broaden the debate'[27] and 'go deeper into the problem of small cetaceans'.[28] In doing so, attempts were made to find common ground that did 'not seek in any way to prejudice different members' positions'.[29] Accordingly, 'non-controversial' and 'co-operative'[30] solutions to the problems surrounding small cetaceans meant that the signatories sought solutions while simultaneously 'setting aside without precedent the different legal views over competence and sovereign rights'.[31]

Despite these attempts, controversy broke out periodically in the 1980s, and

with more consistency in the 1990s. The controversies arose as the IWC did three things. First, they invited governments with adversely impacted populations of small cetaceans 'to seek advice from the IWC on ways in which those impacts may be assessed, and to this end to share catch statistics and data'.[32] Second, they 'urged Parties to undertake relevant research and to continue to provide information on directed and incidental catches of small cetaceans to assist the SC in assessing the Status of, and threats to, small cetacean populations'.[33] Finally, when specific populations of small cetaceans were being pushed to the limits of sustainable catch levels (by both direct and indirect means) the IWC issued direct resolutions to specific governments (such as Chile and Argentina,[34] Japan,[35] Canada[36] and Mexico[37]) to try to rectify the problems at hand. Other resolutions overlapping with the issue of humane killing of small cetaceans were also issued.[38] This approach was reinforced in 1999 with the Resolution on Small Populations of Highly Endangered Whales. This resolution welcomed the focus of the SC upon the status and trends of small populations of highly endangered whales, and encouraged member and non-member governments to participate in this work. Moreover:

> [It called] upon all governments whose nationals have in recent years taken whales from any of these populations of highly endangered whales to refrain from authorising any further takes until the Scientific Committee concludes that adequate scientific advice is available to demonstrate that such takes will not cause a continued threat to the survival or recovery of these populations.[39]

The result of these resolutions was that the countries which had traditionally rejected the IWC's competence over small cetaceans reiterated their views with added veracity. By the end of the 1990s, the problem of the need for an effective international body to manage small cetaceans was as acute as it had been when first raised 25 years earlier. With this predicament, it is no surprise that the IWC has likewise continued to reiterate the pleas that it had made a quarter of a century earlier, articulating the 'urgent need for further international co-operation to ensure the conservation of small cetaceans'.[40]

In essence, the question of the competency of the IWC to manage small cetaceans remains problematic. The uncertainties with the role of the SC generally, and the IWC's competence to manage small cetaceans specifically, are obvious.

4 THE RESPONSIBILITIES OF THE SCIENTIFIC COMMITTEE

In the early 1970s, the IWC decided it was necessary to monitor the catches of species of whales, which had previously been (largely) unexploited.[41] To this

end, member states were asked (for the first time) to give information concerning their take (both deliberate and incidental) of small cetaceans.[42] The Resolution on Reporting Requirements for Small Type Whaling in 1976 noted:

> [The] existing international commissions and organisations concerned with marine resources, do not, at the present time, provide a central agency for the collection of scientific information on captures of small cetaceans . . . the Commission has had brought to its attention the need for such an agency, and the need to commence the collection of such information on an urgent basis . . .[43]

To help collate and synthesize information (with regard to species review, stock identification and other problems) worldwide, a Sub-committee on Small Cetaceans (SCSC) was established,[44] which later,[45] through the SC, made recommendations for future action with regard to small cetaceans.[46] It recommended that, among other things, member nations report to the IWC information regarding the direct and indirect take of small cetaceans.[47] By the mid-1970s, although the SC was not in a position to classify stocks of small cetaceans in the same way as the large whales, it nevertheless was determined not to repeat some of the mistakes that had plagued the large whales, accordingly, it began to 'provide an early warning system for signs of depletion'.[48] of small cetaceans. Until the larger issue of the place of small cetaceans within the IWC regime was concluded, the Commission agreed (and reiterated throughout the 1980s[49] and 1990s)[50] that all cetaceans being taken be subject to consideration by the SC.[51]

Despite arguments to the contrary,[52] the IWC stipulated that the SC should 'provide such scientific advice as may be warranted to Contracting Governments, coastal States and other interested governments and intergovernmental organisations as appropriate'.[53] In the 1990s, this aim was reiterated, with the SCSC being affirmed to direct its attention to the 'certain stocks of small cetaceans [which] are being severely reduced through directed exploitation and incidental catches'.[54] In the pursuit of this objective, the SC instigated a series of regional and global reviews by which it could begin to fully ascertain which species of small cetaceans were being severely threatened. [55] This was reiterated in 2001 when the IWC urged all governments to respond to outstanding and future requests from the SC on the status and threats to small cetaceans.[56]

5 THE COMPETENCY TO MANAGE SMALL CETACEANS

Although there was initial uncertainty by member states over the status of small cetaceans with regard to IWC management,[57] by the 32nd meeting the

lines of debate were clearly established, and were being triggered by attempts to list some small cetaceans as protected species.[58] The essence of the debate, as it unfolded at the 32nd meeting,[59] was in three parts and has remained largely the same ever since. The issues are whether the ICRW confers competence upon the IWC to manage small cetaceans, the possible conflict with coastal states' rights and the role of regional organizations in small cetacean management.

6 INTERPRETING THE LANGUAGE OF THE ICRW AND RELATED DOCUMENTS

The answer to the question of whether the IWC is the competent body to manage small cetaceans is, in part, found within the ICRW and its associated documents (the schedule and the nomenclature). The specific issue is whether the text of these documents grants the IWC management rights over small cetaceans as well as the large ones. The tool by which this can be examined is the Vienna Convention on the Law of Treaties which gives specific rules for treaty interpretation.[60] Article 31 of the VCLT stipulates:

1. A Treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.
2. The context for the purpose of the interpretation of a treaty shall comprise in addition to the text, including its preamble and annexes:
   (a). any agreement relating to the treaty which *wa*s made between all the parties in connection with the conclusion of the treaty.
   (b). any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.
3. There shall also be taken into account, together with the context:
   (a). Any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions;
   (b). Any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation.

The Language of the Convention

As seen above, the primary rule with the interpretation of international documents is that 'the ordinary meaning' shall be 'given to the terms of the treaty'. In scientific terms, the word 'whales' covers both large and small cetaceans. In that regard, no distinction between the two *suborders of the primary order* 'whale' can be made.

This failure to make a distinction between the suborders is also furthered in

the language of the ICRW, which fails to define the species covered by the term 'whale'. Rather, the ICRW talks of whales generally.[61] For example, the preambular objectives of the ICRW speak of 'the interest of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks'. In addition, Article V explains: 'The Commission may amend from time to time the provisions of the Schedule by adopting regulations with respect to the conservation and utilisation of whale resources, fixing (a) protected and unprotected species'. Article 6 adds: 'The Commission may . . . make recommendations . . . on any matters which relate to whales or whaling and to the objectives and purposes of this Convention'. The exception to such generic language continues in the preambular sentence, which stipulates that 'it is essential to protect *all* species of whales from further overfishing' (added italics).[62] Clearly, the word 'all' would give weight to the argument that the generic term 'whale' in the ICRW was designed to cover *all* cetaceans, both large and small.

The 'ordinary' reading of such language has led Switzerland to suggest that 'no distinction has been made between large and small whales. The ordinary meaning of the term 'whale' is therefore legally extended to any kind of whale without any restriction due to size or classification in the whale family'.[63] This approach is in accordance with the view that the focus of the ICRW was to afford for the protection of whale stocks generally.[64] Indeed, the ICRW does not deal with individual species. Rather, the question of the management of individual species is dealt with in the schedule, which is amendable at each IWC meeting.[65]

This contention that the ICRW was designed to accommodate small as well as large cetaceans can also be supported by the fact that the original 1931 Convention for the Regulation of Whaling[66] took a different approach from the ICRW in that its Article 2 stipulated: 'the present Convention applies only to baleens or whalebone whales'.[67] Likewise, the 1937 International Agreement for the Regulation of Whaling was directly linked to baleen whales,[68] which were clearly defined as meaning: 'any whale other than a toothed whale'.[69] As such, the 1931 and 1937 conventions were clearly limited to large whales. Conversely, the 1946 ICRW, although taking a somewhat generic approach with its textual language (apart from the phrase 'all whales') adopted a different approach with its annexed nomenclature, which included *Hyperoodon ampullatus* and *Hyperoodon planifrons* (the northern and southern bottlenose whale). Both of these species are beaked whales, and have teeth;[70] they may therefore be classified as small cetaceans. Thus, the ICRW was clearly intended to be different from its predecessors, by not limiting its coverage to only baleen or whalebone whales.

The Schedule and Subsequent Practice

As noted above, when seeking to interpret a treaty, 'in addition to the text' it is permissible to examine the 'annexes' of the treaty. However, the ICRW does not have an 'annex' (by label). Rather, it has a 'Schedule' – which for all effective purposes relates to the idea and purposes of annexes. The difference between the two terms is that the term 'annex' (which is derived from the Latin *annectere*) means to tie or bind to. In essence, the word expresses the idea of joining a small or subordinate thing with another, larger or of higher importance.[71] The specific document which is joined – the schedule – is the sheet of paper annexed to the principal instrument, which 'exhibits in detail the matters mentioned or referred to in the principal document'.[72] In legal terms, it often comes in the form of an appendix 'arranged under headings prescribed by official authority'.[73]

Such an approach, where the text of the treaty and the annex/schedule are closely linked, was clearly recognized in the ICRW. Article I of the ICRW explains: 'This Convention includes the Schedule attached thereto which forms an integral part thereof. All references to 'Convention' shall be understood as including the said Schedule either in its present form or as amended in accordance with the Provisions of Article V'. (added italics). The Rules of Procedure of the ICRW explain that 'a three-fourths' majority of those casting an affirmative or negative vote shall be required for action in pursuance of Article V of the Convention'.[74]

This approach by the ICRW is in complete accordance with many other international documents dealing with other environmental problems, whereby the annex forms an 'integral' part of the convention at hand. This practice can be seen in areas as diverse as wildlife treaties,[75] conventions dealing with complete conservation areas,[76] international and regional fisheries treaties,[77] through to treaties dealing with such diverse topics as the trade in toxic waste,[78] dumping of waste at sea,[79] ozone depletion[80] or climate change.[81]

The similarity between schedules and annexes extends to the fact that they both do the same thing – they contain the subject areas at hand that the signatories have to focus upon. These may be anything from the specific endangered species, or the gases that need to be restricted to prevent further ozone layer deterioration. Therefore, the essence of such lists is that they evolve to meet the needs of the signatories as time progresses. Thus, all of the above examples of conventions with annexes, allow amendments to the annex by the signatories provided that a majority of the signatories approve (typically three-quarters).[82] This practice is exactly the same in the ICRW. Moreover, this approach is well recognized because of the axiomatic principle of international law, which is also commonly recognized in the treaties themselves, that countries have the right to object to (and not be bound by) majority decisions. Article V (3) of the ICRW recognizes this rule.

Once it is recognized that the schedule/annex of an international agreement is typically the core by which the signatories negotiate and vote upon, then it becomes possible to start to examine some of the other rules of interpreting international documents. These are typically based around the ideal of subsequent practice, or subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions.[83]

In terms of subsequent practice, the question needs to be asked (as it was)[84] – has the Commission done anything subsequent to its formation, to suggest that it has competence over small cetaceans? The place to look for this evidence is in the schedule, which shows direct evidence that the ICRW has extended its jurisdiction to cover species which were not within its original purview – as evidenced by the nomenclature to the agreement, which listed the multiple names of a number of whales, of which the IWC regularly set quotas.

An important species missing from this original list, which nevertheless falls within the 'large' whale category, is the minke whale (contained in the general category of rorqual whales). Despite the fact that the minke is the smallest and most abundant of all rorqual whales, it was not listed on the original nomenclature. Despite this exclusion, by the third meeting of the IWC, catches of minke (with no minimum size restrictions) were being authorized.[85] Moreover, this interest in taking minkes increased rapidly from the 1970s onwards as restrictions on the taking of other whales, from stocks which were clearly plummeting, took effect.[86]

A similar subsequent practice, but with regards to small cetaceans, can be evinced in both the general interpretation section of the schedule for baleen and toothed whales, and in its general section (which defines 'small type whaling'). Small-type coastal whaling, (which the IWC collects information on, but does not regulate) is defined as 'catching operations' which focus upon 'minke, bottlenose, beaked, pilot or killer whales'. The evidence of subsequent practice (which incorporated some small cetaceans) can be found in the fact that the killer whale was not included in the original chart of nomenclature. It was subsequently defined in section I of the schedule at the commission's 29th meeting in 1977.[87] It was not until the 32nd meeting in 1980 that the killer whale was added to the species included in Paragraph 10d of the schedule, effectively placing them within the protection of the moratorium.

Likewise, Baird's beaked whale was not listed in the original nomenclature.[88] However, it was later included in the definition of 'bottlenose whale' in Section I (which deals with interpretation) of the schedule. This inclusion took place at the Commission's 29th meeting in 1977 and was not objected to by any Government. There is also a heading 'bottlenose' in Table 3 of Section III of the schedule (which deals with capture). For many countries, such subsequent practices suggest that 'the application of small cetaceans to the IWC has been concordant, common and consistent through the years'.[89] To many this

practice by the IWC 'shows a willingness to exercise its competence to conserve small cetaceans'.[90]

However, not all countries are willing to accept this view – especially with regard to the extension of competence to small cetaceans.[91] That is, although the first example I have quoted above (the minke) has been avoided, the later examples with small cetaceans have been challenged. Accordingly, it has been suggested: 'The inclusion of Baird's beaked whale in the definition of bottlenose whale in Section I does not confer upon the Commission the competence to classify and set catch limits for it. . . . Such action would be outside the scope of the Convention'.[92]

Moreover, with regard to the killer whale example: 'the inclusion of killer whales in the factory ship moratorium was a special measure taken in response to a particular situation . . . killer whales in other situations [are] not regulated by the Commission'.[93] Accordingly, as time has gone on, some countries such as Denmark have gone on taking killer whales despite protests from other countries that such acts should be regarded as infractions due to be in contravention of the schedule.[94]

Nomenclature

The core of the above objections is that the two small cetaceans now listed in the schedule, were not listed on the original nomenclature which was annexed to the ICRW.

The word '*nomen*' is Latin, and in the civil law, it was recognized as referring to 'the name showing to what gens or tribe they belonged to, as distinguished from his own individual name'. Thus, the *nomen* became recognized as 'the name or style of a class or genus of persons or objects'. Working from this base definition, a 'nomenclature' is:

> a set of names used, or intended to be used, to designate things, classes, places etc; esp, a system of technical terms used in a science or other discipline . . . zoological nomenclature is the application of distinctive names to each of the groups recognised in the classification.[95]

Attempts have been made to standardize nomenclature within the disciplines of biology, ecology,[96] botany and zoology[97] since the end of the nineteenth century. To this end, international codes have been devised and continually updated as new discoveries, and ever-increasing refinements pertaining to the knowledge of species, necessitate new editions.[98]

The idea that the nomenclature changes, and accordingly can only ever be a guide to the interpretation of the vernacular names of cetaceans – and is not a tool which can circumscribe the ultimate purview of regimes is well recognized in other wildlife treaties. Accordingly, the ACCOBAMS clearly explains

that the annex listing the cetaceans covered is only 'indicative'.[99] Likewise, with the 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles, the list of sea turtles that the convention covers are listed in an annex;[100] but it is specifically noted that 'due to the wide variety of common names, even within the same State, this list should not be considered exhaustive'.[101]

Moreover, in similar conventions, the 'guide' of nomenclature clearly evolves. For example, in 1999, the Convention on Migratory Species passed a resolution on a standardized nomenclature for the CMS appendices. This noted that 'biological nomenclature is dynamic' and that 'the taxonomy used in the Appendices to the Convention will be most useful to the Parties if standardised by nomenclatural references'. The CMS then recommended a series of standard references to be 'recognised and used as the basis of the CMS appendices and amendments'.[102]

Likewise, following problems with identification of species via nomenclature at CITES,[103] COP 10 noted that 'biological nomenclature is dynamic'. Moreover, within the realm of CITES, 'the names of the genera and species of several families are in need of standardisation'. Without such a process, and due to discrepancies between the parties with regard to nomenclature, 'the effectiveness' of CITES may have been damaged.[104] Soon after, at the COP 11 in 2000, the nomenclature committee was (re)established as the driving force to achieve a 'standardised nomenclature'. Part of this may involve reviewing some of the species which are already listed, or about to be listed on the CITES appendices to ensure consistency with 'the correct use of zoological and botanical nomenclature'.[105]

Despite these clear indications that nomenclature is something which evolves, and cannot (and should not) be held back by earlier (and often scientifically flawed) assumptions, is not one well received within the IWC. This is despite the fact that science is ever evolving and new distinctions between and within species via both DNA and traditional research continually demonstrate that the knowledge of previous generations is outdated.[106]

The history of the nomenclature of the ICRW can be found in Article IV of the Final Act of International Agreements for the Regulation of Whales from the 1946 International Whaling Conference. This article recommended: 'That the chart of Nomenclature of whales annexed to this Final Act be accepted as a guide by the Governments represented at the conference'.[107]

The nomenclature of whales which was then admitted as an annex, listed the scientific names for 17 different species of whales, and the names for these whales in English, French, Dutch, Russian, Spanish and the Scandinavian languages.[108]

It has been suggested that if a whale species was not on this original list of whale names, the ICRW cannot claim jurisdiction over them unless all of the

members of the IWC agree. The justification for this assertion is that the nomenclature was (in the wording of the VCLT) '*an* . . . *agreement* relating to the treaty which was made between *all* the parties in connection with the conclusion of the treaty'.[109] (added italics). Accordingly, any attempt by the IWC to exercise management over stocks that were not listed on the original nomenclature stocks would be *ultra vires* unless all members subsequently agreed to change the nomenclature.[110] This is because: 'as the chart was adopted unanimously, the only way in which the Commission's competence to adopt regulatory measures can be extended to additional species is if there is unanimous agreement among Contracting Governments to do so'.[111]

Therefore, as Japan argued, agreement on whether to admit other species or not was a 'matter for discussion between Contracting Governments'.[112] Consequently, 'since it is a matter of differing views between Contracting Governments [it] cannot be dealt with by the Commission'.[113] The implications of this view are that if there is no *agreement* between the parties on whether to regulate a species or not, it will not be regulated. This would lead to an outcome that Denmark has suggested, of IWC jurisdiction being restricted to 'only species named in the [original] Annex'.[114] Any other approach, according to the former USSR, would be 'legally unjustified'.[115]

The question raised by this assertion is: was the nomenclature an agreement that was intended to limit the Commission in its jurisdiction? To answer this, a number of points need to be highlighted.

First, the Final Act of the 1946 International Whaling Conference expressly recommended '[t]hat the chart of nomenclature of whales . . . be accepted as a guide'.[116] The word 'guide' does not suggest that the nomenclature was to constitute an exhaustive list.[117]

Second, it appears that the nomenclature was designed as a 'guide' to help achieve consistency with regard to the vernacular names of the whales which were, at that time, the subject of particular attention.[118] This explanation is supported by the title and layout of the chart.[119] As such, the nomenclature was a rough agreement (a guide) but it was only an agreement to name usage. Accordingly, as New Zealand suggested, the nomenclature was for information only ('illustrative, not exclusive').[120]

Finally, the question of the overall status of the nomenclature within the ICRW needs to be examined. As it is set out, the nomenclature was annexed to the Final Act of the International Whaling Conference. It was not annexed to the ICRW. By contrast, when the drafters of the ICRW attached the schedule to the ICRW, the schedule was deemed 'an integral part thereof'.[121] Conversely, in keeping with the assumption that the nomenclature was only to be a 'guide' the ICRW is completely silent as to its status.[122] It was never deemed 'an integral part' of the convention.

The last point noted above is the clue to the overall mistake in this debate.

That is, those who are seeking to suggest that the ICRW cannot extend its mandate, have confused the nomenclature and the schedule. The nomenclatures that are attached to treaties are typically about vernacular names. Schedules or annexes attached to conventions typically reflect the decision by the parties to conventions whether the focus in question should, or should not, be within their purview. There is no evidence to suggest within the history of either the ICRW, or comparable international regimes that nomenclatures are, or were ever intended to ultimately be, the defining mechanisms in international treaties. Conversely, the defining mechanisms in treaties are those which expand or restrict the mandates of the entrenched majority of the signatories. Indeed, because such decisions are so important, occasionally the principle of consensus,[123] but more commonly large majorities (as opposed to simple majorities), are required along with the ability of dissenting signatories to object and not be bound by the weighted majority. Without this ability, which is clearly established in international environmental law, neither the IWC nor the multiple other international organizations with similar purposes would allow the vast majority of their signatories to evolve (while retaining mechanisms which allow dissent to the majorities) as new situations necessitated new responses.[124]

With such considerations in mind, it has been repeatedly suggested by various countries that the nomenclature cannot be used as a justification to limit the Commission's competence in this area.[125] Rather, the answer to whether a species is within the competence of the Commission hinges on whether it is placed in the schedule by a three-quarter majority of the voting members of the IWC.[126]

7 COASTAL STATES, THE UNCLOS NEGOTIATIONS AND EXCLUSIVE ECONOMIC ZONES

Developments in the law of the sea following the first and second Geneva conferences have been of decisive importance in the evolution of a coastal states' fishing rights and the acceptance of the EEZ concept. Although there had been few claims to exclusive fishery zones before 1958 (notably made in the late 1940s and 1950s by some Latin American states) the exclusive fishery zone is rather a product of the failure of the Geneva Conference to settle the question of the territorial sea breadth and to confer to the coastal state any special rights to the exclusive access to fisheries beyond its (12-mile) territorial sea. Accordingly, states decided to act unilaterally (for both the purpose of conservation and economic gain);[127] the 1960–74 period was characterized by a wave of unilateral claims to exclusive fishing zones and a considerable number of bilateral and regional agreements recognizing these claims – despite the rulings of the ICJ to the contrary.[128]

By the time the Final Act of the 1982 UNCLOS was concluded, the 200-mile EEZ had been codified into international law. Article 55 of UNCLOS defines the EEZ as: 'an area beyond and adjacent to the territorial sea . . . under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention'.[129]

Within the EEZ,[130] the coastal state has 'sovereign rights for the purpose of . . . exploiting, conserving and managing natural resources'.[131] Moreover, 'the coastal State shall determine the allowable catch of the living resources in its exclusive economic zone'.[132] The coastal state therefore has 'full powers to determine the allowable catch of the living resources in the EEZ'.[133]

Coastal States, EEZs and the IWC

Given the highly coastal nature of small cetaceans, as the debate began to evolve in the mid-1970s, it became apparent that parallel debates within the then Law of the Sea negotiations and the problem of the 200-mile economic zones, would make this issue 'even more sensitive and difficult'[134] within the IWC. Moreover, because of the mixed agendas that many of the countries had to the UNCLOS negotiations, the IWC tended to reflect a deference to then ongoing UNCLOS negotiations. Thus, the resolution from the 31st meeting[135] acknowledged the ongoing overlap with the UNCLOS negotiations[136] and that contracting governments and other interested parties may have to consider the question of possible amendments to, or renegotiation of, the ICRW in a manner which would reflect a consideration of, *inter alia*, the developments in the Law of the Sea.[137] Once the UNCLOS negotiations were concluded, and the sovereign rights of coastal states were established, the IWC continually expressed its consciousness of these rights generally[138] and specifically when dealing with individual countries.[139]

This awareness can be juxtaposed against a growing chorus of countries (Mexico, Chile, Uruguay, Brazil, Argentina, Peru, Spain, Japan, the former Soviet Union, and Costa Rica) who have all recorded their reservations on the Commission's competence in relation to small cetaceans and within coastal waters.[140] These countries broadly argued that the IWC 'membership is small compared to the 139 coastal States and it would be wrong for this body to take such responsibility'.[141] To rectify this problem, the IWC attempted to promote 'a co-operative dialogue with range States'[142] who are not members of the IWC, but have small cetaceans in their waters. To assist this dialogue, a funding mechanism to facilitate the participation of coastal states on relevant small cetacean issues was established in the mid-1990s.[143]

Despite these initiatives, a number of coastal states have forthrightly

refused to engage the IWC on such a matter. This position was exemplified at the 46th meeting with a resolution (from which the countries seeking IWC small cetacean competence abstained) introduced by St Vincent and the Grenadines, which was directed to show the importance of sovereignty over coastal matters.[144] The resolution noted:

> The governments of St Vincent and the Grenadines, St Lucia, Dominica and Grenada . . . do not accept the competence of the Commission in the management of small cetaceans and related research and . . . these governments may not therefore permit IWC research on small cetaceans in their territorial seas and Exclusive Economic Zones.[145]

Towards a Correct Understanding of the Implications of UNCLOS on the IWC

The thrust of the above paragraphs would seem to indicate that the IWC (or indeed anybody else) has no authority to fetter the discretion of a coastal state with regard to sovereign decisions relating to the exploitation (or conservation) of its EEZ. A rider to this claim has been the implicit assertion that the IWC is somehow *ultra vires* to even be suggesting that it may have a mandate to possibly assist in the management of small cetaceans in sovereign waters. However, these contentions are incorrect for a number of reasons. Moreover, in a number of cases clear limitations on the authority of the coastal state and unfettered freedom to act have been imposed by UNCLOS. That is, UNCLOS does not accord to coastal states a complete sovereignty in the territorial seas that are buttressed to their terra firma. Rather, it affords them limited sovereignty, comprising rights and jurisdiction over the listed economic resources of the EEZ.

Consenting to the IWC

This above resolution from the 46th meeting is correct in the sense that countries can quite legitimately refuse – as sovereign states – the authority of the IWC over the whales in their waters, in as much as they can object to the IWC generally (or any other international body for that matter) and refuse to be bound by it. However, the converse is also correct, in that parties to the ICRW (like any other international treaty) can agree to confer a certain competence on the IWC with regard to the exercise of their rights.[146] As such, the UNCLOS and the development of the EEZ did not make the IWC redundant with regard to coastal zone management of cetaceans – unless the signatories choose to exclude the IWC from these areas.

Moreover, the history of the international management of cetaceans has been one whereby the issue of whales in territorial waters has clearly been a

direct concern. Indeed, from the outset with the 1931 CRW, it was clearly stated that 'The geographical limits within which the Articles of this Convention are to be applied shall include all the waters of the world, including both the high seas and territorial and national seas'.[147] Six years later, the 1937 International Agreement for the Regulation of Whaling stated the coverage slightly differently: 'The present agreement applies to factory ships and whale catchers and to land stations . . . and to all waters in which whaling is prosecuted'.[148] It was this later definition which was followed in the 1946 ICRW where no restrictions upon the geographical limits of the IWC's competence over cetaceans were listed. Accordingly, the convention was to apply: 'to factory ships, land stations and whale catchers under the jurisdiction of Contracting governments and to all waters where whaling is prosecuted'.[149]

In accordance with this broad coverage, the IWC has made sure that full compliance with the ICRW has been achieved by its signatories in all the areas that whaling has been practised. Accordingly, the I&O regimes of the IWC, which were originally designed to cover only pelagic whaling (in non-territorial waters), were extended to cover land stations in the 1960s,[150] and aboriginal whaling[151] by the late 1970s. In the last two examples, not only was the IWC exercising authority over territorial areas, it was/is also ensuring compliance of the signatories' obligations in these places, with what is in effect a very intrusive regime.

At this point, the question needs to be asked, did UNCLOS eclipse the possibility of such regimes? The answer to this is clearly no, for Article 311 of UNCLOS specifically addresses the problem of prior agreements and declares:

> [T]he Convention shall not alter the rights and obligations of State Parties which arise from other agreements compatible with this convention and which do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under this Convention.

Accordingly, two questions arise: do the signatories agree to cede their own sovereignty to the IWC on such issues (which is quite permissible),[152] and is the ICRW compatible with the UNCLOS?

Article 65

It has been my contention elsewhere, that Article 65 of the UNCLOS, and supporting principles of primacy (whereby one international organization, through either specific provisions in its founding treaties or through the general principles of treaty law gains precedence over another on certain questions), in international law make the IWC the central and uppermost

international authority for cetaceans.[153] With regard to the different question of the overlap of EEZs and the management of cetaceans, it is important to note that Article 65, in making no distinction between large and small marine mammals within EEZs stipulated:

> States shall co-operate with a view to the conservation of marine mammals and in the case of cetaceans shall in particular work through the appropriate international organisations for their conservation, management and study.

Later, when dealing with stocks on the high seas, Article 120 noted that with marine mammals, 'Article 65 also applies to the conservation and management of marine mammals in the high seas'.

The question of marine mammals was dealt with, once more, in Chapter 17 of Agenda 21. Section 17.47 began by repeating Article 65 of UNCLOS.[154] However, Agenda 21 then went further than UNCLOS in Section 17.61, when after expressing the hope that countries which are not members of appropriate organizations for the management of high sea fisheries, explained:

> States recognise:
> (a). The responsibility of the International Whaling Commission for the Conservation and management of whale stocks and the regulation of whaling pursuant to the 1946 International Convention for the Regulation of Whaling.
> (b). The work of the International Whaling Commission Scientific Committee in carrying out studies of large whales in particular, as well as of other cetaceans.
> (c). The work of other organizations, such as the Inter-American Tropical Tuna Commission and the Agreement on Small Cetaceans in the Baltic and North Sea under the Bonn Convention, in the conservation, management and study of cetaceans and other marine mammals.

The same section is later repeated under the section on 'marine living resources under national jurisdiction'.[155] The section then ended with the plea that 'States should co-operate for the conservation, management and study of cetaceans'.[156]

In regard to cetaceans, Agenda 21 is therefore very important for three reasons. First, the IWC was clearly listed as the 'appropriate body' for whale stocks. Second, this recognition was not just limited to large cetaceans, but included 'other cetaceans' as well (although the exact responsibility of the IWC for 'other cetaceans' is far from clear).[157] Nevertheless, this sentence was clearly linked to the importance of the SC of the IWC. Finally, the work of 'other organisations' that deal with small cetaceans was noted.

Article 64

In addition to Article 65, there are two further areas under which outright coastal jurisdiction may be weakened under the UNCLOS. These two areas

are particularly important for states which are signatories to the UNCLOS, but not the IWC. The first area in which there is 'a certain limitation of a coastal State's sovereign rights in its zone'[158] is with highly migratory species.[159] Annex I of UNCLOS lists the highly migratory species in question. In addition to listing the large cetacean families, Annex I also includes the families of *Monodontidae* (Narwal and Beluga); *Ziphiidae* (including 20 small to medium beaked whale species) and *Delphinidae* (with 26 species of dolphins).[160] Accordingly, Article 64 also covers cetaceans, and makes *no* distinction between large and small whales.

However, an important distinction is made between Articles 63 and 64. Article 63, which deals with stocks occurring within the EEZs of two or more coastal states and/or within the exclusive economic zone and in an area beyond and adjacent to it specifies: 'these States shall seek, either directly or through appropriate subregional or regional organisations, to agree upon the measures necessary to co-ordinate and ensure the conservation and development of such stocks'.[161]

Conversely, with 'highly migratory species':

> [The] [c]oastal State and other States whose nationals fish in the region for the highly migratory species listed in Annex 1 shall co-operate directly or through appropriate international organisations with a view to ensuring conservation and promoting the optimum utilisation of such species throughout the region . . . In regions for which no appropriate international organisation exists, the coastal State and other States whose nationals harvest these species in the region shall co-operate to establish such an organisation and participate in its work.[162]

The importance of Article 64 is twofold. First, it makes no distinction between the listing of the two suborders in the same appendix. This would appear to legitimize the assumption that they should be dealt with together. Second, countries which share these species are mandated (note the operative words, as with Article 65 'shall co-operate' 'through appropriate international organisations').[163] The key is 'international', as opposed to Article 63's regional vision.

The Bottom Line on the High Seas and within EEZs: Extinction

As noted above, the UNCLOS gives the coastal state considerable discretion in determining exploitation levels within its EEZ. As such, UNCLOS does not provide detailed management and conservation schemes. Rather, it provides a framework in which the coastal state retains an independent discretion to formulate its own management plans within certain broad conservation constraints and standards.[164] This discretion is so wide that Article 297(3)(a) excludes specifically the coastal state's discretion to determine the total allocated catch from the

application of the compulsory settlement of dispute procedure provided for in Section 2 of Part XV, settlement of disputes. Due to such freedoms in managing its own catch limits within their EEZs, it has been contended that 'little if anything in these management and conservation requirements seems sufficiently precise and mandatory to constitute an effective restriction on the coastal State's sovereign rights to exploitation'.[165] The worst-case result of such freedom may be that a state chooses either directly, or through negligence, to fish a species to extinction. For example, with regard to small cetaceans and Japan, it has been contended:

> [W]ith virtually no government control on the hunt of dolphins, porpoises and small whales, the increased efficiency and hunting effort [has] resulted in extensive overcatching, causing the numbers of several species or populations to plummet . . . the exploitation of small cetaceans in Japan's waters [has] resulted in a domino effect, overhunting one species after another.[166]

The question that this scenario raises is: is this permissible under the UNCLOS? The answer to this question is that no state may drive a marine species towards extinction. This point may be adduced from the principles surrounding the management of both the high seas and EEZs.

With regard to the high seas, in terms of international law, it was evident since the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas that: 'the development of modern techniques for the exploitation of the living resources of the sea . . . has exposed some of these resources to the danger of being over-exploited'. Therefore, 'All States have the duty to adopt, or to co-operate with other States in adopting, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas'.[167] This principle was later reiterated by the ICJ:

> It is one of the advances of maritime international law resulting from the intensification of fishing, that the former laissez-faire treatment of the living resources of the sea in the high seas has been replaced by a recognition of a duty to have due regard to the rights of other States and the needs of conservation for the benefit of all.[168]

Very similar rules were later expressed in UNCLOS in Parts V and VII. Part V dealt primarily with species in the EEZ and Part VII focused upon the conservation and management of marine living resources of the high seas. In this latter section, the co-operation of states in the conservation and management of living resources,[169] and the conservation of the living resources of the high seas[170] were highlighted.

The necessity of 'protecting and restoring marine species' was reiterated in Chapter 17 of Agenda 21,[171] as well as the FAO Code of Conduct for

Responsible Fisheries and the 1995 United Nations Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.[172] Indeed, the first general principle of the FAO Code of Conduct for Responsible Fisheries is: 'The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of marine living resources'.[173] The Agreement on Straddling and Highly Migratory Fish Stocks added to this by securing a convention that has as its objective 'the long term conservation'[174] of the stocks in question. Finally, the rule not to drive species on the high seas towards extinction was strengthened in 1999 by the International Tribunal for the Law of the Sea, in the case of *New Zealand and Australia* v. *Japan*. Specifically, the Tribunal found that Japan 'had breached its obligations under Articles 64 [highly migratory species] and 116 to 119 [conservation and management of the Living Resources of the High Seas] of UNCLOS in relation to the conservation and management of the Southern Bluefin Tuna'.[175] Specifically, Japan failed 'to adopt necessary conservation measures for its nationals fishing in the high seas so as to maintain the Southern Bluefin Tuna stock to levels which can produce the maximum sustainable yields, as required by Article 119 and contrary to obligation in Article 117 to take necessary conservation measures for its nationals'.[176]

With regard to EEZs, states are also obliged to protect marine species from extinction.[177] The primary provision[178] in the context of EEZs relating to this obligation is in Article 61. Subsection 2 of this stipulates:

> The coastal State, taking into account the best scientific evidence available to it, shall ensure through proper conservation and management measures that the maintenance of the living resources in the exclusive economic zone is not endangered by over-exploitation.

Subsection 4 adds:

> [T]he coastal State shall take into consideration the effects on species associated with or dependent on harvested species with a view to maintaining or restoring populations of such associated or dependent species above levels at which their reproduction may become seriously threatened.

To help achieve these goals, '[a]s appropriate, the coastal State and competent international organisations, whether sub-regional, regional, or global, shall co-operate to this end'.[179] Moreover, 'available scientific information, catch and fishing effort statistics, and other data relevant to the conservation of fish stocks shall be contributed and exchanged on a regular basis through competent international organisations, where sub-regional, regional or global'.[180] As these last provisions show, a clear hook may be provided when

dealing with the bottom line of extinction of a species, once more, to competent international organizations. Clearly, in dealing with such questions with regard to cetaceans, that body would have to be the IWC.

8 REGIONAL ORGANIZATIONS

For the countries that have objected to the universal, managerial, competency of the IWC, a common argument has been that the only other competent organizations to manage small cetaceans (next to coastal states) are 'regional' organizations. [181] For example, as Japan explained: 'The IWC should recognise that small cetaceans migrating and distributing within 200 nautical mile zones of coastal States [are] subject to the management under the regional organisation or [the] coastal States concerned'.[182] This emphasis on the importance of regional co-operation for such matters is well known with regards to marine pollution (and UNEP's Regional Seas Programme)[183] and in international fisheries law and policy. With regard to the latter, a number of documents such as Agenda 21,[184] the United Nations Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks,[185] the FAO Code on Responsible Fisheries,[186] and the Kyoto Plan of Action,[187] have come to realize the importance of regional co-operation.

The assertion that regional organizations have a 'crucial role to play with respect to small cetaceans'[188] is something on which most sides of the debate agree. Some regional agreements were already encompassing small cetaceans by the early 1980s.[189] By the late 1980s the IWC was seeking to work with related regional organizations on the small cetaceans question; the Inter-American Tropical Tuna Commission[190] and UNEP received direct attention.[191] In the 1990s, the focus on overlapping organizations with an interest in small cetaceans moved indirectly[192] to CITES[193] and directly to the CMS.

With particular regard to the CMS and the question of small cetaceans, an invitation to the CMS secretariat 'to exchange information with the Secretary of the IWC'[194] was made. The engagement with the CMS was undertaken because this organization was seen as important and largely complementary to the work of the IWC.[195] Soon after, with similar considerations in mind, the IWC recognized the 'the relevance of the Agreement on the Conservation of Small Cetaceans of the Baltic and North Sea (ASCOBANS) for the protection of harbour porpoise'. Moreover, the IWC encouraged the co-operation between ASCOBANS and ACCOBAMS, and the IWC.[196] This co-operation was furthered in 1998 when the SC recommended the establishment of a joint working group to consider inter-related scientific matters of interest to the respective bodies.[197]

Despite this growing co-operation with organizations like the CMS, the IWC has been selective in considering which other organizations it will work with in regard to small cetaceans. Accordingly, repeated suggestions by those who oppose the competence of the IWC with regard to small cetaceans have made out that a more appropriate regional organization to work with would be the North Atlantic Marine Mammal Commission (NAMMCO).[198] This organization has had a much lesser recognition by the IWC, in comparison to other regional bodies dealing with small cetaceans as NAMMCO is competing against the IWC for primacy in a number of areas. I have written at length elsewhere[199] on the primacy of the IWC in international law with regard to the management of cetaceans and thus the necessity to treat organizations such as NAMMCO as possessing limited integrity. Accordingly, I do not intend to reiterate my earlier arguments. Nevertheless, it is useful to note that with regard to the above quoted documents, and the drift to regionalism, an equally strong current can be found with regard to international bodies (as opposed to just regional ones) when it comes to management of the oceans. Thus, Agenda 21 stresses the importance of 'international and regional co-operation and co-ordination'.[200] With particular regard to coastal states and the high seas it was noted: 'Effective cooperation with existing subregional, regional or global fisheries bodies should be encouraged'.[201] The FAO Code on Responsible Fisheries also took this approach by suggesting: 'States should, within their respective competences and in accordance with international law, cooperate at subregional, regional and global levels through fisheries management organizations'.[202]

Moreover, the FAO code emphasized that the organization in question must have 'the competence to establish conservation and management measures'.[203] In a similar way, the Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks also highlights the point that the appropriate management organizations must have competence.[204] In addition, it is important to note that this convention did not eclipse the UNCLOS III principles. Rather, it noted the importance of '[taking] into account previously agreed measures established and applied in accordance with the Convention'.[205] Hence Parts V and VII of UNCLOS (with the general conservation requirements within the EEZs and the high seas) and the special status of marine mammals (Articles 64, 65 and 120) remain standing.

These principles, when taken in conjunction with the rules of primacy with regard to international organizations, should make it apparent that the IWC – as an international body – may have a strong role to play with regard to aspects of the management of small cetaceans. Moreover, although regional organizations also have an important part to play, it is necessary that these are complementary to the IWC, and not opposed to it.

9 THE LIMITS OF REGIONAL ORGANIZATIONS AND THE ANTARCTIC KILLER WHALE

The case of Antarctica is a particularly useful example as cetaceans are intricately connected with the marine environment of the South Pole.[206] One of the cetacean species which often resides at the South Pole (and in numerous other locations) is the killer whale, which is a commonly recognized 'small cetacean'. The Antarctic killer whale was clearly the source of controversy in 1980 when the USSR objected to attempts by the IWC to set catch quotas for this species in this area. This was because: 'killer whales belong to small cetaceans which are not regulated by the Commission within the framework of the existing Convention. Thus it believes that the inclusion of killer whales in the number of species regulated by the Commission is legally unjustified'.[207]

The interesting point about this quotation, is that it gives a clear example of the paradox that small cetaceans may create. The typical rider to the above quotation, as seen above, is that such small cetaceans should be dealt with by appropriate regional organizations. The paradox is that such organizations are not always appropriate (as with NAMMCO) or they may not even exist, let alone claim authority of the species in question. Consider, the killer whale which resides in Antarctica cannot be claimed as a species which resides in either sovereign waters (as Antarctica is governed by the signatories to the Antarctic Treaty and is not subject to sovereignty claims)[208] or within strong regional or international organizations which have an interest in it. Rather, the governing international legislation for Antarctica has been explicit, in displaying its deference to the greater body – the IWC – in dealing with whaling matters.[209] This deference was carefully spelt out in the 1980 Convention on the Conservation of Antarctic Marine Living Resources.[210] Article VI stated: 'Nothing in this Convention shall derogate from the rights and obligations of Contracting Parties under the International Convention for the Regulation of Whaling'.

Moreover, Article XXIII (3) states:

> The Commission and the Scientific Committee shall seek to develop cooperative working relationships, as appropriate, with inter-governmental and non-governmental organisations which could contribute to their work, including . . . the International Whaling Commission.[211]

From this background, the two international organizations have established a strong (but informal) co-ordinated working relationship[212] in areas of mutual interest.[213] This relationship has prospered since the mid-1980s.[214]

The result of all of these provisions is that if, as Russia earlier claimed, the killer whale in Antarctica cannot be governed by the IWC because it is a small

cetacean, then which organization should manage this species? Clearly, the species needs to be managed by some international organization, and cannot under any circumstance be considered as 'free for the taking'. In this instance, the appropriate organization is probably the CCAMLR, but this, in accordance with the rules of primacy and the necessity to complement (and not compete against) the IWC, has clearly specified that any question of management is best dealt with by the IWC.

10 CONVENTION ON MIGRATORY SPECIES

The only other international forum which has seriously and specifically addressed the protection of small cetaceans, received the appropriate recognition in international law, and complemented the IWC, is the 1979 Bonn Convention on the Conservation of Migratory Species of Wild Animals.[215] As I have explained elsewhere,[216] the CMS has a close working relationship with the IWC.

The interest of the CMS in cetaceans began at COP 1 CMS in 1985, when a number of large cetaceans were all listed in Appendix I.[217] In addition, at the same meeting, it was proposed that the Indus River dolphin, be listed in Appendix I.[218] Simultaneously, the CMS scientific committee advised that as a number of small cetaceans were clearly threatened[219] (although with many there was an overt paucity of scientific knowledge)[220] many of these should be considered for inclusion in Appendix II of the convention at the next COP.[221] These suggestions helped lead to Resolution 1.7. Although this resolution was not unanimous,[222] 'a working group on small cetaceans'[223] was established. This group was required to work 'in conjunction with . . . appropriate national and international organizations'.[224] The appropriate organization in question was clearly the IWC, and the IWC observer at the CMS meeting responded that the IWC would be ready to co-operate with the future group established under the resolution.[225]

At COP 2 in 1988, despite objections (against the listing of certain species) from Norway[226] and Denmark,[227] the majority of the CMS followed the advice of the working group[228] and added seven species of small cetaceans to Appendix II of the CMS.[229] This list was added to substantially in 1991 COP 3,[230] where once more Norway and Greenland spoke against the inclusion of certain species on the list.[231] By 1994, 27 species of small cetaceans were included in Appendix II of the CMS.[232]

With regard to the question that it was overlapping with debates in other forums, such as the IWC, it was concluded that the two conventions were dealing with substantively different topics:

> There was general agreement among the representatives of the Parties to the convention that coverage of any given species in another Convention was not perse, an argument against coverage in the Bonn convention. The International Whaling Convention, for example, was mainly concerned with matters such as catch levels rather than habitat protection.[233]

This view was reiterated in SC discussions at COP 4 in 1994,[234] where it was suggested that 'there were significant prospects for complementarity' between the CMS and the IWC. This was because 'the CMS . . . focus [is] on the migratory aspects of small species while the IWC Scientific Committee was concerned with its habitat and population'.[235] This complementarity on small cetaceans was soon recognized by the IWC, who in 1993 acknowledged the relevance of the CMS agreements with regard to work on small cetaceans.[236]

With such delineated functions in mind, in 1988 the CMS passed a resolution on small cetaceans which noted 'the need to look at the conservation of migratory small cetacean species globally'.[237] Moreover, it suggested that one of the best ways to achieve this was through regional approaches. As such, the signatories were asked to consider further the species listed in the appendices 'as AGREEMENT candidates'.[238] This suggestion was directly linked to Article IV (4) of the CMS:

> Parties are encouraged to take action with a view to concluding AGREEMENTS for any population or any geographically separate part of the population of any species or lower taxon of wild animals, members of which periodically cross one or more national jurisdictional boundaries.[239]

With particular regard to marine species, it was suggested that additional matters to be considered in agreements were:

1. That range States should include not only those bordering on international waters, but also those whose vessels operate in those waters.
2. Conservation and management plans need to extend into international waters.
3. Hinderances to migration need to take into account boat traffic and noise pollution.
4. Harmful substances for marine species, including ghost nets and other non-degradable debris.[240]

From these considerations, two largely independent AGREEMENTS which cover small cetaceans have been concluded in the Baltic and North Seas, and the Black Seas and Mediterranean Sea.[241] It is hoped that such AGREEMENTS will also occur in Latin America.[242] At COP 7 in 2002, recommendations were made for the regional co-ordination of efforts for the management of small cetaceans in Central and West Africa,[243] as well as in Southeast Asia.[244]

ASCOBANS

The 1992 AGREEMENT on the Conservation of Small Cetaceans of the Baltic and North Seas[245] had its genesis in 1985 when an Agreement on Small Cetaceans in the North Sea was outlined at COP 1.[246] Nevertheless, it took a further seven years until it was open for signature in March 1992,[247] and finally came into force in 1994. The agreement applies to the 'marine environment' of the whole of the Baltic Sea (including the gulfs of Bothnia and Finland), the Kattegat, Skagerrak, North Sea and English Channel.[248] The agreement begins by recognizing that 'small cetaceans are and should remain an integral part of the marine ecosystems'. However, 'the population of harbour porpoises of the Baltic Sea has drastically decreased' and 'by-catches, habitat deterioration and disturbance' may adversely affect these populations. As such, the parties were 'concerned about the status of small cetaceans' in this area, and were 'convinced that their vulnerable and largely unclear status merits immediate attention in order to improve it'.[249] Accordingly, the parties undertook 'to cooperate closely in order to achieve and maintain a favorable conservation status for small cetaceans'[250] by attempting to fulfil the objectives prescribed in the Conservation and Management Plan which was set out in the annex. The plan, which 'prohibit[s] . . . the intentional taking and killing of small cetaceans'[251] also requires the signatories to 'work toward':

> (a). the prevention of the release of substances which are a potential threat to the health of the animals.
> (b). the development of . . . modifications to fishing gear and fishing practices in order to reduce by-catches . . .
> (c). the effective regulation, to reduce the impact on the animals, of activities which seriously affect their food sources.
> (d). the prevention of other significant disturbance, especially of an acoustic nature.[252]

When ASCOBANS was introduced to the CMS, there was some general concern that: 'the agreement just signed was a weak one, in that it lacked teeth' and that the items in the Conservation and Management Plan 'did not seem sufficiently focused'.[253] Moreover, although seven parties have signed the agreement[254] a number of other range states have not committed themselves (but 'remain receptive')[255] whereas some, such as Norway will do no more than co-operate at a scientific level.[256] This is 'owing to its desire to maintain a consistent national policy'. Norway has strong interests with other regional organizations such as NAMMCO, which although overlapping in geographical range with ASCOBANS, has differing objectives.[257] Norway believes in the sustainable use of cetaceans, and also wishes to be able to kill cetaceans while carrying out research.[258] Accordingly, Norway would 'not

sign the agreement [ASCOBANS] itself'.[259] In addition, the five Baltic states (Estonia, Finland, Latvia, Lithuania and Russia) have said that for the time being they do not intend to ratify for a number of reasons (from financial concerns, through to other priorities in wildlife conservation). In response to such concerns, the Netherlands, speaking on behalf of the EU, responded that although some people were dissatisfied with the provisions, '[t]hey should not overlook the fact that hitherto there had been no international agreement whatever'.[260] Sweden added, 'Even a weak text, however, could be strongly implemented where the will to do so existed or could be aroused'.[261]

With such determination, ASCOBANS has evolved with its own action plans which aim to: study the effects of pollution on cetaceans (in conjunction with the IWC)[262] and reduce the offending substances;[263] reduce the disturbances upon cetaceans (including regulating whalewatching, seismic testing and military activities); establish protected areas for cetaceans;[264] and, as shown in Chapter 4, control the problem of bycatch.

ACCOBAMS

Accompanying the ASCOBANS treaty is the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area.[265] ACCOBAMS applies to all the maritime waters of the Black Sea and the Mediterranean and their gulfs and seas.[266] The desirability of such an agreement was driven by the perilous status of some of the cetacean species, and the nature of their deaths in this region.[267] Accordingly, in February 1991 the secretariats of the Barcelona, Bern and Bonn conventions, as well as IUCN and Greenpeace International, met to discuss the possibility of creating a new legal agreement to deal with such problems.[268] Soon after, COP 3 adopted a resolution which 'Urges Parties and non-parties to the Convention that are Range States for the species and populations of small cetaceans listed by the Conference of the Parties in Appendix II of the Convention, to give priority to concluding agreements for their conservation'.[269]

With particular regard for the Mediterranean and the Black Seas, the CMS 'urges Range States to collaborate, under the sponsorship of a Party Range State, with a view to concluding under the Convention an Agreement for the conservation of small cetaceans of the Mediterranean and Black Seas'.[270]

The negotiating phase for this treaty, which was not concluded until late 1996,[271] was long-drawn-out, because of a number of factors. First, it sought to 'bind the countries of two sub-regions to work together on a subject of common concern'. Second, it is also open to membership of non-coastal states (third countries) whose vessels are engaged in activities which may affect cetaceans'.[272] The third factor was that it was stretched to include all cetaceans frequenting the Mediterranean and Black Seas (that is, small and large

cetaceans) since their conservation requirements are similar.[273] Finally, unlike ASCOBANS, a number of important range states have not signed the agreement. Although a number of the non-signatories may sign at some point in the future, four in particular (Bulgaria, Russia, Turkey and the Ukraine) have declared that although they support the general principles of the agreement, they have reserved their position until further questions regarding the Black Sea fisheries are fully resolved.[274] This refusal to sign was despite the preamble of ACCOBAMS (unlike ASCOBANS) which recognized 'the importance of integrating actions to conserve cetaceans with activities related to the socio-economic development of the Parties concerned by this Agreement, including maritime activities such as fishing and the free circulation of vessels in accordance with international law'.[275]

ACCOBAMS, like ASCOBANS before it, starts off with the realization that 'cetaceans are an integral part of the marine ecosystem which must be conserved for the benefit of present and future generations, and that their conservation is a common concern'. Moreover, the signatories are aware that 'the conservation status of cetaceans can be adversely affected by factors such as degradation and disturbance of their habitats, pollution, reduction of food resources, use and abandonment of non-selective fishing gear, and by deliberate and incidental catches.'[276] In an attempt to control some of these activities, the signatories 'to the maximum extent of their economic, technical and scientific capabilities' agreed to 'take co-ordinated measures to achieve and maintain a favourable conservation status for cetaceans. To this end, Parties shall prohibit and take all necessary measures to eliminate . . . any deliberate taking of cetaceans and shall co-operate to create and maintain a network of specially protected areas to conserve cetaceans'.[277]

This objective was assisted by the adoption of the annexed Conservation Plan[278] which aims to reduce pollution, reduce bycatch, indirect interactions with fisheries and disturbance (for example, seismic surveys and whalewatching), establish protected areas and monitor cetacean populations in the area.

11 CONCLUSION

A concern for small cetaceans has been evident within the IWC since the early 1970s. Since this time, the IWC has gradually brought the focus of its scientific committee to examine the status and trends on a number of these species. From such information, it has issued resolutions calling for restraint, often directed to specific countries, where the species are clearly at risk.

Despite this slowly evolving approach, a number of countries have continually objected to this practice, suggesting that any questions regarding small cetaceans are not within the competence of the IWC as the power to make such

moves was not conferred by the governing ICRW, since small cetaceans were not singled out for coverage, nor were they listed in the nomenclature.

This approach is misplaced due to a number of reasons. First, the language of the convention would appear to be broad and encompass 'all' types of whales and whaling. This is especially so since the earlier international conventions clearly excluded small types of whales from coverage, yet the later ones did not.

Second, the idea that the nomenclature to the ICRW was the 'cut-off' line for what species were to be under the purview of the ICRW – or the core of some form of 'agreement' which delineated authority is simplistic. Not only was the nomenclature specifically set out as only 'a guide' in the history of the ICRW, it has also subsequently been shown in other conventions to be, in itself, something that needs to evolve to reflect changing scientific knowledge.

Third, international law (and the conventions within it) often evolves. To achieve this, subsequent practice, as reinforced through mechanisms within conventions that allow entrenched majorities to change the direction of the treaty, exist. Typically, a three-quarters majority acting through a specified annex, schedule or carefully detailed provision has this power. The IWC has a clear and direct history of using subsequent practice to encompass management of species of whales and methods of capture which were not specifically listed in earlier times.

It is with this last point that those who object to the authority of the IWC to manage small cetaceans are particularly mistaken. That is, what they are trying to argue is that the ICRW cannot evolve without the full and unanimous consent of all the signatories. Moreover, they have attached this idea to the creation of the nomenclature. The ICRW was clearly designed to evolve through subsequent practice and the operation of a three-quarters majority (but dissenting nations still have the clear right to object and not be bound). As it would not be possible to argue against this clearly established practice, they have chosen to confuse the issue with the spurious argument of nomenclature.

Closely aligned to the argument that the IWC does not have competence over small cetaceans, is the assertion that coastal states do have competence over them. This contention is typically bolstered by the UNCLOS. However, this is mistaken as the UNCLOS does not accord to coastal states a complete sovereignty in territorial seas. Rather, it affords them a limited sovereignty. It is limited in the sense that nations can waive their rights under the UNCLOS and freely consent to the authority of overlapping international organizations such as the IWC, which has a long history of operations in territorial waters. Likewise, with the management of cetaceans around Antarctica, signatories to the complementary CCAMLR clearly gave the authority to the IWC.

The necessity to co-operate with the relevant overlapping international organizations under the UNCLOS is underlined when dealing with critically

endangered species, migratory species or cetaceans in general. The primacy of the IWC in these discussions was furthered in Agenda 21 in 1992, in which this organization was clearly identified.

This is not to suggest that decentralized approaches to the management of small cetaceans are not important. Rather, the point is that regional organizations need to be complementary to the primary international organization (the IWC) in this area. The regional ASCOBANS and ACCOBAMS agreements are strong examples of this.

In conclusion, the IWC has a broad authority in relation to small cetaceans, and a clear primacy over regional organizations on this question. This authority becomes stronger when the small cetaceans migrate between countries, or are endangered. This authority is in accordance with the workings of the ICRW, the mechanism of subsequent practice and the language of the convention.

NOTES

1. Accordingly, they are often listed in the Convention on Migratory Species (because they move between regions), Convention on Migratory Species. (1980) 19 ILM. 15. Article 1, Interpretation. 'Migratory species means . . . species . . . [which] . . . cross one or more jurisdictional boundaries'. Small cetaceans commonly do this. Hence, a number of them are listed within the CMS directly. United Nations Convention on the Law of the Sea. BH825. txt. Appendix I also lists a number of migratory species, of which no distinction is made between large and small whales.
2. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). (1973) 12 ILM. 1055.
3. For example, ACCOBAMS (1997) 36 ILM. 777 covers all whales, including small cetaceans.
4. Cawardine, M. (1995). *Whales, Dolphins and Porpoises: The Visual Guide to All of the World's Cetaceans* (Dorling, London): 30–33. In 1982, St Lucia argued that the Commission should regulate catches of Baird's beaked whale 'because the species is larger than the minke and killer whale whales already regulated'. IWC. 33rd Report. (1983). 28.
5. In 1986, the Netherlands, UK, India and Sweden utilized this argument in suggesting that the IWC does have competence over small cetaceans, such as Baird's beaked whale 'since . . . it is a larger animal than the minke whale regulated by the IWC'. IWC. 36th Report. (1986). 14.
6. See Nowak, R. (1991). *Walker's Mammals of the World*: Volume II (5th edn, Johns Hopkins University Press, Baltimore): 969–70. Harrison-Mathews, L. (1978). *The Natural History of the Whale* (Weidenfeld, London): 23–48.
7. 'Nomenclature of Whales'. Reprinted in Birnie, P. (1985). *The International Regulation of Whaling* Volume II (Oceana, New York): 701.
8. 'Baleen whale means any whale which has baleen or whale bone in the mouth, i.e. Any whale other than a toothed whale'. Schedule. 1(a).
9. 'Toothed whale means any whale which has teeth in the jaws'. Schedule. 1(b).
10. Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas. (1995) UKTS. No. 52. Interpretation. 1.2.(a).
11. ACCOBAMS, supra n3.
12. Ibid.
13. 1998 Agreement on the International Dolphin Conservation Program, (1998) 37 ILM. 1246. Article 1. Definitions.

14. The 1991 Agreement for the Establishment of the Intergovernmental Organisation for Marketing Information and Co-operation Services for Fishery Products in Africa explicitly excludes marine mammals 'especially dolphins' (irrespective of whether they are endangered) from the agreement. Article 2. Definitions.
15. At the 28th meeting the Commission approved for administrative reasons, a list of smaller cetaceans of the world. See Appendix I of IWC. 28th Report. (1978). 30–31.
16. It has been suggested that within the IWC, the classification of whether a species is large or small turns on the debate of whether it has traditionally been exploited by the commercial whaling industry. See Burns, W.C. (1994). 'The International Whaling Commission and the Regulation of the Consumptive and Non-Consumptive Uses of Small Cetaceans: the Critical Agenda for the 1990's', 13 *Wisconsin International Law Journal*. 105, 106. See also Scarff, J.E. (1977). 'The International Management of Whales, Dolphins, and Porpoises: An Interdisciplinary Assessment (pt. 1)'. 6 *Ecology Law Quarterly*. 323–73.
17. IWC. 24th Report. (1974). 29.
18. IWC 22nd Report. (1972). 32 (Paras 10–12).
19. IWC. 24th Report. (1974). 33. Publication of the initial report required special funding, of which the United States and Norway were willing to assist. See IWC. 26th Report. (1976). 28.
20. IWC. 23rd Report. (1973). 42 (Para 20).
21. IWC. 27th Report. (1977). 9.
22. Ibid. 49, 480.
23. Ibid. 480.
24. Appendix 6: 'Reporting Requirements for Small Type Whaling'. IWC. 28th Report. (1978). 30.
25. Ibid.
26. Birnie, supra n7: 494–6.
27. IWC. 41st Report. (1991). 16.
28. IWC. 42nd Report. (1992). 17.
29. Appendix 3: 'Resolution on Small Cetaceans'. IWC. 41st Report. (1991). 48; 'aware of the differences in views among member states on the regulatory competence of the IWC with regard to small cetaceans'. IWC. 43rd Report. (1993). 32, 36–7.
30. Appendix 4: 'Resolution on Addressing Small Cetaceans in the IWC'. IWC. 44th Report. (1994). 31–32.
31. IWC. 43rd Report. (1993). 32, 36–7.
32. Ibid.
33. Appendix 8: 'Resolution on Small Cetaceans'. IWC Resolution 1997–8. IWC. 48th Report. (1998). 49.
34. Appendix 2. IWC. 35th Report. (1985). 27.
35. Appendix 10: 'Resolution on the Directed Take of Striped Dolphins in Drive Fisheries'. IWC. 43rd Report. (1993). 51. See also Appendix 10: IWC Resolution 1999–9. 'Resolution on Dall's Porpoise'. IWC. 51st Meeting in 1999. (2000). 40, 55–56.
36. 'Resolution on the Directed Takes of White Whales and Narwhals'. Appendix 11. Ibid. 52. Appendix 10: 'Resolution on Directed Take of White Whales'. IWC Resolution 1998–9. IWC. 50th Meeting in 1998. (1999). 46. See also Appendix 8: IWC Resolution 1999–7. 'Resolution on Small Populations of Highly Endangered Whales.' IWC. 51st Meeting in 1999. (2000). 55.
37. Appendix 3: 'Resolution on Biosphere Reserve of the Upper Gulf of California and the Colorado River Delta'. IWC Resolution 1994–3. IWC. 45th Report. (1995). 42. Appendix 4: 'Resolution on Small Cetaceans'. IWC Resolution 1996–4.
38. Appendix 6: 'Recommendations . . . Concerning the Humane Killing of Whales'. IWC. 30th Report. (1980). 36. IWC. 41st Report. (1991). 41–2. Appendix 12: 'Resolution on the Killing of Pilot Whales'. IWC. 43rd Report. (1993). 52. Appendix 2: 'Resolution on Pilot Whales'. IWC. 44th Report. (1994). 31. Also Environmental Investigation Agency (1994). *Don't Buy the Faroese Pilot Whale Slaughter* (EIA, London).
39. Appendix 8: IWC Resolution 1999–7. Resolution on Small Populations of Highly Endangered Whales'. IWC. 51st Meeting in 1999. (2000). 55. Such a resolution (to quote

Mexico) 'not only exceeds the IWC mandate but especially pretends to dictate behaviour to sovereign governments on these matters'. IWC. 43rd Report. (1993). 36–7. In the following years, Mexico, Japan, Norway, Austria and Denmark all took exception to various resolutions on small cetaceans due to a belief that they did not reflect the co-operative approach of the past. IWC. 48th Report. (1998). 40–41, 49; IWC. 51st Meeting in 1999. (2000). 55. 42–3.

40. Appendix 3, supra n29. The Resolution from the 44th meeting noted 'the need for international co-operation to address problems relating to small cetaceans and to facilitate the conservation and restoration of depleted or threatened stocks'. Appendix 4, supra n30. The 45th meeting added the importance of 'co-operation to conserve and restore threatened and depleted stocks' of small cetaceans. Appendix 2: 'Resolution on Small Cetaceans'. IWC Resolution 1994–2. IWC. 45th Report. (1995). 41. Finally, the 47th meeting largely repeated the call at the beginning of the decade of the 'continuing urgent need for cooperation to conserve and restore depleted stocks of small cetaceans.' Appendix 4, supra n37.
41. IWC, supra n18.
42. IWC, supra n20.
43. Appendix 6, supra n24: 30.
44. IWC. 23rd Report. (1972). 26 (Para. 11).
45. IWC. 26th Report. (1974). 17.
46. IWC. 27th Report. (1977). 12 (Para. 21).
47. Appendix 6, supra n24.
48. Birnie, supra n7: 425.
49. IWC. 32nd Report. (1982). 27. Appendix 2, supra n34.
50. Appendix 5: 'Resolution on Small Cetaceans'. IWC. 42nd Report. (1992). 48. Appendix 9: 'Resolution on Small Cetaceans'. IWC. 43rd Report. (1993). 51. Similar commendations were reiterated two years later. Appendix 4, supra n37.
51. 24th Report. (1974). 33.
52. IWC. 35th Report. (1985). 19. IWC. 31st Report. (1981). 24. IWC. 47th Report. (1997). 22–3. Conversely, Japan has broadly accepted the role and value of the SC with regard to the examination of issues relating to small cetaceans. See 'Japan's View on Addressing Small Cetaceans Within the IWC'. IWC/46/SM.1.
53. Appendix 8: 'Resolution Concerning Extension of the Commission's Responsibility for Small Cetaceans'. IWC. 31st Report. (1981). 31.
54. Appendix 3, supra n29. Also IWC. 42nd Report. (1992). 35–6.
55. IWC. 45th Report. (1995). 20. See also Appendix 8: IWC Resolution 1999–7. 'Resolution on Small Populations of Highly Endangered Whales.' IWC. 51st Meeting in 1999. (2000). 55. The reviews included studies of Latin America, Africa, the Indian Ocean and the Red Sea, with special reference to the Middle East. IWC. 44th Report. (1994). 25; IWC. 50th Meeting in 1998. (1999). 33–4.
56. See 'Resolution on Small Cetaceans.' IWC 53/47 Agenda Item 14.1.
57. IWC. 30th Report. (1980). 30. IWC. 32nd Report. (1982). 27. IWC. 34th Report. (1984). 24.
58. IWC. 31st Report. (1981). 23; IWC. 34th Report. (1984). 16.
59. IWC. 31st Report. (1981). 24.
60. Vienna Convention on the Law of Treaties. UKTS. 58 (1980). (1969) ILM 8. 679.
61. '[T]he Convention itself does not define the species covered by the term whale and Contracting governments are not of one view on such a definition as regards the Convention'. Appendix 8, supra n53.
62. Note, however, that 'the 'history of whaling' as noted in the preamble, was about the hunting of large cetaceans. For a comment on this, see Burke, W. (1994). *The New International Law of Fisheries* (Oxford University Press, Oxford): 293.
63. Goetschel, A. 'Legal Analysis of IWC Competence to Manage Small Cetaceans.' (Submitted by Switzerland to the 51st IWC meeting, 1999) (para 7). The comments were later reported in IWC. 51st Meeting in 1999. (2000) 42.
64. Cameron, J. (1991). 'Legal Opinion.' In Environmental Investigation Agency. *The Global War Against Small Cetaceans* (2nd edn, EIA, London): 6–7.

65. This is an argument suggested by New Zealand. See IWC. 41st Report. (1991). 16.
66. International Whaling Convention. Geneva. 1931. LNTS CLU, No. 3586.
67. 'Whalebone' is another word for baleen plates, that is, baleen whales, or 'large cetaceans'.
68. Article 9.
69. Article 18.
70. This point was raised by Switzerland in 1999, which noted, 'The mentioned species are of the toothed small cetacean family'. Goetschel, supra n63. (para. 3).
71. *Black's Law Dictionary*. (1990). (6th edn, West Publishing, St Paul, MN).
72. Ibid. 1344.
73. *The New Shorter Oxford English Dictionary*. (1997). (Volume II). (Oxford, Clarendon): 2710.
74. IWC. (1998). Rules of Procedure and Financial Regulations. Rule E.3.
75. The 1933 Convention Relative to the Preservation of Fauna and Flora in their Natural State created an Annex to the Convention which listed species which needed immediate protection because of 'special urgency and importance'. Article 8. The 1968 African Convention on the Conservation of Nature and Natural Resources, created a series of annexes with lists of protected species. Article VIII. The 1972 Convention for the Conservation of Antarctic Seals contains annexes on all matters relating to the take of seals around the Antarctic. Article 3. The Convention on the Trade in Endangered Species (Article II) and the Convention on Migratory Species (Article II) both have annexes of protected species, as does the 1979 Convention on the Conservation of European Wildlife and Natural Habitats (Article 2).
76. The Convention on Wetlands of International Importance, Especially as Waterfowl Habitat of 1971, created an annexed 'List' of wetlands. See Articles II & V.
77. Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Article 48.1; UNCLOS III, Article 318; 1952 International Convention for the High Seas Fisheries of the North Pacific Ocean, 205. UNTS. 65. Article V.1; 1978 Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries. BH739.txt.
78. 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal contains annexes which 'form an integral part of this Convention'. Re, Article 18.
79. Articles 20 of the Contracting Parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, the 1996 Protocol. (1997) 36 ILM. 1.
80. The 1985 Vienna Convention for the Protection of the Ozone Layer. Article 10.1.
81. With the Framework Convention on Climate Change, the annexes to the convention were deemed 'an integral part thereof'. Article 16.1. Kyoto Protocol to the United Nations Framework Convention on Climate Change. Article 20.
82. For example, the annexes of the 1968 African Convention on the Conservation of Nature and Natural Resources. Articles VIII.2, and XVI.3, XXIV. The 1972 Convention for the Conservation of Antarctic Seals contains annexes which may be amended by 'any contracting party' and a two-thirds majority of signatories who agree with it. Article 9. It is, of course, not binding on those who object. See 9.4. CITES allows for amendments to its appendices (Article XV) if these are accepted by a two-thirds majority, re Article XV.1.(b). The CMS also allows for amendments to its appendices (Article XI) if these are accepted by a two-thirds majority, re Article XI.4. The 1979 Convention on the Conservation of European Wildlife and Natural Habitats, Article 14. 1. Three-quarters majority. Article 16.4. The Convention on Wetlands of International Importance, Especially as Waterfowl Habitat of 1971, created an annexed 'List' of wetlands. Amend, delete or add to this list as they please. Article V. 1972 Convention for the Protection of the World Cultural and Natural Heritage, Article 11. With the Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, Articles 48.2 & 45.2. The International Convention for the Conservation of Atlantic Tunas. Article XIII. UNCLOS III. Article 312.2. The 1952 International Convention for the High Seas Fisheries of the North Pacific Ocean. Article III. Note the importance of consent, to be bound by such moves. See Article VIII. The North-East Atlantic Fisheries Convention of 1959 contains

annexes which sets out fishing boundaries, which may 'be subject to alterations'. 486 UNTS. 157. Note, however, the importance of consensus for alteration of boundaries in this Convention. See Article 5 (4). The 1978 Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries. Article XX.2. The 1983 International Tropical Timber Agreement, BH837.txt. Article 38. This was later changed to a two-thirds majority. Article 42. The 1994 Agreement is reprinted in Birnie, P. and Boyle, A. (1994). *Basic Documents on International Law and the Environment* (Oxford University Press, Oxford): 556. The 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal contains annexes that can be amended as needed (Articles 15 (b) 18). The 1985 Vienna Convention for the Protection of the Ozone Layer, Articles 6(e)–(g) & 10, 9(3). The annexes of the Framework Convention on Climate Change, Article XV.3. Kyoto Protocol, Articles 20.4. & 20.5. Articles 21 & 22 of the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, via a three-quarters majority. 32 ILM. 1069. With the Rotterdam Convention, Articles 21(3) & 22(3)(a). Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. UNEP/FAO/PIC/CON/5. Rotterdam, September 11, 1998. Note, however, Article 22.5.b. Agreements for the Establishment of a General Fisheries Council for the Mediterranean. BH 245. txt. 126 UNTS. 237. Article VII. With ACCOBAMS, supra n11, Article X.

83. See Article 31 (3)(a) of the Vienna Convention, supra n60.
84. The articulation of this argument (that competence can be obtained by subsequent practice) appeared in IWC. 34th Report. (1984). 16. The broader question of competency with regard to small cetaceans in general was deemed to be outside the steering committee's mandate.
85. IWC. 3rd Report. (1952). 6, 16.
86. For the beginning of this interest in the 1970s, see the IWC. 23rd Report. (1973). 9–10.
87. See IWC. 28th Report. (1978). 23.
88. For the origins of this debate in the IWC, see IWC. 33rd Report. (1983). 28.
89. Goetschel, supra n63 (para. 8).
90. Cameron, supra n64: 6–7.
91. IWC. 34th Report. (1984). 17.
92. See Report of the Steering Committee on Regulation of Baird's Beaked Whale. (IWC/35/15). Section 7.1.1.
93. Ibid. Section 7.1.3.
94. See Report of the Infractions Sub-Committee. IWC/55/Rep 4.
95. *Shorter Oxford Dictionary* (1999) (Oxford University Press, Oxford). Volume 2. 1932. The word 'nomen' may be found in *Black's*, supra n71.
96. See Allaby, M. (1985). *The Oxford Dictionary of Natural History* (Oxford University Press, Oxford). See also Lincoln, R. and Cook, A. (1997). *A Dictionary of Ecology, Evolution and Systematics* (Cambridge University Press, Cambridge).
97. The International Commission on Zoological Nomenclature was founded on 18 September 1895. In recognition of its centenary a history of the development of nomenclature since the eighteenth century and of the Commission was published entitled ICZN (1997). *Towards Stability in the Names of Animals – a History of the International Commission on Zoological Nomenclature 1895–1995*. (Oxford University Press, Oxford).
98. The International Code of Zoological Nomenclature (now in its fourth edition) has one fundamental aim, which is to provide the maximum universality and continuity in the scientific names of animals compatible with the freedom of scientists to classify all animals according to taxonomic judgement. The code is available from the International Commission on Zoological Nomenclature.
99. ACCOBAMS, supra n3. Annex 1.
100. Inter-American Convention for the Protection and Conservation of Sea Turtles. Reprinted in 1996 *Journal of International Wildlife Law and Policy*. 1(1): 179–201.
101. Annex 1.
102. Recommendation 6.1. 'Standardised Nomenclature for the CMS Appendices'. (CMS, COP 6, 1999). Reprinted in CMS (1999) *Proceedings of the Sixth Conference of the Parties*. (Cape Town). (Bonn, UNEP). Volume 1: 75. It was also explained in the CMS discussions

that: 'the working group had been guided by the desire to keep to a minimum the number of consequential changes that would be required and the need for consistency with nomenclature of other organisations, in particular, CITES'. Ibid. Volume 1: 114.

103. See IUCN/ de Klemm, C. (1993). *Guidelines for Legislation to Implement CITES* (IUCN, Gland): 14–15.
104. CITES. COP 10. 'Standard Nomenclature'. Doc. 10.22.
105. See CITES. COP 11. 'Standard Nomenclature'. Doc. 11.39 and CITES. COP 11. 'Establishment of a Nomenclature Committee'. Doc. 11.13. See also Doc. 11.11.4.1.
106. Report of the Scientific Committee. IWC/56/Rep 1. 7.
107. Final Act of the International Agreement for the Regulation of Whaling, 1946. Article IV. Reprinted in Birnie, supra n7: 695.
108. Annex. 'Nomenclature of Whales'. Ibid. 701–2.
109. See Article 33.2(a). Vienna Convention, supra n60.
110. IWC. 34th Report. (1984). 16; IWC. 37th Report. (1987). 15.
111. See Report, supra n92. Section 7.1.3.
112. IWC. 35th Report. (1985). 13.
113. IWC. 36th Report. (1986). 14.
114. IWC. 35th Report. (1985). 13. IWC. 40th Report. (1990). 22.
115. IWC. 31st Report. (1981). 21.
116. The International Whaling Conference. (Washington, 1946). 'International Agreements for the Regulation of Whaling'. Point 4. In Birnie, supra n7: 695.
117. See supra n92. Section 7.1.3.
118. IWC. 34th Report. (1984). 16.
119. See supra n117.
120. IWC. 40th Report. (1990). 22. This idea has already been partly accepted. Indeed, as was explained in the debate about the regulation of Baird's beaked whale: 'the reference in the Final Act to the acceptance of the chart as a guide only means that the names therein are to be taken as a guide, whereas the list of species which the Conference regarded as whales is exhaustive and the Commission's competence to adopt regulatory measures is restricted to those species listed'. See Report, supra n92. Section 7.1.3.
121. Article 1. Paragraph 1. International Convention for the Regulation of Whaling. 161 UNTS 143. Indeed, as Article 1 of the ICRW went on to explain: 'All references to the Convention shall be understood as including the said Schedule'.
122. IWC. 34th Report. (1984). 16; IWC. 40th Report. (1990). 22.
123. See, for example, Convention on the Protection of the Marine Environment of the Baltic Sea Area (1992). Decisions need to be unanimous. See 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area. Reprinted in (1992) *United Nations Law of the Sea Bulletin* No. 22. Article 19. The Convention for the Protection of the Black Sea stipulates that amendments must be on the basis of consensus. See Convention on the Protection of the Black Sea Against Pollution. BH1004.txt. 32 ILM. 1101. Article 21. With CCAMLR, BH779.txt. 19 ILM, 841. Decisions of the Commission on matters of substance shall be taken by consensus. Decisions on other matters shall be taken by a simple majority. See Article XII. With the Aarhus Protocol on the Convention of Long-Range Transboundary Air Pollution on Persistent Organic Pollutants, amendments to annexes require consensus. See Article 14. (1998) 37 ILM. 505. The 1998 Agreement on the International Dolphin Conservation Program, (1998) 37 ILM. 1246 requires all decisions to be made by consensus. See Articles IX & XXX. The 1996 Inter-American Convention for the Protection and Conservation of Sea Turtles, reprinted in (1996) *Journal of International Wildlife Law and Policy* 1(1): 179–201 also requires all decisions to be made by consensus. See Article V.5. The 1994 Convention on the Conservation and Management of Pollock Resources of the Central Bering Sea (a copy of this text is available from the ICCAT website, at http://www.iccat.es/) stipulates 'Matters of substance shall be taken by consensus'. See Article V(2). However, if consensus cannot be reached, alternative procedures for decision making exist. See Parts 1 & 2 of the Annex to the Agreement.
124. IWC. 34th Report. (1984). 16.

125. IWC. 35th Report. (1985). 13; IWC. 43rd Report. (1993). 31. Goetschel, supra n63 (para. 4). See Report, supra n92. Section 7.1.3.
126. See Report, supra n92. Competence is due: 'since it is included in the Schedule definitions'. IWC. 36th Report. (1986). 14. Goetschel, supra n63 (para. 2).
127. See Anand, R. (1982). 'The Politics of a New Legal Order for Fisheries.' 11 *Ocean Development and International Law*. 263, 268–70. See also Hollick, G. (1977). 'The Origins of 200 Mile Offshore Zones.' 71 *American Journal of International Law* 494, 500.
128. See the Icelandic Fisheries (Fisheries Jurisdiction Case,) 1974 ICJ Reports (1974), 3.
129. Official Text of the United Nations Convention on the Law of the Sea. (1983). (1982) 21 ILM. (1982). 1261.
130. Article 57. Ibid.
131. Article 56 (1)(a).
132. Article 61 (1). See also Article 62 (1).
133. See Yturriaga, J. (1998). *The International Regime of Fisheries* (Nijhoff, London): 115.
134. Birnie, supra n7 (Volume I): 470.
135. Appendix 8, supra n53.
136. '[T]he rights and responsibilities of Contracting Governments with respect to the conservation, management and study of cetaceans are matters under consideration of the UN Conference on the Law of the Sea'. Appendix 8, ibid.
137. Ibid.
138. The resolution from the 41st meeting noted that 'the sovereign rights of coastal states' as set out in Article 65 of UNCLOS. Appendix 3, supra n29. Likewise, the resolution on small cetaceans from the 43rd meeting was 'conscious of the sovereign rights of coastal states'. IWC. 43rd Report. (1993). 32, 36–7. The resolution from the 45th meeting was 'conscious of the sovereign rights of coastal states, as set out in UNCLOS'. Appendix 2, supra n40.
139. The resolution on the Vaquita from the 45th meeting, which merely noted the highly endangered status of this species was 'conscious of the sovereign rights of Mexico within its coastal waters'. Appendix 3, supra n37.
140. IWC. 33rd Report. (1983). 26–7, 30; IWC. 40th Report. (1990). 22.
141. IWC. 42nd Report. (1992). 16.
142. IWC. 45th Report. (1995). 20.
143. Appendix 4, supra n30. IWC. 45th Report. (1995). 20, 41. IWC. 46th Report. (1996). 38–9. 'Voluntary Fund for Small Cetaceans'. IWC. 47th Report. (1997). 54.
144. IWC. 46th Report. (1996). 20–21.
145. Appendix 5: 'Resolution on Small Cetaceans'. IWC Resolution 1995–4. Ibid. 44.
146. Burke, supra n62: 296.
147. Article 10.
148. Article 2.
149. Article I.2.
150. IWC. 17th Report. (1967). 17, 19–22; IWC. 18th Report. (1968). 18, 23; IWC. 19th Report. (1969). 15, 18, 21–2.
151. IWC. 28th Report. (1976). 24.
152. 'The argument that whales are not subject to the ICRW is difficult to follow . . . it stems from the belief that the UNCLOS over-rides the ICRW and reinstalls coastal state authority over whales'. This position does not seem consistent with Article 65. Burke, supra n62: at 268. See also 291.
153. See Chapter 11 on primacy.
154. Section 17.47 states: 'States shall cooperate with a view to the conservation of marine mammals and, in the case of cetaceans, shall in particular work through the appropriate international organizations for their conservation, management and study'. This is largely reiterated in 17.75.
155. See Section 17.89.
156. Section 17.62.
157. See Birnie, P. (1997). 'Small Cetaceans and the International Whaling Commission.' *Georgetown International Environmental Law Review*. 10: 1, 20.
158. See Yturriaga, supra n133: 129.

159. Ibid. 127–30. Johnston, D. (1988). *The International Law of Fisheries: A Framework for Policy Orientated Inquiries* (Nijhoff, New Haven): lxxi.
160. For a discussion of the various species involved, see Carwardine, M. (1995). *Whales, Dolphins and Porpoises* (Dawling, London).
161. Article 63 (1).
162. Article 64 (1).
163. Article 64.
164. For a general discussion of this area, see Dahmani, M. (1987). *The Fisheries Regime of the Exclusive Economic Zone* (Nijhoff, London): 42–50.
165. See Johnston, supra n159: lix, lxvii–lxix. Burke, supra n62: 266.
166. See Environmental Investigation Agency (2000). *Towards Extinction: The Exploitation of Small Cetaceans in Japan* (EIA, London): 2.
167. Convention on Fishing and Conservation of the Living Resources of the High Seas (1958). Preamble, and Article 1. Reprinted in Kiss, A. (ed.) (1980). *Selected Multilateral Treaties in the Field of the Environment* (UNEP, Nairobi): 133.
168. Paragraph 72 of the Fisheries Jurisdiction Case (*UK* v. *Iceland*). ICJ Reports. 1974. p.32.
169. Article 118.
170. Article 119.
171. See Sections 17.46 (b) & (e); 17.74 (c) & (e).
172. United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea, 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995). Reprinted in 34 ILM. 1542. This is not yet in force.
173. General Principle 6.1. Thereafter, the importance of making sure that 'depleted stocks are allowed to recover or, where appropriate, are actively restored' is emphasized. 7.2.2 (e); 7.6.10.
174. Article 2. See also the Preamble, Paragraph 1. 5(a).
175. International Tribunal for the Law of the Sea (1999). Southern Bluefin Tuna Cases (*New Zealand and Australia* v. *Japan*). ITLOS/PV.99/1.[para 28.(1)].
176. Paragraph 28.(1)(a).
177. See 61(2). For a discussion of this obligation, see Yturriaga, supra n133: 115, 118. Dahmani, supra n164: 43, 49.
178. See also Article 194(5), which requires parties to take measures necessary to protect the habitats of depleted, threatened or endangered species.
179. Article 61 (2).
180. Article 61 (5).
181. IWC. 45th Report. (1995). 20; IWC. 43rd Report. (1993). 31. Burke, supra n62: 264–5, 293–4.
182. 'Japan's View on Addressing Small Cetaceans Within the IWC'. IWC/46/SM.1. Point (e).
183. See Melvasalo, T. (1998). 'Cleaning the Seas.' *Our Planet*. 9(5): 1–5. Regional co-operation is in accordance with Article 197 of UNCLOS.
184. Section 17.10.
185. This agreement reiterated the importance of co-operation between countries and appropriate organizations when dealing with straddling fish stocks, and highly migratory stocks. See Articles 7 & 9.
186. FAO. 6.12; 10.3.
187. International Conference on the Sustainable Contribution of Fisheries to Food Security, Kyoto, Japan, 4–9 December 1995. The records of this conference (including the Declaration and Plan of Action) are available from the FAO. Kyoto Plan of Action 1995, para. 2.
188. Appendix 4, supra n30.
189. See, for example, the 1979 Bern Convention on the Conservation of European Wildlife and Natural Habitat. (1982). UKTS. No. 56. The convention requires its parties to ensure the special protection of all species listed in Appendix II, which includes all species of small cetaceans normally found in European waters. For limitations of this convention, with

regard to small cetaceans, see Churchill, R. (1999). 'Sustaining Small Cetaceans: A Preliminary Evaluation of the ASCOBANS and ACCOBAMS Agreements.' In Boyle, A. (ed.). *International Law and Sustainable Development* (Oxford University Press, Oxford): 225, 231–3. The European Union also has regulations which deal with the protection of small cetaceans. See 894/97 (1997) OJEC L132/1. For a discussion of this, see Churchill. Ibid. 240–43.

190. IWC. 39th Report. (1989). 24–5.
191. Ibid. 29.
192. See Chapter 11 on primacy.
193. CITES. 27 UST. 1087, 12 ILM. 1055.
194. Appendix 9, supra n50.
195. See Chapter 11 on primacy.
196. Appendix 11: 'Resolution on Harbour Porpoise in the North Atlantic and the Baltic Sea'. IWC. 44th Report. (1994). 34. The work with ACCOBAMS can be seen in Report of the Scientific Committee. IWC/53/4. 68–9.
197. IWC. 50th Meeting in 1998 (1999). 34.
198. IWC. 41st Report. (1991). 39–40; IWC. 47th Report. (1997).
199. See Chapter 11 on primacy.
200. Section 17.10.
201. Section 17.59. See also 17.45.
202. FAO. 6.12; 10.3.
203. FAO. 7.1.4.
204. 8.6.
205. 7.2.c.
206. Appendix 2: 'Resolution to Consider the Implications for Whales of Management Regimes for Other Marine Resources'. IWC. 30th Report. (1980). 34.
207. IWC. 31st Report. (1981). 21.
208. See Article IV(2) of the Antarctica Treaty. 402 UNTS. 71.
209. See the 1964 Agreed Measures for the Conservation of Antarctic Flora and Fauna. II(a). Reprinted in (1977). *Treaties and Other International Agreements on Fisheries, Oceanographic Resources and Wildlife Involving the United States* (US Government Printing Office): 28–34.
210. 19 ILM. 841.
211. See also Article IX(5).
212. IWC. 33rd Report. (1983). 37–8. IWC. 34th Report. (1984): 15, 28–9. IWC. 35th Report. (1985). 25.
213. Appendix 5: 'Resolution on Co-Operation Between the IWC and the CCAMLR'. IWC. 31st Report. (1981). 30. IWC. 31st Report. (1981). 20.
214. IWC. 37th Report. (1987). 24. IWC. 41st Report. (1991). 46. IWC. 43rd Report. (1993). 30. IWC. 50th Meeting in 1998. (1999). 32.
215. (1990). UKTS. No. 87.
216. See Chapter 11 on primacy.
217. These were the blue, humpback, bowhead, southern and northern right whales. See CMS *Proceedings of the First Meeting of the Parties* (Bonn, 1985): 10.
218. CMS. *Proceedings of the First Meeting of the Conference of the Parties*. Volume II. (Bonn, 1987): 23.
219. Working Group on Marine Mammals. Reprinted in CMS. Ibid. 8–9.
220. Resolution 3.3: 'Small Cetaceans'. In *Proceedings of the Third Meeting of the Conference of the Parties* (Geneva, 1991): 20. Recommendation 4.2, 'Research on Migration of Small Cetaceans'. *Proceedings of the Fourth Meeting of the Conference of the Parties* (Nairobi, 1994). *CMS Bulletin*. Volume 5 (June 1996): 6. *CMS Bulletin*. Volume 10. (April 2000): 11. *CMS Bulletin*. No. 7. (December 1997): 4, 7.
221. Resolution 1.7: 'Small Cetaceans.' CMS. *Proceedings of the First Meeting of the Parties* (Bonn, 1985): 51.
222. CMS. Ibid. 30.
223. Resolution 1.7, supra n221.

224. Ibid.
225. CMS, supra n221.
226. *Proceedings of the Second Meeting of the Conference of the Parties* (Geneva, 1988): 16.
227. Denmark did not believe that the pilot whale should be included in the appendices. Ibid. 36.
228. After issuing its report, the working group was disbanded, and folded back into the SC. Ibid. 14–15.
229. Ibid. 35–6.
230. In 1991, the SC of the CMS recommended that a number of other small cetaceans be added to Appendix II. These were the Indus and Ganges river dolphins, Franciscana, the Boto river dolphin, the narwhal, the Indo-Pacific humpbacked dolphin, the harbour porpoise (Black Sea and North Atlantic populations), the finless porpoise, the Atlantic humpback dolphin, tucuxi, Peale's dolphin, the bottlenose dolphin (Black Sea population), the long snouted spinner dolphin (eastern tropical Pacific), the striped dolphin (eastern tropical Pacific and western Mediterranean), the common dolphin, Baird's beaked whale, Commerson's dolphin, the Irrawaddy dolphin, the killer whale (North Atlantic and Eastern North Pacific), the northern bottlenose and Heaviside's dolphin. *Proceedings of the Third Meeting of the Conference of the Parties* (Geneva, 1991): 10–11.
231. Norway spoke against the killer whale in this list, as did Greenland against the inclusion of the narwhal (which they stated was already the subject of an agreement between Greenland and Canada). Ibid. 10.
232. Noted in Recommendation 4.2, on the 'Research on Migration of Small Cetaceans'. *Proceedings of the Fourth Meeting of the Conference of the Parties* (Nairobi, 1994).
233. *Proceedings of the Second Meeting of the Conference of the Parties* (Geneva, 1988): 35.
234. This relationship between the IWC and the CMS was the subject of discussion at COP 4 of the CMS in 1994 when India expressed concerns that efforts should be made to avoid duplication between the CMS and the IWC where small cetaceans were concerned. In response, the co-ordinator of the CMS secretariat pointed out that closer contacts with the secretariats of other conventions were favoured but that its efforts in this area regarding collection and exchange of data on small cetaceans were constrained by its limited resources. However, agreement had been reached with the secretary of the IWC on the need for closer contact and a regular exchange of information. Such contacts had been strengthened by the election of the vice-chairman of the CMS standing committee as chairman of the IWC. In addition, it was noted that at the 1994 meeting, the CMS SC had recommended holding consultations with the IWC on the question of small cetaceans. It noted that although there were differences of opinion within the IWC on its competency to deal with the matter of small cetaceans, in recent years there had been some detailed studies in the area, including one for UNCED. As such, the SC of the CMS was in agreement that any conflict of interest or duplication between the CMS and the IWC was unlikely, as the CMS would focus upon the migratory aspects of small cetaceans while the IWC SC would remain concerned with their habitat and population. It further noted that there were significant prospects for the two bodies to complement each other. UNEP/CMS/Conf.4.16. (1994). Chapter II, Report of the SC, paras 42–3.
235. Report of Scientific Committee. *Proceedings of the Fourth Meeting of the Conference of the Parties* (Nairobi, 1994): 52.
236. *CMS Bulletin*. No 4. (July 1993): 8–9.
237. Resolution 2.3: 'Small Cetaceans.' *Proceedings of the Second Meeting of the Conference of the Parties* (Geneva, 1988): 21.
238. Resolution 2.3, ibid. Note, there was disagreement in the CMS to whether such AGREEMENTS which were to cover small cetaceans should be restricted to just small cetaceans, and just to set geographic areas. Ibid. 37.
239. Article IV(4). Article V sets out the guidelines for any such AGREEMENT.
240. Working Group on Marine Mammals. Reprinted in CMS, supra n218: 8–9.
241. For a useful discussion on the 'stand-alone' aspects of ASCOBANS, see Nollkaemper, A. (1997). 'The Protection of Small Cetaceans In the Face of Uncertainty: An Analysis of the ASCOBANS Agreement.' 9 *Georgetown International Environmental Law Review*. 281, 288–9.

242. COP 6, in Recommendation 6.2 on Co-operative Actions for Appendix II Species, drew special attention to 'the dolphins of South America' which although already listed on Appendix II, were not subject to co-operative action. CMS. Recommendation 6.2: 'Co-Operative Actions for Appendix II Species'. CMS. *Proceedings of the Sixth Conference of the Parties* (Cape Town). (Bonn, UNEP). Volume 1: 111.
243. See 'Regional Co-Operation for Small Cetaceans and Sirenians of Central and West Africa.' (2002, COP 7). UNEP/CMS/Res. 7.3. (rev 1).
244. See 'Small Cetaceans and Dugongs of South East Asia.' (2002, COP 7). UNEP/CMS/Res. 7.8.
245. Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas. (1995). UKTS. No. 52.
246. Working Group on Marine Mammals, supra n240.
247. The Final Act which was signed in mid-1991 by Belgium, Denmark, Finland, Germany, the Netherlands, Sweden, the UK and the European Economic Community. *CMS Bulletin*. No. 1. (January 1992): 6. Soon after, Ireland expressed interest in extending the agreement to cover the Irish Sea. *CMS Bulletin*. No. 4. (July 1993): 6. The final impetus for this agreement came from the Memorandum of Understanding on Small Cetaceans in the North Sea, adopted at the Third Ministerial Conference on the North Sea, held in March 1990. Reproduced in Freestone, D. (ed.). (1991). *The North Sea: Basic Legal Documents on Regional Environmental Co-operation* (Kluwer, Dordrecht): 276.
248. The area is defined precisely in paragraph 1(2)(b) of the agreement, as clarified by Resolution 6 adopted at the First Meeting of the Parties. Report from the First Meeting of the Parties (1994): 38.
249. Preamble, Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (1992, United Nations).
250. Article 2.1.
251. Conservation and Management Plan (para. 4).
252. Conservation and Management Plan (para. 1). These goals reflected the earlier CMS recognition that 'pollution, accidental and deliberate catches, habitat changes, and depletion of food supplies' were the primary sources of destruction to small cetaceans. Resolution 2.3: 'Small Cetaceans.' *Proceedings of the Second Meeting of the Conference of the Parties* (Geneva, 1988). 21. See also Working Group on Marine Mammals, supra n240.
253. Comments from Australia, and the Environmental Investigation Agency. *Proceedings of the Third Meeting of the Conference of the Parties* (Geneva, 1991): 14.
254. See 'Progress Report on the Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas'. Reprinted in *CMS Bulletin*. No 5. (June 1996): 2–3.
255. These included Estonia, Finland, Latvia, Lithuania and Russia. Ibid.
256. Norway had 'co-operated actively with ASCOBANS scientific endeavors and has participated in Advisory Committee meetings with the intention to continue, independently of its signatory status'. Ibid.
257. It has been noted that surveys of the geographical range of the small cetaceans covered by ASCOBANS included areas 'operated under the umbrella of NAMMCO'. Ibid.
258. See Report of the First Meeting of the Parties, 2. Report of the Second Meeting of the Parties. 2, 25.
259. *CMS Bulletin*. No. 7. (December 1997): 2.
260. *Proceedings of the Third Meeting of the Conference of the Parties* (Geneva, 1991): 14.
261. Ibid. 15.
262. In 1999, the Advisory Committee of ASCOBANS, with regard to the study of the adverse effects of marine pollution on cetaceans, recommended continuing 'the positive cooperation' with other international organizations, such as the IWC. *CMS Bulletin*. No. 9. (June 1999): 4. For a discussion of the other international organizations involved, see Churchill, supra n189: 239–43.
263. *CMS Bulletin*. No. 7. (December 1997): 2.
264. A working group on protected areas was formed in 2000. *CMS Bulletin*. No. 10. (April 2000): 16.
265. Agreement on the Conservation of Cetaceans of the Black Seas, Mediterranean Sea and Contiguous Area. (1997). 36 ILM. 777.

266. It also covers the internal waters connected to or interconnecting these maritime waters, and of the Atlantic area contiguous to the Medeterranean Sea west of the Straits of Gibraltar and bounded by the line joining Cape St Vincent (Portugal) and Casablanca (in Morocco). See Article I(1)(a) of the agreement.
267. The CMS secretariat attempted to draw attention to the need for 'urgent action with respect to Black Sea dolphins'. Attention was also brought to the mass strandings of harbour porpoises and common dolphins, which were due to 'multiple factors of causation (from parasitic infection to loss of habitat)'. *CMS Bulletin*. No. 2. (May 1992): 4.
268. *CMS Bulletin*. No. 1. (January 1992): 7.
269. Resolution 3.3: 'Small Cetaceans.' In *Proceedings of the Third Meeting of the Conference of the Parties* (Geneva, 1991): 50.
270. Ibid. 20.
271. *Proceedings of the Fourth Meeting of the Conference of the Parties* (Nairobi, 1994): 15, 122. *CMS Bulletin*. Volume 5 (June 1996): 3. *CMS Bulletin*. Volume 6 (January 1997): 1. Nevertheless, ACCOBAMS had been signed by 13 states by 1998.
272. *Proceedings of the Fifth Meeting of the Conference of the Parties* (Geneva, 1997): 21.
273. *CMS Bulletin*. Volume 5 (June 1996): 3.
274. For a useful discussion of this refusal, see Churchill, supra n189: 246–7.
275. ACCOBAMS (1996). Preamble (para. 4).
276. Ibid. (Paras 3, 5).
277. ACCOBAMS. Article II (para. 1).
278. Annex 2 of ACCOBAMS.

11. The primacy of the IWC and related international organizations

1 INTRODUCTION

In international law generally, there is a growing concern over the primacy of competing international organizations with overlapping concerns. With regard to the IWC, this concern is multifaceted, as it has relationships with a number of prominent other international organizations, which often deal in areas of mutual interest.

2 INTERNATIONAL ORGANIZATIONS

International organizations (IOs) – as opposed to non-governmental organizations[1] – are composed of sovereign actors, which agree on a founding constitutional document for the organization. This does not mean that IOs are to be equated with states, or that they hold supra-sovereign powers, but rather that they are capable of possessing rights and duties that are in accordance with international law.[2] The earliest IOs date from the nineteenth century.[3] In the twentieth century, the League of Nations, the International Labour Organization and a number of other smaller IOs were created after the First World War. Following the Second World War, a dramatic growth of universal (and regional)[4] IOs occurred as a result of the ever-increasing recognition by governments of the international dimensions of an increasingly globalized world. Currently, there are over 250 IOs serving some 200 states.[5]

Before an international organization can make any impact on the international scene, it must be afforded some degree of international personality. Personality is short-hand for the proposition that an entity is endowed by international law with legal capacity.[6] The legal personality of IOs may, to some extent, parallel that of states. However, IOs, unlike states, do not all hold equal degrees of personality.[7] That is, the degree of international personality enjoyed by international organizations varies. Variations are determined by their founding documents which determine which rights they are granted and/or excluded. Accordingly, IOs vary considerably in their competencies, importance and membership. Nevertheless, in as much as interstate relations are based on the

principle of respect for the independence and sovereignty of each state due to its international legal personality, comparable principles for IOs are often assumed.

In many ways, it appears that there is a 'family' of IOs. However, this is not correct, as the word 'family' may imply more relations between them than there actually are.[8] A more decentralized approach is probably closer to the correct picture. This is broadly in accordance with the vision of the founders of the UN who had to decide whether they should establish one central organization embracing all activities, or a political organization only, leaving specialized co-operation to separate and independent organizations. This was (and is) a continuing debate which has merit on both sides as arguments within international relations for centralization and the need for a well co-ordinated international system find their counterbalance in the desire for autonomy and decentralization. The UN decided on 'functional decentralisation'. The functions of the UN itself were designed to be limited and other IOs under the UN umbrella were to remain, or become, responsible for specific fields of international co-operation. These became 'specialised agencies' and thus, an interrelated system of IOs was founded – 'the UN family'.[9]

The IOs that make up the UN family may be divided into two parts. The first part consists of those UN bodies which, while appearing autonomous in form, have no judicial personality separate from the UN. Since they lack independent international personality, they are known as the 'minors' in the UN family. Nevertheless, they are organs and they may enjoy independence and operate as separate bodies. They may even have their own separate membership and membership criteria. UNICEF, UNHCR and UNEP are all examples.[10] The second tier of IOs within the UN family consists of the specialized agencies and related organizations, such as the FAO, UNESCO, WHO, the World Bank and the International Monetary Fund (IMF). These bodies have separate juridical personalities reflected in independent governing bodies and in memberships not necessarily coincident with that of the United Nations.[11] With these IOs, their individual relations with the UN are regulated by separate agreements and the UN has little voice in their policies and operations, except in so far as the agreements permit.

3 COMPETING INTERNATIONAL ORGANIZATIONS

With such large numbers of IOs, it is not surprising that there is a considerable risk of duplication, gaps and even conflict between states and IOs and between IOs themselves.[12] This process will probably continue, given the proliferation of international concerns and the willingness of IOs to increasingly try to extend their mandates. 'Rivalry between secretariats' of IOs may only exacerbate the problem.[13]

Apart from the current conflict between the IWC and the CITES, a number of other instances of clashes for primacy between IOs can be cited. These include the dispute that arose between the International Labour Organization (ILO) and the International Maritime Organization (IMO) in the late 1970s. In this instance, the latter IO created a Convention on Standards of Training, Certification and Watch-keeping for Seafarers. Although the new convention expressly provided that all prior treaties on this topic were to remain in force, the ILO felt that a large part of its purpose had been usurped.[14] Similar concerns arose with the Convention on the Elimination of All Forms of Discrimination Against Women, adopted by the United Nations General Assembly (UNGA) in 1979. In this case both the ILO and UNESCO had similar overlapping conventions.[15] Finally, within the UN a series of conflicts have arisen when the Bretton Woods institutions (such as the World Bank and the IMF) have provided services to countries which the UNGA earlier politically disapproved of (such as South Africa and Portugal) – even though the acts of the financial institutions were fully within their constitutional mandates. As such, clear questions of precedence on these issues (in which both bodies claimed priority)[16] arose.

In principle, such difficulties may be resolved by the active co-ordination of either states or larger IOs, who seek to harmonize the actions of possibly competing IOs. The UN has actively used this approach in trying to 'coordinat[e] the policies of the specialised agencies'.[17] This has become a particular concern within the environmental arena, as an increasing numbr of IOs and their accompanying international environmental conventions overlap and possibly conflict.[18] The necessity to co-ordinate IOs within the international environmental arena is a relatively recent phenomenon. Indeed, when the UN was founded, the need to protect the environment at an international level had not been appreciated and the UN and its specialized agencies were given no specific mandate to do this. However, by 1970 environmental concerns were on the agenda of a variety of existing IOs (such as the WHO, WMO, IAEA, FAO, UNESCO the OECD and NATO).[19] Despite this interest, there was a lack of co-ordination and a body with a clearer environmental focus was required. The new body, which evolved out of the 1972 United Nations Conference on the Human Environment (UNCHE), was the United Nations Environment Programme (UNEP). One of the roles for UNEP was to catalyse and co-ordinate the environmental focus in the international community.[20] However, despite their best efforts, between 1972 and 1992 the situation became more difficult with the exponential growth of international environmental laws and their accompanying IOs. Accordingly, once more, prior to the 1992 Earth Summit, calls were made for 'better co-ordination and cooperation between bodies concerned [with] conservation'.[21] The international response to this call came forward in Chapter 38 of Agenda 21. This chapter was emphatic on the role of co-ordination of international environmental concerns

both with the UN itself[22] and among other organizations.[23] A 'priority area' for UNEP was listed as: 'Coordinating functions arising from an increasing number of international legal agreements, *inter alia*, the functioning of the secretariats of the Conventions'.[24]

This objective for UNEP was reiterated by the UNGA in 1997 in the Programme for the Further Implementation of Agenda 21. It added that in performing its functions related to the conventions signed at the UNCED and other relevant conventions, UNEP should strive to promote the effective implementation of those conventions in a manner consistent with the provisions of the conventions and the decisions of the conferences of the parties.[25] This approach is broadly in congruence with the established principles of international law, which can help co-ordinate and prioritize actions between IOs ranging up as far as clashes between the Charter of the UN and goals of other IOs (which must always become secondary in such clashes).[26] Finally, the World Summit on Sustainable Development (WSSD) attempted to advance this area a little by stipulating that the Institutional Framework for Sustainable Development would be strengthened by: 'Increasing effectiveness and efficiency through limiting overlap and duplication of activities of international organizations, within and outside of the United Nations system, based on their mandates and comparative advantages'.[27]

Another route to primacy is that IOs may expressly claim priority for their own acts in the event of a possible conflict of competence with other international organizations. When a treaty specifies that it is subject to, or that it is not to be considered as incompatible with, an earlier or later treaty, the provisions of that other treaty prevail.[28] As such, the priority of one organization's acts over those of another may be spelled out either within the constitution of the IO or within the conflicting document itself. This approach, which helped resolve the above noted conflicts involving the IMO and the ILO[29] and the Convention on the Elimination of Discrimination Against Women UNESCO,[30] has now been recognized in the Vienna Convention on the Law of Treaties (VCLT).

Specifically, a useful piece of interpretation in finding out which IO has precedence was given with Article 59 of the VCLT. This suggested that with 'treat[ies] relating to the same subject-matter' in which there is both an early and later treaty, '[t]ermination or suspension of the operation of a treaty implied by conclusion of a later treaty' will only be accepted if 'it appears from the later treaty or is otherwise established that the parties intended that the matter should be governed by that treaty'. Alternatively, 'the provisions of the later treaty are so far incompatible with those of the earlier one that the two treaties are not capable of being applied at the same time'.[31]

With such considerations in mind, it is now necessary to examine the basis and standing of the International Whaling Commission.

4 THE IWC AS A PRIMARY INTERNATIONAL ORGANIZATION

The IWC has a lineage in international law dating to 1931 and the initial Convention for the Regulation of Whaling.[32] This was built upon with the 1946 International Convention for the Regulation of Whaling which was designed to 'establish a system of international regulation' for the management of whales.[33] This IO was designed, and has subsequently functioned, as the primary universal body that deals with issues relating to cetaceans.

The role of the IWC was recognized at the 1972 UNCHE[34] and the 1982 United Nations Law of the Sea Conference (UNCLOS).[35] Article 65 of UNCLOS stated: 'States shall co-operate with a view to the conservation of marine mammals and in the case of cetaceans shall in particular work through the appropriate international organisations for their conservation, management and study'.

Any ambiguity over which was the appropriate international organization[36] was firmly resolved in Chapter 17 of Agenda 21. Then years later, paragraph 31 of the Plan of Implementation from the WSSD called upon states to recognize the responsibility of the IWC for the conservation and management of whale stocks and the regulation of whaling pursuant to the 1946 ICRW.[37] Given such recognitions, it is not surprising that the IWC sees itself as the 'universally recognised competent international organisation'[38] with regard to cetaceans. This was furthered in 2001 when Japan and the United States put forward a resolution which recognized that 'the IWC is the universally recognized international organization with competence for whale stocks'.[39]

5 THE CREATION OF THE 'STAND-ALONE' IWC

The IWC has not claimed the mantle of the 'universally recognized competent international organization' with regard to cetaceans without good reason. This reason is that its authority on these matters has been established over five decades of dealing with both cetacean-related issues and other IOs interested in these questions. In addition, the IWC may claim that from its outset, it was intended that it would be a specialized and stand-alone IO.

The IWC was created shortly after the Second World War, when there was a rapid growth in IOs. Initially, it was not understood how all of the new IOs would relate. For example, it was suggested that the IWC might fit better as a subsidiary organ within the newly formed Food and Agriculture Organization,[40] as this had a complementary constitution to the types of questions that the IWC was seeking to address. A remnant of this debate can be found in Article III(6) of the ICRW which recognized (at the time):

> That specialised agencies related to the United Nations will be concerned with the conservation and development of whale fisheries and the products arriving therefrom and desiring to avoid duplication of functions, the Contracting Governments will consult among themselves within two years after the coming into force of this Convention to decide whether the Commission shall be brought within the framework of a specialised agency related to the United Nations.

However, the IWC was not folded into the FAO or any other UN IO due to a concern that whaling issues would receive a low priority on their new agendas. Accordingly, at its second meeting, the IWC 'resolved that it should remain an independent body' although it decided to 'maintain its present close relationship with the FAO'. [41] Likewise, the suggestion that the IWC may be linked to the then-discussed International Trade Organization (ITO)[42] was also dismissed (in 1950). At this meeting it was agreed that the IWC should not be brought within the framework of the FAO or any other international organization. Accordingly, from the outset, it was obvious that the IWC was meant to stand alone. Moreover, it was set to stand alone in a manner very similar to the other IOs within the UN.

6 THE IWC AS A UNIVERSAL BODY

The IWC was built upon the intention that it would become the sole body to deal with whaling-related issues. Nevertheless, it was not designed as an 'exclusive' club by which membership was difficult to obtain. Rather, the IWC was predicated upon the idea that it was in the 'interests of the nations of the world in safeguarding for future generations the great natural resources represented by whales'.[43] Given the generic interest of all nations, the focus of the IWC, throughout its lifetime, has been to encourage non-members to join, rather than to force them to stay outside the rubric of its considerations.[44] Moreover, the IWC membership has grown to encompass a number of dissident countries which have operated against the IWC's wishes by utilizing some of the various exemptions within the ICRW such as scientific whaling[45] or reservations with regard to aspects of the IWC's policies.[46]

Despite the IWC's 'open-door' policy, it has continually had difficulties with whaling procedures which have operated outside IWC rules. Those who have sought to depart from the IWC may be divided into two groups. The first are those who have appeared under flags of convenience (so-called 'pirate whalers'). These were a distinct problem throughout the 1950s[47] and 1970s.[48] The second group consists of individual countries and competing regional organizations which have chosen to operate under different rules. Often, the individual countries and competing organizations have become folded into one another.

The first example of a competing regional (as opposed to universal) IO was the Permanent Commission of the South Pacific (PCSP). This originated from the first meeting of the IWC in 1949 when Chile and Peru removed their support from the IWC (despite expressing earlier interest) while simultaneously asserting absolute sovereignty over 200 miles of sea off their coasts.[49] Five years later, Chile, Ecuador and Peru formalized the PCSP and with it, their own whaling and fishing regulations.[50] The more protective IWC provisions of the time (in terms of protected species, limited seasons and hunting locations) were not part of the new commission.[51] Nevertheless, the PCSP maintained that the IWC regulations were largely followed, except where they prejudiced the 'just needs for national consumption and industrial supplies'.[52]

Although aspects of the constitution of this body were deemed 'flagrant acts against international law' by countries such as Japan and the UK, and Japan (unsuccessfully) suggested that 'the whole position' should be taken 'to the notice of the United Nations'.[53] the body continued to operate throughout the 1960s. During this period, the IWC continued to urge the PCSP and its pivotal members (Chile and Peru) to adhere to the ICRW regulations – as it had been requesting since the formation of the Commission.[54] The PCSP response was to reassure the IWC that it was effectively protecting whale resources in the South Pacific. It did, however, agree to have a continual exchange of scientific information and close co-operation with the IWC, but did not accept the invitation to join. The PCSP refused because it thought its rules were 'much more effective' and that the IWC was largely 'ineffective'.[55]

The other regional IO of particular note is the North Atlantic Marine Mammal Commission. NAMMCO was formally established in 1992 by Iceland (which left the IWC in the same year), Norway, Greenland and the Faroe Islands. Kate Sanderson, the former secretary to NAMMCO suggested: 'One of the prime motivating factors behind the creation of NAMMCO was the dissatisfaction in the North Atlantic with the inability of the IWC to agree on a basis for conservation and management of large whales according to these principles and its own convention'.[56]

The IWC has been suspicious and reticent to establish any kind of working relationship with NAMMCO.[57] This reticence has been due to a number of factors. Specifically, although it has been suggested that one of the virtues of NAMMCO is its 'regional rather than global approach',[58] a critical question over the standing of this IO concerns two issues pertaining to the scope of membership. First, the agreement establishing NAMMCO is, in complete contrast to the 'open-door' policy of the IWC, particularly exclusionary. That is, the NAMMCO agreement is only open for signature 'with the consent of the existing signatories'.[59] The second issue is that the parties to NAMMCO may be too few to represent a viable management alternative, as Norway and Iceland are the only two independent state members. Other Nordic countries

such as Finland and Sweden are not members. With such dual membership of the IWC and NAMMCO, it has been suggested that such members are playing 'two hands', and NAMMCO is only a 'bargaining chip'[60] used within IWC debates. With such a background it has been suggested by Steinar Andresen:

> However poorly the IWC may be seen to function, as measured against what it was intended to be, or could have been, it is a fact that by the large majority of member states it is seen as the only legitimate international body for dealing with whaling issues. These nations include the US, all the main EU states, most major western countries, including most Nordic countries. Conversely, I find it most probable that all these actors will view NAMMCO as illegitimate.[61]

The IWC has dealt with the regional IOs (the PCSP and NAMMCO) by focusing upon individual countries and inviting them to join the IWC. The IWC has taken the same approach to states which operate outside its mandate. For example, throughout the 1970s, Chile, Peru, Portugal and Spain were all called upon to adhere to the ICRW.[62] By the late 1970s, the IWC had gone even further by developing the practice of issuing resolutions which referred directly to specifically troublesome individual countries such as Spain, Portugal and Peru. For example, in 1978 with regard to Peru, the IWC expressed its wish that: 'the Government of Peru . . . comply fully with the requirements of the Convention and the Schedule'.[63]

By the early 1980s, the majority of the 'problem' nations that had earlier refused to join the IWC had changed their position. Peru,[64] Chile, Spain and the Republic of Korea were the first to join the IWC in the early 1980s. Soon after, the IWC focused its attention on a number of other relevant non-member countries such as China, Indonesia, Portugal and Tonga. Once again, the secretariat was instructed to explain the work of the IWC to these countries and the procedures for adhering to its objectives. Such moves were clearly successful as by 1982, Korea, Spain and China became members of the IWC.[65] The only other country which has drawn particular interest from the IWC has been Canada, which although maintaining no interest in commercial whaling, has an active policy on 'aboriginal whaling'. This has been the subject of a series of directed resolutions from the IWC.[66]

Despite the generally successful attempt to bring countries with interests in the whaling debate within the IWC's ambit, the problem of those that have refused to join remains and may be evidenced by recent concerns over the illegal trade in whalemeat and related products. The last generic Resolution on Whaling Activities by Non-Member States was in 1993. This noted that: 'whaling operations by non-member States may diminish the effectiveness of the conservation programme adopted by the IWC'. To help remedy this, the IWC once more 'invite[d] non-member States involved in or planning whaling activities to consider as promptly as possible their accession to the . . .

ICRW', and again encouraged 'the Secretary to investigate the reasons why non-member countries continue to remain outside the IWC'.[67]

7 THE IWC AND THE QUESTION OF TRADE RESTRICTIONS

The IWC has a number of powers which it may utilize to achieve its objectives. The usual ones[68] are all directly related to the issue of conservation through setting catch limits, times, locations and methods. In addition to these tools, Article VI states: The Commission may from time to time make recommendations to any or all Contracting Governments on any matters which relate to whales or whaling and to the objectives and purposes of this Convention.

Within this ambit of options are trade related measures. The overlap of the IWC and trade-related issues was implicit in the initial discussions at the formation of the IWC and the suggestion that it might be joined with the then-proposed ITO.[69] However, as history displays, the ITO took 50 years to evolve, and the obvious question of trade was placed on the back-burner at the IWC for a number of decades.

One of the foremost problems was, as seen above, the difficulty of pirate-whalers or individual countries which refused to adhere to the IWC's objectives. This resulted in specific working parties created to examine this problem in 1976[70] and 1980.[71] It was believed by some countries (such as the United States) that (by the late 1970s) non-IWC whaling represented over 13 per cent of the world catch of large whales and that 25 per cent of Japan's whalemeat imports were from non-IWC members.[72]

A large part of the solution to this problem was dealt with through trade restrictions (import and export) on both equipment and products relating to whales. Although this was a new tool for the IWC in the 1970s (let alone CITES, which did not exist until 1973), it was a mechanism which had already been used unilaterally by the United States (from 1971)[73] and the United Kingdom (in 1976).[74] A later version of suggested restrictions occurred in 2001 when the IWC called upon Norway to refrain from issuing export permits for whale products. This was especially highlighted because of the linkage to CITES, and some of the proposed species for export being listed under the latter convention.[75]

Whaling Equipment

The first IWC-instituted trade restrictions were in 1972. These initially applied to the sale of whaling vessels or whaling equipment. The IWC recommended to member governments that, to the extent possible under their national laws,

they should not sell, register or charter to non-member states whaling equipment including vessels no longer in use, until the receiving states adhered to the ICRW.[76] This position was reiterated in 1976, 1978, 1979 and 1981.[77] The 1978 Resolution on the Transfer of Whaling Equipment and Expertise is the best example of this. It resolved that all member nations of the IWC: 'should take all practical steps to prevent the transfer of factory ships, whale catchers, or gear, apparatus or appliances used in the conduct of whaling operations, and to discourage the dissemination by its citizens of expertise and assistance necessary to the conduct of whaling operations'.[78]

To assist this process, in 1979 it was agreed that the IWC secretariat would draw up an annual register. However, as discussed in Chapter 12 on compliance, this is in a current state of disarray.

Trade in Whale Products from Non-IWC Members

As with the trade in whaling equipment, dealing with the trade in whale products (both legal and illegal) has an established history within the IWC. Moreover, there has always been a clear intention to retain oversight and primacy of this area. This later point has come through clearly with regard to the post-1990 debate on the illegal trade in whalemeat and the supporting role of CITES to the IWC.

The evidence of the IWC intention to be the primary IO on the issue of the trade (both legal and illegal) of whale products and their derivatives can be traced back to 1976, when the IWC moved to include the banning of imported whale products from non-member states that exploited whales in a manner inconsistent with the IWC's regulations.[79] This view was clearly recorded in the 1978 Resolution on the Importation of Whale Products from Non-IWC Member Countries, which stated:

> The importing of whales or products thereof from any State not a party to this Convention seriously detracts from the effectiveness of the management procedures of the IWC . . . Be it resolved that each Contracting Government shall take all appropriate measures to prevent the import of any whale or product thereof taken by a whale catcher or processed, at a land station or factory ship which is registered with, partially or wholly owned by, or under the jurisdiction of any State not a party to this Convention.[80]

In 1979, a new resolution on this topic introduced language of a more mandatory nature: 'All member nations shall cease immediately any importation of whalemeat and products from . . . non-member countries and operations'.[81] This resolution was supported by the fact that a number of key countries with an interest in the supply of whalemeat indicated that they had already taken measures to prohibit the importation of whale products from

non-IWC countries.[82] Nevertheless, in 1980 a new resolution was adopted which asked member governments to provide to the secretariat all the available information they had in terms of the exports and imports of all whale products.[83] The 1979 resolution was endorsed in the 1990s as concern arose again over the illegal trade in whale products.[84] However, in the middle of the 1990s this emphasis changed slightly, as illegal shipments were detected either upon attempted entry into certain countries, or once they were already inside the country and were being offered for sale.[85]

The overlap between the IWC and CITES emerged in 1994 with the discovery of 'large quantities' of illegal whalemeat en route to Japan.[86] This prompted the IWC to pass the Resolution on the International Trade in Whale Meat and Products, which reiterated the earlier resolutions on the trade with non-members, but also highlighted the 1979 CITES connection. Specifically, the resolution called upon all IWC members 'to enforce strictly their existing international obligations under the ICRW . . . and under CITES, relating to the control of international trade in whale products'.[87] The concern that was shown at the IWC was mirrored at CITES, which also met in the same year at Fort Lauderdale in the United States. At this meeting, Resolution 9.12 which dealt with the illegal trade in whale meat, was passed. The resolution was 'concerned about continuing international reports of the discovery of whale meat and products appearing for sale in, or en route to importing countries, from no plausible existing source'. As such, it appeared that: 'some unknown level of exploitation of whales may be occurring outside the control of the International Whaling Commission'. This situation suggested that: 'the international trade in meat and other products of whales is lacking adequate international monitoring or control'.

To help resolve this situation, it was recognized that the IWC and CITES must continue 'to cooperate and exchange information on international trade in whale products'. This co-operation was deemed necessary, as: 'any illegal international trade in Appendix-I whale specimens undermines the effectiveness of both the IWC and CITES'.[88]

In 1995, the issue of the illegal trade in whalemeat was revisited at the IWC. Two points are worthy of note. First, the IWC responded favourably to the CITES on this question by adopting co-operative resolutions, in 1995 and 1996,[89] whereby it '[w]elcome[d] the co-operation between the IWC and CITES to address the concern that any illegal trade in whale meat undermines the effectiveness of both the IWC and CITES'.[90] The second point is that although arguments were raised that questioned the level of the illegal trade,[91] a new resolution was passed, the Resolution on Improving Mechanisms to Prevent Illegal Trade in Whale Meat, which specifically acknowledged the difficulty of detecting illegally obtained whale products (given that large, dated stockpiles exist, and some legal whaling does already occur).[92]

Therefore, it called for all governments with whalemeat stockpiles to closely monitor and report on the stockpiles they hold, and:

> [To e]ncourage governments or other entities to develop mechanisms using DNA or isozyme analysis to randomly sample and identify whale meat in their market places by species and . . . to prohibit the sale of meat from all whales that could not have been taken nor acquired in accordance with ICRW and CITES provisions.[93]

This resolution was particularly important as the IWC attempted to mandate a new way in which the illegal trade in whalemeat could be detected within sovereign boundaries.

The following year, in 1996, further illegal shipments of whalemeat to Japan were detected.[94] Accordingly, once more the problem arose at the IWC. At this point, Japan suggested that the question of the trade of whale products, when involving domestic markets, was outside the competence of the IWC.[95] Nevertheless, Japan did attempt to co-operate with the IWC by providing information on this issue on a voluntary basis. However, the information provided was challenged. In 1997, in an attempt to help resolve this difficulty, Japan offered to co-operate in a peer review (involving other countries, such as New Zealand) of all samples analysed in the market surveys.[96] This co-operation was partly reflected in the resolution (objected to by Norway and Japan)[97] of that year (1997) which:

> [e]ncourages all Contracting Governments to provide information to the IWC about the size of remaining stockpiles and the species of origin of meat remaining in the stockpiles, and to collect and inventory skin or meat samples for DNA identification from all whales that enter into commerce, and to make the DNA database available to the IWC.[98]

At COP 10 of CITES, the issue of the illegal trade in whalemeat was again brought to the attention of the CITES parties.[99] In response, in parallel to the IWC, the COP decided[100] to encourage the parties to inventory frozen whale products possessed in commercial quantities and to collect DNA samples, for identification purposes, from these stockpiles.[101]

The following year, in 1998, the question of stockpiles and trade again arose at the IWC. Japan and Norway both suggested that although they would supply information to the IWC on a voluntary basis, they believed that the IWC was the wrong forum for such discussions. They suggested that more appropriate forums were either the WTO or CITES.[102] They then reiterated their view that:

> this was a domestic issue and that it had no intention of formally providing the results to the Commission. . . . Matters of trade and its domestic market fall outside the IWC and are under its own sovereignty, although it cooperates with CITES in

international, and TRAFFIC Japan [a wildlife trade monitoring body] on domestic issues.[103]

With such views, it was not surprising that both Japan and Norway spoke against the 1998 Resolution on the Co-operation Between the IWC and CITES. With specific regard to the issue on illegal trade, they suggested that the resolution was 'trespassing on the competence of other organisations'.[104] Despite these concerns, the Resolution was passed. With regard to the trade in illegal whalemeat, the emphasis remained upon the need for the IWC signatories to 'observe fully IWC resolution[s] . . . addressing trade questions, in particular with regard to the problem of illegal trade in whale products'.[105] A year later, in preparation for the then forthcoming CITES COP 11, Japan showed a different attitude to the CITES secretariat than that shown to the IWC with regard to co-operation in dealing with the problem of illegal trade in whalemeat. Indeed, Japan suggested: 'The [CITES] Secretariat will be kept continuously updated with regard to . . . any developments regarding illegal trade in whale products'.[106]

8 THE IWC AND WORKING RELATIONSHIPS WITH OTHER INTERNATIONAL ORGANIZATIONS

The issue of the illegal trade in whalemeat is a useful example of how the IWC's mandate overlaps with other international bodies which deal with related concerns. Other common overlaps involve oceanic threats,[107] oceanic exploration,[108] migratory species, endangered species, or specific habitats (such as Antarctica) where cetaceans may reside or visit.

As overlapping IOs have developed, the IWC has increasingly been asked to 'contribute to and take part in an increasing number of international activities through cooperation between Conventions'.[109] The typical response of the IWC as stated in 1990, was/is: 'to cooperate to the maximum extent possible within the constraints of its finances, and for the Secretariat to be ready to send appropriate documentation or other information'.[110] The usual relationship in such instances involves an exchange of observers at each other's meetings, who accordingly produce reports for the IWC of the events in the other bodies.

In other instances, where there is no established relationship between the IWC and other bodies, it has, in directed instances, made contact with them with a view to see about possible synergies between them, such as with the Global Environment Facility (GEF).[111] However, this directed contact process has not always yielded positive results. For example, with the IMO, overtures by the IWC to work co-operatively in an area of mutual interest (such as ship strikes) did not result in a positive response from the IMO.[112]

For many, within the direct UN family, the co-operation has been on an ad hoc basis, which has been bolstered by strong working relations between the bodies. Thus, with an IO like the FAO, although the relationship has not been formalized, it has still remained strong.[113] With other UN IOs such as UNEP, co-operation has also been on an ad hoc basis, when working with issues of mutual interest such as the FAO/UNEP Global Plan of Action for Marine Mammals.[114] Conversely, when dealing with IOs which have more independence and greater legal personality, the relationships have been dictated by the provisions of their founding constitutions. That is, as noted above, the problem has been resolved by the VCLT principle which states: 'When a treaty specifies that it is subject to, or that it is not to be considered as incompatible with, an earlier or later treaty, the provisions of that other treaty prevail'.[115] This principle has had to come into play with all of the subsequent IOs following the ICRW as there is no such derogating principle within the ICRW. However, with the other overlapping conventions, such as those dealing directly with whaling issues surrounding Antarctica, migratory species, or the trade in endangered species, there is.

Antarctica

The case of Antarctica is a particularly useful example as cetaceans are intricately connected with the marine environment of the South Pole.[116] Nevertheless, the treaties which deal with this area have been explicit in their deference to the IWC in dealing with cetaceans.[117] This deference was carefully spelled out in the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR).[118] Article VI stated: 'Nothing in this Convention shall derogate from the rights and obligations of Contracting Parties under the International Convention for the Regulation of Whaling'. Moreover, Article XXIII(3) states: 'The Commission and the Scientific Committee shall seek to develop cooperative working relationships, as appropriate, with inter-governmental and non-governmental organisations which could contribute to their work, including . . . the International Whaling Commission'.

This article was necessary to make sure that:

> The Commission shall take full account of any relevant measures or regulations established or recommended by . . . existing fisheries Commissions responsible for species which may enter the area to which this Convention applies, in order that there shall be no inconsistency between the rights and obligations of a Contracting Party under such regulations or measures and conservation measures which may be adopted by the Commission.[119]

From this background, the two IOs have established a strong (but informal) co-ordinated working relationship[120] in areas of mutual interest.[121] This relationship

has prospered since the mid-1980s as overlapping environmental concerns have brought the two secretariats even closer together.[122]

Migratory Species

The 1979 Convention on the Conservation of Migratory Species of Wild Animals (CMS)[123] like the above-noted IOs, has many overlapping IOs and global conventions. This overlap is to be expected given its large ambit with regard to general protection of species, especially those with an unfavourable conservation status, which migrate between countries.[124] Despite these overlaps, the CMS recognizes itself very clearly as the only global mechanism that comprehensively addresses migratory species. Nevertheless, it aims to complement other biodiversity-related instruments where possible, and seek synergies with these.[125] To achieve the CMS's objectives, two appendices were created. Appendix I covers 'endangered migratory species' and Appendix II covers 'migratory species which have an unfavourable conservation status . . . as well as those which have a conservation status which would significantly benefit from the international cooperation that could be achieved by an international agreement'.[126]

From the outset, the CMS's relationship with the IWC has been quite strong, and in 2000 the two organizations negotiated a memorandum of understanding.[127] This relationship has been built upon the assumption that 'the IWC has a vital store of expertise and scientific knowledge on which the CMS can draw'.[128] It would also appear to have been predicated upon the recognition of the VCLT principle that when a treaty specifies that it is subject to an earlier or later treaty, the provisions of that other treaty prevail.[129] In the case of the CMS, the question of precedence was expressly dealt with in two principles in Article XII: 'Nothing in this Convention shall prejudice the codification and development of the Law of the Sea by the United Nations Conference on the Law of the Sea'; and: 'The Provisions of this Convention shall in no way affect the rights or obligations of any Party deriving from any existing Treaty, Convention or Agreement'. With regard to the first paragraph, Article 65 of UNCLOS was important concerning the management of cetaceans. With regard to the second paragraph, a clear question of precedence was given to earlier conventions, such as the ICRW on overlapping topics. This recognition of the IWC was clearly incorporated into some of the regional agreements that fall under the auspices of the CMS, such as ACCOBAMS. This is clearly set out in its preamble, which recognizes 'the importance of other global and regional instruments of relevance to the conservation of cetaceans, signed by many Parties, such as the International Convention for the Regulation of Whaling'.[130]

The relationship between the CMS and the IWC took a further step forward

in 2000, when (despite objections by Japan) a memorandum of understanding was signed by the two organizations. This memorandum seeks to: 'establish a framework of information and consultation between CMS and the IWC'. In particular, the two bodies will 'to the extent possible, co-ordinate their programme of activities to ensure that their implementation is complementary and mutually supportive'.[131] In 2001 this approach was furthered with the suggestion that the IWC, under its memorandum of agreement with the CMS seek to 'pursue complementary and mutually supportive actions in respect of small cetaceans'.[132]

Such objectives reflect the already established practice whereby the CMS has a supporting non-conflicting role with the IWC. This can be seen through two examples. The first is with regard to the listing of large cetaceans in its appendices. In 1985, Appendix I of the CMS had listed blue, humpback, right and bowhead whales.[133] Except for the later inclusion of the highly endangered river dolphins, Appendix I listings of large cetaceans (unlike Appendix II listings for small cetaceans which expanded by seven species in 1988)[134] were largely static until the 2002 meeting. At COP 7 in 2002, the fin, sei and sperm whale were all upgraded to Appendix I. In addition, the Antarctic minke whale, Bryde's whale and the pygmy right whale were all listed in Appendix II, although further research on these last species was called for, with a view to revising the proposals for future consideration.[135] The addition of the Antarctic minke was particularly significant, as this had earlier been declined Appendix II status, due to a suggestion that listing was not necessary as greater protection could be given to it by the IWC.[136] Importantly, this initial failure to list the Antarctic minke could not be seen as a way which could threaten the species in question. As such, the CMS was not effectively undermining the ICRW.[137] Moreover, its subsequent listing, in 2002, clearly removed any doubts over the CMS support for the ICRW on this question.

Such debates over the listings of large whales in the CMS appendices have invoked discussions deemed necessary to determine clear lines of responsibility between the two IOs.[138] Accordingly, when they came to an issue that was of clear interest to both of them, such as small cetaceans, it was suggested (in 1994): '[t]here was unlikely to be any conflict of interest or duplication between the scientific activities of CMS and IWC, as CMS would focus on the migratory aspects of the species while the IWC Scientific Committee was concerned with its habitat and population'.[139]

The second example by which the collaborative and supporting role of the CMS to the IWC can be evinced is that of small cetaceans. The CMS is currently a foremost international body dealing with the conservation of small cetaceans. That is, the IWC is not definitively the leading body in this area, due to questions of competency of the IWC with regard to small cetaceans.[140] As such, the CMS has not usurped the IWC, but has rather 'filled a gap'[141]

which existed in international environmental law. Moreover, the IWC has responded to this move by the CMS in a favourable and supportive way.[142] Accordingly, the two IOs have worked co-operatively on the issues of small cetaceans and related concerns (such as environmental pollution)[143] within the CMS regional agreements of ASCOBANS and ACCOBAMS.

9 CONVENTION ON THE INTERNATIONAL TRADE IN ENDANGERED SPECIES OF FLORA AND FAUNA (CITES)

CITES[144] was created in 1973 with the recognition that 'international cooperation is essential for the protection of certain species of wild fauna and flora against over-exploitation through international trade'.[145] The central mechanism of the convention which seeks to achieve its goal of restricting international trade in endangered species is found in the 'Fundamental Principles'.[146] These stipulate that the convention operates three appendices (I, II and III), and species, depending upon their classification, will be placed in one of these. Although trade is allowable for all species listed in any of the appendices, they are clearly hierarchical, Appendix I being the strictest (no trade is allowable which may be 'detrimental to the survival of the species involved)',[147] all the way down to Appendix III, which has the least onerous controls.[148]

The CITES Relationship with Other IOs

The area of importance for this discussion of CITES is the provisions dealing with other IOs that may have overlapping influence. CITES, like the CMS and the CCAMLR, clearly incorporated the principle that when a treaty specifies that it is subject to an earlier or later treaty, the provisions of that other treaty prevail.[149] This realization of other IOs which may have precedence over CITES occurs in three places.

First, Article XIV dealt with the 'Effect [of] International Conventions' (and domestic legislation). This stated that, with regard to the trade in marine species within Appendix II, the signatories to CITES are to 'be relieved of the obligations imposed on it under the provisions of the present Convention . . . [if they act] in accordance with the provisions of such other treaty, convention or international agreement'.

The second provision dealing with other international bodies was Article XV, which deals with amendments to Appendices I and II. In this context, when amendments to the appendices are proposed, the secretariat is obliged to 'consult the other Parties and interested bodies on the amendment'. With particular regard to 'marine species' it is necessary to '[c]onsult intergovernmental

bodies having a function in relation to those species especially with a view to obtaining scientific data these bodies may be able to provide and to ensuring coordination with any conservation measures enforced by such bodies'.

The third area, which implicitly deals with other IOs, is Article XIV (6). This, like the near identical clause in the CMS, states: 'Nothing in the present Convention shall prejudice the codification and development of the law of the sea by the United Nations Conference on the Law of the Sea'.

Finally, it is useful to note that the question of overlapping IOs has been one of increased focus within CITES. In 1997, specific attention was paid to improving the convention in terms of finding 'cooperation' and/or 'synergies' with other IOs. The focus at this time was clearly upon the overlapping implications of the CBD[150] and the WTO.[151] Two years later in 1999, while still focusing upon a tight-knit group of organizations (WTO, UNEP, CMS – and barely mentioning the IWC), the standing committee of CITES further developed this issue when it recognized the need for greater synergies and coordination between CITES and other multilateral environmental agreements,[152] and in 2002 Mexico proposed a Resolution on Co-operation Between CITES and the IWC.[153]

The Initial Relationship Between CITES and the IWC

Soon after CITES was created, the IWC was concerned that there could be an overlap in their work. Accordingly, the IWC took an interest in the working of the new IO[154] and, in 1977, the IWC offered to act as scientific advisor to CITES, while 'the latter convention could assist the IWC in discouraging commercial exploitation of badly depleted whale stocks. The two conventions can therefore profit from co-operation'.[155] The IWC also sent a directed resolution to CITES. The resolution was clearly directed at establishing IWC precedence and seeking a supportive role from CITES:

> Whereas it is the purpose of the International Whaling Commission to provide for the effective conservation and management of whale stocks . . . and . . . the International Whaling Commission has established regulations which allow no commercial [whaling] . . . in order to contribute to the effort to conserve whales receiving commercial protection from the IWC and to reinforce adherence to IWC regulations, it is desirable to use each international opportunity to stop the taking and to ban trade in those species and stocks of whales which receive total protection . . . Be it hereby resolved by the IWC that it request the Conference on the Parties to [CITES] to take all possible measures to support the IWC ban on commercial whaling for certain species and stocks of whales as provided in the Schedule of the ICRW.[156]

CITES was quick to respond to these demands at COP 2 in 1979. It acknowledged itself as a supporter of the IWC. This support appeared in three

separate resolutions (which are all still standing). The first dealt with CITES' relationship with the IWC.[157] Before expanding upon this, CITES noted the importance of cetaceans generally and the necessity for communication between international bodies dealing with such issues. With regard to the status of cetaceans, CITES recognized that 'whales . . . are of interest to all nations of the world',[158] and 'special attention to the conservation of whales and other cetaceans'[159] is necessary as [c]ommercial utilisation has caused the rapid depletion of many species and stocks of large whales once they become the focus of exploitation and has resulted in a threat to the survival of a number of these species and stocks'.[160] The importance of the protection of cetaceans was dealt with in Resolution 2.8. With regard to this, CITES recognized 'that the jurisdiction of the Parties with respect to marine resources in their adjacent seas is not uniform in extent, [and] varies in nature and has not yet been agreed internationally'. Nevertheless, the signatories to CITES were 'desiring that the maximum protection possible under this Convention be afforded to the cetaceans listed in the appendices'. Accordingly, they recommended 'that the Parties use their best endeavours to apply their responsibilities under the Convention in relation to cetaceans'.

The third step came with the recognition of the role of the IWC. In Resolution 2.8, it was noted that 'the International Whaling Commission has asked for the support of the Parties in protecting certain stocks and species of whales'. In addition, Resolution 2.7 (Relationship with the International Whaling Commission),[161] it was observed that CITES 'requires the Secretariat to consult inter-governmental bodies having a function in relation to' marine species. Moreover, CITES recognized that this consultation had already begun and could be traced back to 1977 with the special working session of the Conference of the Parties when 'the Secretariat . . . requested and obtained observer status (for trade matters) at meetings of the IWC'. Conversely, it was noted: 'the IWC has requested and obtained observer status at meetings of the Conference of the Parties'.

With regard to the status of the IWC, it was clear that CITES was in no way trying to usurp its powers or role. Indeed, CITES recommended in Resolution 2.7 'that those Parties which do not currently adhere to the International Convention for the Regulation of Whaling be encouraged to do so'. This plea was reiterated at COP 3 in 1981, where non-signatories to the IWC were to give the matter of IWC membership 'urgent consideration'.[162]

Resolution 2.9 (Trade in Certain Species and Stocks of Whales Protected by the International Whaling Commission from Commercial Whaling)[163] clearly established CITES as a supporting institution, while 'the leadership position of the IWC'[164] was noted, as were the limitations of the IWC in enforcing its own provisions. The supporting role of CITES was clearly iterated in the recognition that, although the IWC had 'taken increasingly vigorous action',[165] continuing

problems such as 'pirate whalers'[166] 'circumvents and diminishes the effectiveness of the protective regime of the IWC and threatens to prevent the recovery of those protected species and stocks'. Accordingly, 'international cooperation is essential' as 'the meat and other products of such protected species of whales are subject to international trade which cannot be controlled effectively by the IWC alone'. Nevertheless, although international co-operation was essential, the IWC was to take the lead and CITES would follow its regulations. Thus, the conclusion of Resolution 2.9 recommended:

> that the Parties agree not to issue any import or export permit, or certificate for introduction from the sea, under this Convention for primarily commercial purposes for any specimen of a species or stock protected from commercial whaling by the International Convention for the Regulation of Whaling.

Since this resolution did not distinguish between Appendix I and Appendix II, it constituted a modification of the normal rules under CITES. Under this resolution, if the IWC is seeking to protect a species or a stock of a species, then CITES certificates or permits should not be granted even if it is an Appendix II species. This was not to suggest that the two bodies would not consult with each other over listing questions,[167] but rather, that deference would be shown to the IWC's decisions about these matters.[168]

The Appendix Listing of Cetaceans within CITES

Closely following the recognition of the pre-eminent role of the IWC by CITES came the listing of cetaceans in the CITES appendices. This process began in earnest in 1975 when blue, humpback, gray, right and bowhead whales were listed in Appendix I. In 1977, the various stocks of sei and fin whales were listed in Appendix II. In 1979, despite concern by some IWC members on the difficulties of equating the IWC stock management categories with the CITES classifications,[169] the IWC, in conjunction with the UK, provided information for the review of cetacean species for the appendices.[170] Then, at the actual meeting in San José, Costa Rica, the CITES parties listed the entire order of cetacea, which consists of two families and 78 species, in Appendix II for trade control purposes. The exceptions to this listing were those that were already in Appendix I.

Although the Appendix II listing was clearly an achievement, many parties to both conventions attempted to list *all*[171] species of cetaceans in Appendix I.[172] For example, at the third COP in 1981, the Federal Republic of Germany proposed listing three further whales (sperm, sei and fin) in Appendix I. This was controversial, as it was a position which was more protective than the IWC.[173] Two years later in 1983 at COP 4, Bryde's, beaked, pygmy and minke whales (with the exception of the West Greenland stock) were added to

Appendix I.[174] It is of particular interest that with regard to the addition of the minke it was noted in the proposal that: 'There is no positive evidence that any putative population of Minke whales is endangered in terms of the literal interpretation of the . . . criteria for CITES'.[175] Nevertheless, due to the fact that there was no scientific assessment to suggest that they were not endangered, and more importantly, that the IWC had listed them as a protected stock, CITES agreed to include them in Appendix 1. Indeed, the actions of the IWC were so decisive that the implications of the Appendix I listing were timed to coincide with the starting of the moratorium on commercial whaling in 1986.[176] Following the 1985 meeting, at which the last attempt was made to add a whale species to Appendix I,[177] there was a 'slow-down' on cetacean issues.[178] This slow-down 'reflects the realities that CITES had done about all that could be accomplished in that forum as the IWC became the primary battle ground for the issues'.[179] Moreover, as shown below, other animals and issues took the spotlight at CITES meetings, until attempts to transfer cetaceans from Appendix I to II in 1994, 1997, 2000, 2002 and 2004. The exception to this was the upgrading of the Black Sea bottlenose dolphin to Appendix I in 2002.[180]

The Change of Focus within CITES

The debate about cetaceans and the IWC quietened down dramatically at CITES between 1985 and 1994. This coincided with a massive reorientation of focus with regards to CITES' own ideology and increasingly dramatic debates over key species such as elephants, and, in strong parallels with the IWC, their 'sustainable utilization'.[181] The debate over the listing of the elephant was mirrored in other developments that were simultaneously occurring within CITES. These centred around the belief that the old guidelines for listing in the appendices were inadequate and may even have been counterproductive, as in some instances the trade in wildlife products could be beneficial to the conservation of the species in question.[182] With such considerations in mind, it was decided in Resolution 8.20 that a major review of the earlier 1976 (Berne) criteria by which species were listed to one appendix or the other would be reviewed. Resolution 9.24 in 1994 followed this review.[183] This is perhaps the most monumental decision yet made by CITES.

Resolution 9.24 begins with a loyalty oath to the 'fundamental principles . . . of the Convention, which specify the species to be included in Appendices I and II'. However, the mechanisms which filled these appendices were now deemed inadequate and the signatories wished to add some additional stringencies by which they could 'regularly review' the species already in the appendices and any new proposals.

The resolution then set out six annexes by which the listing and transferral

of species between appendices should be assessed. Apart from the traditional focus upon physical endangerment and 'affected by trade' considerations, a number of additional considerations were listed. For example, the annex on 'utilisation and trade' includes a new section which juxtaposes the negative aspects of trade in endangered species with the positive ones. Finally, and most importantly, with regard to the annex on 'conservation and management', proponents were asked to comment on the legal status, species management and control measures.

The overt difficulty that this section has created can be viewed through back-to-back reading of two separate sentences from the preamble to Resolution 9.24: 'Recalling that the international trade in all wild fauna and flora is under the purview of the Convention' and 'Noting the competence of certain inter-governmental organizations in relation to the management of marine species'. These two quotes display different objectives. First, CITES was trying to claim the pre-emptive right to oversee all questions of international trade relating to wild fauna and flora. Second, it was trying to acknowledge the competence of other international organizations which may have an interest in certain species in which CITES is also interested.

The question of trying to reconcile these two goals was further elaborated upon in Annex 6 and the section on 'Conservation in Management'. In particular, it is requested in the section on 'legal status' and 'international' concerns (Section 4.1.2) that three steps be taken by those seeking to amend the appendices. First, with regard to 'international' it is necessary to '[c]onsult in advance with the relevant competent inter-governmental organizations responsible for the conservation and management of the species, and take their views fully into account'. Second, it is necessary to:

> Provide details of international instruments relating to the species in question, including the nature of the protection afforded by such instruments. Provide an assessment of the effectiveness of these instruments in ensuring the protection and/or wise management of the species.

The last requirement in Section 4.1.2 is that those seeking to amend the appendices must: 'Provide similar information relating to international instruments relating to the management of trade in the species in question. Provide an assessment of the effectiveness of these instruments in controlling illegal trade in the species'.[184]

CITES Post Resolution 9.24

By 1994, cetaceans had once more become an important issue at CITES. At this meeting, the issue of the illegal trade in whalemeat arose, as did an initial attempt to move certain species of cetaceans out of Appendix I.[185] At COP 10

in 1997, it was argued that CITES should no longer follow the dictates of the IWC. Rather, it should follow the new CITES criteria for the listing of cetaceans in appendices.[186] This led to a determined and co-ordinated attempt to transfer five species of cetaceans[187] from Appendix I to II. All of these proposals to transfer were unsuccessful[188] because the majority of the CITES parties insisted upon waiting for the IWC's revised management scheme to be completed. Although this attempted transfer failed, two other attempts were made at delinking questions relating to the trade in cetaceans from the influence of the IWC. The first was made by Japan in a draft resolution (Doc 10.34 (Rev)) which aimed at redefining CITES' relationship with the IWC. This was to be done by repealing the pivotal CITES Resolution 2.9 which recommends that parties not issue permits for harvest or trade, for primarily commercial purposes, of any species or stock protected from commercial whaling by the IWC. This resolution was rejected.[189] The second attempt was broadly connected to the first. This involved the Review of Resolutions of the COP, which included all of the earlier CITES resolutions relating to cetaceans (including Resolution 2.9).[190] However, agreement on this proposed consolidation could not be reached and the issue of consolidation of resolutions relating to cetaceans was deferred.[191]

At COP 11 in 2000, the issue of downlisting a number of cetacean species from Appendix I to II was revisited.[192] For this meeting, Norway proposed to transfer the Northeast Atlantic and North Atlantic central stocks of minke whale from Appendix I to II.[193] Japan proposed to transfer southern hemisphere minke,[194] West Pacific minke,[195] and Eastern North Pacific gray whales[196] from Appendix I to II. It was suggested that the IWC was in essence dysfunctional,[197] and other competing bodies (such as NAMMCO),[198] CITES and the WTO[199] were much better suited to effectively manage the world's whale stocks. [200] However, amidst affirmations of the primacy of the IWC, all of the above proposals failed. Many delegations acknowledged the IWC efforts to establish an appropriate management regime, but stressed that no such scheme exists yet. Moreover, the problem of an illegal trade in whale products was advanced, as was the inadequacy of the current compliance regime advocated by Japan and Norway.[201]

Following this outcome, the secretariat of CITES wrote to the IWC in advance of the IWC's 52nd meeting. This letter stated the following:

> Allow me, however, to make use of this opportunity to express serious concern about the escalating and increasingly divisive conflict within the Conference to the Parties to CITES concerning issues, related to the conservation and use of cetaceans, in particular the listing of whale stocks on Appendix 1 of CITES, that may in a number of cases be contrary to the biological criteria for including species or populations in that appendix. The apparent lack of progress – even the alleged obstruction of progress – at the IWC on certain issues is equally of concern to many

> Parties to CITES as it has caused the transfer of the IWC debate to CITES fora. My prediction that this transfer, as has happened in recent years, will negatively affect the relationship between CITES Parties and polarize decision-making within CITES has unfortunately started to come true. From my perspective in CITES, it is therefore crucial that the IWC should soon make important progress towards the adoption of a Revised Management Scheme. This would allow the Conference of the Parties to CITES to adopt the appropriate management regime for whale stocks in the CITES appendices.

Building on this letter, at the 2000 meeting of the IWC, Japan suggested that the IWC had been given a '2-year grace period before the next CITES meeting'.[202] Soon after, in 2002 and again in 2004, Japan again advocated the downlisting of the northern hemisphere stocks of minke and of Bryde's whales.[203] The justifications for these proposed transfers from Appendix I to II were, once more, that the biological criteria of Resolution 9.24 were not being met, and that (domestic) measures to prevent overharvesting, and monitoring of the utilization of whalemeat (via domestic DNA databases) provided adequate protections for the stocks against overexploitation. Moreover, they suggested that 'the political difficulties and dysfunctional nature of the IWC' have been imported into CITES and that 'the anti-whaling majority of IWC members is holding to ransom the work of over 150 countries that are parties to CITES'. Despite these assertions, it has been repeatedly pointed out[204, 205] that the RMS, and in particular, the compliance mechanism necessary to complete the RMS, is incomplete and remains the subject of ongoing negotiations (see Chapter 12).

Despite this, however, the IWC secretariat reported to the CITES conference, that 'real progress' moving towards the completion of the RMS was being achieved.[206] In recognition of this incomplete process, Mexico put forward a resolution (in 2002) under which it was proposed that no whales be transferred into Appendix II until the 'revised management regime is . . . finalized . . . which shall ensure that the whale stocks can be adequately protected'.[207] Despite the clarity of this resolution, the CITES secretariat had commented that it did not support the Mexican resolution because, *inter alia*, it was contrary to the procedure for amendments to the appendices and negated the criteria laid down in Resolution 9.24.[208] Despite this lack of support for the Mexican initiative (which was later withdrawn) when the matter was finally decided in 2000, 2002 and 2004, attempted amendments for large cetaceans from Appendix I to Appendix II have been repeatedly defeated.[209]

10 THE IWC RESPONSE TO CITES

In 1995, following CITES Resolution 9.24, it was noted that CITES had requested the IWC to provide technical assistance in the preparation of

proposals to amend its appendices. Japan, in attempting to carry out the consultation process required by Resolution 9.24, put forward a draft resolution directing the SC of the IWC to assist contracting governments by providing such technical assistance and to review the effectiveness of the inclusion of relevant cetacean species in the appendices. This proposed resolution was rejected by the IWC since there was a feeling that it could confuse the established relationship between CITES and the IWC.[210] However, in 1996, the IWC '[a]cknowledged the current listing of great whale species in Appendix I of the CITES convention, pursuant to and in recognition of the establishment of zero quotas for commercial whaling . . . relating to the status of stocks of great whales species'.[211]

This statement clearly recognized the status quo relationship between the two IOs. Moreover, this resolution also recognized the generic approach of the moratorium, which applied to all commercially hunted species – irrespective of their particular biological status (that is, it encompassed some biologically non-endangered species). Japan responded by suggesting that the IWC was being left behind in terms of the development of international environmental law with regard to conservation and the ethic of sustainable use. It suggested that CITES Resolution 9.24 had been utilized to provide for the downlisting of certain elephant species.[212] Norway supported the Japanese view and suggested that the new CITES criteria allowed CITES to make its own listings independent of the IWC.[213] Conversely, the United States placed a different interpretation on events, noting that the co-operation arrangements between the IWC and CITES were retained and that all species of great whales remained listed in Appendix I, as all downlisting proposals had been rejected.[214] A fourth, and final view of the CITES meetings was given by the IWC observer who suggested that 'the IWC needs to complete its work on the RMS sooner rather than later, otherwise the scientific basis by which CITES has opted for operating will become frustrated'.[215]

Whichever view was taken, it was obvious within the IWC that the relationship with CITES was undergoing profound change. The IWC response to this came in 1998 when the IWC reiterated its 1996 Resolution on Co-operation Between the IWC and CITES. This resolution was noteworthy for two particular reasons. First, the primacy of the IWC as the premier 'universal' body which had been entrusted to make decisions regarding the management of cetaceans was noted and that CITES had an 'important role' in 'supporting the IWC's management decisions'.[216] The second important part of this resolution was the link between the moratorium on commercial whaling which covers 'all species of whales in the Schedule to the IWC have been listed in Appendix I by CITES'. The IWC resolution ended by welcoming the decision by COP 10 to uphold Resolution 2.9.[217]

Finally, in 1999 in the run-up to COP 11 the IWC issued the Resolution on

Co-operation Between the IWC and CITES, which explained: 'That the IWC has not completed the necessary measures to ensure that commercial whaling catch limits are not exceeded, that whale stocks can be adequately protected, and that all whaling by IWC member countries is brought under effective monitoring and control'.[218] Until this was completed, it recognized 'the important role of CITES in supporting the conservation of whale stocks and the IWC's management decisions'.[219] The supporting of the IWC's management decisions was particularly pointed. Although this emphasis was clearly successful, the letter from the CITES secretariat (see above) was the cause for debate at the following meeting. Despite this debate, the IWC has not subsequently issued any further resolutions on the matter, and the majority view would tend to reiterate its traditional position that any downlisting is premature while the completion of the RMS and its inspection, observation and compliance regime is outstanding. With such considerations in mind, CITES should avoid any downlisting which could prejudice this process.

11 CONCLUSION

There are hundreds of IOs operating in the global arena. In some areas, such as with regard to international environmental concerns, the growth in IOs has been exponential. This has often been accompanied by various IOs who have sought to extend their mandates. Against this background, many IOs overlap and sometimes compete. The current debate between the IWC and CITES is an example of this situation. Accordingly, there is a strong need to co-ordinate IOs, so as to avoid questions of overlap and to determine questions of precedence.

In accordance with this need, a number of attempts are currently being undertaken at the international level as directed from the 1992 Earth Summit, through to the 2002 WSSD. Their guiding principles, in attempting to co-ordinate the operations of the various IOs, is to promote the effective implementation of IOs in a manner consistent with the provisions of the conventions and the decisions of the Conferences of the Parties, and in a way which recognizes the various competencies of the IOs at hand. This approach is in congruence with the established principles of international law within the VCLT.

These rules have been applied and followed in respect to the IWC by other IOs, such as the 1979 CMS and the 1980 CCAMLR. The same rule is built into CITES in Article XV. This states that when dealing with amendments to Appendices I and II involving marine species, the secretariat is obliged to 'consult' the relevant 'inter-governmental bodies having a function in relation to those species . . . with a view to ensuring coordination with any conservation measures enforced by such bodies'. This specific provision of CITES

raises a number of questions. First, which is the relevant inter-governmental body with whom CITES must consult? And second, how does it ensure co-ordination with that body? The question of which is the appropriate body is relatively simple to answer. The IWC was designed as a stand-alone IO with a large degree of international personality. It is the only truly international IO that has been repeatedly recognized as the primary authority for the management of cetaceans.The primacy of the IWC has also been clearly recognized by CITES.

The question of ensuring co-ordination with any conservation measures enforced by such bodies is evinced by the precedent record of CITES. This clearly demonstrates that CITES has consistently followed the lead of the IWC since its Resolution 2.9, which recommended that the approach of CITES was to effectively mirror that of the IWC. Accordingly, if the IWC suggested that a stock needed protection, then CITES would oblige by making a comparable listing in its appendices. Conversely, if CITES adopted a listing which was effectively different from the IWC recommendations, it would not be ensuring co-ordination as mandated by Article XV. However, the possibility of CITES acting in direct contravention to its own constitution and the established principles of international law, as laid down by the VCLT, has been an option that a number of countries have tried to utilize, since the mid-1990s and CITES Resolution 9.24.

The central difficulty caused by Resolution 9.24 is that those who are seeking to transfer cetaceans from Appendix I to II must '[p]rovide an assessment of the effectiveness of the instruments' under which the species are currently governed. The response to this demand is that the countries who are seeking to downlist cetaceans, such as Norway and Japan, have suggested that the IWC is currently ineffective and/or acting *ultra vires*. This is a view which has already been voiced within the IWC, by the same protagonists, and forthrightly rejected. Specifically, it is charged that the reason why the RMS remains incomplete, is because those nations wishing to return to whaling have consistently failed to agree to the necessary mechanisms to achieve an adequate inspection, observation and compliance regime. Accordingly, the current protagonists are in a distinct minority within the arena that they are now charging as being ineffective. However, rather than accepting that the IWC may be the best IO for deciding its own actions, they have effectively charged CITES to adjudicate. This de facto adjudication may be made by CITES deciding to take actions which are not in accordance with the wishes of the IWC.

There are multiple problems with this. The first is that CITES has no jurisdiction, let alone an internationally granted mandate, to adjudicate in a de facto means upon the decisions of the IWC. To pass such a de facto judgment would be acting in direct contravention of international law. Moreover, to act

in contravention of the IWC's dictates would also be clearly inconsistent with CITES' own constitution and its established precedent of 'ensuring coordination with any conservation measures enforced by such bodies'. Finally, the implications of allowing CITES to act in such an *ultra vires* manner with regard to its relationship with the IWC needs to be considered. If the IWC is usurped by CITES through considerations implicit within downlisting resolutions while the RMS remains incomplete, effectively, it will become open for any IO to challenge the authority of any other IO which deals with an overlapping subject simply by asking its members to evaluate the performance of the other body, and then voting to decide whether it will, or will not, usurp its role by either direct or indirect means. Despite the risks that this presents, given the letter from the CITES secretariat to the IWC secretariat following COP 11, and the CITES secretariat's failure to support the resolution put forward by Mexico to wait until the RMS is complete, it would appear that a number of countries within the international community, and secretariats of important international agreements, are willing to undertake this dangerous course of action. The damage to international law and order could be large, if such forum shopping is allowed to continue.

NOTES

1. See Chapter 14 on transparency and the pages on NGOs.
2. See Advisory Opinion on Reparation for Injuries Suffered in the Service of the United Nations. 1949. ICJ 3.
3. In 1815, following the Congress of Vienna, the Rhine Commission was established. Fifty years later, more enduring IOs such as the Telegraphic Union (1865) and the Postal Union (1874) came into existence. For a useful discussion of this period, see Claude, C. (1974). *Swords Into Plough-shares* (Macmillan, New York).
4. Outside of the UN family, there are also regional IOs. The European Union, which forms a union of international organizations is the best example of this. Multiple examples for other regions exist.
5. Schermers, H.G. and Blokker, N. (1994). *International Institutional Law* (Nijhoff, Boston): 1056–7, 1702.
6. Common-core features in the sense of rights include, principally treaty-making capacity, privileges and immunities, limited *locus standi* before international tribunals and capacity to bring claims, and duties, in the sense of the responsibility of the organization for its own illegal acts.
7. See Wallace, R. (1997). *International Law* (Sweet and Maxwell, London): 68–9.
8. The term 'family of international organizations' is used when mutual relations are stronger than the occasional exchange of information, partly overlapping membership or an agreement to send observers to each other's meetings. In a family of organizations, tasks are divided and each organization plays a role in the larger unit formed by the family. There must be some institutional links between organizations, which may be common organs, and, in principle, (potential) uniformity of membership.
9. Schermers, supra n5: 1056–7.
10. Ibid. 1060–62.
11. Dupuy, R. (1988). *A Handbook on International Organisations* (Nijhoff, Boston): 362–7.

12. Birnie, P. and Boyle, A. (1992). *International Law and the Environment* (Oxford University Press, Oxford): 36.
13. Schermers, supra n5: 1068.
14. Morgenstern, F. (1986). *Legal Problems of International Organisations* (Oxford University Press, Oxford): 27.
15. Ibid.
16. Ibid. 28–30.
17. Article 58 of the 1945 Charter of the United Nations. Reprinted in Harris, D.J. (ed.). (1988). *Cases and Materials on International Law* (Sweet & Maxwell, London): 1048.
18. See for example, Gillespie, A. (1998). 'Sinks, Biodiversity and Forests: Inter-Linkages with Other Environmental Multilateral Agreements and Instruments.' In Chambers, B. (ed.). *Global Climate Governance: Inter-Linkages Between the Kyoto Protocol and Other Multilateral Regimes* (United Nations University, Tokyo): 117–39.
19. Birnie and Boyle, supra n12: 39.
20. See Recommendation 4, UNCHE UN. Doc. A/CONF 48/14/Rev. 1. This followed on from Principle 25 of the Stockholm Declaration.
21. Birnie and Boyle, supra n12: 481.
22. Agenda 21. A/CONF 187/26. (1992). Section 38.4.
23. Section 38.8. The need for co-ordination between international organizations was also re-iterated in the Report of the Independent World Commission on the Oceans (1998). *The Ocean, Our Future* (Cambridge University Press, Cambridge): 146–7, 157.
24. Section 38.22 (h).
25. See paragraph 124 of the Programme for the Further Implementation of Agenda 21. (1997). Reprinted in Osborn, D. (1998). *Earth Summit II: Outcomes and Analysis* (Earthscan, London): 187.
26. B.H.883.txt A/CONF.129/15 (25 ILM. 543).
27. World Summit on Sustainable Development (2002). Plan of Implementation of the World Summit on Sustainable Development. A/CONF.199/L1. Paragraph 121 (e).
28. Section 30(2). B.H.883.txt A/CONF.129/15 (25 ILM. 543).
29. The IMO Convention expressly provided that all prior treaties on this topic were to remain in force. Nevertheless, the ILO felt that a large part of its purpose had been usurped.
30. However, Article 23 of the General Assembly Document provided that 'nothing in this Convention shall affect . . . any other international convention, treaty or agreement in force'.
31. Article 59 (b). B.H.883.txt. A/CONF.129/15 (25 ILM. 543).
32. LNTS CLU No. 3586. 1931. September 24.
33. International Convention for the Regulation of Whaling. 161 UNTS. 72. TIAS No. 1849. Preamble, Paragraph 6.
34. Recommendation 33 was directed to both the IWC (directing them to call for a moratorium on commercial whaling) and to governments in particular, so as to 'strengthen the International Whaling Commission'.
35. Reprinted in Birnie, E. (ed.) (1994). *Basic Documents on International Law and the Environment* (Oxford University Press, Oxford): 612–28.
36. Article 65 is an interesting provision. In many ways, the failure to specify which body they had in mind was not unique within the UNCLOS. For example, in Section 210 (on the dumping of wastes into the ocean) the provision calls for working through the 'competent international organizations' (subsection 4) and does not single out the London Dumping Convention as the primary body, although it obviously was (and has never been seriously challenged as anything less). However, the fact that the drafters of Article 65 put an 's' at the end of 'international organisations' has always led to the suggestion that this plural approach legitimizes other international whaling bodies. This is unlikely (and the ambiguity was clarified at the Earth Summit regardless) and the plural nature of the paragraph probably referred to the IWC and CITES. After all, no other international, let alone regional, bodies dealing with whales were operative at the time of drafting Article 65. Moreover, Article 311 of UNCLOS states: 'This Convention shall not alter the rights and obligations of States Parties which arise from other agreements compatible with this

Convention and which do not affect the enjoyment by other State Parties of their rights or the performance of their obligations under this Convention'. As such, UNCLOS was explicitly acknowledging the primacy of earlier agreements which were compatible with the new regime. With such considerations in mind, a number of scholars have suggested that Article 65 could only be referring to the IWC, and the IWC has a central role to play in any deliberations regarding cetaceans. See Hey, Ellen (1989). *The Regime for the Exploitation of Transboundary Marine Fisheries Resources* (Nijhoff, London): 62, 109. Yturriaga, J. (1998). *The International Regime of Fisheries: From UNCLOS 1982 to the Presidential Sea* (Nijhoff, London): 130, 167. Lyster, S. (1985). *International Wildlife Law* (Grotius Publications, Cambridge): 36. Finally, it is important to note that the IWC considers itself the pertinent body. Thus, in a directed resolution, it reminded Canada that: 'Canada is a signatory to the United Nations Convention on the Law of the Sea which under Article 65 (Marine Mammals) requires that States co-operate through the appropriate international organizations for the conservation, management and study of cetaceans'. See IWC Resolution 2000–2. 'Resolution on Whaling of Highly Endangered Bowhead Whales in the Eastern Canadian Arctic'. IWC. 52nd Meeting in 2000. (2001). 64–5.

37. Section 17.61. The same provision was also recognized with regard to bilateral and multilateral co-operation. See Section 17.87. With regard to the Earth Summit, the UNCED secretariat had requested the IWC secretariat to provide it with documentation studies on the status of whales since 1972, as well as on the gaps and uncertainties in the estimates. However, following discussion within the IWC, which reflected the importance of UNCED, it decided to also send material on the comprehensive assessment. IWC. 42nd Report. (1992). 45. The WSSD reiteration of the 'conservation and management of the oceans' as contained in Agenda 21 can be found in WSSD Plan of Action. A/CONF.199/L.1. Paragraph 31.
38. 'Resolution on Whaling Activities by Non-Member States.' Appendix 18. IWC. 44th Report. (1994). 12, 38–9. The full resolution is from the 1993 Resolution on Whaling Activities by Non-Member Countries. This recognized 'bearing in mind the purpose of the 1946 ICRW for establishment of a coherent system of international regulation of whaling . . . Bearing in mind relevant rules of international law, as reflected in the 1982 UNCLOS, in particular article 65, which stipulates that States shall "co-operate with a view to the conservation of marine mammals and in the case of cetaceans shall in particular work through the appropriate international organisations for their conservation, management and study" . . . Noting that the IWC is a universally recognised competent international organisation in the sense of Article 65 of UNCLOS. Recalling that Chapter 17 of Agenda 21 recognised the responsibility of the IWC for the conservation and management of whale stocks and the management of whaling'.
39. 'Resolution on Interactions Between Whales and Fish Stocks.' IWC/53/41. Agenda Item 12.3.
40. This proposal was made by the United States. Papers from the Washington Conference. 'Paper on the Proposed Relationship of the IWC to the FAO.' IWC/13 (1946). For the American position, see IWC/14. (1946): Discussed in Birnie, P. (1985). *The International Regulation of Whaling* (Oceania, New York). Volume 1: 184–6.
41. IWC. 2nd Report. (1951). 4.
42. Papers from the Washington Conference. IWC/32 (1946): 19. The proposed ITO took 50 years to germinate into the current WTO.
43. Preamble. Paragraph 1.
44. At the second meeting, the IWC resolved that states that did not ratify the convention should be warned that they could not expect indefinitely to be invited to attend as observers. IWC. 2nd Report. (1951). 4.
45. See Chapter 5.
46. See Article V(3). The best example of this is Norway. Of course, just because it has operated its treaty right not to observe the general policy of the IWC, does not mean that it has been free from criticism from the IWC. See Appendix 2: 'Resolution on Norwegian Whaling. Annual Report of the IWC.' IWC. 50th Meeting in 1998. (1999). 42.

47. IWC. 7th Report. (1956). 5, 17. IWC Doc. XIII C. (1956). 89. IWC Doc. XIV A. 16. IWC. 17th Report. (1967). 11.
48. IWC. 22nd Report. (1972). 22; IWC. 23rd Report. (1973). 21; IWC. 25th Report. (1974). 34. IWC. 30th Report. (1980). 32.
49. The first time they asserted these claims was in 1947. For a discussion of this within the IWC, see IWC Paper No. 28. (1949). A Chilean paper on the Special Difficulties of Chile. During 1952, Chile, Ecuador and Peru together proclaimed in the Declaration of Santiago their: 'sole sovereignty and jurisdiction' over a 200-mile zone adjacent to their coasts. Declaration on the Maritime Zone, Agreement Between Chile, Ecuador and Peru. In Churchill, R. (ed.) (1982). *New Directions in the Law of the Sea: Documents* (Manchester University Press). Volume 1: 231–2. This was a vast expansion over the previous four miles which they claimed. Within this they agreed: 'not to enter into any agreements, arrangements or conventions which would imply a diminution of the sovereignty' over the zone. Agreement Supplementary to the Declaration of Sovereignty Over the Maritime Zone. In Churchill. Ibid. Volume 1: 234, article 5. This meant that this zone was effectively removed from the application of the ICRW. This was despite the fact that the ICRW purported to cover all the waters in which whaling was prosecuted by states party to it (Article 1).
50. UN Legislative Series. ST/LEG/SER.B/6. Also in Churchill, supra n49: 236–9.
51. Birnie, supra n35: 271–4.
52. IWC Doc. V (1955). Noted in Birnie, supra n35: 230.
53. IWC. 7th Report. (1956). 16. See also IWC Doc. XXII. (1955). Verbatim Record of Plenary Session: 35.
54. At the third meeting, concern was also raised over the non-adherence of Argentina, Chile, Italy and Peru, who displayed a 'continued failure of countries interested in whaling to co-operate in the maintainance of the underlying principles of the 1946 Convention'. IWC. 3rd Report. (1952). 3. At the second meeting, Chile was urged to join the IWC. IWC. 2nd Report. (1951). 8. At the fourth meeting, the Commission again expressed 'the earnest hope that the non-participating countries especially those whose representatives had signed the 1946 Convention [Chile and Peru] may see their way to . . . co-operate in the vital task of conserving the world's whale stocks'. IWC. 4th Report. (1953). 3. The same message was repeated verbatim the following year, with the note that 'the objects of the Convention as regards conservation are prejudiced'. IWC. 5th Report. (1954). 18. A similar plea was re-iterated at the sixth meeting. IWC. 6th Report. (1955). 3. The following year at the seventh meeting, it became apparent that Peru, Chile and Ecuador were not only whaling outside of the ICRW, they had also unilaterally extended their 200-mile coastal zones. In the mid-1960s, appeals were still being issued to Peru and Chile to adhere to the convention. IWC. 16th Report. (1966). 58; IWC. 17th Report. (1967). 19. In 1966, it became apparent that Chile and Peru were taking comparatively large numbers of blue whales from their land stations. In the same year, the IWC became increasingly concerned that a number of stocks they were very concerned about, were falling under the control of the PCSP. The PCSP had received a note from the IWC secretary, inviting it to join the IWC, or at least observe its minimum size requirements for sperm whales. Attention was also drawn to a growing anxiety over Antarctic stocks generally. IWC. 17th Report. (1967). Appendix VII. 113. Disagreement between the two commissions continued into 1967, with growing concern that Peru and Chile were continuing to catch large numbers of blue (253) and humpback (58) while the IWC members were not. IWC/19/8 & 14. Despite such disagreements, an invitation from the PCSP was issued to the IWC, inviting the IWC to attend its 1967 meeting. The chairman of the IWC did attend. IWC. 19th Report. (1969). 20. The IWC also attended the 1968 PCSP meeting. IWC. 20th Report. (1970). 20.
55. IWC. 17th Report. (1967). Appendix VII.
56. See Sanderson, K. (1997). 'The North Atlantic Marine Mammal Commission – In Principle and Practice.' In Petursdottir, G. (ed.). *Whaling in the North Atlantic* (Fisheries Research Institute, University of Iceland): 67, 68. The genesis for this organization lies in 1990, when after applying for quotas which were refused by the IWC, Iceland threatened to set up a rival body of its own to regulate whaling in the North Atlantic. It was suggested that this would be an: 'alternative framework for discussing the . . . rational management' of

marine resources in the North Atlantic. See MacKenzie, D. (1990). 'Whaling Nations Threaten Unilateral Action.' *New Scientist*. July 14: 6.

57. At the fourth meeting of the North Atlantic Committee for Co-operation on Research and Marine Mammals, an agreement was concluded to create the North Atlantic Marine Mammal Commission (NAMMCO), which the IWC reported: 'intends to establish working relations with appropriate organisations including the IWC'. IWC. 43rd Report. (1993). 30. However, as late as 1998, despite the SC noting the considerable overlap in the scientific topics being addressed by both IOs, 'the Commission provided no advice on whether the Scientific Committee should take a more active role in establishing co-operation with the NAMMCO Scientific Committee'. IWC. 50th Meeting in 1998. (1999). 32.
58. Sanderson, supra n56: 69. This restrictive focus is also recorded in Article II and the title of the Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic. This agreement may be obtained from the NAMMCO secretary. Despite this general drive towards asserting primacy in this area the IWC still sends an observer to NAMMCO meetings (and vice versa). See Report of the Scientific Committee. IWC/53/4. 4.
59. Agreement on Co-Operation in Research, Conservation and Management of Marine Mammals in the North Atlantic. Article 10 (2).
60. Andresen, S. (1997). 'NAMMCO, IWC and the Nordic Countries.' In Petursdottir, supra n56: 75, 80, 83–4.
61. Ibid. 84.
62. IWC. 24th Report. (1974). 27. This was in addition to further directed requests to the reticent countries to join or adhere to the goals of the ICRW. IWC. 26th Report. (1976). 30; IWC. 28th Report. (1978). 23. Directed resolutions to Spain were issued in 1977. See Appendix 3: 'Fin Whale Stocks.' IWC. 28th Report. (1978). 28. See also Appendix 4: 'North Atlantic Sperm Whales,' ibid. 29. A directed resolution to Portugal was also issued in Appendix 4: 'North Atlantic Sperm Whales', ibid. 29. Appendix 6: 'Right Whales at Maderia', ibid. 30. Note also, Portugal has long been a country of concern. IWC. 3rd Report. (1952). 15.
63. Appendix G: 'Adherence of Peru to the ICRW.' Special Meeting, Tokyo, 1978. This is in IWC. 30th Report. (1980). 9.
64. IWC. 30th Report. (1980). 13. Although Peru joined in 1980, a number of problems continued with its specific adherence to the ICRW. IWC. 33rd Report. (1983). 22–3. These ambiguities continued with Chile and Peru in 1983, when Peru informed the IWC that it 'misunderstood' the IWC directives, and the trade in fully protected whale species had continued. IWC. 34th Report. (1984). 15–16. The infractions report from Peru was missing in 1984, as were those from Chile (from 1980). IWC. 36th Report. (1986). 13–14.
65. Even some countries such as the Philippines indicated that although they would not join the IWC, they would abide by the commercial moratorium. IWC. 37th Report. (1987). 15.
66. Canada left the IWC in 1981. Although clear concern had been expressed about creating and sending resolutions to specific non-member countries (IWC. 47th Report. (1997). 47) the resolutions were still created in 1993, 1996, and 1998. In 1992, it was noted that on several occasions the SC had expressed concern over the status of white whale stocks, and that: 'the present harvest of Baffin Bay stocks of white whales and narwhals (stocks exploited by Canada and Greenland) is not sustainable'. It therefore recommended an intensive working programme on the status of these whales. Moreover, the secretariat was instructed to: 'transmit the text of this resolution to the Government of Canada, requesting their co-operation with the IWC regarding conservation of white whales and narwhals and development of scientific information related to these stocks'. Appendix 11: 'Resolution on the Directed Take of White Whales and Narwhals.' IWC. 43rd Report. (1993). 52. In 1996, concern was raised by the United States of the Canadian hunt of the endangered bowhead whales for aboriginal purposes. The resolution that followed urged Canada to refrain from issuing permits unless the IWC approves a quota. Appendix 12: 'Resolution on Canadian Whaling.' IWC. 47th Report. (1997). 55. The 1998 Resolution on Canadian Membership to the IWC: 'Reaffirms its opposition to all whaling not conducted under the ICRW . . . Invited the Government of Canada to rejoin the IWC and, in the meantime, not to issue

further licenses for any whaling not conducted under the ICRW'. Appendix 17: 'Resolution on Canadian Membership to the IWC.' IWC. 50th Report. (1999). 49.

67. 'Resolution on Whaling Activities by Non-Member States.' Appendix 18. IWC. 44th Report. (1994). 12, 38–9.
68. See Article V of the ICRW, and its accompanying schedule which is amended in accordance with this annually.
69. Papers from the Washington Conference. IWC/32 (1946): 19.
70. It was not until 1976, that a specific working party was established to study the question of securing the adherence to the ICRW of non-member states, and the effects of their catches upon the IWC. A specific resolution was passed, drawing non-member states' attention to the effect of their operations on the IWC's protected stock category. IWC. 28th Report. (1976). 32.
71. See Appendix 7: 'Resolution Establishing A Working Group on Non-IWC Whaling.' IWC. 31st Report. (1981). 31.
72. Special Meeting, Tokyo, 1978. In IWC. 30th Report. (1980). 5.
73. The importance of trade restrictions from the United States cannot be underestimated. Unlike other countries, the United States is legislatively willing to sanction other nations which diminishes the effectiveness of international oceanic organizations (via the Pelly, and Packwood-Magnuson amendments) not just by banning trade in the restricted product, but also by denying access to the lucrative US fishing grounds. This mechanism was very successful in making Japan eventually accept the commercial moratorium. See Cherfas, J. (1984). 'New Deal Harpoons Whaling Commission.' *New Scientist*. December 6: 4. Cherfas, J. (1985). 'US Courts Overturn Whaling Deal.' *New Scientist*. March 14: 4. Anon. (1986). 'Success for Whaling Diplomacy.' *New Scientist*. July 17: 19. Anon (1988). 'Reagan Bans Japanese Fishing.' *New Scientist*. April 14: 22. Kleiner, K. (1996). 'US Could Get Tough Over Japanese Whaling.' *New Scientist*. January 6: 5. The possibility of sanctions with regard to scientific whaling was also later considered. See Anon (2000). 'Sanctions on Japan.' *Environmental Policy and the Law*. 30: 261. Similar actions were also threatened against Norway. See Anon (1986). 'US Moves to Punish Norwegian Whaling.' *New Scientist*. June 12: 19. MacKenzie, D. (1993). 'Norway Threatened With Sanctions Over Whales.' *New Scientist*. August 28: 4. Also, MacKenzie, D. (1992). 'Norway's Choice: Whales or Europe.' *New Scientist*. August 15: 9.
74. IWC. 27th Report. (1977). 22.
75. See 'Resolution on Commercial Whaling.' IWC/53/26 Rev. Agenda Item 9.2.
76. IWC. 24th Report. (1973). 30.
77. IWC. 28th Report. (1976). 31, 33. The 1979 resolution is in Appendix 9: 'Importation of Whale Products from Non-Member Countries.' IWC. 30th Report. (1980). 38. The 1980 resolution is in Appendix 6: 'Resolution Aimed at Discouraging Whaling Operations Outside IWC Regulations.' IWC. 31st Report. (1981). 30.
78. Appendix F: 'Resolution on the Transfer of Whaling Equipment etc.' Special Meeting, Tokyo, 1978. In IWC. 30th Report. (1980). 8–9.
79. IWC. 28th Report. (1976). 26.
80. Appendix E: 'Resolution on the Importation of Whale Products from Non-IWC Member Countries.' Special Meeting, Tokyo, 1978. IWC. 30th Report. (1980). 8.
81. Appendix 9: 'Importation of Whale Products from Non-Member Countries.' IWC. 30th Report. (1980). 38.
82. IWC. 30th Report. (1980). 32. Editor (1980). 'Call for Ban as Whales Gather.' *New Scientist*. July 17: 184. Anon (1981). 'Whale Ban.' *New Scientist*. December 10: 723.
83. Appendix 6: 'Resolution to Implement Recommendations of the Technical Committee Working Group on Non-IWC Whaling.' IWC. 32nd Report. (1982). 36–7. 24.
84. 'Recalling IWC/30 Appendix 9 (non-importation)'. 'Resolution on Whaling Activities by Non-Member States.' Appendix 18. IWC. 44th Report. (1994). 12, 38–9.
85. See International Fund for Animal Welfare (1998). *Whale for Sale: Illegal Trade in Whale Meat and Products in Japan and South Korea* (IFAW, Sussex). TRAFFIC (1997). 'Whale Meat Controls Remain Inadequate in East Asia.' (Press Release, May 15). Phipps, M. (1997). 'A Preliminary Report on DNA Sequence Analysis and Whale Meat Products Collected in Japan.' TRAFFIC. 17(2): 91–5.

86. The first lot of whalemeat was discovered in Vladivostok, apparently from Taiwan and intended for illegal shipment to Japan. In the same year, Norway reported a seizure of whalemeat at Oslo airport. IWC. 45th Report. (1995). 18–19.
87. Appendix 7: 'Resolution on International Trade in Whale Meat and Products.' IWC. 45th Report. (1995). 44–5.
88. Specifically, the resolution was concluded that the parties to CITES: 'WELCOMES the work of the IWC in this respect and URGES CITES Parties to explore the issue of illegal trade in whalemeat and the geographic origin of such meat and to co-operate with the CITES Secretariat in the collection of such information; ENCOURAGES the IWC to keep CITES Parties fully informed through the CITES Secretariat and the Standing Committee between meetings of the Conference of the Parties on all related developments regarding the illegal trade in whale products; INVITES all countries concerned to co-operate to prevent illegal trade in whale meat, and to report to the CITES Secretariat on any development regarding this issue; and; DIRECTS the Secretariat to share with the IWC any information it collects regarding illegal trade in whale meat'.
89. Appendix 3: 'Resolution on Improving Mechanism to Restrict Trade and Prevent Illegal Trade in Whale Meat.' IWC. 47th Report. (1997). 49.
90. Appendix 7: 'Resolution on Improving Mechanisms to Prevent Illegal Trade in Whale Meat.' IWC. 46th Report. (1996). 45. This resolution, which also talked of the examination of stockpiles of existing whalemeat along with previous resolutions, was specifically forwarded to CITES.
91. This was raised because of the results of a small study using mtDNA techniques to help identify protected species (which should not be commercially available in Japan). IWC. 46th Report. (1996). 19.
92. Appendix 7, supra n96: 45.
93. Ibid.
94. Japanese customs seized five tonnes of whalemeat, which had been sent from Norway, but was on a vessel, of Korean origin. IWC. 48th Report. (1998). 24–5.
95. IWC. 47th Report. (1997). 21.
96. IWC. 48th Report. (1998). 24.
97. Norway expressed concern over the IWC competence relative to the WTO and CITES. Ibid. 25. Japan opposed this resolution, taking the view that the issues were outside the mandate of the ICRW. IWC. Ibid. 25.
98. Appendix 2: 'Resolution on Improved Monitoring of Whale Product Stockpiles.' IWC. 48th Report. (1998). 46.
99. See Docs 10.40 and 10.40.1.
100. Decision 10.40 from the COP, regarding co-operation in monitoring illegal trade in whale parts and derivatives.
101. See 10.40–10.43.
102. IWC. 50th Meeting in 1998. (1999). 9.
103. Ibid. 9–10.
104. Ibid. 32.
105. Appendix 9: 'Resolution on Co-operation Between the IWC and CITES.' IWC. 50th Meeting in 1998. (1999). 45–6.
106. Japanese Proposal to transfer Southern Hemisphere Minke from Appendix I to Appendix II. Prop. 11.16: 6.
107. The IWC became involved with the United Nations with the resolution on driftnet fishing, by supporting its banning. IWC. 41st Report. (1991). 46, 49.
108. At the 1997 meeting, a formal relationship with ICES (the International Council for the Exploration of the Seas) was discussed, and a memorandum of understanding was forwarded. IWC. 48th Report. (1998). 40.
109. IWC. 41st Report. (1991). 46.
110. Ibid. In 1997, the secretariat was asked to develop a paper outlining the IWC's relation with other IGOs. IWC. 48th Report. (1998). 39.
111. See 'Resolution on Possible Synergies with the Global Environment Facility.' IWC/56/38.

112. See IWC. 53rd Meeting in 2001. (2002). 34. The IMO refused to distribute an IWC resolution to its members, as there was no formal agreement between the two organizations.
113. A close working relationship with the FAO has been present, with varying degrees of intensity, over the past five decades. The IWC first sent an observer to the FAO meetings from the early 1960s. See IWC. 13th Report. (1962). 23. For the FAO relationship with the IWC, see IWC. 15th Report. (1965). 15; IWC. 16th Report. (1966). 25–6; IWC. 18th Report. (1968). 18; IWC. 19th Report. (1969). 16; IWC. 21st Report. (1970). 18; IWC. 26th Report. (1976). 9, 30; IWC. 28th Report. (1978). 24.
114. IWC. 36th Report. (1986). 19; IWC. 37th Report. (1987). 19; IWC. 40th Report. (1990). 34; IWC. 41st Report. (1991). 46; IWC. 47th Report. (1997). 42.
115. Section 30(2). B.H.883.txt A/CONF.129/15 (25 ILM. 543).
116. Appendix 2: 'Resolution to Consider the Implications for Whales of Management Regimes for Other Marine Resources.' IWC. 30th Report. (1980). 34.
117. See the 1964 Agreed Measures for the Conservation of Antarctic Flora and Fauna. II(a). This is reprinted in (1977) *Treaties and Other International Agreements on Fisheries, Oceanographic Resources and Wildlife Involving the United States* (US Government Printing Office): 28–34.
118. 19 ILM. 841.
119. Article IX(5).
120. IWC. 33rd Report. (1983). 37–8; IWC. 34th Report. (1984). 15, 28–9. In 1984, CCAMLR confirmed that it did not wish to formalize working relationships with other organizations, but would continue to communicate between secretariats. IWC. 35th Report. (1985). 25.
121. Appendix 5: 'Resolution on Co-operation Between the IWC and the CCAMLR.' IWC. 31st Report. (1981). 30. Argentina and Chile reserved their positions on this resolution. In the same report, at page 20. They reiterated their objection the following year.
122. IWC. 37th Report. (1987). 24; IWC. 41st Report. (1991). 46; IWC. 43rd Report. (1993). 30. Appendix 2: 'Resolution on the Need for Research on the Environment and Whale Stocks in the Antarctic Region.' IWC. 43rd Report. (1993). 39–40; IWC. 46th Report. (1996). 33; Appendix 11: IWC Resolution 1995–10. 'Resolution on the Environment and Whale Stocks.' IWC. 46th Report. (1996). 47; Appendix 8: IWC Resolution 1996–8. 'Resolution on Environmental Change and Cetaceans. IWC.' 47th Report. (1997). 52. See especially Appendix 8: 'IWC Resolution on Co-ordinating and Planning for Environmental Research in the Antarctic.' IWC. 50th Meeting in 1998. (1999). 30, 45. 32. Note also, the increasing importance of environmental concerns has also meant that the IWC has begun to collaborate with other important international organizations, such as the WHO. See 'Resolution on IWC Concern About Human Health Effects from the Consumption of Cetaceans.' Appendix 12. IWC Resolution 1998–11. IWC. 50th Meeting in 1998. (1999). 47. See also IWC Resolution 1999–4. 'Resolution on Health Effects from the Consumption of Cetaceans.' See IWC. 51st Meeting in 1999. (2000). 53.
123. 'Conservation of Migratory Species of Wild Animals.' (1980) 19 ILM. 15.
124. Article II.
125. See the 2002 Resolution, 'Co-Operation With Other Bodies.' CMS. UNEP/CMS/Res.7.5. This realization dates from the first COPs. Convention on the Conservation of Migratory Species of Wild Animals. *Proceedings of the First Meeting of the Conference of the Parties* (1985, Bonn). (Secretariat, Nairobi): 26. See CMS (1999). *A Guide to the CMS* (UNEP, Nairobi): 18. Apart from the IWC, the most notable overlaps are with CITES, RAMSAR, the CBD and UNCLOS.
126. The quote for Appendix I is from Article III and the quote for Appendix II is from Article IV.
127. The IWC has been actively involved with the CMS from its first COP in 1985. See CMS. *Proceedings of the First Meeting of the Conference of the Parties* (1985, Bonn). (Bonn Secretariat, Nairobi): 23, 109. CMS. *Proceedings of the Second Meeting of the Conference of the Parties* (1988, October). (Bonn Secretariat, Germany): 11. The Memorandum of Understanding Between the CMS and the IWC was negotiated at the 2000 Adelaide (52nd) IWC Meeting. See IWC/52/17. Agenda Item 16.2. This memorandum was not without controversy, as Japan, Dominica and Norway had all expressed reservations in 1999 and 2000. See Report of the IWC. 51st Meeting in 1999 (2000), Oman (IWC, Cambridge): 34.

128. *CMS Bulletin*. No. 3 (1992). 'Annual Meeting of the IWC.' 6.
129. Section 30(2). B.H.883.txt A/CONF.129/15 (25 ILM. 543).
130. Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area. (1997). 36 ILM. 777. The quote is from the last paragraph of the preamble. In addition, with Article XI of ACCOBAMS the recognition of prior agreements was clear.
131. Memorandum of Understanding Between the Secretariat of the IWC and the Secretariat of the CMS. Appendix 2. IWC. 52nd Meeting in 2000. (2001). 71.
132. 'Resolution on Small Cetaceans.' IWC/53/47. Agenda Item 14.1.
133. *Balaenopteridae – balenoptera musculus*, *megaptera novaeangliae*; *balaenidae*, *balaena mysticetus*, *eubalaena glacialis* . . . See CMS. *Proceedings of the First Meeting of the Conference of the Parties* (1985, Bonn). (Bonn Secretariat, Nairobi): 11.
134. These were the harbour porpoise, the bottlenose dolphin, Risso's dolphin, the common dolphin, the long-finned pilot whale and the harbour porpoise, and the white-beaked and white-sided dolphins. Norway refused to accept the last two being listed in Appendix II. Denmark also expressed concern about the pilot whale being listed in Appendix II. Convention on the Conservation of Migratory Species of Wild Animals. *Proceedings of the Second Meeting of the Conference of the Parties* (1988, October). (Bonn Secretariat, Germany): 17, 35–6.
135. See CMS. 'Future Action on the Antarctic Minke, Brydes and Pygmy Right Whales.' UNEP/CMS/Res. 7.15.
136. It was initially rejected because it could not fulfil the Article IV CMS criteria. Accordingly, the proposal with regard to this species was withdrawn. CMS. *Proceedings of the Second Meeting of the Conference of the Parties* (1988, October). (Bonn Secretariat, Germany): 17, 35–6. This approach was reiterated 11 years later, when it was suggested with regard to marine mammals, that the objective of the CMS was, 'To stimulate concerted actions in favor of each of the endangered marine mammal species listed in Appendix I that are not adequately covered by other instruments'. CMS. *Proceedings of the Sixth Meeting of the Conference of the Parties* (1999). (Cape Town, South Africa). Volume 1: 46.
137. Birnie and Boyle, supra n12: 470.
138. *Proceedings of the Second Meeting of the Conference of the Parties* (1988, October). (Secretariat, Germany): 35–6.
139. CMS. *Proceedings of the Fourth Meeting of the Conference of the Parties* (1994, Nairobi). (Bonn Secretariat, Germany): 52.
140. See Chapter 10.
141. See Birnie and Boyle, supra n12. The exact quote is: 'This would fill a gap in the IWCs listing of small cetaceans, only two species of which are subject to any form of protection under its Schedule': 540.
142. IWC. 41st Report. (1991). 46. 'Linkages With Other Conventions.' *CMS Bulletin*. No. 5 (1996): 9.
143. Under the auspice of the CMS, the regional ASCOBANS agreement on small cetaceans has had a clear overlap with the scientific work of the IWC. See Appendix 11: 'Resolution on Harbour Porpoise in the North Atlantic and the Baltic Sea.' IWC. 44th Report. (1994). 34–5. In a reciprocal manner, at the Second Conference of the Parties to ASCOBANS in 1997, a resolution following the IWC workshop on chemical pollutants, strongly endorsed the workshop, and agreed that the ASCOBANS Advisory Committee should continue to co-operate with the IWC. Second Meeting of the Parties to ASCOBANS. 17–19 November 1997, Bonn, Germany. Annex L. 'Resolution on Management and Further Research Needs to Address the Effects of Pollutants on the Health of Cetaceans.' For a continuation of this approach. IWC. 50th Meeting in 1999. (2000). 30, 32.
144. Preamble, Convention on International Trade in Endangered Species of Wild Flora and Fauna. (1973) 12 ILM. 1055. 993 UNTS. 243.
145. Preamble. Ibid.
146. Article 2.
147. Article 3(a).
148. See Article 2 of CITES. For discussion, see Favre, D. (1989). *International Trade in Endangered Species: A Guide to CITES* (Nijhoff, London).

149. Section 30(2). B.H.883.txt A/CONF.129/15 (25 ILM. 543).
150. Conf. 10.4. Co-operation and Synergy With the Convention on Biological Diversity. This was also assisted by Decision 10.110 which requested that: 'Continued co-operation between CITES and the Convention on Biological Diversity shall be fostered and this should be extended to include other relevant Conventions'. See also Decision II.17 from COP 13 in 2004.
151. See 'Evolution of the Convention: How to Improve the Effectiveness of the Convention: Co-operation/Synergy With Other Conservation Conventions and Agencies.' Doc. 10.22.
152. CITES. Standing Committee. 'Synergy Between the Biodiversity Related Conventions and Relations with Other Organisations.' Doc. SC.42.17.
153. See Draft Resolution Between CITES and the IWC. COP 12 Doc. 16.4. Annex. Available from the CITES secretariat.
154. The possibility of differences between the operation of the ICRW and CITES was first noted in 1973. IWC. 25th Report. (1975). 33. For discussion, see Birnie and Boyle supra n12: 397–8.
155. IWC. 28th Report. (1978). 23. See also the Special Meeting, Tokyo, 1978. IWC. 30th Report. (1980). 5.
156. Appendix D: 'Resolution to the CITES.' Special Meeting, Tokyo, 1978. This is in IWC. 30th Report. (1980). 8.
157. CITES. Second Meeting of the Conference of the Parties, San José (Costa Rica), 19 to 30 March 1979. Resolution of the Conference of the Parties. Conf. 2.7 (Rev.)
158. CITES. Second Meeting of the Conference of the Parties, San José (Costa Rica), 19–30 March 1979. Resolution of the Conference of the Parties. Conf. Resolution 2.9: 'Trade in Certain Species and Stocks of Whales Protected by the International Whaling Commission from Commercial Whaling'.
159. These words are from Resolution 3.13, from the 1981 COP.
160. Resolution 2.9, supra n164.
161. CITES. Second Meeting of the Conference of the Parties, San José (Costa Rica), 19–30 March 1979. Resolution of the Conference of the Parties. Conf. 2.7 (Rev.)
162. Third Meeting of the Conference of the Parties, New Delhi (India), 25 February to 8 March 1981. Resolution of the Conference of the Parties. Conf. 3.13. Trade in Whale Products.
163. Resolution 2.9, supra n164.
164. See Favre, supra n154: 91.
165. 2.9 continues: 'NOTING that IWC has established regulations which protect certain species and stocks from all commercial whaling by nationals of its member nations in order to provide them with protection and the opportunity to recover from over-exploitation'.
166. The CITES wording was more diplomatic: 'commercial harvest[ing] by nationals of non-IWC member nations'.
167. Following the 1979 and 1981 CITES meetings, there was an increased flow of scientific information between the two secretariats. Accordingly, the IWC SC was designated as the advisor to CITES on cetacean matters for the 1983 CITES meeting. There was 'considerable discussion' on this matter. This was primarily because some members of the SC felt that: 'the criteria being used by CITES for the listing of organisms in their Appendix I and II were quite different from those being used by the IWC to classify whaling stocks'. IWC. 33rd Report. (1983). 24. As such, they suggested providing: 'specific advice *vis-à-vis* the appropriateness of listing certain species on CITES appendices relative to CITES own biological criteria'. IWC. 33rd Report. (1983). 37. This co-operation between the two bodies continued for the next decade, with CITES periodically seeking relevant documentation from the IWC as issues arose. See IWC. 43rd Report. (1993). 30. For example in 1993, CITES requested comments (and the SC responded) on five species of small cetaceans of which it was proposed would be moved to Appendix I of CITES. IWC. 44th Report. (1994). 25.
168. Favre, supra n154: 92.
169. With the resolution that was put forward, Canada, Denmark, Iceland and Japan expressed their views on the difficulties of equating the IWC stock management categories with the CITES classifications and questioned what the resolution might achieve. Special Meeting, Tokyo, 1978. In IWC. 30th Report. (1980). 5.

170. However, 'there was no opportunity for all members of the Commission to develop or agree on a statement of its position at a meeting after the UK proposals were made available, and so it was not possible for the Commission to make any comments on the proposals'. IWC. 30th Report. (1980). 13.
171. With the exception of the West Greenland stock of minke whales which is listed in Appendix II by CITES.
172. Although questions were raised about the listing of some cetaceans species, which were more likely to be in Appendix II of CITES, the wholesale move was justified because their products cannot be distinguished in trade from species already listed. IWC. 30th Report. (1980). 33.
173. This was accepted by a vote of 37 in favour, two against, and three abstentions. Both Japan and the USSR reserved the right to enter a reservation on these listings.
174. Plen. 4.11. Noted in Favre, supra n154: 93.
175. This quote is from Berney, J. (1997). 'CITES and the International Trade in Whale Products.' In Petursdottir, supra n56: 99, 105.
176. Ibid. 105–6.
177. This was for the narwhal. However, this attempt failed. Plen. 5.11.
178. Favre, supra n154: 93.
179. Ibid.
180. See *Earth Negotiations Bulletin*. 21 (3). The Twelfth COP to CITES. Available from <http://www.iisd.ca/cites/COP12/>.
181. See Gillespie, A. (2002). 'Forum Shopping In International Environmental Law.' *Ocean Development and International Law*. 33: 17–56.
182. See Resolution 9.24. For a full discussion of this resolution, see Wijnstekers, W. (1995). *The Evolution of CITES* (CITES, Switzerland): 28–9.
183. Resolution of the Conference of the Parties. Conf. 9.24. Criteria for Amendment of Appendices I and II. 'CITES: 9th Conference of the Parties.' (1995) *Environmental Policy and the Law*. 25(3): 88–9.
184. Annex 6. Format for Proposals to Amend the Appendices. Conservation and Management. Legal Status, International. 4.1.2.
185. 'CITES: 9th Conference of the Parties.' supra n89: 87–8.
186. High North Alliance (1997). *CITES and the IWC: The Fall of Conservation* (High North Alliance, Oslo, Norway). 13.
187. The gray Eastern Pacific stock; the West Pacific, southern hemisphere and Northeast and Central Atlantic minke.
188. Gray, J. (1997). 'Report of the Tenth Meeting of the Conference of the Parties to CITES.' *TRAFFIC*. 17: 1.
189. Ibid. 1, 5, 8.
190. Consolidation of Valid Resolutions. Doc. 10.24. Annex 1. 'Resolutions Relating to Cetaceans.'
191. Gray, supra n194: 5–7.
192. Unlike the other proposed cetacean transfers from Appendix I to II, it was proposed that the Black Sea bottlenose dolphin be transferred from Appendix II to I. See CITES. Amendments to Appendices I and II of CITES (Transfer of *Tursiops truncatus ponticus*). Prop. 11.14. This failed at COP 11, and was reattempted at COP 12. See Consideration of Proposals for Amendment of Appendices I & II. Proposal 12.3.
193. Proposal Submitted by Norway to transfer the Northeast Atlantic and North Atlantic Central stocks on Minke whale from Appendix I to Appendix II. Prop.11.18.
194. Japanese Proposal to transfer Southern Hemisphere Minke from Appendix I to Appendix II. Prop. 11.16.
195. Japanese Proposal to transfer West Pacific Stock Minke from Appendix I to Appendix II. Prop. 11.17.
196. Japanese Proposal to transfer Gray Whales Eastern North Pacific Stock from Appendix I to Appendix II. Prop. 11.15.
197. '[T]he objective of the [ICRW] Convention is not to protect whales for their own sake, but to regulate catches of whales for the benefit of mankind now and in the future'. Japanese

Proposal to transfer Gray Whales Eastern North Pacific Stock from Appendix I to Appendix II. Prop. 11.15: 7. Japan contends that the necessary mechanism to restart commercial whaling (the RMP) has not been implemented because: 'the IWC has shown no willingness to actually implement the RMP because of strong oppositions from anti-whaling interests'. Moreover, the 'moratorium on commercial whaling . . . was in . . . contradiction with the management objectives of the ICRW. This reflects the fact that the IWC neither functions according to scientific advice nor adheres to its own legal basis. The IWC moratorium on commercial whaling is not maintained due to political considerations'. Japanese Proposal to transfer Southern Hemisphere Minke from Appendix I to Appendix II. Prop. 11.16: 7.

198. Draft Resolution Submitted by Norway and Japan on the Relationship with the IWC. Doc. 11.15.1.
199. Japanese Proposal to transfer Southern Hemisphere Minke from Appendix I to Appendix II. Prop. 11.16: 8. Proposal Submitted by Norway to transfer the Northeast Atlantic and North Atlantic Central stocks on Minke whale from Appendix I to Appendix II. Prop.11.18: 13.
200. Japanese Proposal to transfer Southern Hemisphere Minke from Appendix I to Appendix II. Prop. 11.16: 8. Proposal Submitted by Norway to transfer the Northeast Atlantic and North Atlantic Central stocks on Minke whale from Appendix I to Appendix II. Prop.11.18: 13.
201. Anon (2000). 'Eleventh Meeting of the COP to CITES.' *TRAFFIC*. December 97-114. Anon (2000). 'CITES: Important Trade Decisions.' *Environmental Policy and the Law*. 30: 118–23.
202. IWC. 52nd Meeting in 2000. (2001). 49, 58.
203. Consideration of Proposals for Amendment to Appendices I & II. Proposals 12.4 (Northern Hemisphere Minke) and 12.5 (Bryde's). The proposals are also set out in (2002) *TRAFFIC*. 19(2): 60–63.
204. IUCN. (2002). 'Transfer of Northern Hemisphere Stocks of Minke Whales.' Ref. CoP 12. Prop. 4: 2.
205. IUCN. (2002). 'Introduction to Whale Proposals.' P. 5. Available from the CITES website.
206. IWC (2002). 'Chair's Report to CITES on Progress With the RMS.' Circular Communication. October 29.
207. Draft Resolution of the COP: 'Co-Operation Between CITES and the IWC.' COP 12. Doc. 16.4. Annex.
208. 'Co-Operation Between CITES and the IWC.' Comments by the Secretariat. COP 12. Doc. 16.4.
209. See (2002) *Earth Negotiations Bulletin*. 21(3). The Twelfth COP to CITES. Available from <http://www.iisd.ca/cites/COP12/>.
210. IWC. 46th Report. (1996). 34.
211. Appendix 3: 'Resolution on Improving Mechanism to Restrict Trade and Prevent Illegal Trade in Whale Meat.' IWC. 47th Report. (1997). 49.
212. IWC. 48th Report. (1998). 40.
213. Ibid.
214. Ibid.
215. It was also suggested that the IWC secretariat should continue to develop strong links with the CITES secretariat, and the SC should maintain links with the animals committee of CITES on relevant issues. Ibid.
216. Appendix 9: 'Resolution on Co-operation Between the IWC and CITES.' IWC. 50th Meeting in 1998. (1999). 45–6.
217. This meant 'that Parties [would] not issue any import or export permits for trade in any whale stocks for which the IWC has set zero catch limits'. Ibid.
218. IWC Resolution 1999–6. 'Resolution on Co-operation Between the IWC and CITES.' IWC/51/43. This was circulated at CITES COP 11 as Doc.11.15.2. The resolution is reprinted in IWC. 51st Meeting in 1999. (2001). 54.
219. Ibid.

12. Compliance

1 THE HISTORY OF NON-COMPLIANCE WITH THE IWC

The IWC has a long history of non-compliance with the rules and goals of the organization. Those who have sought to depart from the IWC may be divided into three groups. The first are those who have appeared under flags of convenience ('pirate whalers'). These were a distinct problem throughout the 1950s[1] and 1970s.[2] The second group involves signatories who have blatantly disregarded the conservation dictates of the organizations, such as the former Soviet Union who were involved in a 'considerable falsification of records' in the 1950s.[3] The third and final group consists of individual countries and (former) competing regional organizations (as discussed in Chapter 11) operating outside of the IWC's auspice. These countries (see pages 325–6, Chapter 11) have all, historically, made the issue of compliance with IWC rules very difficult as they have operated outside the regime causing consternation to both CITES[4] and the IWC.[5] Specific working groups were being created (in 1976 and 1980) to examine this problem as whaling by non-members was believed to represent over 13 per cent of the world catch and 25 per cent of Japan's whalemeat imports.

Although the IWC has a long record of dealing with such non-compliance, the problem is not only historical. Current attempts to conclude an RMS and possibly end the moratorium on commercial whaling, necessitate the conclusion of a new I&O regime. As such, the IWC is renewing its compliance measures. This has been increasingly difficult, as both the problem and the methods utilized by the international community to confront it have moved considerably in the five decades since the moratorium on commercial whaling was agreed.

2 THE FIRST ATTEMPTS AT COMPLIANCE WITHIN THE IWC

Observers

Although the idea of shared inspection was well established before the Second World War in some other international fisheries agreements, this precedent

was not followed in the 1937 International Agreement for the Regulation of Whaling.[6] This agreement only mandated national observers on whaling ships, and was not bilateral in focus, let alone international.[7] By the time this convention was reworked in 1946 the necessity to have international observers had became apparent, as the minimal international scrutiny provided by the IWC, in reviewing the national reports of the whaling states, was not working very well. Moreover, 'pirate whalers' (directly competing non-parties) and the poor enforcement of ICRW goals by member states, prompted Norway to propose that international observers should be appointed to all factory ships, and that the Commission should appoint the observers.[8] Although this was supported by the technical committee and the United States, it was not formally discussed due to procedural difficulties. These were overcome the following year (in 1956) when it was suggested that the Norwegian proposal be formed into a protocol, to be negotiated outside the ICRW – because the convention did not provide for it. Although this protocol was concluded in 1956 and the Commission 'accepted the principle of an observer scheme'[9] it took another 18 years for it to be introduced. The initial delays related to lack of ratifications for the protocol,[10] debates on how it should actually work,[11] and most importantly, the withdrawal of a number of key players (Norway and the Netherlands in 1959 and 1960) from the IWC. Key members remaining within the IWC (such as the USSR) refused to be bound in such circumstances.[12]

As the IWC struggled through these dark years, it became apparent that part of the enticement package to get Norway and the Netherlands to rejoin the IWC was 'the introduction of an international system of inspection'.[13] Accordingly, as part of an overall package of developments at the time, a scheme to examine this issue was introduced in 1963 by a specially convened meeting of the commissioners. This meeting created the International Observer Scheme (IOS),[14] which allowed governments to nominate observers (who would be responsible to the IWC)[15] to monitor any infractions of the ICRW or its schedule.[16] After the Commission had received the nominations for observers from the (Antarctic pelagic whaling) nations, 'the Commission was obliged to appoint one to each and every expedition'[17] of the countries engaged in Antarctic pelagic whaling. In addition, each government had the right to put one observer of its own nationality on every foreign expedition engaged in Antarctic pelagic whaling.[18]

Despite the conclusion of the scheme in 1964, it was not implemented by individual governments (such as the Soviet Union and Japan),[19] despite calls emphasizing its necessity,[20] because of the continuing debates within the IWC over quotas – and the question of whether it went far enough. That is, it was argued that it was necessary to have inspectors on land stations (due to the importance of the land-station catch which needed to be monitored[21] and the fact that the convention was clearly crafted to cover land-based operations)[22]

as well as the Antarctic pelagic whaling vessels. As a result of these new calls, another working group was established (in 1966) to consider a scheme which covered both Antarctic pelagic whaling, and land stations.[23] This was clearly a novel situation, as the principles of the 1963 IOS were designed to cover only factory ships involved in pelagic whaling. Nevertheless, the working group agreed that some form of agreement, of which the existing IOS was the blueprint, was necessary to cover land stations.[24] The Commission adopted this plan the following year,[25] and at the 20th meeting, this addition was added into the IOS, with the exception that coverage of land stations was to be done on a regional basis.[26] The essence of the expansion of the scheme to land stations was that: 'there shall be maintained such observers as member countries having jurisdiction over land stations may arrange to place at each other's land stations'.[27] However, no sooner had this issue been settled than contention arose over the extension of the IOS to cover all[28] whaling areas (and not just the Antarctic and land stations) such as the North Pacific. Although the whaling countries of the North Pacific were sympathetic to the adoption of the scheme[29] the IOS was once more delayed, before finally being introduced in the 1971–72 season[30] and was noted in 1972 as being 'fully operative in all areas where whaling is undertaken by member countries'.[31]

Although 'practical difficulties'[32] visited the scheme in the early to mid-1970s, and political game-playing threatened it at one point,[33] by the middle of the decade the scheme was generally regarded as running well.[34] Thereafter, it was extended (on a bilateral basis) to cover aboriginal subsistence whaling.[35] Finally, just before the advent of the moratorium on commercial whaling, the IOS was reviewed and broadly supported in both its focus and direction.[36] Nevertheless, with the advent of the moratorium, the IOS, which had taken so long to develop, lapsed. The last observers were appointed in 1986. Since that time, all the bilateral agreements have lapsed. Consequently, whaling such as that undertaken by Norway, which resumed in the early 1990s, has been without observers from other countries.[37]

Vessel Identification

A second method by which compliance has traditionally been built upon within the IWC has been through vessel identification. This is particularly important in helping with the identification of non-parties to the ICRW. Unlike traditional observer-based regimes, the technology for vessel identification has changed dramatically over the last two decades. This technology allows those in charge of inspection to identify the legitimate from the illegitimate vessels in certain areas. The traditional way this goal was achieved was through the collation of lists which are commonly held in registers and then circulated to the signatories. This remains standard practice for most regional or international fishery

bodies. The IWC adopted this practice in 1979 when it was agreed that the secretary would draw up an annual register of whaling vessels of member countries. The purpose of this register was to make it easier for contracting governments to take appropriate action against the whaling operations of vessels flying flags of convenience,[38] while simultaneously tracking whaling vessels that had not been transferred to non-IWC nations. Although there were initial classificatory difficulties,[39] the register went into several editions before 1990. At this point, Japan explained (and has continually reiterated)[40] that it would no longer provide information on this, due to the sinking of whaling boats by 'terrorist' groups.[41] Norway and Iceland followed this decision in the 1990s.[42] Only Denmark has continued listing its vessels.[43]

3 THE REVISED PROCESS

As the various components of the RMS have fallen into place over the last decade, it has become apparent that only one aspect has become outstanding. This is the creation of a new regime to make sure that any possible future rules of whaling are enforced, and non-compliance with the ICRW and its schedule is defeated.[44] To achieve this goal, multiple considerations – on top of the traditional whaling inspection and observation, and vessel identification regime – have had to be examined. This has been assisted by the clear mandate of the IWC to examine how other international regimes have come to deal with similar problems.[45] Although this goal of international best practice has been embraced by all countries with diverse agendas (such as Japan)[46] progress has been slow. In addition to regular discussion at the annual IWC meetings, the momentum has been supplemented by dedicated working groups: one in 1994 (which was initially disbanded, and later reformulated),[47] a dedicated intersessional meeting in Monaco (in 2001),[48] followed by two restricted expert drafting group (EDG)[49] meetings (in Cambridge in 2001, and in Auckland in 2002)[50] and a further restricted (involving all contracting governments, but with limited delegation size) intersessional meeting in Cambridge in 2002.[51] With this later meeting, there was no set guiding text for discussions, because the question of preferred text, or overall approach was not settled at the 54th IWC meeting in Shimonoseki. Two versions of text from countries opposed to whaling were on the table,[52] as was alternative text, proposed by Japan.[53] As such, despite over eight years of negotiations, and promises of 'compromises' and 'good faith'[54] bargaining, much remained unsettled. The situation was summed up by the chair of the EDG process: 'Progress was made in some areas of discussions within the RMS, but in others fundamental differences remain . . . To a large extent, these differences stem from political disagreements that preclude further useful discussions on any technical aspects'.[55]

With such considerations in mind, it was suggested (and agreed) that the 2002 Cambridge intersessional meeting should address the following broad issues:

1. Catch verification (through DNA registers and genetic monitoring, and catch documentation).
2. The role of a Compliance Review Committee, including participation by NGOs.
3. Costs and how they may be shared among Contracting Governments.
4. The need to collect animal welfare data.
5. The issue of . . . the moratorium.
6. The proposal, originally from Ireland, that catches may only be taken within the EEZs or other waters within 200 miles of the coast.[56]

An important difference for the 2002 intersessional in Cambridge, as opposed to earlier discussions in this area, was the inclusion of the moratorium, and the so-called 'Irish Proposal'. In the earlier meetings, discussions about linking the I&O to the lifting of the moratorium (as advocated by Norway),[57] and the Irish Proposal, have been effectively sidelined (although the text of the Irish Proposal has been included in the documents, but not discussed).[58] This sidelining was because, as the chair of the RMS working group pointed out in London in 2001 (and again at the 2002 Shimonoseki meeting):[59] 'it was not the role of the Working Group to discuss whether or not there should be commercial whaling, whether or not there should be an RMS, or whether or not the RMS is tied to the Commission'.[60]

This understanding that the IOS and related discussions would continue without prejudice to either the Irish Proposal or the lifting of the commercial moratrium. However, when the chair's proposal of 2004 on an overall 'package' for an RMS was presented, it was suggested that coastal whaling would only be for a short period (of five years) while public confidence was restored before commercial whaling on the high seas could be fully resumed.[61] As discussed in Chapter 1, this overall package was/is a central part of the ongoing intersessional work in Sweden and Denmark in late 2004 and early 2005.

4 DISCUSSION TO DATE

Throughout all of the above meetings, a number of issues have been discussed. Although agreement has been reached in some areas, it is important to note that difficulties remain in others, and square brackets are still surrounding multiple areas of the possible structure and content of a revised schedule to the ICRW. This section will attempt to highlight the current situation.

Statement of Principle

The statement of principle is the broad explanatory sentence, explaining the overall purpose of the document that follows. At the 2001 London meeting, New Zealand introduced the idea of a 'statement of principle' in the chapter on supervision and control to clearly describe the scope, mandate and purpose of any RMS, particularly stressing that any new text was not an attempt to interfere with legitimate trade. Although this was supported by a number of countries, others (led by Norway) argued that this was unnecessary, as it added little to the discussions, and the purpose was already fulfilled by the convention.[62] Nevertheless, despite the continuing 'divergence of views expressed' and the fact that there was 'no consensus', the EDG at the Auckland meeting agreed on its statement of principle as follows:

> 1. (a). The purpose of this [section][chapter] is to set out the basic requirements for a robust supervision and control scheme to ensure compliance with the provisions of the Convention.
> [(b). No provision of this Chapter V is intended to, nor shall it be deemed or interpreted to be, a restriction on any legitimate trade in any whale product.][63]

Following the EDG meetings, Norway and Japan asked New Zealand to remove the second paragraph, believing it was unnecessary. However, New Zealand would not do this, suggesting that it was important for it to remain, so that it was clear that the regime was not designed in any way to interfere with any possible future legitimate trade in whale products.[64]

Rule-making Power

The second area in which there was substantial agreement in the negotiations process pertained to a second-level body, entrusted to deal with any necessary technical specifications relating to the overall compliance regime. New Zealand introduced this proposal for a subsidiary body to be set up within the RMS to establish, set and review as necessary, the required technical specifications (such as technical specifications for autonomous tracking systems and so on) that would be encompassed in any future compliance regime. This was initially objected to by Japan and others, as 'yet another layer of bureaucracy' that could be attempting to subvert the necessary three-quarters rule, needed to effect changes to the Schedule.[65] However, at the second EDG meeting, it was agreed that it was useful to have a mechanism for developing the (non-controversial) technical details necessary for the practical implementation of the scheme.[66] Ideally, this mechanism would work on the practical details, which would be kept in a single document, not the schedule itself, and the schedule would refer to a dated version of these, so that if the Commission

adopted any modifications then it would be only the date in the schedule that needed to be modified.[67] If the changes were controversial then unless there was a three-quarters majority, the schedule would still refer to the earlier version. Similarly, if a contracting government objected to a change in the date, it would still be bound by the earlier version. Support for this technical body was given at the 2002 IWC meeting.[68]

The Overall Compliance Scheme

A third area of agreement in these discussions, was with the terms of overall governing principles for the compliance scheme. In particular, the EDG process agreed that the primary objectives of any I&O scheme are to:

1. Ensure that the rules and regulations of the Commission are obeyed;
2. Ensure that the rules and regulations of the Commission are seen to be obeyed;
3. Report to the Contracting Government any infractions of those rules and regulations;
4. Report to the Commission any infractions of those rules and regulations.

In developing a scheme to meet these objectives, the EDG agreed that account must be taken of:

1. Certain desired features of any credible combined scheme, including that it be, to the extent possible, robust, independent, transparent and be based on best practice;
2. The need for the scheme to be as simple, practical and cost-effective as possible, concomitant with meeting its objectives; and
3. The nature of likely future operations (whilst noting that any scheme must be sufficiently generic to be able to incorporate new vessels, etc without modification).[69]

Despite agreement on the overall objectives of the scheme, the debates on the crucial aspects within the multiple sections of debate were far from settled. These debates fell into three areas with regard to the overall compliance areas. These were in relation to the I&O scheme, the tracking of whale products, the data required to be taken by observers, and finally a compliance committee to help oversee the entire process.

5 INSPECTION AND OBSERVATION

Before discussion of the I&O regime begins, it is useful to note that substantial agreement, as evidenced by precedent, has already been built up within the IWC over inspections and observation for large-scale pelagic whaling vessels.

As such, it would be mistaken to assume that any of the discussions that have proceeded since 1994, were in any way attempting to move backwards from what was already established IWC practice. Rather, the subsequent debate has primarily centred on enlarging the scheme, covering previously unforeseen situations, utilizing new developments, or revisiting previously overlooked practices. In these areas, the discussions since 1994 have focused on essentially four considerations: whether observers would be placed on all whaling vessels ('coverage'); whether it was necessary to report daily on any whales hunted, struck and killed; whether any contracting government may object to the appointment of an observer; and finally, what information observers are required to record or – specifically in this instance – in addition to the traditionally recorded information, should they be required to record information pertaining to animal welfare considerations.

Coverage

The question of coverage has focused primarily on small-scale whaling. With regard to large-scale pelagic whaling and the need for international observers, and the principle of autonomous tracking systems (typically Vessel Monitoring Systems (VMS))[70] but not the technical details of such[71] is relatively well settled and accepted (both in international fisheries policy[72] and within the IWC debates).[73] That is, in one of the few pieces of text without square brackets, it is stated (and accepted) that: 'All whaling vessels engaged in whaling operations shall be equipped with an autonomous system which records data that assist in ensuring compliance with the Schedule'. Nevertheless, questions remained over the extent of its coverage of vessels without international observers,[74] and in early 2004, questions were re-opened over VMS on pelagic whaling operations.[75]

Additional questions like vessel registration, although rudimentary within the scheme[76] (and clearly requiring further attention both in terms of detail[77] and substance, since the near collapse of the register)[78] were not subject to in-depth discussion at the EDG, nor were the related problems of the collapse of the vessel register. As such, given the already near-completed parts of this equation, and the omission of other parts, the discussions have been structured around only a few issues. In particular, with regard to the overall RMS negotiations, the debates have been twofold. First, how should the I&O apply to small-type whaling operations, and what to do on vessels where there is limited space for observers.[79] That is, if a boat had room for only one inspector, should that be a national or an international one? Norway, Japan and the Republic of Korea all argued that the national inspector must have precedence. Conversely, the UK, the USA, New Zealand, Sweden, Germany, Brazil, Spain and Monaco all argued the opposite.[80] Rather than fully repeat this debate, the

EDG adopted an approach which, while agreeing that having an international observer on board a whaling vessel and at the point of landing will clearly meet the objectives of its I&O scheme, acknowledged that this is not always practical for certain categories of vessels (as is the case for other fishery management bodies). It therefore examined alternative methods for such vessels that will satisfactorily meet the objectives of its I&O scheme given above. In its discussions, it concentrated on those rules/information requirements for which there was consensus. With regard to coastal whaling, the EDG suggested that three categories of coastal whaling vessels should be considered:

1. Vessels which operate day trips (less than 24 hours) only, which carry out no substantial flensing onboard and can accommodate neither a national inspector nor an international observer (that is, the legal limit of persons on board does not exceed the number of crew). For these vessels, the EDG agreed that a combination of VMS data transmitted in real-time to an observer at the point of landing, is acceptable.[81]
2. Vessels which are less than 24m, operate only within waters under the jurisdiction of the flag state and can only accommodate one additional person in addition to the crew. For these vessels, the EDG agreed that it would be possible in principle for an individual to act as both an international observer and a national inspector. Clearly such a person would need to meet the selection requirements for both positions.
3. All other vessels. For these vessels, which are large enough to accommodate both a national inspector and an international observer, the EDG agreed that they should have an international observer on board.

Despite these suggestions, as was made clear by Norway at the 2002 Shimonoseki meeting, there had not been complete agreement within the EDG on the need to have national inspectors and international observers on all vessels and at all landing points.[82]

Second, with regard to pelagic whaling, after considerable discussion, the EDG could not reach consensus as to the most appropriate scheme for pelagic whaling. While all members of the EDG agreed that there should be two international observers on board each factory ship, two main views emerged with respect to the presence of observers on each catcher vessel. The first view was that there should be an international observer on each catcher vessel. The alternative view was that this was not necessary, and to omit this category would only slightly reduce the quality of monitoring but would be considerably more cost effective.[83]

Objections to Selected Observers

It is an established ideal in the IWC that whaling countries have the right to veto inspectors that they do not approve of. This is because in principle, it would be very difficult to force a sovereign state to accept an observer it disapproves of. Although this provision is somewhat unique, it stems from the fears of contracting governments that they may not be subject to fair and objective verification by some individuals. While some countries wished to remove the veto, a number of others strongly rejected this. The concern was, as the UK pointed out, 'the need to have a system in which unjustified objections can be discounted'. South Africa added that the veto system was fine 'provided that it was made clear that vessels could not sail without an observer on board'. This view was rejected by Japan, who suggested that it 'could not allow a situation where the departure of a vessel was delayed simply because an international observer is not available'.[84] Within the EDG process, the group agreed that the procedure for selection of observers should be identical irrespective of whether the observer might also be a national inspector. Such a process is designed to engender as much confidence as possible in persons fulfilling the combined role. Observers chosen for the combined role with a national inspector must fulfil the qualifications for both positions. The EDG noted that the process alters the nature of the 'multiple objection' problem referred to in earlier RMS discussions. It considered this issue at some length, including the question as to whether it was necessary to include a provision to try to accommodate the hypothetical situation whereby a government or governments might object to all of the observers on any list.[85] The EDG agreed that it was possible to proceed on the basis that contracting governments would act in good faith. It therefore recommended that observers should be selected in accordance with the following procedure.

> (1) The Secretariat will put out a call for candidates to apply (including via Contracting Governments, the Scientific Committee and the IWC website). It will develop a standard application form that will include information on the scientific and technical criteria that will be used in the selection process. It will also request information on *inter alia*: language(s) spoken; available dates; previous experience (including time at sea); any known problems with admission to certain countries; references.
> (2) The Secretariat will draw up a list of suitable candidates.
> (3) The list will be circulated to all Contracting Governments with a summary of information on each candidate (individual applications may be given to any Commissioner on request).
> (4) Any Contracting Government may veto any candidate.
> (5) Following predetermined guidelines, and after consultation with relevant Contracting Governments over practical arrangements, the Secretariat will decide the placement of observers and will inform the appropriate Contracting Governments at least 30 days prior to the start of whaling operations. . . .

The EDG also noted that there must be a review process established such that the secretariat can remove someone from the approved list of observers if that person is found to have failed to perform his or her duties adequately. The precise details of any review process need to be determined.[86]

Although the veto provisions had been retained within the EDG text, the rider to this section – the prevention of vessels from going whaling due to not having an observer – remained clasped in square brackets (and was not subject to discussion at the EDG). As such, although it remains policy for the sovereign states to reject observers, if they pursue this indefinitely, the vessel may not be able to leave port. This can be seen in Paragraph 10 of the Revised Draft Schedule, which reads:

> 'If, through no fault of the Contracting Government or relevant whaling operation, an observer is not available, the Secretariat [shall/may], on behalf of the Commission, waive the requirement for an observer to be present.
> [Notwithstanding the above, vessel departure, hunting or landing of whales shall neither be delayed nor prevented if, through no fault of the Contracting Government or relevant whaling operation, an observer is not available.][87]

The key points for discussions about this text are: 'no fault of the Contracting Government' (which remains uncontroversial) and the operative language of 'shall/may.' In a nutshell, although the veto has been retained, the rider on this has yet to be decided.

Animal Welfare Considerations

From the outset of negotiations, the UK has proposed that data on animal welfare issues be included in the information required by observers. Within the IWC inspection regime, the intention is to get observers to record data relating to welfare concerns. That is, the UK was not asking for them to enforce welfare standards. Several countries (including Denmark)[88] expressed support for this proposal, believing it would bring the schedule in line with much domestic legislation and other international conventions that now recognize the increasing importance of animal welfare.[89] The UK suggested that such information should include reporting data related to the primary killing method, the secondary killing method, information on the target whale, and where possible, information from the post-mortem.[90] Despite these proposals, there was no initial consensus that the UK proposal should be inserted into the schedule, and the idea of even including such recording of data requirements relating to humane killing has been directly challenged.[91] By way of compromise, in addition to the original proposal, the UK suggested wording that could be included into the Schedule: 'but with an associated expiry date (e.g. 2 years). After completion of this trial period, the Commission may wish to

renew the reporting requirements'.[92] However, this possible compromise was also rejected. Accordingly, the UK retained the paragraphs relating to information concerning humane killing in square brackets: 'considering it imperative to keep animal suffering to a minimum and that to ensure this it is important to collect the data proposed'.[93]

At the special meeting at the end of 2002, Japan reiterated its objection to observers collecting this data, stating it would provide it only on a voluntary basis. Norway also voiced its opinion, suggesting that the UK was trying to introduce new issues that were not to be found in comparable organizations. The Norwegian statements were rebutted on two grounds. First, the UK advocacy of this position dates back to the mid-1970s, when its desire to increase research into improved killing methods[94] was, by necessity, linked to the recommendation that international observers within the inspection and compliance regime: 'collect information regarding humane killing'.[95] Second, with regard to other regimes, it was pointed out that with the NAMMCO control system, the objectives of the observers include, *inter alia*, observation of 'hunting equipment and its use, hunting procedures and killing methods'.[96] Likewise, CCAMLR's system of inspection is related to the compliance measures of the Commission, of which a strong concern pertains to the capture methods employed by members and especially their effect upon incidental species.[97] As such, what was being asked for was not unique in comparable international forums. Despite these precedents, when the issue was again discussed at the later intersessional meeting in Antigua and again at the 55th meeting in Berlin, Japan staged a walk-out, refusing to have anything to do with this agenda item.[98] The chair's proposal of 2004 suggested that a compromise on this area would be to state the principle of welfare considerations in the schedule, but make any provision of welfare-related data only on a voluntary basis.[99]

6 TRACKING AND IDENTIFYING THE PRODUCT: CATCH DOCUMENTATION AND DNA DATABASES

As the negotiation process has evolved, some new developments have been added to the compliance considerations. These developments have revolved around the utilization of DNA and catch documentation schemes to help track and identify products which are legitimately on the market, so as to be able to distinguish the illegitimate ones. Although the placing of these new developments on the table initially caused some consternation to Japan and Norway,[100] these were clearly justifiable as they were in accordance with the current best international practices in this area, which the various working groups were obliged to examine.[101]

DNA

DNA technologies are the ultimate tool in verifying genetic identities. This can be an essential part of verification processes, which helps establish which products are legitimately in a marketplace. Accordingly, it has been advocated that DNA technologies be utilized within the inspection and compliance regime of the IWC, via a centralized system of some sort.[102] This advocacy is consistent with policies in contemporary international fisheries policy[103] and within specific forums such as the IWC. Within this later forum, after debate going back to the mid-1990s,[104] it has been accepted by the Commission (and the scientific committee)[105] that DNA technology may be of direct relevance since by tracking whale products from capture: 'through all stages of the marketing and distribution chain' it may be possible 'to show that products come from an approved quota'.[106] As such, 'DNA-based identification of market products and genetic typing of known catches' is 'one of the most promising of the new technologies'.[107] This recognition is not only theoretical. Indeed, the utility of this mechanism is such that the two foremost advocates of whaling (Japan and Norway) have already instituted their own domestic DNA databases, so as to track whale products within their domestic jurisdictions. As Japan explained:

> Japan has already made substantial progress on the implementation of a comprehensive DNA sampling program and registry that will satisfy international concerns related to possible illegal trade. This voluntary initiative includes sampling in the domestic market, sampling of all whales taken under our research program, sampling of all frozen stockpiles of whale meat as well as sample from all stranded animals and those caught accidentally in fishing gear.[108]

Norway has also followed this approach (the Japanese system is based on the Norwegian one) and although not fully diagnostic includes sequences for over 97 per cent of whales taken, encompassing some 2,676 minke whales.[109] The Norwegians indicated they were prepared to make some information from their DNA databases available 'as a courtesy'.[110] However, Japan, Norway and Denmark have all strongly argued that the utilization of DNA technologies in this area was 'an essential trade issue and outside the terms of the Convention'. To allow otherwise would be an illegitimate 'international control over domestic markets'.[111] As such, DNA databases could be utilized only on a domestic, and not an international basis (and if an international basis was to be developed, CITES was the appropriate body to do this, not the IWC).[112] This view is countered by a number of other countries who argue, as the UK did, that if the RMS was to be concluded, it was 'vital . . . to include such aspects as tracking of whale products and the provision of central oversight'.[113] Thus, as the chair of the 2001 London IWC meeting noted: 'it would

appear that the primary issue is not whether or not it is useful to have DNA profiles of all whales killed, but rather whether a central IWC register should be established'.[114]

At the Monaco meeting, there was 'no consensus on the need for a central (IWC) register or centralized genetic monitoring'.[115] This lack of consensus continued through the London meeting, and EDG I. At EDG II, a discussion document put forward (by the United States in co-operation with the secretariat) suggested that the current debate was between two extremes. These were: 'national governments are wholly responsible for establishing and maintaining any DNA registers, carrying out any comparisons that they deem necessary and reporting any results that they feel are appropriate to the IWC' and 'the IWC establishes a single DNA register that it maintains and carries out any comparisons – national governments must supply a suitable tissue sample to the IWC of each whale caught, bycaught or stranded'.[116] By way of compromise between the two regimes, the document suggested as a way forward, that in addition to recognizing that any possible new nation seeking to go whaling must establish a genetic database, in accordance with agreed IWC guidelines, the following approaches may be of merit. In particular:

> [T]he IWC shall develop requirements and guidelines for requests for comparison of samples/profiles obtained by appropriate third parties (e.g. national governments or relevant inter-governmental bodies) with those held in national registers and the IWC held profiles [Contracting Governments shall provide [electronic] genetic profiles of each individual in their national registers to the IWC]. This is to ensure that fraudulent requests for comparisons are not made and to provide a possible method for the resolution of disputes should these occur.[117]

The document went on to suggest that:

> [T]he IWC shall . . . develop a system of oversight of such national systems to ensure that they meet the agreed guidelines and requirements. Such a system would probably include:
>
> - Periodic reviews of national procedures and an audit of their performance.
> - Specification of an appropriately qualified third party to carry out such reviews/audits.
> - A review of the results reviews/audits by appropriate IWC bodies (e.g. the Scientific Committee/Infractions Committee.[118]

However, this proposed 'compromise' approach was not successful in assisting those members whose view was that DNA registers were outside the scope of the RMS, and the EDG was unable to offer any consensus view on the issue of genetic monitoring. The existing proposals included in square brackets are thus unaltered, although a slowly appearing broad agreement on external review for independent oversight of a DNA register, as well as necessary

market sampling by appropriate bodies (such as TRAFFIC) did appear to be gathering force at the later intersessional meeting in Antigua.[119] Nevertheless, Norway was circumspect about the extent to which it was prepared to compromise over this issue. As such, at the conclusion of this discussion, the UK expressed its grave disappointment that those countries in favour of whaling had flatly rejected the compromise proposal, even as a basis for discussion.[120] As of 2004, the secretariat noted that: 'considerable technical detail and some policy is needed before this area can be concluded'.[121]

Catch Documentation

At the Monaco meeting, New Zealand presented a proposal to incorporate a catch certification/documentation scheme (CDS)[122] into the RMS[123] as it was consistent with established international best practice.[124] In this setting, variants on CDSs have been advocated in numerous international documents,[125] and have been utilized in a number of other agreements (which are now at such an advanced state that their CDSs are being harmonized),[126] to which the whaling nations were already signatories.[127] In addition, a number of countries operate comparable schemes within their own domestic jurisdictions often in conjunction with general consumer labelling and information campaigns.[128]

Despite these developments, certain countries, such as Japan, saw no need for such provisions which they considered excessive and beyond the scope of the convention.[129] Moreover, they argued that it had improper implications on trade-related questions, which were better suited to CITES than to the IWC.[130] Those supporting the scheme pointed out that the purpose of the CDS was to help identify and trace whale products on the market (the extent of tracking in the market would need to be decided), and was not an attempt to control legitimate trade. Moreover, CITES deals with endangered species, and it was hoped that any possible revision of whaling would not be utilizing endangered species, hence the application of CITES would be limited in this area. Nevertheless, so as to help distinguish between the legitimate and the illegitimate, a CDS would be essential. The retort to this was that although it was correct that CDSs had been established: 'such schemes have been established primarily for the purpose of controlling Illegal, Unregulated and Unreported (IUU) fishing, which although a problem in the past for IWC, they did not believe to be a current problem'.[131]

In addition, it was argued that since the possible market for whale products would be small, at least in the short term, the establishment of a CDS would be premature and expensive. It would also duplicate the work done by national inspectors and international observers – particularly in the situation where observer schemes provide 100 per cent coverage – and would therefore simply add another level of compliance. Finally, the view was expressed that

no satisfactory explanation had been provided that there are any benefits in the simultaneous operation of a CDS and a DNA system. Those supporting the establishment of a CDS considered that it would not necessarily duplicate information obtained by observers and inspectors since it would include information downstream from whaling operations. Moreover, they considered that the functions of I&O and catch documentation are fundamentally different since the latter seeks to be able to distinguish products once they are on the market. It was also noted that:

1. such schemes should not be contingent on the percentage availability of observers, and that they exist in other fishery regimes having 100 per cent observer coverage;
2. the introduction of a scheme would not be premature and should be implemented at the same time as commercial whaling;
3. they could provide information useful for scientific purposes (for example, better catch data); and
4. they would not necessarily be costly.
5. They also did not share the view expressed that IUU fishing is no longer a problem for the IWC.

Finally they noted their view that DNA analysis is needed to corroborate and verify any CDS including the identification of illegal products.[132] These arguments were largely reiterated at the 2002 special meeting, with the Norwegian addition that CDSs are only of use when the catch is taken from international waters (with the assumption that Norwegian whaling will be primarily within its EEZ). The retort to this was that whaling, on a global scale, would most likely go beyond the Norwegian waters, and it would be necessary for all sources to be covered, not just those of Norway. This broader view was generally accepted at the following intersessional in Antigua, where the value of a CDS, as a detection tool for whaling done outside of authorized countries yet illicitly imported into these places, became enhanced.[133] Further work was noted as needed in this area in 2004.[134]

7 COSTS

There are two options for all of the costs associated with compliance. The costs are paid for either by the entire Commission, or by the whaling nations who are being supervised. It was pointed out by those who wanted the whaling nations to pay for the associated costs of compliance that this was in broad accordance with user-pays principles in this area. For example, the FAO Code of Conduct on Responsible Fisheries suggested:

> States and sub-regional or regional fisheries management organizations and arrangements, as appropriate, should agree on the means by which the activities of such organizations and arrangements will be financed, bearing in mind, *inter alia*, the relative benefits derived from the fishery.[135]

Those like the Republic of Korea, who argued that the Commission as a whole should bear the costs, suggested that as 'all Contracting Governments are in principle the beneficiaries of the international observer scheme' then they should all share in the costs. In addition, Norway argued that since whaling nations already pay large dues to the IWC, they would in effect be subject to 'double taxation'.[136] A compromise put forward by New Zealand suggested that the core administrative functions associated with the RMS (for example, the Secretary's salary) would be paid by the IWC as a whole; operating costs for the RMS (recruitment, travel and so on) by the whaling nations; and capital expenditure (computer equipment and so on) would be initially met by the Commission, and then recovered over time as part of operating expenditure. However, after Japan, Norway and Iceland indicated that they could not support this proposal, it was initially withdrawn.[137] Nevertheless, New Zealand was persuaded to reintroduce this compromise motion at EDG II.[138] Despite this second attempt, a number of countries could still not agree that it should be the whaling countries who should bear the bulk of the costs. They expressed the view that it was not reasonable for contracting governments to demand a comprehensive and costly scheme without being willing to pay their fair share of the expense. However, at the special meeting in the later part of 2002, Japan conceded that the NZ approach of split costs had merit. In furtherance of the progress in this area, a further subgroup was established to look at the financial implications of the necessary regime. However, although this adduced some useful figures of what some aspects of the proposed regime may cost (such as from 13–20 pence per kilo of meat for DNA material) the broader questions – in parallel to the larger debates about financing the Commission overall – of how to allocate such costs were not resolved[139] and 'considerable policy work' remains necessary in this area.[140]

8 COMPLIANCE REVIEW COMMITTEE

The United States proposed a committee to review and report on the compliance of all whaling operations (including aboriginal subsistence and bycatch areas) at the 2000 IWC Adelaide meeting. The desire to have a meaningful review committee is shared by many countries, and is particularly bolstered by the disregard that the current infractions committee is held in by some whaling nations, and its overall toothless nature.[141] The United States suggested

that this was '[o]ne of the fundamental changes needed to ensure a credible RMS'.[142] It had: 'studied the supervision and control schemes of other fisheries organizations regarding their conservation measures, and believes there is not a huge disparity with revisions proposed . . . it believed that the proposed Review Committee would provide similar oversight to that occurring in other fisheries organizations'.[143]

Others disagreed over the need for such a body, suggesting that the current infractions committee was more than adequate and already ensured transparency as (NGO) observers were already admitted,[144] and as such the proposal only added an unnecessary 'increased level of bureaucracy'.[145] It was also considered (by Norway) that such a new body could be a 'kangaroo court' leading to 'unfair judgments'. To partly overcome this, New Zealand suggested (but it was not concluded) that such a body could be guided by a series of principles (of fairness, transparency and due process).[146] However, disagreement was overcome at EDG II and it was agreed[147] that in terms of general principles, the oversight group (to be known as the compliance review committee) would:

(i) review: infraction reports from Contracting Governments; and the annual report of the functioning of the international observer scheme, including any alleged infractions, for the most recent completed whaling season;
(ii) review other reports submitted by Contracting Governments on matters relevant to the Committee, including alleged infractions;
(iii) compare the information in (i) and (ii) above and identify any disagreement in the details of an alleged infraction;
(iv) report its view as to whether an alleged infraction is a violation(s) of the provisions of the Schedule;
(v) review action(s) taken by a Contracting Government in response to violation(s) of the provisions of the Schedule identified above;
(vi) review the actions taken, including progress made, by Contracting Governments in response to previous violations considered by the Commission;
(vii) recommend to the Commission actions to be taken to improve compliance with the provisions of the Schedule;
(viii) submit a report to the Commission on its deliberations and recommendations.

There were two contentious issues in the debate over the compliance committee: the first related to composition considerations, and the second to powers of the committee. The composition question further divided into two parts, the first of which dealt with NGO participation. From the outset, the United States had argued that the new body should have: 'two accredited international (NGO) observers (who would be allowed to speak, but not vote) who would provide the necessary transparency and perspective'.[148] The United States drew attention to other bodies (such as the International Review Panel

of the Agreement on the International Dolphin Conservation Program) which had already done this to good effect. Others expressed concern that reducing the number of NGOs able to attend the committee would reduce transparency. They preferred to continue to allow all NGOs to observe. A suggestion was made that in this situation, a small number of NGOs could be allowed speaking rights, but concern was expressed by some members that NGOs may abuse such a privilege. It was generally agreed that such rights should be limited to raising questions and making comments relevant to the compliance review committee's agenda. In this context, a proposal was made that infractions data be collected earlier and the secretariat's summary circulated to all contracting governments and observers well in advance of the annual meeting. This would provide time for the information to be reviewed and for NGOs to submit written questions via the chair of the compliance review committee. The chair would filter the questions, amalgamate them as necessary and pass on relevant questions to contracting governments as appropriate. These questions would then be answered at the meeting. This proposal was noted but not discussed further and the issue of the participation of NGOs with speaking rights was not resolved. The EDG therefore agreed to keep the status quo (that is, open to all accredited NGOs as observers) and to include draft schedule text in square brackets referring to the participation of 'x' NGOs with speaking rights.

The second issue related to the composition of the committee, in terms of member countries. Some countries preferred to reduce the number of contracting governments participating (rather than membership being open to all member governments) which would be based on an equitable and revolving number of member countries (as with comparable compliance regimes in other international environmental forums, such as those concerned with climate change,[149] ozone depletion[150] and international air pollution regimes).[151] They believed that a smaller committee which was representative of the various interests within the Commission, would be able to function more efficiently than the infractions sub-committee had done in the past. However, others considered that the proposed compliance review committee should be open to all contracting governments without any restriction. Despite their preference for a smaller committee, those who favoured this option indicated that in order to achieve agreement on the overall concept of a compliance review committee, they were prepared to compromise to reach an overall consensus. The EDG therefore agreed that the compliance review committee should be open to all contracting governments, noting that this could be reviewed in the light of experience.[152]

The final issue of strong debate with regard to the new compliance committee was over its possible roles with regard to penalties – that is, whether it could recommend reductions in quotas and so on. This discussion was largely short-circuited by agreement that the committee could make recommendations, but

that it was for the Commission itself to decide on appropriate actions. Despite the supposed consensus over this issue at the EDG, the consensus appeared to unravel at the 2002 Shimonoseki meeting, as the agreement by Japan and Norway (to the new compliance committee) appeared to weaken.[153] However, at the special meeting in the latter part of 2002, the United States withdrew its proposal that the NGOs should have speaking rights in the committee. In response to this offer, Japan announced that it would withdraw its reservation to the new committee. Despite this movement, a number of issues still required resolution. As such, it was agreed that a further, specialized group on compliance would be established. Although this group was able to list the specific areas in need of coverage, the details were not finalized.

9 CONCLUSION

The necessity to have an overall, effective compliance regime is a problem which has haunted the IWC for over 50 years. Although this problem was eventually solved after three decades, by the time of the moratorium on commercial whaling and the development of the RMS, the need for a new compliance regime, consistent with international best practice emerged. The completion of the new compliance regime is the final outstanding issue with regard to completion of the RMS. However, despite negotiations dating back to the mid-1990s, and prima facie agreement on a number of secondary considerations and tentative agreement in some areas of substantial concern, a number of prominent difficulties (despite compromise options being offered) remain:

1. The role and control of catch verification schemes (through genetic monitoring and catch documentation schemes).
2. The role of a new compliance review committee, including its constitution, in terms of both participating governments and NGOs; and the powers that the CRC may have.
3. The placement and selection of inspectors, their placement on small-type coastal vessels and ancillary ships to large-scale pelagic whaling vessels, precedence of inspectors and vessel monitoring schemes.
4. The need for inspectors to collect animal welfare data.
5. Costs of the inspection and observation regime, and how this may be shared among contracting governments.

Finally, the connection of the overall scheme, linked into the lifting of the commercial moratorium and/or the Irish Proposal, has been tied into the above discussions. However, the proposals in 2004 to bypass these concerns will most likely lead to a further level of debate.

Despite the chasms that exist on many of these technical issues, and the avoidance of the larger policy debates (such as the Irish Proposal and the commercial moratorium) the process was reconvened in 2004 for a further series of work, with a view to achieving a conclusion in this area.[154]

NOTES

1. Notably, the *Olympic Challenger*. IWC Doc. XVI. Verbatim Record. In Birnie, P. (1985). *The International Regulation of Whaling* (Oceana, New York). Volume 1: 218. IWC. 7th Report. (1956). 5. IWC Doc. XIII C (1956). 89. IWC Doc. XIV A, 16.
2. Notably, the flags of the Bahamas, and later Somalia. IWC. 25th Report. (1974). 34. IWC. 30th Report. (1980). 32.
3. IWC. 45th Report. (1995). 19.
4. At COP9, at Fort Lauderdale in the United States, Resolution (9.12) (which dealt with the illegal trade in whale meat) was passed. This resolution was 'concerned about continuing international reports of the discovery of whale meat and products appearing for sale in, or even en route to importing countries from no plausible existing source'. As such, it appeared that 'some unknown level of exploitation of whales may be occurring outside the control of the International Whaling Commission'. This situation suggested that: 'the international trade in meat and other products of whales is lacking adequate international monitoring or control'.
5. Appendix 18: 'Resolution on Whaling Activities by Non-Member States.' IWC. 44th Report. (1994). 12, 38–9.
6. The 1937 International Agreement for the Regulation of Whaling. Ruster, B. and Simma, B. (eds) (1976). *International Protection of the Environment* (IPE). (Oceana, New York). Volume VII. 3475.
7. 'The Contracting Governments will take appropriate measures to ensure the application of the provisions of the present agreement and the punishment of infractions against the said provisions, in particular, will maintain at least one inspector or whaling on each factory ship under their jurisdiction. The inspectors shall be appointed and paid by governments'. Article 1.
8. IWC. 7th Report. (1956). 5.
9. IWC. 11th Report. (1960). 19.
10. IWC. 8th Report. (1957). 17; IWC. 9th Report. (1958). 14; IWC. 10th Report. (1959). 13.
11. This began in 1959 as both Japan and Norway put forward different proposals. IWC Doc. XIV. (1959). 112–13. Questions such as the nationality of observers, and whether the Commission should consult flag countries before appointing observers to their factory ships were mooted. IWC. 11th Report. (1960). 19.
12. Until these countries returned, it was argued (by the USSR) that 'the setting up of any international scheme of control in the Antarctic would serve no purpose'. IWC. 12th Report. (1961). 18.
13. Ibid. 17. Moreover, 'its implementation should be made as quickly as possible'. IWC. 13th Report. (1962). 18; IWC 14th Report. (1963). 19–20.
14. The Agreement Concerning an International Observer Scheme for Factory Ships Engaged in Pelagic Whaling in the Antarctic Reprinted in IWC. 15th Report. (1964). 23–6.
15. Ibid. It was also resolved that the operation of the observer scheme should be the responsibility of a committee consisting of the commissioners for the member countries engaged in Antarctic pelagic whaling. Ibid. 21.
16. In numbers equivalent to the number of expeditions that each government operated. All the observers will be appointed by the Commission and are to be enabled to verify the observance by the expeditions of the provisions of the ICRW and the schedule. See Article 2 (5) of the scheme.
17. Article 1(b).
18. IWC. 15th Report. (1964). 20.

19. 'The Soviet Government could not see their way to implement the Scheme without prior revision of the arrangements governing national quotas on a basis satisfactory to them, while the Japanese Government were not willing to discuss such matters until the implementation rules and the . . . catch limit[s] . . . had been accepted by all parties'. IWC. 16th Report. (1966). 8–9. The USSR reiterated the following year that before the IOS could be implemented 'it would be necessary to solve on a just basis the problem of re-allocation of national quotas between the countries concerned'. IWC. 17th Report. (1967). 22.
20. In 1965, Norway put forward a resolution, which was adopted by the IWC, for the implementation of the IOS scheme as soon as possible. Ibid. 21. The importance of the IOS was reiterated in 1966, as necessary to stop the continuing violations of the ICRW. IWC. 18th Report. (1968). 19.
21. In 1967, the IOS scheme ran into direct problems with the difficulty of land stations, and whether the IOS should now cover them. No agreement could be concluded. IWC. 17th Report. (1967). 22. The technical committee recommended that a special group should be set up to examine this problem. Ideally, the objective was to make sure that catches from land stations do not detract from the overall management regimes for the Antarctic. Ibid. 19–20. This was formed into a resolution, which was accepted by all of the 13 commissioners present, except the Soviet representative. Ibid. 21. This problem became heightened in 1968, when the IWC expressed concern that the number of whales being caught from land stations situated in non-member countries threatened the work of the Commission. The member countries of the UK and South Africa were singled out for concern, with the Commission urging them to show restraint. IWC. 18th Report. (1968). 18. The Soviet Union, in particular, was very concerned about this practice.
22. Article 1 of the ICRW explained: 'This Convention applies to factory ships, land stations, and whale catchers, under the jurisdiction of the Contracting Governments and to all waters in which whaling is prosecuted by such factory ships, land stations, and whale catchers'. Article 1(2). ICRW. BH200.txt. 161 UNTS. 72. This was similar to the 1931 Convention which was explicit in stating that: 'The Geographical limits within which the Articles of this Convention are to be applied shall include all the waters of the world, including both the high seas and territorial and national waters'. Article 9. Convention for the Regulation of Whaling. Geneva. LNTS. CLU. No. 3586. 1931, September. 24. Article 9.
23. IWC. 18th Report. (1967). 17.
24. IWC. 19th Report. (1968). 21, 22.
25. Ibid.
26. IWC. 20th Report. (1969). 18.
27. Ibid. 18.
28. IWC. 22nd Report. (1972). 24.
29. IWC. 21st Report. (1971). 20.
30. IWC. 22nd Report. (1972). 10, 22.
31. IWC. 24th Report. (1974). 20.
32. Ibid. 27.
33. Both Japan and the USSR 'expressed their doubts about the possibility of the agreement for the Antarctic being renewed in view of the situation that had arisen as a result of the differences on quotas'. IWC. 25th Report. (1975). 30.
34. IWC. 26th Report. (1976). 10; IWC. 27th Report. (1977). 10; IWC. 28th Report. 1976. 24.
35. Ibid.
36. The review within the IWC on the IOS concluded that 'all whaling operations by Commission members should be subject to observation under the international observer scheme'. See Appendix 8: 'Recommendations Adopted by the IWC at Its 31st Annual Meeting on New Observer Schemes.' IWC. 30th Report. (1980). 37–8. Moreover, the strong bilateral basis (by which countries exchanged observers, who made their reports available to the IWC) should continue (ibid. 32) and all whaling operations should also cover whaling involving aboriginal subsistence claims. See paragraph 6 of Appendix 8. Ibid. 37–8. This was clearly reiterated at the following meeting in 1980. See Appendix 13: 'Recommendations from the Infractions Sub Committee.' IWC. 31st Report. (1981). 33. See paragraph 12 in particular. IWC. 32nd Report. (1982). 30–31.

37. See Rose, G. (1996). 'Compliance with International Environmental Obligations: A Case Study of the International Whaling Commission'. In Cameron, J. (ed.) (1996). *Improving Compliance with International Environmental Law* (Earthscan, London): 148, 165.
38. IWC. 30th Report. (1980). 32.
39. IWC. 33rd Report. (1983). 29–30.
40. IWC. 45th Report. (1995). 39; IWC. 46th Report. (1996). 41.
41. IWC. 41st Report. (1991). 42–3.
42. IWC. 42nd Report. (1992). 41; IWC. 44th Report. (1994). 29; IWC. 45th Report. (1995). 39.
43. But only every three, as opposed to every year. IWC. 43rd Report. (1993). 33.
44. Ibid. 18. Appendix 3: 'Resolution on the Revised Management Scheme.' Ibid. 40. Appendix 5: IWC Resolution 1994–5. 'Resolution on the Revised Management Scheme.' IWC. 45th Report. 1995. 43–4. Appendix 6: Resolution 1996–6. 'Resolution of Provisions for Completing the Revised Management Scheme.' IWC. 47th Report. 1997. 51.
45. IWC. 45th Report. (1995). 25–6.
46. As Japan itself argued: 'the IWC should refer to measures presently applied by other international fishery management organizations'. Japan, Opening Statement. Appendix 2: Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February, 2001).
47. IWC. 44th Report. (1994). 15; IWC. 45th Report. (1995). 19, 25. At this point, the working group was unable to reach any conclusions on many of the matters discussed and 'very little common ground seemed to exist'. IWC. 46th Report. (1996). 26–7. Faced with such an impasse, a new working group was established. However, even within this new body, it was not possible to locate 'much common ground'. IWC. 47th Report. (1997). 33. This pattern was followed the next two years. IWC. 50th Meeting in 1998. (1999); IWC. 52nd Meeting in 2000. (2001). 34–7.
48. See 'Report of the Intersessional meeting of the Revised Management Scheme Working Group. Monaco,' 6–8 February 2001. (IWC, Cambridge).
49. Following the London meeting, an Expert Drafting Group was established. This limited group (New Zealand, the UK, the United States, Sweden, Norway, Japan, Denmark and Antigua and Barbuda) were charged with preparing a consolidated text (to replace chapters V and VI of the current schedule) and that the text: 'shall contain as few square brackets as possible'. Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 7–8.
50. See 'Report of the RMS Working Group.' IWC/53/9. Agenda Item 9.
51. 'Report of the RMS Working Group.' IWC/54/7. Agenda Item 9.2.1. Section 6.
52. The first version is contained in IWC/54/53. Agenda Item 9.2.2. 'Completion Of The Revised Management Scheme.' The other text (the so-called 'Swedish text') was IWC/54/35. Agenda Item. 9.2.2. Proposed Schedule Amendment for Adoption of the RMS'. This text was more prescriptive in terms of adoption of the progressive side of the EDG text, along with broader linkages to paragraph 10 of the schedule (with regard to the moratorium and the Irish Proposal).
53. See IWC/54/34. Agenda Item 9.2.2. 'Schedule Amendment to the International Convention for the Regulation of Whaling Completing the Revised Management Scheme (RMS).' Submitted by Japan.
54. Norway, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
55. 'Proposed Terms of Reference for An Intersessional Workshop on the RMS.' IWC/54/61. Agenda Item 9.2.2. Both 'fundamental differences' and 'fundamental outstanding issues' were highlighted by Japan and Norway at the end of the EDG process. Similar conclusions were reiterated by New Zealand and the UK. Report of the Revised Management Scheme Working Group. IWC/54/7. Agenda Item 9.2.1. Section 5. 'Proposed Terms of Reference for An Intersessional Workshop on the RMS.' IWC/54/61. Agenda Item 9.2.2. See also 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1.
56. 'Proposed Terms of Reference for An Intersessional Workshop on the RMS.' IWC/54/61. Agenda Item 9.2.2. See also 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1.

57. Norway, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
58. See 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 2–3.
59. 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1. Section 3.
60. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 1.
61. Chair's Proposal: 'A Way Forward for the RMS.' IWC/56/26.
62. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 1.
63. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Section 2.1.
64. 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1. Section 5.2.1.
65. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 6–7.
66. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Paragraph 2.2.
67. 'Details of the Supervision and Control Scheme of the RMS' dated 17 March 200X. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Paragraph 2.2.
68. 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1. Section 5.2.2.
69. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Section 2.3.
70. See Charles, D. (1991). 'Satellite Nets Illegal Fishing Ships.' *New Scientist*. August 24: 13. MacKenzie, D. (1992). 'Spy in the Sky to Track Illegal Fishing.' *New Scientist*. October 17: 10. Hadfield, P. (2000). 'How to Defeat the Scourge of the Sea.' *New Scientist*. August 12. See also (1993) 4 YBIEL for the discussions within the IMO of such technology. See USA. 'Monitoring High Seas Fishing Vessel Operations By Satellite'. A/CONF.164/L.17. Reprinted in Levy, J. (ed.). (1996). *United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Selected Documents* (Nijhoff, Boston): 209–13.
71. Such as pertaining to certain technical quality and specifications, to provide automatic regular transmissions of specific information in real time and is tamper proof.
72. FAO Code of Conduct for Responsible Fisheries. This may be found in (1995) 6 YBIEL. Document 10. Paragraph 7.7.3. United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. 34 ILM. 1542. Articles 18(2)(a)–(i), 20. See The Rome Declaration on the Implementation of the Code of Conduct for Responsible Fisheries. FAO Ministerial Meeting, Rome, 10–11 March, 1999. (FAO, Rome). Conclusion, point 12.J. Paragraph 37 and Appendix D. Article XI.4. This is also utilized within a number of international and regional fisheries bodies such as CCAMLR, North Atlantic Fisheries Organization (NAFO), the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, the 2000 Framework Agreement for the Conservation of Living Resources of the High Seas of the South Pacific (the 'Galapagos Agreement'), the 1973 Convention on Fishing and Conservation of Living Resources in the Baltic Sea and the Belts and the CCSBT.
73. The USA, the UK and New Zealand have all argued that any new scheme must have '100% observer coverage and real time reporting' since the mid-1990s. IWC. 45th Report. (1995). 19.
74. See paragraph 21 of 'The Possible Structure and Content of a Revised Schedule Based on Discussions to Date.' IWC/54/RMS2.
75. Discussion Document: 'Further Work Required on the RMS.' IWC/56/36. 3.
76. See paragraph 20 (b) of 'The Possible Structure and Content of a Revised Schedule Based on Discussions to Date.' IWC/54/RMS2.
77. Additional useful information may include the vessel's owner; previous flags, names and owners of the vessel; species targeted by the vessel; and gear type used by the vessel. However, within the context of small-type coastal whaling, this extra information may prove problematic.

78. See above, Section 2.
79. Japan, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
80. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 1.
81. Japan noted that it would need to investigate legal issues surrounding the transmission of VMS data in real-time to the international observer.
82. 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1. Section 4.
83. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. 2.3 National Inspection and International Observer schemes.
84. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 5.
85. See Denmark's Proposal for the Appointment of Observers, Annotated With Comments Received. EDG II. Document 3. The crucial point was suggested by Denmark that: 'A Contracting Government may only object once per season'. Norway and Japan both objected to this, while the UK supported it. For additional consideration on this document, see 'Comments Submitted by EDG Members on the Straw Man.' EDG II. Document I. Also, 'The Straw Man Annotated With Comments Received.' EDG II. Document II. The overall right to veto, without limitations appeared in the subgroup, which produced 'Refinement of the Straw Man Proposal: Summary of Deliberations.' (28/03/02).
86. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Section 2.3.3.
87. 'Possible Structure and Content of a Revised Schedule.' IWC/54/RMS2. Paragraph 27.
88. Denmark regarded the inclusion in the RMS of some aspects of animal welfare to be reasonable, but that the best place for such additions would be through the whale killing and associated welfare issues workshops. Denmark, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
89. Ibid. 3.
90. 'Proposals for the Incorporation of Reporting Requirements Needed to Assess Whale Killing Methods.' EDG II, Document 6. Such information being largely based on the whale killing methods adopted by the IWC in Resolution 1999–1.
91. IWC. 53rd Meeting in 2001. (2002). 11.
92. Report of the RMS Expert Drafting Group. IWC/54/RMS 1. Section 3.2. Optional paragraph b.
93. Ibid. Section 3.2.
94. IWC. 27th Report. (1977). 10.
95. Appendix 8: 'Recommendations Adopted by the IWC at Its 31st Annual Meeting on New Observer Schemes.' IWC. 30th Report. (1980). 37–8. Note, the recommendation was that the countries involved in the scheme 'consider' this objective.
96. See 'Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals.' NAMMCO/CS/1998 rev. Appendix 1. AD B.2.6. 'Duties and Tasks of the Observer.' In 1999, NAMMCO held a workshop on hunting methods, which focused on 'hunting ethics'. This is noted in IWC/53/WKM & AWI 3. Agenda Item 3.2.
97. See CCAMLR 'Scheme of International Scientific Observation.' Annex 1. http://www.ccamlr.org/English/e_basic_docs/e_pt10.htm.
98. 'Collection of Animal Welfare Data.' IWC/55/Rep 5. Extract.
99. Discussion Document, supra n85.
100. Japan, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
101. New Zealand, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
102. The specific language (in square brackets) was

    '[A. Contracting Governments shall maintain a tissue sample from each whale killed or otherwise obtained within its jurisdiction and that are destined for the market. The Contracting Government shall arrange for genetic analysis of each such sample according

to the specifications drawn up by the Scientific Committee so that individual and species identity can be determined with a high degree of probability, and a copy of the resulting DNA profile shall be forwarded to the Commission within six months of the date of sampling for inclusion in a central diagnostic register of DNA profiles. The register shall be available to the Scientific Committee and accredited scientists according to the Committee's Rules of Procedure.] [Contracting Governments which may not assume the costs of genetic analysis may/shall use the central archive of DNA analysis placed by the RMS to comply.]

[B. The Commission shall arrange for the establishment of a central archive of tissue samples maintained according to specifications drawn up by the Scientific Committee. A sub-sample from each tissue sample maintained according to sub-paragraph (a) shall be submitted to the central archive within six months of the date of sampling, or the date of notification of establishment of the archive, whichever is the later. The means of transportation of samples shall be such that they ensure proper preservation. The Commission shall arrange for further genetic analysis of the archived samples based on advice from the Scientific Committee, including where appropriate the generation of additional DNA profiles for inclusion in the Commission's register.]

[C. After January 1st, 2004, any commercially available perishable whale products that have not been derived from whales whose DNA profile has been registered with the Commission by this date or within six months of capture, whichever is the later, shall be deemed to have been derived from whales not obtained in accordance with this Schedule.]'

103. For example, the IPOA against Illegal, Unregulated and Unreported Fishing stipulates: 'States should encourage scientific research on methods of identifying fish species from samples of processed products. FAO should facilitate the establishment of a network of databases of genetic and other markers used to identify fish species from processed product, including the ability to identify the stock of origin where possible'. Paragraph 64. See also, Coghlan, A. (2003). 'Forensic Test Fingers Rhino Poachers.' *New Scientist*. September 6: 9. Hecht, J. (2002). 'Test to Monitor Fin Trade.' *New Scientist*. August 3: 7. Choi, C. (2002). 'Quick Test Targets Illegal Traders.' *New Scientist*. November 30: 20. Anon (2003). 'DNA Tool for Ivory Trackers.' *New Scientist*. November 29: 14. Graham-Rowe, D. (2003). 'Britain Wants Genetically Modified Food to Have DNA Bar Codes.' *New Scientist*. February 15: 5.
104. New Zealand first suggested that molecular genetic methods for the identification of whale products should be utilized, as it could be very useful in detecting infractions, and as such, form a useful part of the IOS of commercial whaling operations. IWC. 45th Report. (1995). 19. This was quickly objected to by Japan on both practical and political grounds. Japan also alleged – that compliance involving DNA was wrongfully intruding into sovereign retail markets, and that is a function that only CITES and not the IWC has authority to do. Since this point, the debate has continued along broadly the same path, although a number of other countries have come to support the NZ position. IWC. 48th Report. (1998). 33; IWC. 50th Meeting in 1998. (1999). 24, 34.
105. In 2001 the SC noted the usefulness that DNA profiles may contribute in coming to terms with the problem of bycatch. Report of the Scientific Committee. IWC/53/4. 17–18. See also Report of the Scientific Committee. IWC/56/Rep 1. 50–51.
106. IWC. 50th Meeting in 1998. (1999). 24. Nevertheless, scientific methodological issues remain to be resolved. See Scientific Committee Report (2002) IWC/54/4. 75–6.
107. Appendix 9: IWC Resolution 1999–8. 'Resolution on DNA Testing.' IWC. 51st Meeting in 1999. (2000). 55. In addition, they requested the SC to establish DNA as an agenda item, of which progress in the areas of species, stock and individual identification, collection and archiving of samples, and database consideration, could all be reported upon. For discussion of this, and the fact that Japan noted that they 'already have a database for whale meat and tuna, available on request, in advance of the FAO eco-labeling'. See IWC. 51st Meeting in 1999. (2000). 40. Debate about who should control the database continues. See Motluk, A. (1998). 'From Harpoon to the Plate.' *New Scientist*. May 30: 13.
108. Japan, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).

109. See Scientific Committee Report (2002) IWC/54/4. 75–6.
110. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 6.
111. Denmark, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
112. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 6.
113. United Kingdom, Opening Statement. Appendix 2: 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001).
114. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 6.
115. 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001). 2.
116. Some Thoughts on DNA Registers and the RMS. EDG II. Document 5. (IWC/F02/EDG 5).
117. Ibid.
118. Ibid.
119. 'Report of the RMS Working Group on Catch Verification.' IWC/55/Comms.3. 4.4.5.
120. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Section 2.5.1 DNA registers and genetic monitoring.
121. Discussion Document, supra n85.
122. Under a CDS, all imports are considered legal if the flag state can certify that the product had been taken in accordance with the relevant management and conservation requirements. Conversely, if something has been procured outside existing regulations, then it should not be certified as legal and as a result cannot enter the markets of those countries requiring certification of legal harvest. Chaves, L. (2000). 'Illegal, Unreported and Unregulated Fishing: WTO Consistent Trade Related Measures to Address IUU Fishing.' In FAO. *The State of the World's Fisheries and Aquaculture* (FAO, Rome): 4. 25, 26.
123. The primary language for the CDS (specifications have not been set out, as the debate to date was only on the principle of its acceptability) is (in square brackets):

    '[A. The Commission shall operate a standardised system for the collection of catch data. This shall certify that all products derived from whales taken or collected under the authority of a Contracting Government are derived solely from whales taken in accordance with the provisions of the Schedule or from authorised utilisation of bycatch or stranding. This scheme shall include a unique identifier for each product derived from each animal and shall provide information on:
    date and location of catch, bycatch or stranding; species; national issuing authority of authorisations for catch or utilisation;
    licence number for that authorisation; and, in the case of catches: place and date of landing/transshipment & vessel identification.

    B. The Commission shall establish procedures to monitor the origins of perishable whale products sold and/or offered for sale in wholesale and retail markets under the jurisdiction of Contracting Governments. These procedures shall confirm whether the whale products are derived only from individual animals caught in accordance with the provisions of the Schedule, from individual animals that die as a result of bycatch, from strandings or from stockpiles of frozen meat. The overall purpose of these procedures shall be to help to confirm that whaling only takes place in accordance with the provisions of the Schedule, and that total human-caused mortalities are accounted for in the calculation of catch limits under the Revised Management Procedure, as specified in Chapter III, Paragraph 5.

    C. Pursuant to the requirements of this Paragraph, the Commission shall arrange for genetic surveys of perishable whale products sold and/or offered for sale in wholesale and retail markets under the jurisdiction of Contracting Governments to be conducted. These analyses shall involve comparisons of the DNA profiles of the market samples with those in the diagnostic DNA register as described in Chapter V, Paragraph 22 in order to determine which of the sampled products arise from individual animals caught in accordance with the provisions of the Schedule. For those samples that can not be identified as having been derived from animals caught in accordance with the Schedule, the probable species and stock origins shall be determined so far as is possible.]'

Note, this last paragraph helped provide some of the linkage between the CDS and the DNA ideals.

124. The success of this approach is partly reflected in its long history in international law. The idea of certifying goods so as to ensure compliance with environmental objectives (which go beyond national boundaries) can be traced to an 1878 European Convention on Measures to be Taken Against Phylloxera Vastatrix. The 1878 Convention Between Germany, Austria–Hungary, Spain, France, Italy, Portugal and Switzerland on Measures to be Taken Against Phylloxera Vastatrix. IPE, supra n16. Volume IV. 1565. This mechanism was clearly successful, as it was soon incorporated into a number of other treaties over the following hundred years. The 1911 Convention Between the United States, United Kingdom and Russia for the Preservation and Protection of Fur Seals. IPE, supra n16: Volume VIII. 3682. Article III. 1916 Convention Between the United States and Great Britain for the Protection of Migratory Birds. IPE Volume IV, 1638. Article 2. The 1929 International Convention for the Protection of Plants. IPE. Volume IV. 1669. Articles 4–6. 1933 Convention Relative to the Preservation of Fauna and Flora in Their Natural State. IPE Volume IV. 1693. Article 3. The 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. 161 UNTS. 485. Article IX.1. 1968 African Convention on the Conservation of Nature and Natural Resources. Reprinted in Kiss, A. (1983). *Selected Multilateral Treaties in the Field of the Environment* (UNEP, Nairobi): 206–9. Article IX. See also the Convention on International Trade in Endangered Species of flora and fauna. Articles III, V & VI.
125. Such as the 'Expert Consultation on the Code of Conduct for Responsible Fishing'. (1994, FAO, FIIT/R506). Paragraph 9; the FAO Code of Conduct, Article 11.1.11. and the IPOA. See Paragraphs 56, 61, 62 & 66.
126. See Standing Committee on Tuna and Billfish (2002). 'Report of the Expert Consultation of the Regional Fisheries Management Bodies on the Harmonisation of Catch Certification.' SCTB 15 Working Paper. Available from: http://www.soest.hawaii.edu/PFRP/sctb15/papers/SWG-6.pdf.
127. See, for some examples, the fishery agreements for Anadromous Stocks in the North Pacific, those for the Barents Sea, the ICCAT, CCAMLR, the CCSBT and the IATTC.
128. 'Report of the RMS Working Group on Catch Verification.' IWC/55/Comms.3. 4.4.7. See, for example, Rahman, B. (2002). 'Japan's Scales Begin To Tilt Towards Consumers.' *Financial Times*. August 2: 7.
129. 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001). 2. Japan, Opening Statement. Appendix 2. Ibid.
130. '[W]e will carry out necessary measures to control such trade in compliance with the regulations under CITES which has legitimate competence to deal with international trade'. Japan, Opening Statement. Appendix 2. Ibid.
131. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. 2.5.2 Catch documentation.
132. Ibid.
133. 'Report of the RMS Working Group on Catch Verification.' IWC/55/Comms.3. 3.2.
134. Discussion Document, supra n85.
135. 'Code of Conduct for Responsible Fisheries.' (1995) 6 YBIEL. Document 10. Paragraph 7.7.4.
136. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 5–6.
137. Ibid. Agenda Item 9. 5.
138. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. Section 2.6.
139. 'Report of the RMS Working Group on Costs.' IWC/55/Comms. 4.
140. Discussion Document, supra n85.
141. A useful example of this failure can be seen with the persistent non-compliance with IWC dictates taken by St Vincent and the Grenadines. This began in 1982 when St Vincent reported that three (instead of two) whales were taken at Bequia. IWC. 33rd Report. (1983). 29. In 1983, the IWC requested more detailed co-operation from St Vincent due to a number of 'outstanding infractions'. IWC. 34th Report. (1984). 15. Since 1983, there have been more than a dozen infractions. In response to these, there have been six excuses:

'any infractions that did occur took place outside territorial waters' (IWC. 36th Report. (1986). 13); 'by establishing the existence of an aboriginal subsistence hunt, and by obtaining a very modest quota, the Government will be able to cure these infractions in the future' (IWC. 37th Report. (1987). 19); 'no attempt is being made to improve the methods used in the hunt because the Government does not wish to encourage its continuation' (IWC. 40th Report. (1990). 30–31); 'the phasing out of whaling would take place naturally as the single harpooner was 67 years of age'. (IWC. 39th Report. (1989). 22); 'the infractions occurred because it was a very small fishery in a remote location' (IWC. 44th Report. (1994). 15); and 'the relationship between the cow and calf . . . are not clearly defined in the schedule' (IWC. 49th Report. (1999). 14). The seventh infraction included yet another humpback cow and calf (IWC. 52nd Meeting in 2000. (2001). 14).

142. 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001). 2.
143. United States, Opening Statement. Appendix 2. Ibid.
144. 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001). 2.
145. 'Report of the Revised Management Scheme Working Group.' IWC/53/9. Agenda Item 9. 6.
146. See IWC/53/RMS 2 rev. 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001). 2.
147. 'Report of the RMS Expert Drafting Group'. IWC/54/RMS1.2.4.1.
148. 'Report of the Intersessional Meeting of the RMS Working Group.' IWC/53/RMS 5. (Monaco 6–8 February 2001). 2.
149. Decision 24/CP.7. 'Procedures And Mechanisms Relating To Compliance Under The Kyoto Protocol.' Annex. 1. COP 7. (Marrakesh). FCCC/CP/2001/13/Add.3. November 2001. Action Taken. Volume III. 64.
150. Annex IV. Non-Compliance Procedure. 'Report of the Fourth Meeting of the Parties to the Montreal Protocol.' Copenhagen, 23–25 November 1992. UNEP/OzL.Pro.4/15. 25 November 1992. 47. Point 5.
151. Annex III. Decision 1997/2 Concerning the IWC. Its Structure, Functions and Procedure for Review of Compliance. Available from <http://www.unece.org/env/lrtap/conv/report/eb53_a3.htm>.
152. 'Report of the RMS Expert Drafting Group.' IWC/54/RMS 1. 2.4.2.
153. 'Report of the Revised Management Scheme Working Group.' IWC/54/7. Agenda Item 9.2.1. Section 5.2.3.
154. 'Resolution on Completion of the RMS.' IWC/56/42.

13. Reservations to the ICRW

1 INTRODUCTION

In late 2002, Iceland was readmitted as a member of the International Whaling Commission as a signatory to the International Convention for the Regulation of Whaling.[1] This readmission followed an acrimonious process in two earlier meetings when Iceland's attempt to rejoin the IWC was rejected. Its initial attempts were refused by a majority vote by the IWC because of the 'conditional' reservation to the schedule which is attached to the ICRW. The second time Iceland was refused membership (the majority of the IWC agreed that the issue had effectively been dealt with at the meeting in the previous year) its representatives left the meeting, refusing to even participate as an observer nation[2] and indicated their intention to resume their international trade in whalemeat (following a 14-year hiatus) regardless.[3]

Iceland did not carry out this threat, as it was victorious in joining the IWC with its third attempt. This success for Iceland occurred because the chair chose not to follow his earlier decision (that is, that the matter had been dealt with earlier because the reservation was the same). Accordingly, with the third attempt, the chair implicitly suggested that the reservation this time was different, and as such, the issue had to be dealt with afresh. Although this was challenged, a series of votes were undertaken, trying to force the chair to lead one way or another (on whether it was a different reservation or not). After an exhausting and confusing process (including Iceland being able to vote on its own admission), Sweden decided that this was a new reservation and effectively swung the balance of power against those who wanted to keep Iceland out of the IWC with its reservation. This subtle change allowed a sequence to follow, in which following a 19/18 vote that it was a new reservation, a number of other reticent countries (such as Ireland) decided to no longer contest the Icelandic membership bid, and welcomed Iceland. Nevertheless, they, and many others made it clear that their objections to Iceland's reservation stood, irrespective of its being seated as a member government of the ICRW. Despite Iceland's eventual success in gaining membership to the IWC with a reservation, this controversy raised many questions of international law, which this chapter seeks to answer.

2 ICELAND AT THE IWC

Iceland, although not an original signatory to the ICRW in 1946, deposited a receipt of notification of adherence the following year. For most of its time within the IWC, it was broadly in the 'pro-whaling' camp. This stance became pronounced when the moratorium on commercial whaling was finally agreed (see below) and Iceland vowed to keep whaling. However, Iceland elected not to continue whaling which, in accordance with the ICRW, it could have done by entering an objection to the moratorium as embodied in paragraph 10(e) of the schedule. Instead, to avoid confrontation with strong opposing countries including the United States, it began conducting whaling under the scientific auspice found in Article VIII of the ICRW. The utilization of this loophole became controversial as the scientific merits of the research were solidly criticized, as was the practice of exporting the resulting whalemeat to Japan.[4] In the face of mounting external criticism of this practice, Iceland threatened 'severe repercussions in the attitude of Iceland towards the Commission'[5] before stopping the practice of scientific whaling in 1989.[6] The following year, after applying for quotas which were refused by the IWC, Iceland threatened to leave the IWC and to set up a rival body of its own to regulate whaling in the North Atlantic. It was suggested that this would be an 'alternative framework for discussing the . . . rational management' of marine resources in the North Atlantic.[7] This organization was to eventually become the North Atlantic Marine Mammal Commission[8] which unlike the IWC is a controlled membership organization[9] and actively desires to lethally take whales and other marine mammals on a sustainable basis. However, before Iceland came to actively promote NAMMCO, it had to leave the IWC. It promised to do this in 1991 as the then proposed scientific basis for whaling did 'not allow whaling soon enough or on a large enough scale to satisfy Iceland'. Iceland believed that it was safe, in conservation terms, to set its own quotas in its own waters 'regardless of any limit that might be set down by the (IWC's) new management procedure'.[10] The following year Iceland left the IWC and threatened to renew its commercial whaling outside of the ambit of the IWC[11] after complaining that the change of emphasis (that is, the moratorium on commercial whaling) within the IWC gave it 'the right to leave'.[12] In doing so, Iceland suggested that the IWC: 'is no longer a viable forum for international co-operation on the conservation and management of the whale population in our region'.[13]

3 ICELAND'S RESERVATION

Despite these earlier actions, in the late 1990s, Iceland began hinting that it may rejoin the IWC before actually attempting to do so in 2001 and 2002.

However, the application to rejoin the IWC was not straightforward, since Iceland attempted to incorporate a 'reservation'[14] which it deemed conditional on its readherence. Specifically, its notification to the United States (the depository under the ICRW) with its instrument of adherence contained the following reservation: 'we hereby declare that Iceland through this instrument adheres to the . . . Convention and [1956] Protocol with a reservation with respect to paragraph 10(e) of the Schedule attached to the Convention. The reservation forms an integral part of this instrument of adherence'.[15]

As soon as this attempt was known, considerable diplomatic and academic discussion was generated before the 53rd IWC meeting in London in anticipation of the attempted reservation. When the meeting finally convened, on the first morning of the first day of the plenary, Australia and the United States moved a formal motion that: 'The Commission does not accept Iceland's reservation regarding paragraph 10(e) [i.e. that Iceland is not bound by paragraph 10(e) of the Schedule], as reflected in its instrument of adherence'.[16]

This motion led to two separate questions. First, did the Commission have the competence to decide this matter? On this question, 'the Commission voted by 19 votes to 18 (1 country was absent for the vote) that it had the competence to determine the legal status of Iceland's reservation'.[17] After that vote, the Commission voted on the original motion that: 'The Commission does not accept Iceland's reservation regarding paragraph 10(e) of the Schedule, as reflected in its instrument of adherence'.[18] This motion was then carried with 19 votes in favour; 16 member nations refused to vote, believing it was illegal and three abstained. After consultation with commissioners, the chairman then ruled that Iceland should 'assist in the meeting as an observer'.[19] This ruling was challenged, but upheld by 18 votes to 16, with three abstentions. The following year in Japan, the chair elected not to entertain this issue once more as it had already been decided the previous year in London. This ruling was upheld. At both points a statement was then recorded by the dissenting nations which suggested that: 'In denying Iceland membership, the IWC clearly was in contravention of customary international law' and that this was 'an illegal act'.[20] Iceland later added:

> The practice with respect to other reservations regarding the Whaling Convention supports the above conclusion. The reservations made by Argentina in 1960, by Chile and Peru in 1979, and by Ecuador in 1991, were not addressed by the IWC but were subject to acceptance by individual Parties. Thus, for example, the United Kingdom formally objected to Argentina and Peru's reservations and the Federal Republic of Germany formally objected to Peru's and Ecuador's reservations. There was no legal basis to treat Iceland's reservation any differently.[21]

> The general principle of international law is that a reservation with respect to an international agreement is subject to the explicit or implicit acceptance by individual parties to such agreement. This general principle applies in the case of Iceland's

> reservation as the exceptions from that principle are not applicable. At the Annual Meeting some States maintained that the IWC had the competence to make a decision with respect to the reservation on the basis of the exemption rule that a reservation with respect to a constituent instrument of an international organization is subject to acceptance by the relevant body of that organization. Iceland's reservation, however, does not relate to the original Whaling Convention, but to paragraph 10(e) of the Schedule attached to the Convention. The rationale behind the exemption rule is that it is important to preserve the integrity of a constituent instrument which includes provisions of an organizational nature. Reservations with respect to such [an] instrument are only valid if accepted by the relevant body of the international organization.[22]

Needless to say, with such a close vote and such weighty accusations, 'the row over Rekyavik's application almost split the organization in two'.[23] Accordingly, the question on which so much hangs must be answered: was it legal to refuse Iceland's admission to the IWC with a conditional reservation?

4 THE IWC TRADITION OF RESERVATIONS

Iceland suggested that an inconsistent practice had arisen within the IWC with regard to dealing with reservations when previous and present practices were examined. To prove this, it offered the examples of 'Argentina in 1960, [of] Chile and Peru in 1979, and [of] Ecuador in 1991'.[24] This choice of precedents was very selective. In fact, counting the possibility of China, there have been five (not three) attempted reservations to the ICRW in the past. It is the first of these – the case of Denmark in 1948, which Iceland omitted – which is the most interesting. This attempt was with regard to Danish registered ships working within Danish waters, which Denmark wished to be not subject to the provisions of the schedule governing such vessels. In doing so, it requested the United States, acting as depository, to 'inform [Denmark] at the earliest practicable date whether the reservation proposed by the Government of Denmark with respect to the Convention is acceptable to each of the governments concerned'.[25]

On circulation, Norway replied: 'it is the view of the Norwegian Government that the proposal put forward by the government of Denmark raises a question of such a nature that it should be submitted for the consideration of the International Whaling Commission'.[26]

The British agreed that the matter should go to the IWC (when established) as it 'raises a question of principle'.[27] The former Soviet Union concurred that such a 'question of principle' should be discussed by the IWC.[28] The United States also agreed that: 'as this reservation would constitute an amendment to the Schedule annexed to the Convention [it] is therefore a matter which should be submitted to the International Whaling Commission for consideration when it is established'.[29]

After collating all of these views, the United States, as depository, finally replied to Denmark:

> It will be noted that certain of the signatory and adhering governments to the International Convention for the Regulation of Whaling have stated that they cannot agree to the ratification of the Convention with the reservation proposed by Denmark as this reservation would constitute an amendment to the Schedule annexed to the Convention and is therefore a matter which should be subjected to the International Whaling Commission when it is established. In view of the fact that, in accordance with the general principles of international law and procedure, the assent of all signatories and adhering governments to the Convention would be required before a reservation of the nature of that proposed by Denmark could become effective, this Government, as depository of the Convention, considers that it could not accept for deposit an instrument of ratification with the reservation proposed by Denmark.[30]

As a result of these objections, and consistent with the unanimity rule of the time, Denmark did not make its proposed reservations when it deposited its instrument of ratification. Nevertheless, the incident did raise three important questions. First, to quote Norway, it was concluded that this 'raise[d] a question of such a nature that it should be submitted for the consideration of the International Whaling Commission'.[31] The United States, the UK and former USSR also all agreed that the IWC was the correct forum to determine this question. Second, the issue had to be determined in accordance with the unanimity rule (to be discussed shortly). Third, 'the reservation would constitute an amendment to the Schedule'.

In the following years, Peru (in 1979)[32] Chile (also in 1979) and Ecuador (in 1991)[33] also attached reservations to their instruments of adherence, but these did not lead to any action by the IWC. These reservations related to matters being dealt with in other forums, and were only of indirect relevance to the IWC. That is, their reservations related to claims of exclusive economic sovereignty of up to 200 miles off their coasts. These reservations were objected to by the United States,[34] the UK,[35] Russia[36] and Germany[37] on the grounds that they were inconsistent with international law (that is, UNCLOS) but the matter was not referred to the IWC for discussion. A similar approach followed Argentina's reservation in 1960, pertaining to the sovereignty of the Falklands[38] (which prompted a strong reply from Britain), and a declaration[39] by China in 1980, that any attempt by Taiwan to join the IWC was 'illegal, null and void'.[40]

It is important to note that none of these later reservations was dealt with by the IWC. The reason why they were only dealt with on a bilateral basis was twofold. First, the matter was not put to the IWC for formal discussion (unlike the incidents with Denmark and Iceland). The probable reason why this did not occur was because the matters raised by these other reservations did not

directly relate to the business of the IWC and were better suited for discussion in other forums. Conversely, the attempted reservations by both Denmark and Iceland did go to the core of the IWC's business. It should be noted that this percentage of non-relevant reservations is also in accordance with general practice. Indeed, findings suggest that the vast majority (70 per cent) of reservations are 'insignificant' and only a small percentage (6 per cent) could be deemed 'significant'.[41]

5 RESERVATIONS IN INTERNATIONAL LAW

Reservations to multilateral[42] treaties began with the Enlightenment early in the nineteenth century. Nevertheless, despite over two centuries of utilization, an advisory opinion from the International Court of Justice (ICJ), three examinations of the issue by the International Law Commission (ILC), the conclusion of an international treaty, and extensive literature on the topic, the issue remains 'inevitably complex'.[43] This is especially so with 'ongoing and perhaps insoluble doctrinal quarrels'[44] between theorists, over multiple questions,[45] which deal with political,[46] technical and good faith concerns.[47] Of late, this topic has become a particular problem in the area of human rights.[48]

The Traditional Rule

The traditional rule governing reservations to multilateral conventions was that in order to be admitted, any reservation must be consented to by all the contracting parties to the treaty in question.[49] It was believed that this approach helped maintain the integrity of treaties, tied all parties to the same uniform obligations, and was in broad congruence with the view that a treaty is a contract.[50] These views were so widely held that the League of Nations stipulated: 'a reservation can only be made at the moment of ratification if all the other signatory States agree or if such a reservation has been provided for in the text of the Convention'. This interpretation followed on from the rule in the 1928 Convention on Treaties which stipulated: 'In case the ratifying State makes reservations to the treaty it shall become effective when the other contracting party informed of the reservations expressly accepts them, or having failed to reject them formally, should perform action implying its acceptance'.[51]

Although the unanimity rule was clearly articulated by the League, it was not followed by all countries or regions who opted for a more 'flexible' approach. Specifically, the Latin American approach (later adopted by the former Soviet Union) as defined by the Pan American Union in 1932, suggested that the unanimous agreement of all the parties to a treaty was not

necessary to enable a state entering a reservation to successfully join. Accordingly,

1. As between States which ratify a treaty with reservations and States which accept those reservations, the treaty applies in the form in which it may be modified by the reservations, and,
2. As between States which ratify a treaty with reservations and States which, having already ratified, do not accept those reservations, the treaty will not be in force.[52]

The second rule marked a significant departure from the unanimity rule in the sense that it permitted a reserving state to become a party to the treaty in relation to those contracting states which were prepared, expressly or tacitly, to accept the reservation. In other words, a reserving state might become a party to an inter-American convention in spite of the objections of one or more states to its reservations. However, the convention would not be in force as between the reserving and the objecting states. As such, the dependence of the reserving states' acceptance by other parties was substantially weakened. Nevertheless, maximum participation was achieved within a treaty. However, in the quest to protect state sovereignty over the ideals of integrated and uniform international integration, the Pan American system aimed to ensure that all the states would be equally bound by any legal norms and thus stripped the multilateral treaty of its element of community.

The International Court of Justice and the International Law Commission

It was not until 28 years later that a serious international attempt was made to resolve which view should predominate. The catalyst for the attempt arose in 1950 when some states sought to attach reservations to the Convention on the Prevention and Punishment of the Crime of Genocide.[53] A number of countries opposed this attempt, and because the Genocide Convention contains no provisions governing reservations, the matter went (on the request of the UN General Assembly: UNGA)[54] to the ICJ for an advisory opinion.

The ICJ addressed the principle of unanimity, finding it rested 'essentially on a contractual conception of the absolute integrity of the Convention adopted'.[55] It did not regard this conception as having been 'transformed into a rule of international law'.[56] Nevertheless, it did recognize that it was of 'undisputed value as a principle'[57] and attempted to find a middle ground by laying down a threshold which effectively meant that a state could not make any reservation it wished. To allow any reservations at all would be 'so extreme an application of the idea of state sovereignty [that] it could lead to a complete disregard of the object and purpose of the Convention'.[58] With such

considerations in mind, in seeking a more flexible approach to reservations,[59] the ICJ ruled (by seven votes to five):

> That a State which has made and maintained a reservation which has been objected to by one or more of the parties to the Convention but not by others, can be regarded as being a party to the Convention if the reservation is compatible with the object and purpose of the Convention; otherwise, that State cannot be regarded as being a party to the Convention.[60]

Accordingly, despite the strong dissenting opinions of three judges in defence of the unanimity rule,[61] the ICJ broke the rule of absolute integrity of treaties when the reservation concerned inessential provisions. As such, it largely followed the two Latin American approaches. Nevertheless, the test still places a clear 'threshold' for the permissibility of reservations. [62]

Despite the ICJ's ideal of a threshold (compatibility) test for reservations, the ICJ's movement towards more flexibility created more uncertainty than unity on the issue.[63] This uncertainty was furthered greatly by the fact that, shortly after the ICJ opinion was offered, the UNGA asked the ILC to also examine the problem of reservations. The ILC, then led by James Brierly, took the view that the 'object and purpose' test as formulated by the ICJ, was too subjective and was accordingly not suitable (due to the way that this test could end up turning a multilateral treaty into an unwieldy collection of bilateral interpretations)[64] for application to multilateral treaties in general.[65] Not surprisingly, given the fact that the ICJ and the ILC had come to different conclusions, no settled practice emerged and countries (such as the United States) continued to follow the traditional unanimity approach while others adopted the flexible approach advocated by the ICJ. Some countries followed variations of both.[66]

This situation began to change in the 1960s when with a new special rapporteur, Sir Humphrey Waldock, at the helm, the ILC swung against its earlier recommendations, and came to support the ICJ approach. The ILC did this because it believed that the international world was rapidly expanding to the point where 'the number of potential participants in multilateral treaties' seemed to 'make the unanimity principle less appropriate and less practicable'.[67] As such, the traditional unanimity principle was deemed no longer applicable. Moreover, 'the essential interests of each individual state were to a very great extent safeguarded by the two fundamental rules that . . . [the objecting state could] regard the treaty as not being in force between it and the receiving State'.[68] Accordingly, the ILC went back to the 'compatibility test'. However, it noted:

> The difficult lies in the process by which that [compatibility] principle is to be applied, and especially where there is no other organ vested with standing competence to interpret the treaty. Where the treaty is the constituent instrument of an

> international organization, the Commission was agreed that the question is one for determination by its competent organ. It was also agreed that where a treaty is concluded between a small group of States, unanimous agreement to the acceptance of a reservation must be presumed to be necessary in the absence of any contrary indication. Accordingly, the problem essentially concerns multilateral treaties which are not constituent instruments of international organizations and which contain no provisions in regard to reservations.[69]

The 1969 Vienna Convention on the Law of Treaties

Following the reconciliation of the ILC with the ICJ and the general agreement that a more flexible approach (which retained key parts of the traditional ideals, the Latin American ideals and the ICJ compromise with regard to reservations) the VCLT was finally agreed. Article 19 (Formulation of Reservations) stipulated:

> A State may, when signing, ratifying, accepting, approving or acceding to a treaty, formulate a reservation unless:
> (a). the reservation is prohibited by the treaty.
> (b). The treaty provides that only specified reservations . . . may be made.
> (c). In cases not falling under sub-paragraphs (a) or (b) the reservation is incompatible with the object and purpose of the treaty.

Article 20 (Acceptance of and Objection to Reservations) added:

> 1. A reservation expressly authorized by a treaty does not require any subsequent acceptance by the other contracting States unless the treaty so provides.
> 2. When it appears from the limited number of negotiating States and the object and purpose of a treaty that the application of the treaty in its entirety between all parties is an essential condition of the consent of each one to be bound by the treaty, a reservation requires acceptance by all the parties.
> 3. When a treaty is a constituent instrument of an international organization and unless it otherwise provides, a reservation requires the acceptance of the competent organ of that organization.
> 4. In cases not falling under the preceding paragraphs . . .

The VCLT as Customary International Law

When the ILC re-examined the question on reservations between 1993 and 1999, there was a 'consensus in the Commission that there should be no change' in the relevant provisions of the VCLT. This consensus reflected the view that the VCLT regime on reservations 'achieves a satisfactory balance between the objectives of preservation of the integrity of the text of the treaty and universality of participation in the treaty'.[70] Moreover, it was suggested that the VCLT, especially the sections on reservations, now represents customary international law.[71] The importance of this, especially in the debate about

the IWC, should not be overlooked. This is because Article 4 of the VCLT explained that: 'the Convention applies only to treaties which are conducted by States after the entry into force of the present Convention with regard to such States'.

Given the fact that the ICRW was concluded 23 years before the VCLT, a certain difficulty appears to arise. However, this is subverted by the first sentence of Article 4 which states: 'Without prejudice to the application of any rules set forth in the present Convention to which treaties would be subject under international law independently of the Convention'. The 'without prejudice' sentence would appear to make clear that principles of customary international law codified in the VCLT continue to apply to treaties such as the ICRW. This is especially so when the actions of the IWC in the 2001 debate over Iceland (and the move from unanimous to majority opposition) are examined below. These demonstrate how the IWC adopted some of the VCLT principles and moved partly away from its old precedents.

6 APPLYING THE VCLT TO ICELAND'S RESERVATION AT THE IWC

Working upon the assumption that the VCLT represents the customary international law on reservations, it is now appropriate to work through the VCLT, with regard to Iceland's attempted reservation.

The Reservation is Prohibited by the Treaty

The first provision of the VCLT on dealing with reservations is that they are not allowed if 'the reservation is prohibited by the treaty'.[72] Although there is nothing in the ICRW which prohibits reservations, it is useful to note the way that international environmental law has largely evolved on this question. Indeed, as the uncertainties on reservations began to emerge in the late 1950s, the UNGA recommended that future conventions should directly address the possibilities of reservations, so as to avoid this labyrinth in the future.[73] Accordingly, in the formation of treaties, the deliberating parties have been asked to consider whether they wish to admit reservations or not. From these deliberations it has become apparent that a number of instruments expressly prohibit reservations.[74] This has become a very common (but not exclusive) approach with regimes concerned with international law. For example, no reservations may be taken on the international regimes which protect the ozone layer (the Vienna Convention[75] and the Montreal Protocol)[76] the regimes which protect the climate (the Framework Convention on Climate Change[77] and the Kyoto Protocol,[78] and multiple regimes which deal with

biodiversity, such as the Convention on Biological Diversity,[79] the Biosafety Protocol,[80] the Convention on Migratory Species,[81] and the Convention on Trade in Endangered Species.[82] Important conservation agreements such as the Madrid Protocol for Environmental Protection in the Antarctic,[83] the Basel Convention on the Trade in Toxic Waste[84] and the Convention on Desertification,[85] also all prohibit reservations. The same practice is followed by many contemporary regimes designed to improve the international governance of the oceans: the United Nations Convention on the Law of the Sea,[86] the Straddling Stocks Agreement,[87] the Convention Prohibiting Driftnets in the South Pacific[88] and recent regional fishery agreements such as those relating to the Western and Central Pacific[89] and the South Pacific.[90] Although this list is by no means exhaustive of international environmental law, it is possible to assert that the majority of important international environmental law documents are moving towards a situation of not allowing reservations. Even within treaties which do allow such reservations, it is possible to argue that within the more normative international environmental treaties, reservations are increasingly viewed with disquiet.[91] This refusal to tolerate reservations is probably implicitly due to the above concerns about fragmenting conventions, and especially those where international co-operation of the highest, not lowest common order is desired.[92] Indeed, by refusing to even tolerate the consideration of reservations, those thinking of joining a convention know exactly what the contents of the contract are that they are contemplating.

The Object and Purpose of a Treaty

The second possibility under the VCLT for prohibiting reservations is that the reservation is incompatible with the object and purpose of a treaty. Despite the compatibility hurdle being very clearly set out, the test is not significantly explained or reinforced elsewhere in the VCLT's articles on reservations. Nevertheless, some guidance may be taken from the ICJ's genocide opinion, which suggested that the compatibility of a reservation with the object and purpose of a treaty must be done on a case-by-case basis, based upon the treaty's 'character . . . purpose, [and] provisions'.[93]

The purpose and provisions of the ICRW

With regard to the ICRW, the purpose of the convention is well reflected in the provisions of its preamble.[94] This explains that the parties to the ICRW have subscribed to, *inter alia*:

> safeguard[ing] for future generations the great natural resources represented by the whale stocks;
> protect[ing] all species of whales from further over-fishing;
> [seeking] the optimum level of whale stocks;

> [providing] an interval for recovery to certain species of whales now depleted in numbers;
> [and] establish[ing] a system of international regulation for the whale fisheries to ensure proper and effective conservation and development of whale stocks.

Interestingly, Iceland also concurred that in determining the object and purpose of an agreement such as the ICRW, the preamble has a high value.[95] The Icelandic commissioner highlighted the preambular paragraphs 3 and 7, which state:

> Recognising that the whale stocks are susceptible of natural increases if whaling is properly regulated, and the increases in the size of whale stocks will permit increases in the number of whales which may be captured without endangering those natural resources;
> Having decided to conclude a convention for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry.

Obviously, these preambular paragraphs cited above the Icelandic quotations take a somewhat larger conservation focus than preambular paragraphs offered by Iceland. However, I believe that the first selection of preambular paragraphs offered are just as legitimate in interpreting the treaty as the ones selected by Iceland. However, by way of reducing difficulties I shall just utilize the preambular paragraphs that Iceland offered to show how its reservation is inconsistent with the paragraphs that it suggests are the most illustrative for interpreting the object and purpose of the treaty. The two points I wish to highlight from the Icelandic preambular paragraphs are first, that 'whaling [should be] properly regulated' and the 'whaling industry' should be subject to 'orderly development'. Second, that whales should not be captured which may '[endanger] those natural resources'.

In order to examine these objectives, it is necessary to fully examine the subject of the Icelandic reservation. Paragraph 10(e) of the schedule states:

> Notwithstanding the other provisions of paragraph 10, catch limits for the killing for commercial purposes of whales from all stocks for the 1986 coastal and the 1985/86 pelagic seasons and thereafter shall be zero. This provision will be kept under review, based upon the best scientific advice, and by 1990 at the latest the Commission will undertake a comprehensive assessment of the effects of this decision on whale stocks and consider modification of this provision and the establishment of other catch limits.[96]

Paragraph 10(e) is commonly regarded as the paragraph that established the so-called 'moratorium' on commercial whaling.[97] A large part of the justification of the moratorium was to realign the overall management regime of the IWC. Against a background of calls for a global moratorium, and recurring uncertainties in stock numbers and catch quotas, the earlier management

regimes were replaced in 1981[98] at the same time that a comprehensive stock assessment was undertaken.[99] Within ten years, the objectives of the new management regime were established.[100] These were/are:

- Stability of catch limits which would be desirable for the orderly development of the whaling industry.
- Acceptable risk that a stock not be depleted (at a certain level of probability) below some chosen level so that the risk of extinction is not seriously increased by exploitation.
- Making possible the highest possible continuing yield from the stock.

The remarkable similarity between the preambular paragraphs which Iceland has highlighted and the objectives for the RMP cannot be lightly overlooked. However, the overt irony (and hence a background reason why many countries objected to Iceland's attempted reservation) is that Iceland, by objecting to paragraph 10(e), was objecting to the very process which aims to facilitate these goals. The goals are intricately connected to the RMP which, although being agreed in the early 1990s,[101] has been forced to take a number of 'additional steps' to complete the procedure.[102] These included consideration of how much factors such as environmental change, 'human induced mortalities' (bycatch) and the falsification of earlier Soviet whaling data should be taken into account within the catch limit algorithms. Additional non-scientific aspects that make up the RMS, which have to be concluded before the scheme can become operative include a suitable compliance regime (as discussed in Chapter 12).[103]

In sum, since the imposition of the moratorium, the IWC has been struggling to work out the best estimates of whale stocks to prevent endangerment of species, a suitable procedure by which to facilitate so-called 'sustainable catch limits' and to develop essential mechanisms – such as the compliance regime – by which the traditional whaling industry may be updated. The moratorium has been/is the breathing space in which these key objectives have been pursued. Moreover, many of these objectives have not yet been completed. As such, a central justification for the moratorium remains. By objecting to the moratorium, Iceland would in essence be pursuing whaling upon species which have not been approved by the IWC, and nor have the compliance mechanisms by which the whaling is supposed to be controlled. Exactly how avoiding these developments and processes within the IWC would further the development of the traditional whaling industry is a mystery.

The character of the ICRW, and the importance of paragraph 10(e)

The second suggestion put forward by the ICJ for ascertaining the object and purpose of a treaty pertains to its 'character'.[104] The importance of paragraph

10(e) to the character of the ICRW and the workings of the IWC cannot be underestimated. Indeed, it is possible to assert that the moratorium is arguably the core of the IWC's current character. Thus, as the United States stated in 2002: 'The moratorium remains an integral part of the Schedule and . . . no country should be allowed to exempt itself from the Schedule at will – if this is allowed, the entire structure of the IWC would be undermined'.[105] This assertion can be made when the history of the moratorium, as discussed in Chapter 1, is discussed.

After the long journey to obtain the moratorium, and the subsequent journey to complete all of the necessary components of the RMS, it is possible to assert that paragraph 10(e) is now a core part of the ICRW's character. Moreover, attempting to set a reservation against paragraph 10(e) is also contrary to the object and purposes of the ICRW as displayed in its preamble, and acted out in the process since the moratorium to achieve the RMS.

'A Limited Number of Negotiating States'

Working through the VCLT, the third section which deserves attention is Article 20(2) which stipulates:

> When it appears from the limited number of negotiating States and the object and purpose of a treaty that the application of the treaty in its entirety between all parties is an essential condition of the consent of each one to be bound by the treaty, a reservation requires acceptance by all the parties.

This paragraph represents the concession within the VCLT to the traditional rule of reservations in international law. However, although the traditional principle still has a clear applicability in some cases, the first part of the sentence (a 'limited number of negotiating States') clearly restricts where it may have an application. A limited number of states has been interpreted as meaning a grouping whose relations are 'so closely interwoven that any alteration in the legal relations between two parties has inevitable repercussions' for other parties.[106] Although there have been no efforts to establish numerical criteria for defining a 'restricted' treaty, the emphasis is clearly upon a small number, working in 'very close co-operation'.[107]

Interestingly, with regard to the ICRW it would appear that this was the practice that was initially adopted. Indeed, when the convention was concluded, there were only 12 signatories and, in accordance with the practice of the time, the unanimity rule – as displayed in the Danish example above – was followed. However, in a clear situation of evolution, when the Icelandic example appeared in 2001, the membership of the IWC had grown to over 40 countries and the matter was dealt with by majority vote, as opposed to unanimity. It may be arguable to suggest that the IWC could have followed its

earlier precedent as nothing, in substance, had challenged this approach. However, this was not the case in 2001, and as such, it would appear that the IWC broke from its traditional path on this unanimity issue.

The Decision by the Competent Organ, as Created through Its Constituent Instrument

The third and final section to consider in deciding the legitimacy of a reservation, ultimately relates to how the decision on the admissibility of a proposed reservation is determined and applied. The applicable section of the VCLT is Article 20(3) which stipulates: 'When a treaty is a constituent instrument of an international organization and unless it otherwise provides, a reservation requires the acceptance of the competent organ of that organization'.

This short sentence raises five detailed issues. The first two relate to whether IOs or individual states should decide on reservations collectively or on an ad hoc basis, and if an IO suitable for examining the reservation exists, whether the ICRW is the constituent instrument of an IO. The final three issues are concerned with the acceptance by the competent organ of that organization, how that acceptance is to be recorded, and finally, whether there is any difference between a reservation to the constituent instrument itself or its associated protocols, annexes and so on.

Individual or collective responses to reservations

Where a reservation has been entered the question arises as to who is to determine its effect: the individual state parties or the institution within in collective identity? Prior to the 1969 VCLT this remained an open and sometimes controversial question, and practice was mixed.[108] Sometimes the organization decided the question,[109] and sometimes it was decided individually by the members on the principles of unanimity[110] after either the depository or the constituent organ[111] distributed the reservations to the members. The practice of the governing body of the organization deciding the issue was not eclipsed by Article 20(3) which clearly opted for a 'collegiate system' of reservations (if a suitable organ exists for this purpose). The important clue of why the collegiate, as opposed to the unilateral approach is given preference is from the sentence following 'acceptance of the competent organ'. The key words are: 'In cases not falling under the preceding paragraphs'. As such, if a reservation cannot be satisfactorily dealt with by the constituent organization, then the VCLT sets out a secondary sequence of possible alternatives for individual countries in Article 20(4) (a)–(d). This secondary sequence of possible alternatives clearly favours the reserving state. Conversely, if the reservation can be dealt with inside sections 20(1)–(3) then it becomes much harder for a state with a reservation to achieve success. However, before the secondary

sequence can be activated, it is first necessary to see whether the reservation can be dealt with within Article 20(3).

Is there a 'competent organ' available to examine the reservation?
The availability of a competent organ is the primary difficulty in this area. Indeed, as the ILC recognized nearly forty years ago:

> The difficulty lies in the process by which that [compatibility] principle is to be applied, and especially where there is no other organ vested with standing competence to interpret the treaty. Accordingly, the problem essentially concerns multilateral treaties which are not constituent instruments of international organizations and which contain no provisions in regard to reservations.[112]

Accordingly, the question arises, did the constituent instrument establish a 'competent organ' to deal with this question. Phillipe Sands gave a pointer in the way that this question may be answered. He suggested:

> As most constituent instruments do not address this question, it will therefore be the organ which is charged with deciding on the candidacy of a state wishing to join the organization which will adjudge the reservation. Ultimately this may go to a plenary organ or, if one has been provided for, a judicial or other body charged with authoritative interpretation.[113]

The alternative situation – where there is no single authoritative body which might decide whether a reservation is contrary to the object and purposes of a treaty – is ultimately a scenario of 'great confusion' as each state is forced to individually decide upon the admissibility of the reservation in accordance with Article 20(4) (a)–(d) whereby 'the unity of the treaty' may be 'destroyed as a result of the establishment of a complex network of bilateral agreements'.[114]

The constituent instrument of an international organization
The constituent instrument of an IO is almost always a treaty. The constituent instrument will provide for the functions and objects of the organization, and indicate how they will be achieved.[115] The unique feature of a constituent instrument is that it creates an organ with an identity distinct from that of the individual member states. As such, the organization has its own legal personality. Personality is shorthand for the proposition that an entity is endowed by international law with legal capacity. Personality may be expressly granted by the founding document[116] or implied by the actions of the IO.[117] The ICRW is clearly the constituent instrument of the IWC because as Article III of the ICRW stipulates: 'The Contracting Governments agree to establish an International Whaling Commission' and then proceeds to elaborate on the make-up of the Commission. The Commission is further strengthened by

fulfilling additional requirements to enhance its independence and identity.[118] Accordingly, on the first question, it may be suggested that the ICRW is the constituent instrument of the IWC, which is a valid international organization in itself.

The acceptance of the competent organ of that organization

When a competent organization has the authority to decide upon the admissibility of a reservation, a question arises over how that should be done. That is, what procedural method should be utilized in ascertaining what is a suitable majority of states necessary to accept the reservation? Since the decision does not arise under Article 20(2), the only certainty is that it need not be done by a unanimous process. As such, within most conventions, depending upon what the reservation is in respect of, the issue will depend upon the applicable rules of procedure and whether weighted majority voting is necessary. Within the IWC, when this matter was dealt with in 2001, it was decided by a simple majority voting in accordance with the IWC's Rules of Procedure.[119] This was despite the fact that the United States had earlier suggested that the matter should be seen as being related to a specific instance that necessitated a three-quarters approval for the reservation.[120]

Reservations to the instrument and/or its supporting schedules or annexes

The final consideration which deserves consideration under this section pertains to Iceland's suggestion that as its attempted reservation applied only to the schedule and not to the actual constituent instrument of the ICRW, then it was not possible for the IWC to object to that reservation. In its own words:

> At the Annual Meeting some States maintained that the IWC had the competence to make a decision with respect to the reservation on the basis of the exemption rule that a reservation with respect to a constituent instrument of an international organization is subject to acceptance by the relevant body of that organization. Iceland's reservation, however, does not relate to the original Whaling Convention, but to paragraph 10(e) of the Schedule attached to the Convention. The rationale behind the exemption rule is that it is important to preserve the integrity of a constituent instrument which includes provisions of an organizational nature. Reservations with respect to such [an] instrument are only valid if accepted by the relevant body of the international organization.[121]

This suggestion is mistaken for three reasons. First, the VCLT makes no distinction regarding where the reservation is attached. As such, the competent organ has the ability to examine reservations attached to the constituent instrument, or to its connected schedules/annexes. Second, this ability for the competent organ suggests a reading whereby connected schedules/annexes and so on are considered to be 'integral' to the constituent instruments and

cannot be lightly severed, which Iceland appears to be implying. Finally, the precedent which Iceland seems to be seeking comes from the CITES and CMS treaties where clear distinctions are drawn within the constituent documents (between the treaties and their appendices) of both the CMS and CITES for this kind of split. However, such splits do not occur within the ICRW, and the precedent of the IWC on the early Denmark reservation shows that the matter of a reservation to the schedule was clearly within the IWC.

7 THE AFTERMATH

Once the question of permissibility of a reservation is decided by the constituent body, the issue becomes what happens next? At this point, two options occur. The first is that the reservation is deemed unacceptable, in terms of relations between those who objected to the reservation and the country with the failed attempt and the options it faces. The second is the exact opposite of the first – and the reservation is successful.

With regard to the first question, in terms of the options faced by the refused country, it is possible for that country to consider severing its reservation from its application. Whether this is possible will depend on how closely attached the reservation is to the application. Clearly, with the Icelandic case, this was not possible given that '[t]he reservation form[ed] an integral part of this instrument of adherence'.[122] From the Icelandic perspective, this was a correct choice, as its third attempt was successful – and it did not need to sever its reservation from its application. The fact that Iceland was successful leads on to the second part of the consideration for the first question – in relation to what becomes of treaty relations between the state whose reservation was refused by the competent organ and the dissenting states within the competent organ who disagreed with the majority (and argued that the reservation should be admissible). On this question, in terms of international practice, there is no definitive answer as state practice on this specific question is inconclusive.[123] Unfortunately, the Icelandic instance did not progress this lacuna, as the space of time between the failed and successful attempts was so short, very little consideration, let alone a precedent, was offered.

Conversely, when dealing with the aftermath of a successful reservation – which has ultimately been accepted by the constituent organization as with the Icelandic example – a series of interesting precedents are developing. The question is, how do the dissenting countries – which attempted to block the entry with the reservation and lost the vote – deal with the country that was successful. As of 2003, as the fallout of Iceland's success was being examined, two approaches were developing. The commonality with both approaches is their notification to the depository of their individual objections to Iceland's

reservation – noting its inconsistency with the objectives and purposes of the convention. However, thereafter, the approaches diverge. On the one hand, a number of countries, despite noting their objection, note that their objection does not preclude entry into force of the convention between their country and Iceland. On the other hand, some countries maintain that because of both the substance of the reservation, and the manner in which they ultimately gained acceptance, Iceland would not, by them, be considered a member of the IWC. Exactly how these divergences will work out on the floor is very uncertain.

8 CONCLUSION

The IWC's initial rejection of Iceland's assertion for membership of the IWC, which was conditional on acceptance of its reservation to the moratorium on commercial whaling, was in accordance with the international law on reservations. In accordance with the VCLT, the IWC initially prohibited the reservation as it was originally deemed incompatible with the object and purpose of a treaty. This incompatibility was evident through the text and character of the ICRW. The original decision on the question of whether Iceland's reservation was incompatible was correctly decided by the IWC, which is the competent organ of that organization (as empowered through the ICRW – the constituent instrument of that organization). When Iceland finally gained membership in 2002, the majority (implicitly) held that the reservation was not incompatible with the ICRW. At this point, a divergence of views by the countries dissenting to Iceland's admission opened up (over whether to ultimately accept Iceland or not). In this regard, it is possible that those who have continued to accept that Iceland has membership have in part missed the substance of what the reservations debate was about in 2001 and 2002 – whether the governing body acting democratically through the constituent instrument of an IO has the power to decide that question. As such, whether the decision is ultimately yes or no is not necessarily the most important concern. Rather, it is the fact that members within IOs have the ability to make such decisions, and ultimately control the integrity of their own conventions.

NOTES

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9. Agreement on Co-Operation in Research, Conservation and Management of Marine Mammals in the North Atlantic. Article 10(2).
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14. See Article 19 of the Vienna Convention of the Law of Treaties. Reprinted in Evans, D. (1999). *International Law Documents* (Blackwell Press, London). See also International Law Commission, (1999). Chapter VI: Reservations to Treaties. Text of Reservations to Treaties: Guides to Practice. Section 1. Pages 10–12. Available from <http://www.un.org/law/ilc/reports/1999/english/chap6.htm>.
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16. Motion Regarding Iceland's Reservation. IWC/53/25. Agenda Item 1.3.
17. IWC. (2001). Final Press Release from the IWC 53rd Annual Meeting. 1.
18. Ibid. 2.
19. Ibid.
20. Statement Concerning Iceland's Adherence to the International Convention for the Regulation of Whaling. IWC/53/50.
21. Diplomatic Note from Iceland to Objecting Countries. August 2, 2001.
22. Diplomatic Note, ibid. Very similar information on this incident can be found in IWC. 53rd Meeting in 2001. (2002). 5–9.
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25. Diplomatic Note, December 8, 1948. This note was circulated to other governments from the Government of Denmark proposing a reservation to the convention.
26. Diplomatic Note from the Government of Norway. March 9, 1949.
27. Diplomatic Note from the Government of the United Kingdom. February 17, 1949.
28. Diplomatic Note from the Government of the Union of the Soviet Socialist Republics. May 4, 1949.
29. Diplomatic Note from the Government of the United States. May 29, 1949.
30. Diplomatic Note from the Government of the United States. June 22, 1950.
31. Diplomatic Note from the Government of Norway. March 9, 1949.
32. This is noted in a document by the Department of State, 'Status of the Whaling Convention.' (2001). 5.
33. Ibid. 7.
34. Diplomatic Note from the Government of the United States. May 27, 1983.
35. Diplomatic Note from the Government of the United Kingdom. March 1 & 12, 1984. A similar note was recorded for Ecuador on May 1, 1992.
36. Diplomatic Note from the Government of Russia. March 24, 1992.
37. Diplomatic Note from the Government of the Federal Republic of Germany. May 27, 1983. A similar note was recorded for Ecuador on May 29, 1992.
38. This is noted in a document by the Department of State, supra n32: 4.
39. ILC Report. (1998). 'Chapter IX: Reservations to Treaties. Paragraphs 517 & 518'. Available from http://www.un.org/law/ilc/reports/1998?chp9.htm>. McRae, D. (1978). 'The Legal Effects of Interpretative Declarations.' *British Yearbook of International Law*: 160–61.

40. Department of State, supra n32: 6.
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43. Sinclair, I. (1984). *The Vienna Convention on the Law of Treaties* (2nd edn, Manchester University Press, Manchester): 51.
44. ILC Report (1997), supra n42. Paragraph 55.
45. ILC Report (1996). 'Chapter VI, Reservations to Treaties. Paragraphs 111 & 119.' Available from <http://www.un.org/law/ilc/reports/1996/chap06.htm>.
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47. The good faith concern relates to where a state withdraws from a treaty and immediately re-accedes just in order to make a reservation which it did not make before. This is known as the Trinidad and Tobago strategem. This arose in 1999 when Trinidad and Tobago withdrew from the Optional Protocol on International Covenant on Civil and Political Rights. It then simultaneously deposited an instrument of reaccession with a reservation attached. See 'Unacceptably Limiting Human Rights Protection.' Available at <http://web.amnesty.or…/AMR050011999?OpenDocument&of=COUNTRIES%5CGUYAN>. In the present case, the circumstances are very different. Iceland withdrew from the convention nine years ago. Nevertheless, on the broad basis of principle, concern may be justified in allowing situations where countries which once had an opportunity to object, missed the opportunity, and later leave the convention, and when trying to readhere set down a reservation to something they previously did not object to. As such, they effectively have two bites at the cherry.
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52. These three rules are quoted by the ICJ in the Genocide Opinion. See [1951] ICJ. Pleadings. 5, 17.
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56. Ibid. 372.
57. Ibid. 368.
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60. ICJ Report, supra n55: 29–30.
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68. *Yearbook of the International Law Commission*. (1962). Volume II: 207.
69. Ibid. 178–179.
70. ILC (1997), supra n42. Paragraph 98.
71. Pellet, A. (1995). 'First Report on the Law and Practice Relating to Reservations to Treaties.' A/CN.4/470. May 30. Paragraph 157.
72. Article 19 (A).
73. See UNGA Res. 598 (VI). 1952, January 12.
74. Nevertheless, in some extreme historical instances states have still tried to register their reservations. This happened when Switzerland joined the League of Nations, but wanted a reservation to express its neutrality. See Hudson, J. (1924). 'Membership in the League of Nations.' *American Journal of International Law*: 439–42.
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77. United Nations Framework Convention on Climate Change. UNCED. A/AC.237 /18 (Part II) / Add.1. 15 May 1992. Article 24.
78. Adoption of the Kyoto Protocol. FCCC/CP/L.7. Article 26.
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83. Protocol on Environmental Protection to the Antarctic Treaty (1991). BH992.txt. See Article 24.
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85. Convention on Desertification. A/AC.241/27. 12 September 1994. See Article 37.
86. United Nations Convention on the Law of the Sea (1982). BH825.txt. Article 309.
87. United Nations Conference On Straddling Fish Stocks And Highly Migratory Fish Stocks: Agreement For The Implementation Of The Provisions Of The United Nations Convention Of The Law Of The Sea Of 10 December 1982, Relating To The Conservation And Management Of Straddling Fish Stocks And Highly Migratory Fish Stocks. (1995) 34 ILM. 1542. See Article 42.
88. Convention For The Prohibition Of Fishing With Long Driftnets In The South Pacific (And Protocols) (24 November 1989) BH954.txt 29 ILM. 1454. Article 11.
89. Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (2000). Article 37. Available from <http://www.ocean-law.net/texts/htm>.
90. Framework Agreement For The Conservation Of Living Marine Resources On The High Seas Of The South Pacific. See Article 18. Available from <http://www.oceanlaw.net/texts/htm>.
91. See Hafner, G. (2001). 'Environmental Issues Within the Work of the International Law Commission.' YBIEL. 11: 3, 30–32.
92. See Gillespie, A. (2001). *The Illusion of Progress: Unsustainable Development in International Law* (Earthscan, London). Chapter 10.

93. ICJ, supra n62: 22, 26.
94. Article 31 of the VCLT recognizes that preambles may be used 'for the purpose of interpretation of a treaty'. See Article 31(2).
95. Diplomatic Note from Iceland to New Zealand. August 2, 2001. Iceland quotes from preambular paragraphs 3 & 7.
96. Paragraph 10(e). Schedule of the International Convention for the Regulation of Whaling. (IWC, 2001). 13.
97. Statement by Germany at the 53rd IWC meeting in London, 2001.
98. See Appendix 2: 'Resolution on Developing Revised Management Procedures.' IWC. 32nd Report. (1982). 35.
99. IWC. 33rd Report. (1983). 21; IWC. 34th Report. (1984). 30; IWC. 36th Report. (1986). 12–13; IWC. 37th Report. (1987). 12–14; IWC. 39th Report. (1989). 13–15; IWC. 40th Report. (1990). 17–21; IWC. 41st Report. (1991). 16–19.
100. Appendix 4: 'Resolution on the Revised Management Procedure.' IWC. 42nd Report. (1992). 47–8.
101. IWC. 42nd Report. (1992). 47–8.
102. Appendix 5: IWC Resolution 1994–5. 'Resolution on the Revised Management Scheme.' IWC 45th Report. (1995). 43–4.
103. See Appendix 3: 'Resolution on the Revised Management Scheme.' IWC. 43rd Report. (1993). 40.
104. ICJ, supra n55: 22, 26.
105. IWC. 54th Meeting in 2002. (2003). 6.
106. Horn, F. (1986). *Reservations and Interpretative Declarations to Multilateral Treaties* (Nijhoff, Dordrecht): 123.
107. Sinclair, supra n43: 34.
108. Sands, P. (2001). *Bowett's Law of International Institutions* (5th edn, Sweet & Maxwell, London): 445.
109. See Hudson, supra n74: 439–40.
110. See Schermers, N. (1995). *International Institutional Law*. (Nijhoff, London): 716.
111. See *International Law Commission*. (1966). Volume II: 207.
112. *Yearbook of the International Law Commission*. (1962). Volume II: 178–9.
113. Sands, supra n111: 445.
114. ILC (1997), supra n42. Paragraph 105.
115. Sands, supra n111: 422.
116. See the preamble of the Vienna Convention on the Law of Treaties Between States and International Organizations or Between International Organizations. B.H.883.txt. A/CONF.129/15. 25 ILM. 543 (1986).
117. White, N.D. (1994). *The Law of International Organisations* (Manchester University Press, New York): 24. Advisory Opinion on Reparation for Injuries Suffered in the Service of the United Nations. 1949. ICJ. 11.
118. Statutory Instrument pertaining to the Diplomatic and International Immunities: The International Whaling Commission, 1975. No. 1210. (July 23rd).
119. Article III(2) of the ICRW provides that with the exception of Article V decisions, decisions of the ICRW shall be taken by a majority of members voting. See also Rule E.3 of the Rules of Procedure.
120. This was originally in the Diplomatic Note from the Government of the United States. May 29, 1949. The United States reiterated this belief with the Icelandic reservation.
121. Diplomatic Note from Iceland, supra n21.
122. This is noted in a document by the Department of State, supra n15: 7.
123. Redgewell, supra n41: 245. Shaw, supra n48: 647.

14. Transparency

1. INTRODUCTION

In the parlance of the current literature on international relations, this chapter pertains to considerations such as transparency, and the openness of the mechanisms within the IWC. The specific mechanisms of interest are NGOs and secrecy (via secret voting and media access). This chapter will assess how these issues have been reconciled within the IWC and how it compares to both international principles and other organizations.

2. NON-GOVERNMENTAL ORGANIZATIONS

Non-governmental organizations are just that. Independent organizations which are typically made up of activists, who work upon sets of principled ideas or values.[1] These organizations can be nationally or internationally (or both) focused. There are tens of thousands of international NGOs in existence.[2] Some of these command annual incomes in the tens of millions, and represent millions of people worldwide.[3] When international in character, within the liberal paradigm of international law, they help blur the boundaries in international law and policy and become useful citizens in the global community.[4] From the formation of international agreements, through to ensuring compliance[5] with them, NGOs are essential actors in the global world as they mobilize information and use it strategically to create new issues and categories and to persuade, pressure and gain leverage over much more powerful organizations and governments. Despite limits on what they can actually achieve in the international world,[6] through the politics of symbolism, leverage and accountability, they often create powerful influences. This is done via the framing of debates, encouraging commitments, causing procedural changes, and ultimately affecting policy.[7]

One of the more prominent areas of growth and influence of NGOs has been of those with an environmental focus. Although environmental NGOs account for only about 7 per cent of the world's NGOs,[8] they have rapidly risen to prominence. This is all the more remarkable when it is realized that although international NGOs with an environmental focus existed prior[9] to the 1972 Stockholm conference, they were barely noticed.[10] Conversely, at the

1992 Earth Summit, more than 1,400 NGOs were officially represented[11] and approximately 9,000 attended the unofficial forum at Rio.[12] This point was seen as a 'sea change' with regard to the attitudes shown towards NGOs. Apart from the influential commissions on environment and development,[13] global governance[14] and oceans,[15] Agenda 21 is a clear example of the recognition that NGOs 'play a vital role in the shaping and implementation of participatory democracy'.[16] The effective implementation of the UNCED agenda[17] was deemed contingent on the 'critical . . . and genuine involvement of all social groups'.[18] Because NGOs were so important, Agenda 21 called on all the organizations within the United Nations system to: 'Design open and effective means to achieve the participation of NGOs'.[19] It was recommended that this should be an 'expanded role' which 'takes into account' NGO views.[20] A decade later the International Plan of Implementation from the World Summit on Sustainable Development called upon governments to: 'Enhanc[e] participation and effective involvement of civil society and other relevant stakeholders in the implementation of Agenda 21, as well as promoting transparency and broad public participation'.[21]

This drive has been assisted with iniatives such as the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters,[22] which has the objective of: 'each Party guarantee[ing] the rights of access to information, public participation in decision-making, and access to justice in environmental matters in accordance with the provisions of this Convention'.[23]

Although environmental NGOs are forming a distinctive niche in international law, it is important to realize that they still fit within established rules of international procedure for all NGOs. These rules have developed as NGOs became important in international affairs.[24] This importance resulted in special attention within the League of Nations[25] and the United Nations. In the latter forum, although there was no hint of any role for NGOs in the United Nations Charter in the affairs of the General Assembly or Security Council, they were clearly incorporated into the Economic and Social Council (ECOSOC).[26] Accordingly:

> The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements shall be made with international organizations and, where appropriate, with national organizations after consultations with the Member of the United Nations concerned.

It is from this provision that much of the international practice on NGOs, and its subsequent interpretations by ECOSOC,[27] has come. This practice includes questions of how to define NGOs, the reasons for including them and the 'rights' given to them. These rules provide effective yardsticks by which to juxtapose the practice of other IOs.

The definitional question of NGOs within ECOSOC is one which has evolved. Originally, preference was clearly given to international, as opposed to just domestic, NGOs.[28] However, this process changed and access may be granted to international, regional, or national NGOs. A particular emphasis is given to NGOs from developing countries.[29] The key factor that ECOSOC now looks for before granting admittance, is that the NGO must be of 'recognised standing within the particular field of its competence'. This generalized approach has been followed, especially in the environmental arena, since the 1972 Stockholm conference, where ECOSOC tradition was broken and invitations were issued to NGOs which had a 'genuinely international character' and which were 'directly concerned with the subject matter of the conference'.[30] A slight variation on this has been seen in the Commission on Sustainable Development (CSD), where single country NGOs gained access to the UN system in large numbers.[31]

The key factors that ECOSOC looks at, as well as being able to make a suitable contribution to the forum, are that the NGO must have a headquarters, an executive officer, a democratically adopted constitution and transparent decision-making processes.[32] Governmental membership of NGOs is allowed, providing that this membership does not 'interfere with the free expression of the views of the organization'.[33] Its sources of membership funding must be available if requested.

With regard to the purpose of having relations with NGOs, ECOSOC explained that the purpose is: 'to secure expert information or advice from organizations having special competence, and . . . to enable international, regional, sub-regional and national organizations that represent important elements of public opinion to express their views'.[34]

Accordingly, clear limits are placed upon NGOs. They may be allowed access to help provide information and express views. In terms of a pecking order, states are followed by IOs, and then NGOs. There is never any suggestion that NGOs should be able to vote or negotiate on a par with states. As such, related bodies such as the CSD are forthright that: 'Non-Governmental Organisations shall not have any negotiating role in the work of the Commission or its subsidiary bodies'.[35] Nevertheless, once NGOs are inside the system (via a vote of the NGO ECOSOC committee) they gain a distinct type of 'legitimacy'. In many cases, this is a huge advance on what they can expect in domestic jurisdiction. Indeed, this point should not be underestimated, because NGOs often represent a distinctive international ontology which is at variance with many national governments. Being inside an international forum with the theoretical ability to challenge their sovereign governments – something which they may not be able to do domestically – can be quite a coup.[36]

The 'rights' that an NGO obtains depends upon its status. ECOSOC divided

NGOs into three categories. Category 1 concerns NGOs that have 'most of the activities of the Council . . . and . . . substantive and sustained contributions to make'.[37] Category 2 concerns NGOs with a 'special competence' in a few areas of activity.[38] A third category concerns those that ECOSOC thinks can make 'occasional and useful contributions'. These categories affect the abilities of NGOs to interact with ECOSOC (and subsidiary bodies,[39] including related UN conferences)[40] via a number of methods. First, Category 1 NGOs may propose items to be put on the ECOSOC agenda. Categories 1 and 2 may attend all meetings, and make written statements.[41] Finally, subject to approval by the Council, Category 1 NGOs may also make oral presentations during meetings.[42] This ability to observe, make written statements, and speak (when the chair thinks it is appropriate) has been followed by international conferences such as Stockholm,[43] and the CSD. Interestingly, within the latter, the importance of achieving an equity between NGOs so as to be able to receive views from different perspectives is emphasized.[44]

These broad patterns have been followed in multiple international environmental agreements[45] (which is unlike other areas of international law, such as with the WTO).[46] although small variations tend to exist between them all. Nevertheless, as general rules, NGOs, depending on their classificatory status, are allowed to attend the Conference of the Parties (subject to either a majority or one-third disapproval of the signatories), are commonly allowed to distribute limited written documents, can sometimes put items on the agenda, and in certain instances, are allowed to address either the plenary or specialist committees.

NGOs within the IWC

The IWC has a long, and unique history in its dealings with NGOs, and is somewhat out of step with comparable organizations.[47] Representatives from the IOs, the FAO and the International Council for the Exploration of the Sea (ICES) were present from the third meeting in 1951.[48] The next year, these two were joined by the first real NGO, the Association of Whaling Companies.[49] These three entities made up the non-signatory section of the IWC until 1960.[50] At the 13th meeting in 1961, the FAO and ICES were joined by the (independent) Special Committee of Three Scientists[51] and by 1963, the International Society for the Protection of Animals was attending meetings.[52] These were soon joined by the World Wildlife Fund (WWF), the International Union for the Conservation of Nature (IUCN) and the Fauna Preservation Society.[53] The International Society for the Protection of Animals, and the Universities Federation for Animal Welfare joined in the late 1960s[54] and Friends of the Earth in the early 1970s.[55]

This growth of NGOs soon became exponential, and by 2002, 98 NGOs

were accredited and participants at the 54th meeting in 2002.[56] Given this influx of interest, the IWC formulated specific rules of procedure for NGO accreditation. These rules, which were originally drafted in 1987[57] and were later revised,[58] were designed to ensure that only one representative from each NGO attend, and that each NGO was actually 'legitimate' and that NGOs operate within a tight series of constraints. Many of the constraints are diametrically opposed to the best practice of comparable international environmental organizations which also deal with NGOs, but in a much more facilitating way.[59]

The yardstick for accreditation for NGOs for the IWC was that they have offices in at least three countries.[60] This limitation is clearly not in accordance with international best practice as comparable international environmental organizations typically fail to draw such distinctions. Building on the ideal of suitable contributions, other forums have effectively divided the NGOs into categories of usefulness, with associated privileges. With only a few exceptions,[61] this is not something to which the IWC had traditionally given serious consideration. However, in 2004 this issue, along with the difficulty that NGOs at the IWC were paying vastly disproportionate participation fees compared to other international environmental organizations, was the subject of discussion, from which the secretariat was directed to investigate some possibilities on the (three offices) accreditation issue.[62]

The right to verbally address a forum at key points during a debate (typically at the end or the beginning) is an increasingly common practice for NGOs working within international forums. Ironically, this is one area where the IWC was initially ahead of the field, but has subsequently fallen behind. Indeed, originally, NGOs were allowed to make oral statements to the IWC. This process was clearly evident as early as 1967.[63] The practice of NGOs speaking at the beginning of the meeting, coincided with the practice of existing signatories reading out their opening statements (which must not be directed at any specific government and must be relevant to matters under consideration of the Commission).[64] This practice with regard to NGOs continued for the next decade[65] although it was sometimes reversed, and observers spoke at the end of the meeting.[66] In 1979 at the 31st meeting, it was agreed that 'in order to save time . . . opening statements would be distributed in written form only'. However, the chairman called upon new members to address the Commission (a practice which has continued) and in addition, allowed joint oral statements by three speakers representing different NGOs.[67] The following year, opening statements by commissioners and observers were distributed 'in written form only'.[68] Since this point, neither signatories nor observers have had the chance to verbally address the forum although they can and do provide written opening statements (provided they are truthful,[69] relevant and non-directed)[70] at the beginning of the plenary. The only participants granted this privilege are new signatories.[71]

With regard to general debate in the plenary, the rights of NGOs are tightly constrained. As it stands, speaking rights for other IOs (not NGOs) are less than strong. The roots of this approach can be found in 1974 when the United States argued that the FAO and UNEP should be allowed to participate in the discussions of the IWC. However, no rule was established on this, and it was decided to leave such decisions to the discretion of the chair.[72] This principle has followed through into the Rules of Debate,[73] and has subsequently been acted upon. Accordingly, in 2000 and 2001, the chair, after noting that 'observers were not usually called upon', allowed for interventions from two interested (but contrary) regional intergovernmental organizations (of which signatories were members) to speak on the merits of the South Pacific Whale Sanctuary.[74]

The secondary areas that NGOs seek to participate in are the IWC committees, which, although only having the power to make recommendations, are well known battlegrounds.[75] The foremost committee within the IWC is the SC. This has been open to qualified observers since 1975.[76] By 2000 not only were general NGOs allowed to apply to participate (non-voting) in the SC, but also the NGO IUCN had been recognized as an 'ad-hoc advisor'. Representation for the international organizations of CCAMLR, UNEP and the FAO has also been reserved.[77]

Interestingly, the main debate over the last two decades in the SC has not been with regard to NGOs or IOs, but with scientists from non-member governments. Although access has been granted and maintained[78] for this group since 1980[79] and funds provided to facilitate this have been provided since 1987,[80] the issue has been problematic, with scientists sometimes attending without the approval of their national governments. This was a forceful debate in the mid-1990s as Russia raised its concerns that some of the scientists being invited to speak at the IWC on matters pertaining to Russia, were participating without the consent of the government.[81] Despite these concerns, the Commission decided to retain its existing position which is based upon the 'independence' of the SC, whereby scientists are invited because of their scientific expertise.[82]

With regard to access to other IWC committees, it has been advocated by a number of countries (such as the United States) since 1984 that access by accredited observers should be given to all sub-committees and working groups, including the technical committee (excepting the infractions and finance sub-committee). Although supported by some delegations, others 'strongly opposed the proposal, expressing the opinion that the presence of NGO observers would not enhance quiet and constructive discussion'. Accordingly, the United States decided not to pursue the matter.[83] Nevertheless, by the early 1990s the issue had reappeared. However, Japan and Norway argued strongly against it.[84] A forceful debate on this topic

continued throughout the 1990s, with the United States (and sympathetic countries like the Netherlands) arguing (and eventually winning) for access for NGOs to all committees, except the finance committee.[85]

The problems that NGOs have had in expanding their influence within the IWC also need to be assessed in the light of the fact that some NGOs have been directly challenged by sovereign countries. The foremost example of this is Greenpeace, which Japan sought to have removed from the IWC in 1999 (that is, cancel its accreditation) because of the protests allegedly involving trespass against Japanese whaling vessels. Although this was rejected by the IWC,[86] it was in clear accordance with the Japanese intention to have Greenpeace removed from other international forums such as the Commission on the Conservation of Southern Bluefin Tuna[87] and CITES.[88] This campaign has coincided with allegations by St Lucia, Antigua, Dominica and Grenada that 'the presence of NGOs in the meeting was intimidating, even when they were members of a national delegation'.[89] In response to this problem, a resolution on the review of observer status was put forward in 1998[90] and again in 2001[91] whereby accreditation could be denied to any NGO which 'has violated the laws of the Contracting Government or has threatened any individual, or . . . has caused economic hardship to the Contracting Government'.[92] A variation on this theme was raised in 2001, with the suggestion that 'irresponsible NGOs' be sanctioned by the IWC.[93] However, these proposed resolutions did not gather enough votes to enter into the Rules of Procedure. Despite this failure, in 2003, *ECO* (published by a group of NGOs) became the subject of prolonged debate in private commissioners' meetings due to an article which contained many of the factual allegations around the 'vote-buying' of other nations' votes by Japan. However, this was not the source of concern, but rather, a cartoon that was included which suggested that the countries whose votes had been secured were 'lap dogs' who responded to the master's wishes for the rewards of yen.[94] The result of the private meetings was a statement by the chair of the Commission that:

> [T]he Commission as a whole [w]as severely distressed by [such] written statements [as they] contained language which was in the view of the Commission extremely offensive impugning the Sovereignty of a number of Contracting Governments to this Commission and containing significant factual inaccuracies.

As such, '[the] Commission unequivocally condemns these statements and considers that they constitute an abuse of privileges accorded to the accredited observers'. Therefore, the Commission demanded a 'formal apology' and that the NGOs listed in the article should 'formally dissociate themselves from the offending statements, failing which their accredited status as observers may be called into question'.[95]

Although some NGOs did attempt to dissociate themselves from the publi-

cation, the majority saw the threat of expulsion or censure as the antithesis of freedom of expression or a free press.[96] Despite this effective squaring off, the Commission did not have time to consider the matter further at the meeting due to a shortage of time. Nevertheless, the threat against 'offensive' NGOs had already been made. Although the Commission managed to avoid directly confronting this problem in 2003, a very similar issue appeared in 2004, when the NGO IFAW ran into direct conflict with a number of countries over a press statement which focused on vote-buying.[97] Although there were clear uncertainties over the status of the press statement (a copy had allegedly been found within the meeting premises) a series of 'commissioner only' meetings were again held on how to resolve the issue. These were particularly fraught, as the Commission was clearly teetering on the possibility of extreme censorship as some countries were seeking redress for offended governments, stemming from statements which originated from outside of the official meetings. The end result was twofold. First, the chair of the Commission, in a verbal statement, noted that 'some unsubstantiated statements' had been made, and the Commission was 'extremely concerned about unsubstantiated allegations which cause offence to certain countries'. As such, NGOs were urged to give 'due and proper respect' to all sovereign governments. The second result was the formation of a small drafting group to create a code of conduct for NGOs, violation of which could lead to loss of accreditation.

3 THE PRESS

Exposure to the outside world of the activity of intergovernmental organizations feeds into important theories of accountability and transparency within the rubric of democracy. In this regard, the media often has a key role to play, as they can both report and critique (and not always favourably)[98] the information necessary for outside scrutiny.[99] With regard to the IWC experience with the media, it is possible to assert that although it has taken five decades, it has increasingly opened its doors to outside media attention.

The ideal of the IWC being media 'friendly' began in the mid-1950s when it was decided that 'the work of the Commission should be known at all times and that a fuller press report should be produced at the end of each meeting'.[100] To further this objective, the Commission began to make different papers available to the press.[101] However, progress was slow, as 'the verbatim reports of the Commission' could not be made available, due to a belief that they contained the privileged information of sovereign governments.[102] Therefore, a specially created press release was made available from 1961[103] onwards. Despite such efforts to satisfy outside interest in the IWC, as the IWC fell under increased international scrutiny, efforts were stepped up to

make the IWC's 'meetings open to the world press and interested members of the public'.[104] However, when the time came to put the rhetoric into practice, the majority of the commissioners voted against this idea, and the then status quo prevailed.[105] This position was confirmed with a poll of the signatories to the convention, which showed that eight of the nine members (the United States was the exception) did not want the complete meetings open to the press.[106] This conclusion was reiterated in 1974, with the result that the press could stay only for the opening statements of both accredited observers and member governments.[107] Specific rules governing the press on these occasions were quickly added,[108] as was their opportunity to also stay for the closing part of the meetings.[109] It was not until 1979, that in addition to their presence at the beginning and the end of meetings, 'it was agreed that in the future either the Chairman or vice-Chairman would attempt to make themselves available to the press at least once a day'.[110]

Once more, despite attempts to placate the press, it was becoming obvious by the early 1980s that some governments were leaking information to the press, which was being 'rapidly relayed' outside the Commission.[111] This coincided with a push for complete media access to the meetings,[112] which was not successful. It was not until the mid-1990s that progress was made, when Denmark and Japan sought to increase 'the openness and transparency' of the IWC by improving the press facilities by, for example, relaying proceedings by closed-circuit TV.[113] The ideal that 'the press should be more involved in IWC meetings'[114] was chorused in 1997,[115] and at the 50th meeting they were given much broader access and the entire plenary session was relayed. However, despite the apparent progress in this area, in 2003 a step backwards was taken when the application by the *Earth Negotiations Bulletin* to witness the meetings was declined due to 'no consensus' being reached on this issue.[116]

4 SECRET VOTING

The idea of voting in secret on matters of substance at the IWC is a relatively new argument, and one which has so far not been adopted within the IWC.[117] This debate only began at the 49th meeting in 1997 (but has been repeated every year subsequently)[118] when Japan argued that the Rules of Procedure should be changed so as to allow for secret voting on most matters.[119] This move coincided with secret voting at the CITES meeting in the same year. In addition to being a common practice in a number of other international environmental conventions,[120] Japan also suggested that it was necessary to move from such visible transparency (that is, by being able to see which way countries vote), 'to protect the sovereign rights of Contracting Governments in the

democratic process as governments were being subjected to undue pressures'.[121] Moreover, Japan also suggested that 'because the press is allowed to cover the IWC, pre-vote discussions would reveal a country's intent, thereby obviating any concerns about the transparency of the organization'.[122] This was supported by the Caribbean countries who argued that they suffered from 'economic victimisation from some NGOs and governments'.[123] Accordingly, they demanded 'the right to vote free of fear'.[124]

This proposal has been continually rejected by the majority of the IWC members. Even Denmark and Norway[125] (traditional allies of Japan in the IWC) have at times voted against the proposal. The reasons for objecting were on the grounds of both comparisons and principles. With regard to comparisons, although some international environmental agreements allow secret votes, a number do not.[126] This rejection of secret voting goes to the highest international forums, such as the United Nations, where the draft Rules of Procedure do not entertain such an idea.[127] Even the International Plan of Implementation that emerged from the 2002 WSSD stressed that in implementing Agenda 21, governments should: 'strengthen sustainable development institutional arrangements at all levels . . . and should build on developments since UNCED and should lead to the achievement of, *inter alia* . . . promoting transparency and broad public participation'.[128]

The philosophical and political reasons why secret voting has been rejected pertain to the contradiction between an international public body and secrecy. The interlinking idea is one of transparency, whereby the representatives of states can be seen to faithfully reflect the principles they have been empowered to represent. As such, the Japanese argument that it is necessary to 'protect the sovereign rights of Contracting Governments in the democratic process', is mistaken. What is necessary is to protect the interests of the citizens who place them in power (and those who challenge them), not those in power. Secrecy in public forums destroys the possibility by denying knowledge of actions, and therefore accountability. The corollary from this position is that some countries suggest that they 'fear' for the consequences of the actions if they vote according to conscience. However, as I have contended above, this approach is mistaken and should be abandoned. Sovereign nations should, in accepting all of the rights that accompany sovereignty, be willing to accept the duty to be held accountable for their actions. The key point is to prevent the unfair influences of others upon their decision-making powers. International law is very clear that each state, no matter what its size and influence, is equal to all others.[129] International law fundamentally recognizes this equality between states, and seeks to protect it. Conversely, at no point does international law suggest that NGOs are in any sense equal to states. As such, the influence of NGOs, operating under democratic principles to try to influence foreign governments in David and Goliath struggles, is part of the

processes of public participation. Conversely, the influence of foreign governments, operating under secrecy, is the antithesis of transparency.

5 CONCLUSION

There are three areas that lend themselves to an analysis of the success of the quest for transparency of the IWC. The first of these relates to NGOs. As it stands, the IWC is operating on a procedural system which is somewhat unique by comparison to other international forums. Although some progress has been made in allowing NGOs to increasingly witness what goes on within the IWC and most of its committees, the abilities of NGOs to fully contribute are limited. Speaking rights are restricted, accreditation costs are very high, as is the access yardstick of having to have offices in three countries. In addition, the current backlash that is developing against some NGOs is a distinct cause for concern, over issues as diverse as allegations that they (the NGOs) have caused 'economic hardship' through to direct censorship of NGOs which print statements that are deemed 'offensive' to various sovereign governments. With regard to the latter especially, this is a very slippery slope.

With regard to the IWC experience with the media, it is possible to assert that although it has taken five decades, it has increasingly opened its doors to external media attention. Nevertheless, the reticence over admission of certain modern press organizations, such as the ENB, suggest this area is not yet without restrictions.

Finally, the issue of secret voting is currently being dealt with in a successful and transparent way. The current approach of trying to be as opaque as possible is a success in terms of protecting the interests of citizens who place sovereign governments in power (and those who challenge them). As such, accountability is maintained to a degree.

NOTES

1. See Keck, M. and Sikkink, K. (1999). *Activists Beyond Borders* (Cornell University Press, Ithaca, NY): 1.
2. It is suggested that 275,000 exist in the UK (see Salamon, L. (1994). 'The Rise of the Non-Profit Sector.' *Foreign Affairs*. 73: 109–15), and up to 2 million in the United States (see Editor (2000). 'NGOs More Powerful Than Ever.' *Ecologist*. 30 (2): 5).
3. See Princen, T. and Finger, M. (eds) (1994). *Environmental NGOs in World Politics* (Routledge, London): 2–4, 186–217.
4. See Boli, J. (ed.) (1999). *Constructing World Culture: International NGOs Since 1875* (Stanford University Press, Stanford, CA): Chapter 1. Keck and Sikkink, supra n1: Chapter 2 and 209–17. Smith, J. (1997). *Transnational Social Movements and Global Politics* (Syracuse University Press, New York): 3–42, 243–79.

5. See Cameron, J. (1997). 'Compliance, Citizens and NGOs.' In Cameron (ed.). *Compliance, Citizens and NGOs*. (Earthscan, London): 29–43.
6. See Gillespie, A. (2001). *The Illusion of Progress: Unsustainable Development in International Law* (Earthscan, London): Chapter 9.
7. Bothe, M. (1997). 'Compliance Control Beyond Diplomacy: The Role of Non-Governmental Actors.' *Environmental Policy and the Law*. 27: 293–7. Giorgetti, C. (1998). 'The Role of Nongovernmental Organisations in the Climate Change Negotiations.' *Colorado Journal of International Environmental Law and Policy*. 9: 115–32. Princen and Finger, supra n3: 10–11, 106–8, 161–3, 167, 179–82.
8. Boli, supra n4: 42–3.
9. The International Union of Forestry Research was formed in 1891, and the International Friends of Nature in 1895. Frank, D. (1999). 'The Rationalisation and Organisation of Nature in World Culture.' In Boli, supra n4: 81, 83.
10. Smith, E. (1972). 'The Role and Purpose of NGOs in the Environmental Crisis.' *International Organisation: Special Issue: International Institutions and the Environmental Crisis*. 26(2): 308.
11. See Finger, M. (1994). 'Environmental NGOs in the UNCED Process.' In Princen and Finger, supra n3: 186–217.
12. See Willets, P. (ed.) (1997). *The Conscience of the World: The Influence of NGOs in the UN System* (Brookings, New York): 55.
13. World Commission on Environment and Development (1987). *Our Common Future* (Oxford University Press, Oxford): 131–2.
14. Commission on Global Governance (1995). *Our Global Neighbourhood* (Oxford Univeristy Press, Oxford): 32–5.
15. Independent World Commission on the Oceans (1998). *The Ocean: Our Future* (Cambridge University Press, Cambridge): 129.
16. Chapter 27, Agenda 21.
17. See Morphet, S. (1997). 'NGOs and the Environment.' In Willetts, supra n12: 130–45.
18. Chapter 23.1.
19. Chapter 38.43.
20. Chapter 38.43.
21. International Plan of Implementation of the World Summit on Sustainable Development. A/CONF.199/L.1. Paragraph 121 (g).
22. ECE/CEP/43. For a discussion of this, see Brady, K. (1998). 'Aarhus Convention Signed.' and 'New Convention on Access to Information and Public Participation in Environmental Matters.' *Environmental Policy and the Law.* 28: 69–74, 171–89.
23. Article 1.
24. See Seary, B. (1997). 'The Early History: From the Congress of Vienna to San Francisco.' In Willets, supra n12: 13, 21.
25. Sees Articles 24 and 25 of the League of Nations Covenant. The Covenant is reprinted in Evans, D. (1994). *Blackstone's International Law Documents* (Blackstone, London). 1. Note the special mention of the Red Cross. For further discussion of this pivotal NGO, see Finnemore, M. (1999). 'Rules of War and Wars of Rules: The International Red Cross and the Restraint of State Violence.' In Boli, supra n4: 149–65.
26. Article 71 of the UN Charter states: 'The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements shall be made with international organizations and, where appropriate, with national organizations after consultations with the Member of the United Nations concerned'. The UN Charter is reprinted in Evans, supra n24: 8.
27. In 1968, in an attempt to streamline an increasingly crowded situation, ECOSOC passed Resolution 1296 on 23 May 1968. Reprinted as Appendix B in Willetts, supra n12: 291–96. This established the governing principles of ECOSOC relations with NGOs. It was updated in 1996. See ECOSOC Resolution 1996/31. Consultative Relationship Between the United Nations and Non-Governmental Organisations. <http://www.un.org/esa/coordination/ngo/Resolution_1996_31/index.htm>.

28. Willets, supra n12: 57.
29. ECOSOC 1996/31, supra n27: Paragraphs 5, 6.
30. See UN Doc. A/CONF.48/PC.11 of 30 July 1971: 65.
31. See ECOSOC Decision 1993/215. Procedural Arrangements For the Commission of Sustainable Development. Reprinted in Willetts, supra n12: 306–8.
32. ECOSOC. 1996/31, supra n27: Paragraphs 10–12.
33. Ibid. Paragraph 12.
34. Ibid. Paragraph 20.
35. Procedural Arrangements for the Commission of Sustainable Development. Rule 2(iv). Reprinted in Willetts, supra n12: 306–8.
36. Boli, supra n4: 37–8.
37. ECOSOC. 1996/31, supra n27: Paragraph 22.
38. Ibid. Paragraph 23.
39. Note, the rules for subsidiary bodies are slightly tighter. See ibid. Paragraphs 33–8.
40. Ibid. Paragraphs 41–5.
41. Ibid. Paragraphs 27–31.
42. Ibid. Paragraph 32.
43. See UN Doc. A/CONF.48/PC.11 of 30 July 1971: 65.
44. See ECOSOC Decision 1993/215. Procedural Arrangements For the Commission on Sustainable Development. Reprinted in Willetts, supra n12: 306–8.
45. For some of the basic applications of these rules and their various settings, see Cameron, J. (1999). 'Access to Environmental Justice and Procedural Rights in International Institutions.' In Boyle, A. (ed.). *Human Rights Approaches to Protecting the Environment* (Oxford University Press, Oxford): 130–51.
46. See O'Brien, R. et al. (2000). *Contesting Global Governance: Multilateral Economic Institutions and Global Social Movements* (Cambridge University Press, Cambridge).
47. Attempts to get the secretariat to consider the ways NGOs are dealt with in regard to speaking rights, fees, access to documents and accreditation, in comparable international forums, were unsuccessful in 2002 despite a resolution being proposed on this matter. This failed due to lack of time in the meeting, and the resolution did not get put to the vote. See 'Draft Resolution on Participation by Non Governmental Organisations.' IWC/54/45. Agenda Item 17.
48. IWC. 3rd Report. (1952). 3.
49. IWC. 4th Report. (1953). 3.
50. IWC. 5th Report. (1954). 3; IWC. 6th Report. (1955). 3; IWC. 8th Report. (1957). 15; IWC. 9th Report. (1958). 14; IWC. 10th Report. (1959). 13; IWC. 11th Report. (1960). 15.
51. IWC. 13th Report. (1962). 15.
52. IWC. 15th Report. (1964). 15.
53. IWC. 18th Report. (1967). 16. IWC. 19th Report. (1969). 15.
54. IWC. 20th Report. (1969). 15.
55. IWC. 24th Report. (1974). 21.
56. IWC. 54th Meeting in 2002. (2003). 56–7.
57. See Appendix 8: 'Additions to Rules of Procedure.' IWC. 38th Report. (1988). 31. These can be seen in earlier forms in IWC. 34th Report. (1984). 28.
58. IWC. 45th Report. (1995). 38–9.
59. For a full consideration of this area, see Gillespie, A. (forthcoming). 'Facilitating and Controlling Civil Society'. In *International Environmental Law*.
60. IWC. 47th Report. (1997). 46. This rule is in the IWC Rules of Procedure. C:1. (a) & (b).
61. The exception relates to the IUCN on the SC. See the IWC Rules of Procedure for the Scientific Committee.
62. See 'Potential Changes to the Rules of Procedure in Light of NGO Requests.' IWC/56/ F& A.
63. IWC. 19th Report. (1969). 19.
64. IWC. 53rd Report. (2002). 45.
65. IWC. 20th Report. (1970). 19; IWC. 22nd Report. (1972). 25; IWC. 23rd Report. (1973). 24; IWC. 27th Report. (1977). 6.

66. IWC. 24th Report. (1974). 23.
67. IWC. 30th Report. (1980). 25.
68. IWC. 31st Report. (1981). 17.
69. The necessity to have truthful opening statements by NGOs was highlighted at the 50th meeting, when one such document was removed. IWC. 50th Meeting in 1998. (1999). 40.
70. IWC. 51st Meeting in 1999. (2000). 46
71. IWC. 32nd Report. (1982). 17.
72. IWC. 26th Report. (1976). 30.
73. Observers have the right to speak if the chairman thinks that their comments are relevant to the subject under discussion. IWC. Rules of Debate, A.2.
74. IWC. 52nd Meeting in 2000. (2001). 15–16. In 2001 the chair indicated that it was willing to let such NGOs speak for three minutes if time permitted.
75. In all of the IWC committees, the procedures adopted depend upon their terms of reference from the IWC and their Rules of Procedure. These committees are designated to 'make recommendations'. Recommendations, by their very nature, are not binding upon the bodies that initiated them. However, the IWC, when acting in good faith, having itself established the specialist committee, should take into account its recommendations. Of course, there is a large difference between 'taking into account' a view, and being obliged to follow it. This is a pertinent debate within the IWC where attempts have been made to get the Commission to follow the dictates of the SC. However, when this was suggested at the 51st meeting in 1999, when discussing the rules of procedure for the scientific committee, the proposal was rejected, and the purpose and direction of the SC, as a 'recommendatory body only' was again emphasized. See Annex S, 'Proposed Rules of Procedure for the Scientific Committee.' (1999/IWC/51). Apart from the overt questions of sovereignty within international bodies for why the final decision rests with the parties, as opposed to the specialist committees created by them, is an important fact that within the IWC, the specialist bodies often reach recommendations on simple majority, and not consensus. As such, once more, the weight given to such recommendations has to be considered by the parties. See Rules of Procedure for the Technical Committee. In IWC. Rules of Procedure. Rule D.1.
76. IWC. 28th Report. (1978). 12. Note, this was in accordance with the Rules of Debate. A.2.
77. See Rules of Procedure for the Scientific Committee. A.1–3.
78. The principle to be able to invite 'qualified scientists' to the SC has subsequently been incorporated into the Rules of Procedure for the Scientific Committee. See Rule A.6.
79. See Appendix 17. 'Amendments to the Rules of Procedure for the Scientific Committee.' IWC. 31st Report. (1981). 35.
80. IWC. 38th Report. (1988). 26.
81. See IWC. 46th Report (1996). 39.
82. IWC 45th. Report. (1995). 42; IWC. 47th Report. (1997). 41; IWC. 48th Report. (1998). 42.
83. IWC. 35th Report. (1985). 23.
84. IWC. 45th Report. (1995). 18.
85. IWC. 46th Report. (1996). 18; IWC. 47th Report. (1997). 46; IWC. 48th Report. (1998). 43.
86. As there were no records of the arrest or damage to the ship or persons, the Japanese proposal was defeated, when the UK, Australia, New Zealand and the United States upheld such 'non-violent action' and suggested that 'Japan had dramatized the incident'. IWC. 51st Meeting in 1999. (2000). 47.
87. Japan opposed the application by Greenpeace to be an observer at the CCSBT because 'Greenpeace was known to use radical methods to achieve its goals and to act against the provisions and spirit of the Convention'. CCSBT. 'Report of the Fourth Annual Meeting.' Canberra. 8–13 September 1997. Agenda Item 3. This refusal coincided with a campaign from Greenpeace Germany which culminated with over 110,000 letters to the secretariat expressing concern. 'Report of the Resumed Fourth Annual Meeting.' Canberra. 19–22 January 1998. Agenda Item 9.2. This position remained the same in 1999, despite the Australian and New Zealand support for Greenpeace as an observer, as it was in accordance

with the principle of 'transparency in international organizations'. CCSBT. Report of the Fifth Annual Meeting. Tokyo. 22–26 February 1999. Agenda Item 2.

88. See *Earth Negotiations Bulletin*. 21(09). April 2000.
89. IWC. 50th Meeting in 1998. (1999). 40.
90. Appendix 16: IWC Resolution 1998-12. 'Resolution on Review of Observer Status.' IWC. 50th Meeting in 1998. (1999). 48.
91. 'Resolution on NGOs.' IWC/53/33.rev. Agenda Item 3.2.
92. Addition to the Rules of Procedure. Noted in 'Resolution on Review of Observer Status', supra n90. At the same meeting, rules of conduct for both the press and observers (with regard to issues such as recording the meetings, mobile telephones, quoting from draft documents and so on) were passed. See Appendix 14: 'Rules of Conduct for the Press.' Appendix 15: 'Rules of Conduct for Observers.' Both are in IWC. 50th Meeting in 1998. (1999). 48.
93. IWC. 53rd Meeting in 2001. (2002). 7.
94. 'Japan Vote Buying Scandal Brings on Japanese Government Inquiry.' *ECO*. LV(3): 1–2. (June 18, 2003).
95. Statement by the Chair of the Commission. IWC/55/31.
96. See Response to the Statement by the Chair of the Commission. IWC/55/31a. See also: 'The Pen is Mightier Than the Harpoon.' *ECO*. LV(4): 1–4. (June 19, 2003).
97. Anon (2004). 'IFAW Responds to Attack by Pro Whalers.' *ECO*. LVI(3): 1–2.
98. See Beder, S. (1999). *Global Spin: The Corporate Assault on Environmentalism* (Scribe, London).
99. Sartori, G. (1987). *The Theory of Democracy Revisited.* (Chatham, Chatham, NJ): 86–7.
100. IWC. 7th Report. (1956). 20.
101. IWC. 9th Report. (1958). 14.
102. IWC. 10th Report. (1959). 17.
103. IWC. 13th Report. (1962). 24–5.
104. IWC. 24th Report. (1974). 22.
105. Ibid. 22, 34.
106. IWC. 25th Report. (1975). 25.
107. IWC. 26th Report. (1976). 25.
108. Appendix 1: 'Admission of Observers and the Press to Commission Meetings.' IWC. 28th Report. (1978). 27.
109. IWC. 28th Report. (1978). 18.
110. IWC. 30th Report. (1980). 33.
111. IWC. 34th Report. (1984). 28.
112. IWC. 35th Report. (1985). 24.
113. IWC. 46th Report. (1996). 40.
114. IWC. 48th Report. (1998). 44.
115. IWC. 47th Report. (1997). 46.
116. 'Report of the Finance and Administration Committee.' IWC/55/Rep 2. 3–4.
117. Accordingly, the traditional rule of the IWC has remained in place. This is: 'votes shall be taken by a show of hands, or by roll call, as in the opinion of the Chairman is most appropriate'. Rule E.3.D. Rules of Procedure.
118. IWC. 50th Meeting in 1998. (1999). 38; IWC. 51st Meeting in 1999. (2000). 48; IWC. 53rd Meeting in 2001. (2002). 8; IWC. 54th Meeting in 2002. (2003). 8–9.
119. In 1999, secret votes were introduced for the election of the chairman, and location of the next meeting. IWC. 51st Meeting in 1999. (2000). 48.
120. Important international environmental conventions which allow this are the Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. (1989) 28 ILM. 657. Rules of Procedure, No. 46. The Convention on International Trade in Endangered Species of Wild Fauna and Flora. (1973) 12 ILM. 1055. Rules of Procedure, No. 15(3). The 1972 Convention on the Prevention of Marine Pollution by Dumping. (1972) 11 ILM. 1294. Rules of Procedure, Rule 29(1); United Nations Framework Convention on Climate Change. UNCED. A/ AC.237 / 18 (Part II) / Add.1. 15 May 1992. Rules of Procedure, No. 42(1). The Vienna Convention on the Protection of the Ozone

Layer. (1987) 26 ILM. 1529. Rules of Procedure, No. 46. The International Convention on Wetlands of International Importance. (1971) 11 ILM. 693. Rules of Procedure, No. 13.

121. IWC. 48th Report. (1998). 43.
122. IWC. 50th Meeting in 1998. (1999). 38.
123. IWC. 48th Report. (1998). 43.
124. IWC. 50th Meeting in 1998. (1999). 39.
125. Norway was only prepared to go along with a 'reasonable' system of secret balloting. IWC 50th Meeting in 1998. (1999). 39. However, by 2002, although agreeing in principle with transparency objectives, it believed that the threats of victimization, intimidation and coercion made secret voting necessary. IWC. 54th Meeting in 2002. (2003). 9.
126. See the Convention on Environmental Impact Assessment in a Transboundary Context, (1991) 30 ILM. 802. The Convention on Nuclear Safety (1994) 33 ILM. 1525. And the 1994 International Tropical Timber Agreement. (1994) 33 ILM. 1016.
127. See Sabel, R. (1997). *Procedure at International Conferences* (Cambridge University Press, Cambridge): 5, 17–18. I am obliged to Gail Bingham, for bringing this to my attention.
128. International Plan of Implementation, World Summit on Sustainable Development. Paragraph 146.
129. Article 2.1. of the UN Charter. The UN Charter is reprinted in Evans, supra n25. 8.

15. Vote-buying

1. INTRODUCTION

This chapter is the follow-on to the earlier discussions on transparency within the IWC. However, unlike the earlier chapter which focuses upon broad issues of NGOs, secrecy and the access of the press, this one focuses upon only one issue – that of so-called 'vote-buying'. This topic is worthy of a separate chapter, and the manifestations in international law generally, of this alleged practice are vast.

'Good governance' is an objective to be achieved at both domestic and international levels. Within this goal, important steps such as democratic procedures, equality and freedom from corruption are paramount. Despite the axiomatic worth of such goals, the practice of certain states in the international community is the antithesis of such objectives as their practices may introduce corruption. This problem is most prominently displayed with the issue of vote-buying. The best example of this within an international forum at the moment is with regard to the IWC. In this instance, the alleged buying of votes has been associated with linkages to Overseas Development Assistance (ODA or 'aid').

The current attempts to confront this practice have come via three avenues. First, the international community is developing a body of law aiming at prevention of corruption or corrupt practices operating at a number of levels. Second, with regard to the specific instance of possible corruption being linked through ODA, the international community is moving to untie conditionality attached to aid to low- income countries for commercial reasons. Finally, the debate is being taken to the forefront of a number of specific international forums, such as the IWC, which have been forced to confront this problem head on. Although these developments are welcome, it may be necessary for the international community to go further, and the forums that are being increasingly entrapped within such practices should consider appropriate measures which defend both the integrity and equality of all its members, but also the integrity of democratic procedures themselves.

2 GOOD GOVERNANCE, DEMOCRACY AND FREEDOM FROM COERCION

'Good governance' has become the catch-cry of the international community. This ideal began to appear clearly in the 1990s with the end of the Cold War when the international community began to reinvigorate itself. This idea made a clear imprint at the 1992 Earth Summit, where Agenda 21 stipulated a number of considerations around this ideal. Specifically, sustainable development requires: 'Good management that fosters the association of effective, efficient, honest, equitable and accountable public administration . . . All countries should increase their efforts to eradicate mismanagement of public and private affairs, including corruption'.[1]

By the end of the decade, the ideal of good governance had moved from a broadly environmental discourse, into the mainstream debates within international law. As such, the Millennium Declaration could stipulate that success in achieving the millennium goals depends, *inter alia* 'on good governance within each country. It also depends on good governance at the international level'.[2] Two years later at the World Summit on Sustainable Development the signatories added: 'Good governance within each country and at the international level is essential for sustainable development'.[3] This principle was reiterated at the 2002 International Conference on Financing for Development at Monterrey.[4]

The key to good governance is democracy.[5] The primacy of this type of political governance over all others has taken over 2,500 years to gestate, with its roots going all the way back to Antiquity[6] and Pericles with his oft-quoted definition of democracy as: 'power . . . in the hands not of a minority but of the whole people. . . . our political life is free and open'.[7] Within modernity, the right for citizens to exist within democratic regimes is a fundamental principle of human rights, and is well recognized within international law.[8] Non-democratic systems are seen as the antithesis for establishing sustainable (as well as economic and social) development.[9] This was confirmed at both the 1992 Earth Summit[10] and the 2002 WSSD.[11]

The international arena is also predicated on principles which are very similar to those in democratic domestic systems. The idea that democratic systems are also fundamental to international governance has been a long time coming although anomalies exist within the architecture of the international realm.[12] Nevertheless, it is increasingly accepted that democracy is the best formula at all levels, for ultimately individuals – like states – are equal to one another.[13] This position is reflected in the United Nations Charter which is predicated upon the ideal of 'the sovereign equality of all its Members'.[14] Moreover, the purpose of the United Nations is to, *inter alia*, 'develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples'.[15]

Within this rubric of sovereignty and equality, international law has evolved to link a number of inter-related ideas together as a platform for good governance at the international level. For example, Chapter 38 of Agenda 21 called for the documents adopted at the Earth Summit to be implemented in accordance with the: 'principles of universality, democracy, transparency, cost-effectiveness and accountability'.[16] One decade on, the 2002 WSSD proclaimed: 'within the workings of the international arena, the importance of democratic processes, accountability and transparency are foremost considerations'.[17]

One of the best ways to achieve these considerations is to ensure that all countries retain independence in their actions and choices. Theoretically, this should not be too difficult as international law is largely based on the principle of equal sovereign countries acting independently. Independence includes the power of a state to control domestic affairs and make its own choices (within the limits of international law) on both domestic and foreign policy.[18] Accordingly, Article 2(4) of the United Nations Charter stipulates: 'All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state'. This principle was clearly recognized in the 1970 Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States, in Accordance with the United Nations Charter.[19] Although this declaration strongly emphasizes refraining from the use or threat of force against other countries, it nevertheless stipulates:

> No state may use or encourage the use of economic, political, or any other type of measures to coerce another State in order to obtain from it the subordination of the exercise of its sovereign rights and to secure from it advantages of any kind.

This principle was also recognized in the ICJ case between Nicaragua and the United States which recognized a general prohibition of wrongful intervention in the domestic policies of foreign countries. Specifically, an intervention is prohibited by international law if it impinges on matters on which each state is permitted to make decisions by itself freely (for example, choice of its own political or economic system or adoption of its own foreign policy.)[20]

Despite this principle, it is important to note that the Nicaragua case added that the intervention must also involve an element of subversive coercion (that is, the use of force). This view is largely reflected in the 1969 Vienna Convention on the Law of Treaties, which declares treaties void if coercion of a state by the threat or use of force was involved.[21] However, the VCLT says nothing about economic types of coercion, although if the attempts involved getting another state to conclude a treaty through either corrupting or coercing one of the representatives of that state, the treaty could be considered invalid

for the joining state.[22] Thus, it would not necessarily lead to sanctioning those conducting the fraud. Fraud is the pertinent word.[23] Although in international law, it is clear that it is illegal for transnational corporations to act fraudulently[24] and fraudulent acts by an international organization can nullify that entity,[25] when the undue coercion for political gain is done by a sovereign state, the issue has – until the last decade – not been addressed. As such, disputes of this nature have had to be resolved through utilization of general international yardsticks such as those of 'good faith'. For example, in 2001 when the issue of vote-buying was a central point of contention at the IWC, a resolution was passed (by consensus) that noted the importance of good faith, the 1970 declaration and affirmed the application of these principles to the IWC. As such, the IWC resolution endorsed and affirmed 'the complete independence of sovereign countries to decide their own policies and freely participate in the IWC (and other forums) without undue interference or coercion from other sovereign countries'.[26]

Although this resolution was clearly well intentioned, it was restricted by the limits of the international jurisprudence available at the time. That is, although it is a clear principle of international law that all members of the international community should act in good faith towards one another,[27] good faith is very difficult to define[28] beyond the *pacta sunt servanda*[29] rule and elements of honesty, fairness and reasonableness.[30] However, of late, this difficulty may be slowly being overcome by a further evolving body of international law, which has both helped to flesh out these principles while at the same time helped lay down a definitive rule of what good faith is not – that is, it is not acting corruptly.

3 CORRUPTION

There is a difference between the legal and non-legal definitions of corruption. The non-legal meaning defines it as: 'To spoil or destroy . . . to turn from a sound into an unsound impure condition; to cause to go bad; to make rotten'.[31] Conversely, the legal definitions are much more specific, being concentrated around set activities. Thus, according to the European Civil Law Convention on Corruption,[32]

> [it] means requesting, offering, giving or accepting, directly or indirectly, a bribe or any other undue advantage or prospect thereof, which distorts the proper performance of any duty or behaviour required of the recipient of the bribe, the undue advantage or the prospect thereof.[33]

The problems with corruption are multifaceted. According to the various international conventions on the topic, corruption 'represents a major threat to

the rule of law, democracy and human rights, fairness and social justice, hinders economic development and endangers the proper and fair functioning of market economies'.[34] It 'undermines good governance . . . and endangers the stability of democratic institutions and the moral foundations of society'[35] and it 'undermines the legitimacy of public institutions and strikes at society, moral order and justice, as well as at the comprehensive development of peoples'.[36] The United Nations Convention Against Corruption contains a series of principles well worth iterating in its preamble. In particular:

> [Corruption can threaten] the stability and security of societies, undermine the institutions and values of democracy, ethical values and justice and jeopardise . . . sustainable development and the rule of law . . . corruption is no longer a local matter but a transnational phenomenon that affects all societies and economies, making international co-operation to prevent and control it essential.[37]

In essence, if corruption is permitted, all of the core values of good governance will be threatened.[38] Due to such overt concerns and direct threats to the international community, since the 1990s, a number of international and regional agreements on corruption have been concluded because, as the 2002 International Conference on Financing for Development at Monterrey recognized: 'Fighting corruption at all levels [was] a priority'.[39]

In furtherance of this goal a number of international and regional documents have already been concluded. These include the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions;[40] the Inter-American Convention on Corruption;[41] and the European Conventions on Civil[42] and Criminal Corruption.[43] Additional anti-corruption objectives or interlinkages working at the international level include those issued by the World Bank,[44] the International Monetary Fund[45] and the World Trade Organization.[46]

4 VOTE-BUYING

Democracy works by each qualified individual being given equal weight in decision-making processes. Typically, this process is concluded by the utilization of votes through which individuals declare and register their opinion.[47] Once a certain number of votes is obtained, the decision-making process will proceed accordingly. This process is utilized in domestic and international settings. In the latter, the general principle is that each country, no matter what its size and influence in the world, has one vote to exercise in the democratic process. Equality of voting is the general rule.[48]

Despite the obvious appeal of such practices, it has been recognized for over 2,500 years[49] that the democratic process can be fragile, as it can be

corrupted by unscrupulous actors who attempt to distort the outcomes of free and democratic processes.[50] In the context of forums which decide matters by voting, one of the simplest ways that corruption can be achieved is through buying the vote of others, so that the bought vote reflects the interests of the buyer, not the free and independent decision of the person/entity that originally possessed it.[51] Unfortunately, this is not just a philosophical discussion as the practice is a plague on many democratic countries.[52] Due to such problems, a number of countries have instigated specific laws which prohibit such activities.[53] For example, in New Zealand, the 1996 Electoral Act lists bribery, treating (the giving of gifts) or other forms of 'undue influence' (such as the use of force) as 'corrupt and illegal practices' if the intention of the act is to make a voter behave in any way which does not reflect the true will of the person voting.[54]

5 ODA, CONDITIONALITY AND UNDUE INFLUENCE

Manipulation of bilateral (as opposed to multilateral) ODA is an ambiguous problem. At the end of the twentieth century, US$51,521 million was distributed from the wealthy countries. Over one-quarter of this (26.5 per cent) was given as tied aid – or aid which was conditional on the fulfilment of various terms.[55] A condition attached to a loan or grant sets out a requirement for action of some sort by the recipient government, without which assistance will not be granted or continued.

In general, enforced conditionality is involuntary and as such may be viewed as a simple expression of *force majeure*, summed up in the popular saying, he who pays the piper calls the tune. One view is that donors who insist on conditionality are merely flexing their financial muscles in order to achieve their own objectives without necessarily paying much heed to the interests of recipients.[56] These donors have the resources which some developing country governments are desperate to obtain and this gives the donors the economic power to impose their will. This idea of conditional ODA (or its implementation) is not new. During the Cold War, 'Foreign economic aid [wa]s widely regarded as a weapon in the ideological war'.[57]

The use of conditionality has not changed since the end of the Cold War, although the purposes for which it is applied has. Multilateral institutions which work in areas of international economic concern such as the World Bank and the IMF,[58] through the debt crisis and the quest for development have gained an unprecedented ability to influence the countries to which they lend money.[59] As the leverage has become more entrenched, the conditions attached for the obtainment of finance (with an average of 56 conditions per loan)[60] have moved away from the traditional objectives of commercial self-interest and the

pursuit of economic orthodoxy towards broader 'good governance' objectives such as human rights, democracy and protection of the environment.[61] Typically, the multilateral institutions and the bilateral loans are piggy-backed, with mutually reinforcing conditionality. Moreover, the conditionality is often overlayed with other persuasion techniques, both complex and subtle, to achieve the desired goals of the donors.[62] The success of conditionality is determined from the relationship between the donor and the recipient. The most important consideration in this relationship is 'the internal characteristics of the targeted country'.[63] The characteristics of democracy and transparency are important in this equation, although possibly not as much as the inverse relationship between the use of conditionality and recipient governments' access to alternative sources of finance.[64]

Although recipient nations may sometimes resent conditional aid on the grounds that it is an invasion of their sovereignty,[65] philosophically such conditionality may be justified if the overall outcome is worthwhile and the expectations of the international community are observed when it is being applied. As such, the giving of aid which is conditional on the promotion of human rights and so on, is not necessarily a bad thing, as it reflects a type of world order worth aspiring to.[66] Furthermore, such conditionality is further supported if it is applied in a transparent manner and the direct self-interest of the donor in the outcome is minimal. This is the antithesis of a situation where a country may use its ODA to secure advantages for itself in various international forums, by manipulating vulnerable countries to vote in accordance with its wishes, or lose its ODA.

6 VOTE-BUYING IN INTERNATIONAL FORUMS

Vote-buying is an extreme example of conditionality and ODA. This issue first became apparent in the late 1970s and early 1980s when a number of Arabic countries introduced a new type of conditionality to their aid. Although they could not demand that aid recipients purchase their technology or utilize their consultants, they could (and did) insist that their aid recipients support Arab issues in general, and Palestinian ones in particular at international forums.[67] Unfortunately, this practice did not end there, as by the 1990s it was appearing in a number of very diverse international forums such as the International Olympic Committee (with regard to vote-buying to allegedly secure the Olympic Salt Lake City venue),[68] UNESCO (with regard to a Japanese official allegedly obtaining the top post)[69] and the WHO (again, with regard to a Japanese official allegedly obtaining the top job).[70]

This link becomes increasingly apparent in the management of international environmental resources and has been evident for over twenty years.

The first evidence of the overt manipulation of ODA appeared in 1982 in the South Pacific Forum when Japan was trying to reorganize its fishing arrangements in the light of the new UNCLOS arrangements which gave vast swathes of the ocean to coastal states.[71] Although Pacific island leaders noted in their communiqué 'the importance of aid for the development of their economies' they nevertheless 'Deplore the increasing tendency of distant water fishing nations to link the grant of aid with the receipt of fisheries access; and Declare that distant water fishing nations should not link that aid to fisheries access agreements'.[72]

These difficulties have been ongoing for Pacific island countries as they have continually experienced 'the negative effects of political intervention in Japan's aid decision-making'.[73] These pressures continued in the South Pacific region, where although aid discussions have always been welcome, overlaying difficulties have always clouded issues. This has been particularly so with Japan over the driftnet controversy, and Japan's reluctance to deal at the multilateral level (with the South Pacific Fisheries Forum Agency) with regard to access to regional fisheries. Rather, the Japanese preference has been for negotiations with individual countries.[74] Moreover, it became increasingly apparent in the 1980s that recipients of Japanese aid were also meant to be supportive of Japan in international forums. This was made clear in 1987 at an Overseas Fisheries Cooperation Foundation symposium, when a Fisheries Agency representative told Pacific island states that there were at least two criteria for providing fisheries grants:

> When the Japanese government selects the countries to which it provides fisheries grants, criteria include that the recipient country must have a fisheries agreement with Japan and it must take a supportive position to Japan in various international organizations.[75]

A different gloss on this process was offered by the Japanese Ministry of Foreign Affairs in 1998 with its assertion:

> Japan's ODA has demonstrated a substantial measure of success, and many recipient countries and their citizens have expressed sincere gratitude for that assistance. Such sentiments have earned Japan broad support from countries in Latin America, Africa, the Asia-Pacific, and other regions, notably within the context of UN elections and other international forums.[76]

At this point, the lines between appreciation, coincidence and coercion inevitably begin to blur to everyone except those who were involved in the direct negotiations. Moreover, it is important to note that Japan has continually explained that its overseas aid programme 'was not linked to voting policy'.[77] Nevertheless, it is possible to assert that coercion, via manipulation of ODA, *may* be becoming a recognized tactic by Japan. This linkage first

became apparent with the (successful) attempt to prohibit driftnets in international law,[78] which Japan tried to prevent.[79] It then manifested itself at the CITES Commission in 1994,[80] 1997[81] and 2000,[82] where Japan has allegedly repeatedly tried to manipulate the placement of endangered species on various protection lists, which restricts international trade in them.

Although such vote-buying allegations have been prominent in the above instances, it is within the IWC where Japanese vote-buying tactics have been most apparent. The IWC is a particularly interesting example for three reasons. First, Japan has been at the forefront of the whaling debate for the last thirty years and it has invested a large amount of time and effort in achieving an outcome which is both desirable and distinctive for an aspiring world superpower, showing it is willing to stand in opposition to the majority of other countries, with which it typically has a very close relationship. A second point of interest with the IWC forum is that the countries which are typically linked to having their votes bought (Antigua and Barbuda, St Vincent and the Grenadines, St Lucia, Dominica, St Kitts and Nevis, and Grenada) are unlikely members to actually be in the IWC, given the limited number of other international organizations in which these countries participate. Ironically, the Caribbean countries are not signatories to some very important international wildlife-related conventions, such as the Convention on Migratory Species (which has 76 contracting parties)[83] or the Wetlands Convention (128 contracting parties).[84] Both of these conventions are considerably cheaper to join than the IWC (as, unlike the other two organizations, the IWC is not based on the UN scales of assessment for membership contributions). Furthermore, these IOs may be of as least equal interest to these Caribbean states, as whales are, in the much smaller (40-member) IWC, where they have played a continually provocative role.[85] Arguably, the best example of this was in 2002 at the 54th IWC meeting in Shimonoseki, where part of the aboriginal subsistence quota for indigenous groups in Russia and the United States was voted down, essentially because a quota of 50 minke would not be given to some small-type coastal whaling communities in Japan (which did not fit the criteria for aboriginal subsistence whaling). The following countries voted against the proposal: Antigua and Barbuda; Benin; Dominica; Gabon; Grenada; Guinea; Japan; Mongolia; Palau; Panama; St Kitts and Nevis; St Lucia; St Vincent and the Grenadines; and the Solomon Islands.

Allegations of Japanese vote-manipulation first surfaced during the IWC's 1994 intersessional meeting on the then hotly debated Southern Ocean Sanctuary. At that meeting, four Caribbean countries – Grenada, St Lucia, Dominica, and St Vincent and the Grenadines – voted against the sanctuary proposal, along with the traditional opponents such as Japan and Norway.[86] Speculation and media reports soon suggested that hundreds of millions of dollars were being spent to secure the votes of countries which were recipients

of Japanese ODA in anticipation of IWC debates.[87] Although concern with vote-buying remained prominent throughout the 1990s, it was not until the end of the decade that the issue once again became front-page news. In 1999, Japan announced that it was giving aid to countries that had been reluctant to join the IWC for fear of damaging ties to 'anti-whaling' countries, in the hope of changing the balance of votes at the Commission.[88] The Japanese vice-minister for fisheries added: 'We would like to utilise overseas development aid as a practical means to promote nations to join [the IWC] expanding grant aid towards non-member countries which support Japan's claim'.[89]

In its attempt to change the balance of power at the IWC, Japan pushed so hard that in 2000 the (former) environment minister of Dominica, Atherton Martin, resigned in protest at the 'outright extortion'[90] of Japan and its conditionality on its foreign aid. He explained that he was doing this because: 'I am alarmed that the Japanese seem to be using the promise of aid . . . to manipulate [Dominica's] voting at the IWC'.[91] He went on:

> They [Japan] make it clear, that if you don't vote for them, they will reconsider the aid. They use money crudely to buy influence. Small islands are enormously vulnerable to offers of aid. Through extortion with aid, Japan has been able to get many island nations to join the International Whaling Commission and vote its way.[92]

The following year, a senior Japanese official partly explained this situation. Masayuki Komatsu stated:

> Japan does not have a military power like the United States or Australia. Unlike the United States or Australia, you may dispatch your military power to East Timor, that is not the case of Japan. Japanese means is simply diplomatic communication and ODA. So, in order to get appreciation of Japan's position, of course it is natural that [what] we must do results on these two major truths. So I think there is nothing wrong.[93]

Later in the year, the Tongan representative at the IWC commented: 'When we came to the meeting, on the agenda it had whaling and Japanese grants as one item. Mixing it like that, I don't think is the proper way of doing it. They are two separate issues'.[94]

Such comments sparked a furore at the 2001 meeting of the IWC[95] and in a number of countries. New Zealand accused Japan of 'chequebook diplomacy' in the South Pacific by exploiting small and vulnerable island states into supporting the Japanese position.[96] In the British House of Commons debate, the situation was described by Tony Banks:

> One of the most contemptible practices employed by the Japanese is the buying of votes in the IWC – providing development and fisheries aid to a number of countries on condition that they will vote with Japan at the IWC. I have a list here:

> Antigua and Barbuda, Dominica, Morocco, St Lucia, St Vincent and the Grenadines, St Kitts and Nevis, Grenada and Guinea. Two more countries – Panama and Peru – are likely to join the IWC this year as part of the Japanese vote-buying strategy. Namibia and Togo are rumoured to be potential IWC members, having signed fisheries agreements with the Japanese. The Government must challenge Japan and that vote buying, because if it is allowed to succeed at the IWC, it will buy a return to whaling.[97]

Despite the rising interest in this debate, in 2003 the Japanese ambassador to New Zealand acknowledged that his country gave aid in exchange for votes:

> [T]o defend our own stances we have to persuade our friends. . . . We are an international player so it is very natural for the Japanese government to ask for votes . . . overseas aid is very good leverage so they can support our positions in general, including whaling.[98]

7 JAPANESE ODA

Japan's ODA programme[99] grew out of an approach to economic co-operation with developing countries that Japan initiated in the 1950s. The first step towards becoming an aid donor was taken in 1952 when Japan contributed US$80,000 to the forerunner of the UNDP. This process continued throughout the 1950s as Japan made contributions towards Asian countries, especially those to which Japan had not paid reparations with regard to its wartime involvement. Japan entered the international community of donors by joining the forerunner of the Development Assistance Committee (DAC) (which tries to effectively co-ordinate donor activities to developing countries) of the OECD in 1960.

In order to promote Japanese exports in the 1960s, aid was tied to the purchases of Japanese goods and services by creating markets for Japanese goods and introducing Japanese banks and trading companies into developing countries. Starting in the 1970s, Japanese funds were used to build large-scale facilities for exploiting and processing raw materials in resource-rich countries, such as Indonesia and Brazil, and to relocate hazardous and energy-intensive industries to offshore facilities, usually in Southeast Asia.[100] Additional projects soon came to concentrate on supplies of materials crucial to Japanese industry, such as oil, aluminium and pulp. In terms of Pacific island nations aid, this has largely been used as a tool to secure access for Japanese fleets.[101]

In 1989 it emerged that Japan's foreign aid budget was the largest in the world. By 1998, Japan was donating US$10,683 million annually. This was the equivalent of 0.28 per cent of GNP (the global average is 0.23) or US$85 on a per capita basis (the global average is US$63). In terms of volume, this

makes Japan the largest contributor.[102] In 2000, due to the prolonged recession, the outlook for Japan's aid programme was deemed 'pessimistic'.[103] Although the aid budget was cut by 10 per cent in 1998, the anticipated cut in the 1999 aid budget was avoided. Overall, the net disbursement of aid has been in decline since 1996.[104]

Japan gives 46.8 per cent of its aid to low-income countries (an average income per capita of less than US$2 per day). This is a lower percentage than 16 other donors, which reflect a global average of 50.7 per cent. This percentage is a reflection of the strong focus of Japanese aid in Asia (48.6 per cent to the Far East, and 20.1 per cent to South Asia). Places like Oceania receive only 2.0 per cent.[105] However, despite this small percentage going to Oceania, it still remains very influential in this area. This influence began in 1987 with the Kuranari Doctrine, when ODA was doubled to the region.[106] This sudden increase in Japanese interest in the region coincided with the sudden growth in power of small island states following the conclusion of the UNCLOS convention (see above). In addition, a 'security burden' which accompanied the Cold War (making sure that Soviet aid to the region was minimalized) meant that Japan quickly became the largest or second-largest donor to the region. This position became more pronounced with the end of the Cold War, and the United States and the United Kingdom scaled down their ODA in the region. A common characteristic of most Pacific island states is the important role of aid in their economies. The ratio of aid to GDP is more than 20 per cent for many countries and for others, such as Tuvalu, the ratio is as high as 70–80 per cent. This reflects the small export base of many of these countries and low levels of domestic savings. Fiji, with a relatively large export base and higher savings rate, has an aid to GDP ratio of only 5 per cent.[107]

In tandem with the vast amounts of ODA that Japan provides, is the Japanese vision of its foreign assistance. The essence of this vision has been tied to moving away from the idea of traditional forms of 'strategic' aid (due to Japan's historical legacy in the Second World War) and moving towards one which provides a 'positive' international profile for Japan or as the Ministry of Foreign Affairs suggests, 'an honored place in international society'.[108] As such, 'ODA is a vehicle through which Japan strives to cultivate a sound international environment and promote ties of good will'.[109] Historically, Japan has largely lived up to this objective, as its ODA has been, as a rule, less ideologically driven[110] compared to that of many comparable donors.[111] The emphasis on good will, and the expansion into an apparently very admirable ODA policy, increased in the late 1980s and early 1990s when Japan was at the forefront of the primary international donors who issued a wave of public statements indicating that their aid programmes would reflect a broadened concept of development.[112] The core of the Japanese vision is clearly articulated in Japan's 1992 Official Development Assistance Charter,[113] which includes the

promotion of environmental conservation, and the pursuit of democracy and human rights.[114] Japan has fulfilled many of these objectives, and deserves special merit for its policy of not allowing its ODA to be applied to military use or the promotion of international conflict.[115] However, it is important to note that the charter also promises:

> Japan's ODA will be provided in accordance with the principles of the United Nations Charter (especially those of sovereign equality and non-intervention in domestic matters).[116]

Despite the admirable vision of Japan's ODA, it has been, according to the Ministry of Foreign Affairs,

> a target of serious criticism. In particular, Japanese ODA principles have been described as ambiguous, and the projects in some instances have been rated as ineffective, lacking in technical assistance or other 'soft' expertise-orientated aspects, or insufficient in terms of attention to local environmental factors or the needs of local residents. . . . Though some of the criticisms aimed at Japanese ODA happen to be erroneous, others nonetheless contain a truth and should be heeded if Japan is to improve the quality of its ODA programs.[117]

Corruption scandals aside,[118] a good example of the difficulties of Japanese ODA can be found in Japan's (substantial)[119] ODA which is utilized for environmental purposes. Within this broad portfolio, which began within Japan's various aid-related ministries in the mid-1980s, some notable results have been achieved, such as withdrawing funding from the Sardar Sarovar dam on India's Narmada river.[120] Nevertheless, in spite of a large degree of rhetoric to the contrary, parts of Japan's record with environmental aid have been problematic. The problems have arisen from within the auspices of aid, sending debatable pesticides to Third-World countries,[121] creating a detrimental impact within tropical forests,[122] and funding heavy polluting industries in the Third World.[123] With such a record it has been suggested that the only sustainability that Japan considers when allocating aid, is sustaining its own interests.[124]

The question raised by these issues, in addition to the vote-buying allegations, is how could this situation occur with Japan's ODA, given that Japan has such strong background principles? The answer to this may be twofold, and both answers relate to the same concern – the ability of rogue actors to act independently if they so desire. That is, if the charter and repeated Japanese pronouncements on ODA are taken seriously, vote-buying is clearly something that would not be tolerated. Nevertheless, it may be that unscrupulous actors within the Japanese bureaucracy have alternative views of this matter. However, until two problems are addressed within Japan on this question, it may be impossible to confront this issue.

The first problem relates to the possibility that ODA may be distributed via multilateral or bilateral means. If it goes through multilateral institutions, such as the World Bank, then that forum (not Japan) controls the distribution. If it is done bilaterally, then the donor retains the control. Japan like many other large donors clearly prefers the bilateral option, as opposed to multilateral ones or those based upon common and like treatment[125] or multilateral ODA management schemes.[126] Despite this preference, Japan is only slightly above the global average for bilateral as opposed to multilateral aid (70 per cent of Japan's aid is bilateral, whereas the global average is 66.9 per cent)[127] Moreover, Japan has reported that (unlike much of the recent history of its contemporaries) none of its bilateral aid commitments is tied to the purchase of goods and services from Japan.[128] As such, any analysis of the bilateral pressure applied with ODA needs to be more sophisticated than seeking simple linear relationships with Japanese ODA, and rather seen as part of the 'totality of relations'[129] with recipient nations.

The second part of the problem is the somewhat unique position within Japan's overall ODA schema, whereby there is no strong common or co-ordinating structure. As such, Japan's ODA administration lacks unified or coherent authority over programmes. It also lacks forceful laws governing it. Japanese citizens' groups and opposition parties in the Diet have tried for more than three decades to enact a 'basic ODA law' to create a centralized ministry and bring strong co-ordination to the system. As such, unlike other developed countries that are part of the DAC, Japan 'has no defined political structure for aid but relies on a dispersed administrative pattern to delineate political relationships'.[130] Efforts to create such a law (such as the US Foreign Assistance Act)[131] have repeatedly failed, apparently because of opposition from the bureaucracy. The lack of a unified development assistance structure creates a lack of co-ordination and, allegedly, even breeds unproductive competition between different branches of the bureaucracy.[132] As it stands, it appears that the four primary ministries (Foreign Affairs, Finance, International Trade and Industry, and the Economic Planning Agency), complemented by the implementing arms of the Overseas Economic Cooperation Fund (OECF) and the Japan International Co-operation Agency (JICA) together, represent a labyrinth of interests and objectives which may not always be in consensus. Indeed, it has been contended that conflict within government bureaucracy can skew the good overall intentions.[133]

The possible conflict of interests becomes even more pronounced when the close relationship between private sector, governmental bureaucracy and government actors becomes apparent in their attempts to advance strategic economic interests through ODA. These 'gray areas' often complement other aspects of Japanese political and economic development.[134] As such,

although there have been formal attempts to untie aid from the commercial sector, questions have been asked about how successful this objective has been.[135] These questions remain pertinent as Japan's ODA is far below the DAC average in most sectors, possibly relating to basic human needs, while retaining a somewhat 'commercial' flavour,[136] and the impetus 'from the business community to retie aid' is increasing.[137]

8 CONFRONTING CONDITIONALITY

Conditionality and ODA can be divided into two areas. The first may be termed 'political conditionality', in which the ODA is linked to a certain political outcome. The process of vote-buying is an exemplar of this practice. The second type may be termed 'commercial conditionality', typically whereby a donor links its ODA to the demand that certain conditions, such as the purchase of the donor's goods with the ODA is part of the deal. This type of commercial conditionality has resulted in linkages being made to countries which do not need financial assistance, because they are far from what may be considered in economic need, and/or the direction of ODA into projects which are far from the real basic needs of the recipients.[138]

The international community has been struggling for over five decades to reduce the tying of aid.[139] Of late some progress has finally been achieved, with regard to attempts to control the influence of commercial conditionality within ODA. This process began in 1998 when the G8 promised to 'work within the OECD on a recommendation on untying aid to the least developed countries'.[140] This process to untie bilateral ODA 'to the greatest extent possible'[141] has been buttressed by other developments in which aid has been tied to specific – worthwhile – objectives, such as basic education, health and local environmental protection. With the last practice, after a decade-long debate, it has been prima facie agreed that a certain percentage of aid for the least developed countries is to be directed strictly towards their 'basic needs'.[142]

Unlike unacceptable commercial conditionality attached to ODA, the international community has not yet directly addressed the issue of unacceptable political conditionality. This is not to suggest that all political conditionality is necessarily a bad thing. For example, ODA linked to an improved human rights record is commendable. However, ODA linked to the subversion of good governance, democratic procedures and the furtherance of corrupt practices is not. This is ironic, for as seen in the above sections, a vast amount of effort is currently being directed towards the furtherance of two inter-related goals at the international level – good governance and the prohibition of corruption. As yet, a strong linkage between good governance, corruption and

ODA with political conditions attached has not yet been made secure. Rather, as shown above, the emphasis is upon the amorphous ideal of 'good faith' in international negotiations. This is clearly not sufficient, as the alleged practice of vote-buying may not have weakened despite the clear articulation of these principles in the forums which are affected by the problem.

9 CONCLUSION

With such background issues in mind, the question now becomes: where to from here? The answer to this question is in three parts. First, the problem of vote-buying should be unequivocally rejected by the international community at the highest levels due to its being the antithesis of good governance, democracy and attempts to confront corruption.

Second, it is necessary to invoke suitable mechanisms to deter this practice. With regard to the necessity of actual deterrence it is important to recognize that resolution of vote-buying problems, as with resolution of corruption problems must primarily be sovereign based. This is due to two reasons. First, in an ideal world, bilateral assistance would give way to equitable, efficient and transparent multilateral assistance in which all ODA would be channelled through appropriate international organizations such as the World Bank or the Global Environment Facility. Apart from the surmountable difficulties of these organizations[143] the hope that countries will voluntarily do away with the influence that their bilateral ODA programmes give them is hopelessly utopian. As such, it is important to be realistic and accept that bilateral assistance is likely to remain a forthright feature of ODA for the foreseeable future. Second, the issue of vote-buying will be dealt with in a primarily domestic setting because as the current conventions on corruption are increasingly concluding, although extradition of offenders may be facilitated and international assistance forthcoming, ultimately, the issues of corruption will not be settled by some international forum. Rather, they will be dealt with by the sovereign states who have committed themselves to confronting the problem.[144]

Finally, a suitable method will have to be adopted within international institutions that are typically the battleground for such debates between the international recognition of the problem and the direct domestic confrontation of the difficulties. At this 'middle level' is would be useful to proceed on the assumption that those who are willing to subvert the objectives of good governance, democratic procedures and the fight against corruption, should not be allowed to participate in the forums they are seeking to distort.

NOTES

1. Agenda 21. Chapter II. Paragraph 32.
2. United Nations Millennium Declaration A/res/55/2. Paragraph 13.
3. WSSD. Plan of Implementation. Paragraph 4. See also paragraphs 120bis & 123.
4. International Conference on Financing for Development (Monterrey, 2002). A/CONF/198/11. Paragraph 11.
5. Democracy may be defined as: 'Government by the people, that form of government in which the sovereign power resides in the people as a whole and is exercised either directly by them or by officers elected by them'. (1988). *The Compact Oxford English Dictionary*. (Oxford University Press, Oxford): 410.
6. For a full discussion of this area, see Gillespie, A. (1999). 'Ideas of Human Rights in Antiquity.' *Netherlands Quarterly of Human Rights*. 17(3): 233–58.
7. Pericles. In Thycydides. *A History of the Peloponnesian War*. (Penguin Classics. Harmondsworth. 1954). II 37.3.
8. See Article 21 of the Universal Declaration of Human Rights. UNGA Res. 217 A (III). 10 December 1948. See also Article 25 of the International Covenant on Civil and Political Rights. UNGA Res. 2200 A (XXI). 16 December 1966. The importance of democracy has been reinforced by the United Nations following the end of the Cold War. through its Support of the Efforts of Governments to Promote and Consolidate New or Restored Democracies. See documents, UNGA. Doc A/49/713. 23 November 1994; UNGA. Doc A/52/334. 11 September 1997.
9. See Gillespie, A. (2001). *The Illusion of Progress: Unsustainable Development in International Law and Policy* (Earthscan, London). Chapter 1.
10. Rio Declaration. Principle 6.
11. WSSD. Plan of Implementation. 120bis.
12. Such as the Security Council and some of the Bretton Woods institutions. See Gillespie, supra n9: Chapter 10.
13. '[A]ll nations too are by nature equal the one to the other'. Wolff, C. (1749). *Jus Gentium Methodo Scientifica Pertractatum*. Prolegomena, paragraph 16. This reprinted volume is available from the Carnegie Series on International Law.
14. United Nations Charter. Article 2(1).
15. United Nations Charter. Article 1(2).
16. Agenda 21. Chapter 38. Paragraph 2.
17. WSSD. Political Declaration. Paragraph 31. Also: 'To achieve our goals of sustainable development, we need more effective, democratic and accountable international and multilateral institutions'. For the importance of transparency, see paragraphs 123 and 125 of the Plan of Implementation.
18. See Shearer, I. (1999). *Starke's International Law* (11th edn, Butterworths, London): 91. Shaw, M. (1999). *International Law* (Grotius, Cambridge): 152–3.
19. GA Res. 2625 (XXV). October 24, 1970. Adopted by consensus.
20. *Nicaragua* v. *The United States*. ICJ. (1986). 14.
21. See Article 52 of the Vienna Convention of the Law of Treaties. Reprinted in Evans, M. (2001). *International Law Documents*. (Blackwell, London): 168.
22. See Articles 50 and 51 of the Vienna Convention of the Law of Treaties. Reprinted in Evans, ibid. 168.
23. The word pertains to the usage of a dishonest act or trick to gain an unjust advantage. It is also used in connection with a person or thing not fulfilling what is expected of it. *The Oxford Concise Dictionary*. (Oxford University Press, Oxford): 466.
24. See World Bank. 'World Bank Debars Five Firms.' Press Release No.2000/081/S. The movement to stop corruption in international society is one of the more promising areas in this arena. In 1997, the Combating Bribery of Foreign Public Officials in International Business Transactions was agreed by the OECD. For some general discussions of corruption, see the special edition of (1999) *Third World Quarterly*. 20: 485–645.

25. See Cheng, B. (1987). *General Principles of Law As Applied by International Courts and Tribunals* (Grotius, Cambridge): 358–60.
26. Resolution on Transparency Within the IWC. IWC. 53rd Meeting in 2001. (2002). 54.
27. United Nations Charter. Article 2(2).
28. See the Nuclear Tests Case. ICJ. (1974). 253.
29. The rule that agreements and stipulations, especially those in treaties, must be observed. See Garner, R. (1994). *Black's Law Dictionary*. (7th edn, Liber, New York): 1133.
30. See O'Connor, J. (1991). *Good Faith in International Law* (Dartmouth, London): 117–25.
31. *The Compect Oxford Dictionary*, supra n5: 341.
32. Civil Law Convention on Corruption. Strasbourg, 4.XI.1999. ETS. 174. Article 2.
33. The Inter American Convention Against Corruption worked around the similar idea of bribery or other rewards but restricted the setting to governmental or public officials. 1996 Inter-American Convention Against Corruption. See Article 5.
34. European Civil Law Convention on Corruption Strasbourg, 4.XI.1999. ETS. 174.
35. Criminal Law Convention on Corruption. Strasbourg, 27.I.1999. ETS. 173. Preamble.
36. Inter-American Convention on Corruption. Preamble.
37. United Nations Convention Against Corruption. A/AC.261/3/Rev.5. Preamble, paragraphs 1 & 4.
38. '[E]thical principles, such as, *inter alia*, the general objective of good governance, the principles of fairness and equality before the law, the need for transparency in the management of public affairs and the need to safeguard integrity'. Revised Draft United Nations Convention Against Corruption. A/AC.261/3/Rev.4. Preamble, paragraph 9.
39. International Conference on Financing for Development (Monterrey, 2002). A/CONF/198/11. Paragraph 13.
40. OECD Convention. See <http://www.oecd.org/department/0,2688,en_2649_34859_1_1_1_1_1,00.html>.
41. Inter-American Convention. See <http://www.oas.org/juridico/english/Treaties/b-58.html>.
42. European Convention, supra n32.
43. European Convention, supra n35.
44. See <http://www1.worldbank.org/publicsector/anticorrupt/supporting.htm>.
45. See <http://www.imf.org/external/pubs/ft/exrp/govern/govindex.htm>.
46. See <http://www.wto.org/english/res_e/doload_e/reser_e/ae9902_e..htm>.
47. *The Compact Oxford Dictionary*, supra n5: 2251.
48. Although certain exceptions exist with weighted voting of which the Security Council of the United Nations is the most obvious example. See Schermers, N. (1995). *International Institutional Law* (Nijhoff, London): 518–27. White, N. (1996). *The Law of International Organisations* (Manchester University Press, Manchester): 72–6.
49. See Roberts, J. (1994). *Athens on Trial: The Antidemocratic Tradition in Western Thought* (Princeton University Press, Princton, NJ). 56, 64, 88.
50. As Hannah Arendt recognized, this reflects a corruption not on the part of the process, but of those at the top who are able and willing to manipulate their position. Arendt, H. (1963). *On Revolution* (Viking, New York): 238–42.
51. See Berelson, B. (1954). *Voting* (University of Chicago Press, Chicago): 306–7.
52. See Hyland, J. (1995). *Democratic Theory: The Philosophical Foundations* (Manchester University Press, Manchester): 240.
53. Hasen, R. (2000). 'Vote Buying.' *California Law Review*. 88: 1323. Carlan, P. (2003). 'Elections and Change Under Voting with Dollars.' *California Law Review*. 91: 705. Diamond, L. (1997). 'Consolidating Democracy in the Americas.' *Annals* (of the American Academy of Political and Social Science). 550: 12.
54. See Electoral Act. 1996. Reprinted in Statutes of New Zealand. Volume 35. 39–279. Section 218–30.
55. Independent Review of Poverty Reduction and Development Assistance (2000). *The Reality of Aid: 2000* (Earthscan, London): 3.
56. Baird, N. (1996). 'Tied to the Hand that Feeds.' *New Scientist*. October 12: 12–13. Tied aid typically costs 20–25 per cent more for goods or services than if they were subject to inter-

national competition. See OECD (2001). 'DAC Reaches Agreement on Untying Aid.' <http://webnet1.oecd.org/oecd/page…/0,3380,EN-document-notheme-2-no-20-5559-0,00.htm>.

57. Freeman, M. (1995). *Foreign Economic Aid: Means and Objectives* (Hoover Institute Press, Stanford, CA): 1.
58. Gillespie, supra n9: Chapters 1 & 3.
59. Killick, T. (1998). *Aid and the Political Economy of Policy Change* (Routledge, London): 5.
60. Ibid. 2.
61. See Hewitt, A. and Killick, T. (1996). 'Bilateral Aid Conditionality: A First View.' In Stokke, O. (ed.). *Foreign Aid Toward the Year 2000* (Cass, London): 21–36.
62. Nelson, J. (1994). *Global Goals, Contentious Means: Issues of Multiple Aid Conditionality* (Overseas Development Council, Washington): 30–34.
63. Ibid. 65.
64. Killick, supra n59: 12.
65. Nelson, supra n62: 24–5.
66. According to Killick, the justification of conditionality 'stands or falls on its ability to improve policies within recipient countries'. Killick, supra n59: 17.
67. Sardar, Z. (1981). 'How Good Is Arab Aid for the Third World?' *New Scientist*. October 22: 233.
68. See Sportserver (2001). 'IOC Looking Into Vote-Buying Case.' http://www.sportserver.com/olympics/story/6843p-219339c.html.
69. See Deen, T. (2000). 'Japan Battles for Big Power Status at the UN.' *Asia Times*. July 18. Also available from http://www.globalpolicy.org/security/reform/japan.htm. Also, Giudice, B. (1999). 'New UNESCO Chief Pledges Radical Steps to Reform.' <http://www1.worldbank.org/education/tertiary/news_archive/1203b9.html>.
70. See Centre for UN Management Accountability (1998). '50 Years of the WHO: Successes and Failure.' September 7. <http://www.cunma.com/press_articles/who_successes.htm>.
71. The main concern of the leaders was that linking aid with access denied countries a fair return to their EEZs. But the weak position of the Pacific island states, most of which could not afford a loss of aid or access fees, meant that the practice of linking aid and access continued. See Tarte, S. (1998). *Japan's Aid Diplomacy and the Pacific Islands* (Australian National University, Canberra). Chapter 4, and p96.
72. South Pacific Forum Communiqué, 1982. Available from the Ministry of Foreign Affairs, New Zealand.
73. Tarte, supra n71: 15. Tarte goes on: 'On one level this refers to the use of aid to threaten, punish or cajole states. All countries in the region, from the largest (Papua New Guinea) to the smallest (Tuvalu) have at times experienced these pressures'.
74. See South Pacific Forum Communiqué (1990). Vanuatu. July 31–August 1. 64–5. South Pacific Forum Communiqué (1988). Tonga. September 20–21. 50, 56. South Pacific Forum Communiqué (1987). Samoa. May 29–30.
75. Overseas Fisheries Cooperation Foundation (1987). Conference Report: Symposium on South Pacific Fisheries Development. (Tokyo). 93.
76. Japanese Ministry of Foreign Affairs. ODA Summary: 1998. Available from: http://www.mofa.go.jp/policy/oda/summary/1998/1.html.
77. IWC. 50th Meeting in 1998. (1999). 40.
78. See Chapter 4 on bycatch in this book.
79. See *Fiji Times*, 1989, July 31: 11. This example is cited by Wright, A. (1991). 'Driftnet Fishing in the South Pacific.' *Marine Policy*. September: 303–37.
80. In the lead-up to the tenth CITES meeting in Florida in 1994 an attempt was made to include the Atlantic Bluefin Tuna in Appendix II of CITES. This would have severely restricted the trade in this species, which Japan has a strong commercial interest in. The proposal came from Kenya. However, Kenya later agreed to withdraw its proposal before the meeting, after representations from the Japan Fisheries Agency 'through diplomatic channels'. See FFA News Digest. No. 5/94, September/October 1994: 2. This is noted in Tarte, supra n71: 148.

81. Brown, P. (1997). 'Japanese Bribes Threaten Wildlife.' *Guardian Weekly*. June 15: 4. Dickson, B. (1997). 'CITES in Harare: A Review of the Tenth Conference of the Parties.' *Colorado Journal of International Environmental Law and Policy*. 55. Brown, P. (1997) 'Japanese Bribes Threaten Wildlife.' *International News*. June 17.
82. Anon (2001). 'Note: The CITES Fort Lauderdale Criteria.' 114 *Harvard Law Review*. 1769.
83. CMS. Parties to the CMS. <http:/www.wcmc.org.uk/cms/part_lst.htm>.
84. RAMSAR. Contracting Parties to the RAMSAR. <http://www.ramsar.org/key_cp_e.htm>.
85. See Chapter 12 on compliance and the discussion on the truthless nature of the infractions committee.
86. Brown, P. (1993). 'Sanctuary for Whales Proposal Gets Support.' *GAZETTE* (Montreal), February 28: B8. See also *Japan Times*. 1993, May 14: 1, 2. Noted in Tarte, supra n71: 140.
87. See Caron, D. (1995). 'Current Development: The International Whaling Commission and the North Atlantic Marine Mammal Commission: The Institutional Risks of Coercion in Consensual Structures.' *American Journal of International Law*. 89: 154. For alleged latter figures involved, see Anon (2002). 'Stop Japan's Return to Full Blown Whaling.' *Ecologist*. 32(2): 19.
88. The Editors (1999). 'Japan Urges Support for Whaling.' *The Observer*. May 13: 7.
89. See Brown, P. (1999). 'Japan Admits Using Aid to Build Pro-Whaling Vote.' *Guardian International*. November 11: 12.
90. Whymant, R. (2000). 'Whaling Extortion Denounced.' *The Times* (UK). August 14: 8. Also available from <http://www.transparency.org/sourcebook/17.sidebards.html>.
91. Noted in Parry, R. (2001). 'Japan Admits Aid Deals Buy Support for Whaling.' *Independent*. July 19: 7.
92. Martin, noted in Browne, A. (2001). 'Dirty Deals: Whales Lose Out in Japan's Fight For Votes.' Observer. May 13: 5. See also 'Buying Votes for Dominica.' http://news.bbc.co.uk/hi/english/events/newsnight/newsid_994000/994511.stm.
93. This was originally reported in a radio interview of July 18, 2001. It was later reported in the *Independent*. July 19, 2001: 6. See also Browne, A. (2001). 'Global Ban on Whaling Faces Its Severest Test.' *Guardian Weekly*. July 26: 7. And Editorial (2001). 'Bloody Whaling.' In the same edition.
94. Mr Samiu Vaipulu. As reported in 'War of the Whales.' 60 Minutes. September 24, 2001.
95. See McCarthy, M. (2001). 'Battle Over Vast Whale Sanctuary In Pacific; Conservation Anti-Whaling Nations Need The Support Of Caribbean States In A Crucial Vote On A Proposal To Protect Nine Species From Hunters.' *Independent*. May 8: 7. Browne, A. (2001). 'Aid Harpoons Votes For Slaughter.' *Observer*/ *NZ Herald*. May 22. B2.
96. See 'PM Slates Japan's "Deplorable" Stand on Whaling.' NZ Herald. January 19, 2001: 3.
97. Banks, T. (2001). House of Commons Hansards Debates. Column 306WH. July 11. Available from <http://www.parliament.the-stationery-office.co.uk/pa/cm200102/cmhansrd/…/1071h05.ht>.
98. Masaki Saito. Quoted in NZ Press Association (NZPA). (2003). 'Japan Uses Aid to Buy Whaling Support, Ambassador Says.' *Dominion Post*. July 24: 1.
99. Japan has three types of aid. Grant aid (no obligation to repay), technical assistance and yen loans (loans at soft interest rates). Aid for fisheries is typically within the grant aid section. Orr, R. (1990). *Japan's Foreign Aid Power* (Columbia University Press, New York): 30.
100. See Brooks, W. (1985). 'Japan's Foreign Economic Assistance.' *Asian Survey*. 25(3): 324.
101. Orr, R. (1987). 'The Rising Sun: Japan's Foreign Aid to ASEAN, the Pacific Basin and Korea.' *Journal of International Affairs*. 41(1): 45.
102. That is in terms of volume, not in terms of percentage of GDP). Independent Review, supra n55: 3, 57. The highpoint of the GDP ratio was 0.35 in 1984.
103. Independent Review, supra n55: 54–5.
104. Ibid. 54.
105. Ibid. 3, 56.
106. In 1987 the foreign minister of Japan, Tadashi Kuranari, visited the Fiji capital of Suva and announced a new beginning in the relationship between Japan and the Pacific island coun-

tries. The centrepiece of the Kuranari speech was a declaration that Japan would double its official development assistance to the region. For a discussion of this, see Tarte, supra n71: 1.

107. Ibid. 2, 96.
108. Ministry of Foreign Affairs of Japan (1998). 'Council on ODA Reforms for the 21st Century, Final Report.' http://www.mofa.go.jp/policy/oda/reform/report21.html. At 2. At 26, they add: 'ODA in spirit and practice is an expression of Japan's will, ability, and character as a member of th[e] international community'.
109. Ibid.
110. Although Japan has a long, continuing history of using its ODA to secure its necessary resources, resource security (such as food supply) remains a predominant objective for Japan's ODA. In many ways, Japan's aid diplomacy has been 'extremely successful' in achieving this and other goals. Nester, W. (1990). 'The Third World In Japanese Foreign Policy.' In Newland, K. (ed.). *The International Relations of Japan* (Macmillan, London): 71, 97. Japan appears to have first used aid strategically in the early 1970s in the wake of the OPEC oil crisis. At this point Japan used aid as a 'diplomatic weapon' to placate Arab anger over Japanese compliance with US policy in the Middle Eastern region. The mission brought $3 billion in aid pledges to oil-producing nations and a 'distancing' policy towards Israel. See Yoshitsu, M. (1984). *Caught In the Middle East: Japan's Diplomacy in Transition* (Lexington Books, Lexington, MA): 7.
111. For discussion, see Orr, supra n99: 57–9.
112. 'Japan has traditionally been guided by a set of ODA policies that placed primary emphasis on economic development while maintaining a cautious stance about the attachment of political strings. However, in the aftermath of the Cold War . . . this particular feature of ODA policy has been changing'. Ministry of Foreign Affairs of Japan, supra n108: 6.
113. Official Development Assistance Charter, 1992. Cabinet Decision June 30. Available from <http://www.mofa.go.jp/policy/oda/summary/1999/ref1.html>.
114. Ibid. Section 2, Principles.
115. See Inada, J. (1990), 'Japan's Aid Diplomacy.' In Newland, supra n110: 100–120. Japan has utilized its aid to pressure both India and Pakistan to sign the Non-Proliferation Treaty, and in 1991, Japan announced it was suspending all its aid to North Korea until it dismantled a plutonium processing plant. See Nelson, supra n62. 110–11.
116. Official Development Assistance Charter, supra n113. Section 2, Principles.
117. Ministry of Foreign Affairs of Japan, supra n108: 7.
118. In 1986, a JICA (Japanese International Cooperation Agency) official was arrested for being involved in a 700,000 yen bribe in relation to an agricultural project in Morocco. The bribe came from a private firm official with a distinctly overlapping interest in the delivery of Japanese aid in this sector. It has been suggested that the fault in this instance was more in being indiscreet about the incident, and getting caught. In the same year, allegations were raised that Japanese aid funds were misused by the Marcos administration in the Philippines. When questioned about this, the director general of the Economic Planning Agency said that Japanese funding is 'like money a husband gives to a wife for shopping – the husband can't know where the wife spends it'. This story is told in Forrest, R.A. (1991). 'Japanese Aid and the Environment.' *Ecologist*. 21(1): 24, 28. See also Orr, supra n99: 42.
119. At the 1992 Earth Summit, Japan announced that it would increase its environmental aid to between 900 and 1000 billion yen for the period of 1992–96. In 1998, with regard to the Kyoto Protocol alone, Japan funded ODA projects amounting to 243.3 billion yen. See 'Annual Report of Japan's ODA: 1999.' Available from http://www.mofa.go.jp/policy/oda/summary/1999/ref2_02.html Footnotes 14 & 15.
120. See Forrest, R. and Harago, Y. (1990). 'Japan's ODA and Tropical Forests.' (WWF, London).
121. See Hadfield, P. (1993). 'Japanese Aid May Upset Cambodia's Harvests.' *New Scientist*. March 13: 5.
122. See Forrest, supra n118: 30–32.
123. Anon (1990). 'Japanese Business Counts the Cost of Aid Projects.' *New Scientist*. August 11: 9.

124. See Cross, M. (1989). 'Tokyo Nods Its Head Toward the Environment.' *New Scientist*. September 16: 6.
125. Tarte, supra n71: 2, 105.
126. For example, at the Earth Summit in 1992, as the Global Environmental Facility agreement was being concluded, with the objective of channelling environmental aid on issues of international concern through more balanced intermediaries (initially the World Bank, but later a balanced board with an equal split of developed and developing countries) which would effectively control the aid for clear and transparent purposes, Japan warned that it preferred the bilateral approach, and may try to bypass any overseeing multilateral institutions. Pearce, F. (1992). 'Japan's Billions May Bypass World Bank.' *New Scientist*. June 13: 4.
127. Independent Review, supra n55: 3, 56.
128. This is unlike many other countries. Indeed, just over a quarter of DAC bilateral aid (26.5 per cent) is given on the condition that it is used only to purchase goods and services from the donor country. This excludes technical co-operation which is mostly tied to services from the donor and which amounted to 40 per cent of bilateral aid in 1997. Independent Review, supra n55: 4, 56.
129. Rix, A. (1993). *Japan's Foreign Aid Challenge: Policy Reform and Aid Leadership* (Routledge, London): 176.
130. Ibid. 84.
131. For a copy of the 1961 US Foreign Assistance Act, and discussions of its implementation, see <http://www.usaid.gov/about/usaidhist.html#foreign>.
132. Forrest, supra n118: 28.
133. Orr, supra n99: 3, 19–52, 138–141. Rix, A. (1980). *Japan's Economic Aid*. (St Martins, London): 12–15.
134. Orr, supra n99: 64. Forrest, supra n122: 26–8.
135. Orr, supra n99: 65–8.
136. For Japan, building economic infrastructure, rather than poverty alleviation is the mainstream of its aid allocation. This emphasis is achieved in an ever-increasing call to achieve a 'balance' between poverty elimination and economic growth. Independent Review, supra n55: 55.
137. Ibid.
138. See Gillespie, supra n9: Chapter 10.
139. See OECD, (1996). *The Story of Official Development Assistance*. (OECD. Paris): 14, 22, 57–58. Agenda 21. A/CONF 187/26 (Volume III). 1992. 14 August.
140. G8 (1988) Communiqué, Birmingham. Available from http://www.g7.utoronto.ca/g7/summit/1998birmingham/finalcom.htm. G8 (2000) Communiqué, Okinawa. Available from <http://www.g7.utoronto.ca/g7/summit/2000okinawa/finalcom.htm>.
141. 2001 OECD DAC recommendation on Untying ODA to the Least Developed Countries. Available from <http://webnet1.oecd.org/oecd/page…/0,3380,EN-document-notheme-2-no-20-5559-0,00.htm>. See principle 2. Note, as well as only being targeted at the least developed countries, it also excludes food aid and 'investment related technical co-operation'.
142. Final Outcome of the International Conference on Financing for Development. (Monterrey). A/CONF/198. March 1, 2002. Paragraph 43. WSSD, supra n3: Paragraph 79 (a).
143. See Gillespie, supra n9: Chapter 1.
144. Revised Draft United Nations Convention Against Corruption. A/AC.261/3/Rev.4. Article 4.

16. Finance

1 INTRODUCTION

The financing of international organizations does not appear to be an interesting idea and seems far removed from the more enticing political and legal debates which tend to have much higher profiles. As such, there has traditionally been a dearth of literature on this seemingly bewildering area.[1] This is ironic, as the financing of IOs, although taking much more indirect routes, often goes to the heart of the organizations. This realization has become apparent in a number of IOs where refusal to pay (typically because of political, as opposed to financial constraints)[2] agreed contributions has led to serious questions being raised about the viability of the organization's existence. The foremost example of the current problem is the United Nations,[3] although this problem has also been at the centre of a number of other IOs.[4]

Unlike many of the other areas of international law, the financing of IOs is a relatively new dilemma. Although historical examples of contributions to IOs can be traced back to classical Greece,[5] until the twentieth century, the question of financing such entities was very rare. This was because before the League of Nations most intergovernmental conferences were non-recurring. That is, they met once, transacted their business, and the delegates went home. Accordingly, expenses were temporary. The situation at the beginning of the twenty-first century could not be more different where the number of IOs, the regularity of their meetings, and the overt financial costs of this have proliferated at speed and are typically massively bigger amounts than when they started. For example, whereas some small IOs such as the IWC have gone from an annual budget of just over a thousand pounds sterling in 1946[6] to just over a million fifty years later,[7] larger IOs like the UN have budgets which are 65 times greater (ten times bigger in real terms) than when they started.[8] Such costs and the question of how to attribute them have been the subject of decades of debate. It is with regard to trying to find a solution to this problem which has bedevilled the IWC for the last 30 years, that this chapter has been written.

2 THE FINANCING OF THE INTERNATIONAL WHALING COMMISSION

The financing of the IWC began with a basic equal split of the costs between the signatories. As the Commission evolved, the costs of both scientific research (from the mid-1960s) and inspection and observation (from the early 1970s) became apparent. These were ultimately dealt with by schemes that reflected pro rata interest in the taking of whales. In 1974, the first major revision of the contributions regime occurred. At this point an equal share split was introduced, with the signatories bearing 50 per cent of the total, and the balance being met equally by (25 per cent) contributions based on operated areas since 1954 and (25 per cent) contributions based on catches in the preceding year.[9] Debate quickly followed[10] and the last two considerations changed to a 30 per cent (area of interest component) and 20 per cent component based on the weight of the whales caught by member countries.[11]

Although this was accepted at the time, the debate was especially notable at this point as the suggestion arose (from Iceland) that the contributions regime would be better placed to work on the 'capacity to pay' UN formula.[12] Although this proposal was rejected, debate about 'equity' gathered pace[13] as did the elusive search for another scheme devised to 'produce a more equitable distribution of costs amongst members'.[14] The new scheme which emerged in the early 1980s was broadly similar to that utilized by the North East Atlantic Fisheries Commission (but was abandoned by the commission in 1982).[15] The new IWC scheme was based on the accumulation of shares allocated for membership (six shares), commercial (each land station and small-type coastal whaling operation at three shares and each pelagic whaling vessel at two shares) and aboriginal/subsistence whaling operations (two shares), and delegation size at the last IWC meeting.[16]

No sooner was this system agreed, than it was challenged as inefficient[17] and simultaneously too expensive for the wealthy countries to remain within the IWC and too expensive for the poorer countries to join.[18] As such, the search for 'alternative arrangements'[19] began anew with a fresh intersessional working group.[20] However, this group could not reach consensus,[21] and despite continuing disquiet for the next few years, the Commission continued with the then operative regime.[22] At the 42nd meeting the secretariat put forward a proposal based on a flat membership fee, supplemented by a system of shares allocated on the basis of whaling activity, receipt of documents, attendance at meetings and the right to vote. Despite intense debate, agreement could not be reached.[23] Nevertheless, the following year at the 43rd meeting, a new formula for contributions was agreed.[24] This was substantially the same as the previous share system (with regard to shares for land stations, small-type coastal whaling, factory

ships and aboriginal whaling), except that the membership share fell (from six to two) and delegation size at annual meetings increased, with larger delegations having to pay increased amounts.[25]

This was no sooner agreed than debate erupted that the generating economic benefits from cetaceans (such as whalewatching[26] scientific whaling and small cetacean takes)[27] should be considered. This debate was then fanned by Antigua and Barbuda who reactivated the equity argument and suggested that consideration should be given to the idea of 'moving to a UN system of country assessments' which would comprise 'a basic element of 10% and 90% shared in accordance with the UN contribution rate'.[28] This suggestion sparked debate at the 1999 and 2000 meetings.[29] The 2001 intersessional on this topic tried to make further progress towards solving this problem. Although the intersessional adopted the principles of 'openness, stability, fairness and user-pays' the variations of how these were to be utilized could not be agreed by this meeting, or by the 53rd IWC assembly.[30] Further intersessional meetings in 2002 attempted to advance this area even further by dividing the possible contributions regime into four areas, with affixed percentage contributions. These were annual membership (10–40 per cent), a wealth component (30–50 per cent); a consumptive use component (10–25 per cent), and a meeting attendance component (5–20 per cent).[31] Despite these proposals, debate was fractious over the inclusion of considerations pertaining to whalewatching, and small cetaceans – given that some countries did not agree to the IWC competence in this area. Additional suggestions that an international observer regime for any forthcoming observation regime, could be in the range of £850,000 per year (nearly doubling the current IWC budget) added to the difficulties.[32] This situation considerably worsened at the 54th annual meeting in 2002, when an 'Interim Measure for Financial Contributions' was voted through (led by Argentina, and Antigua and Barbuda) of which reductions of between 50 and 25 per cent were passed for developing countries, whereas financial increases in contributions were forced upon a number of developed countries. The rider to this 'interim' regime was that the current mechanism was too 'onerous' for developing countries, and that the task force was taking too long to resolve the situation. As such, it was instructed to complete its work as a matter of 'urgency' despite ongoing concerns with the task force in 2003, with a number of key countries withdrawing from the group.[33] Unsurprisingly, progress on this issue was slow, and the task force was postponed until the RMS discussions were concluded, as it was not deemed practical to develop budget proposals until the full cost implications of these were known.[34] This delay in resolution of the cost issue led to a further resolution which reduced the contributions from very small (developed) countries after they made a special plea to the Commission.[35]

Unfortunately, neither this proposal by the task force, nor the interim solution is likely to engender progress within the IWC. The reason for its failure is that not only is it reliving debates which arose over twenty years ago, it is also out of line with the development of financing for organizations which operate in the international arena. The divergence from the current developments can be seen in two clear areas: the first pertains to the splitting of budgets into different components; and the second relates to the mechanisms to fund the different components.

3 SINGLE AND SPLIT BUDGETS

According to principles of budgetary unity, public bodies should bring their income and expenditure into single budgets.[36] If applied to IOs this may increase the organization's autonomy and prevent member states from concentrating their financial contributions on specific activities within an IO. If this approach is neglected, member states may choose no longer to pay the organization as a whole and the classical distinction between compulsory and voluntary contributions can become blurred.

Despite these ideals, the principle of budgetary unity has slowly fractured within both the UN generally[37] and a number of IOs. This is probably because when the costs are divided according to administrative and operational costs, the control and utilization of funds is enhanced. Within the UN at the macro level the ideal of a massive single budget has already been defeated by the advent of the multitude of specialized agencies which all command separate budgets.[38] Even within the more centralized UN body which still professes to administer a broadly singular budget, the more costly operations (that is, peacekeeping) are dealt with by a separate budget.

Within a number of international agreements, the idea of having different mechanisms to divide up the broadly administrative costs from important sections of the operational costs has been dealt with in a number of different ways. Some organizations use a separate budget for their operational expenditure, either because they wish to apply a different (voting) procedure in approving different expenditures, or because they want to finance them via different methods. For example, the International Agreement on Jute and Jute Products[39] contains an administrative budget (which is compulsory) and an operational budget (which is optional). Other examples of IOs which have separate budgets (often with very clear demarcation lines of what fits in which) are the International Atomic Energy Agency[40] the International Tin Agreement[41] and the United Nations Industrial Development Organization.[42]

Administrative and Operational Budgets

Broadly, the expenditure of IOs can (theoretically) be classified as either 'administrative' or 'operational'. The administrative costs[43] are the costs of running the organization (buildings, staff, equipment and so on). The operational costs are those related to the projects performed by the organization (economic assistance, peacekeeping, environmental management and so on). Sometimes, the distinctions are not always clear. Nevertheless, the classification is important as operational expenditure often needs more extensive control than administrative expenditure.

Administrative Costs

A few unique examples exist where there is no standing secretariat, and no standing budgets to divide amongst signatories. The Antarctic Treaty System was an exemplar of this approach (until 2003) whereby since there was no standing secretariat, the meetings (and costs associated with them) were the responsibility of the governments who hosted the meetings (which follow the alphabetical list of the signatories).[44]

However, for most IOs, a standing secretariat and the multiple associated costs is common. In such situations, typically, the largest part of the IO's overall budget is used for administrative expenditure.[45] For example, within the UN, it is estimated that 85 per cent of the regular budget is administrative.[46] Within these costs the largest single item (normally about three-quarters) is the cost of personnel.[47] In the IWC, in the 1990s, approximately six-tenths of the budget went to the running of the secretariat.[48] The costs of having international meetings may also contribute considerably to the administrative costs of the IOs, even though it is common practice for each member to bear the costs of its own delegation. For example, nearly one-sixth of the IWC's annual budget is dedicated to the costs of the annual meeting.[49]

The next important cost sector is the facilities (that is, the building) in which the secretariat is located. With regard to the cost of buildings, as a rule, this is typically covered by the budget of the organization. In many cases, however, other financial sources have been available to meet at least part of the costs. This usually comes in the form of generous contributions by the host governments (because of the economic and political advantages of having an IO situated in their territory) towards the housing of the IO.[50]

Specialist/Scientific Costs

An important area within administrative costs pertains to the specialists (and their equipment) who make up the scientific, technical and working groups or

committees of IOs. Unless the IO has a strong scientific research basis, this is usually a relatively small contribution to the total and therefore forms only a small part of the administrative total.[51] However, with some IOs, such as the CBD, the scientific costs may be significant, yet are still incorporated into the overall administrative budget.[52] Likewise, with the IWC, although scientific costs have ranged from nearly half of their budget in the 1980s, down to close to one-fifth between 1990 and 2002, scientific costs are part of the general budget, which breaks off into a very broad 'research' classification (although contributions are often earmarked).[53] This is despite the fact that directly related scientific research costs were originally offset by a separate levy on pelagic whaling[54] and attempts to create dedicated (separate) environment research funds have not eventuated, despite clear intentions for their establishment.[55]

Alternative arrangements for the funding of the science component can be seen where the scientific component of the budget has become a stand-alone consideration within a largely autonomous body that provides specific information for the larger IO. This may work in one of two ways. First, where the IO is primarily scientific in focus, the administrative costs are a small subsector of its overall budget and the two are weaved together within a general funding mechanism. The Intergovernmental Panel on Climate Change (which provides the science for the Climate Change regime) is a good example of this, whereby its overall costs are met by annual contributions from governments which are determined in accordance with the UN scale of assessments.[56] A second approach may be seen with the Scientific Committee on Antarctic Research which plays a supportive role to the ATS. Here, the budget is provided (on a largely voluntary basis) by annual contributions of its national members and inter- and non-governmental organizations.[57]

In other IOs, if the scientific/research is a significant cost sector, it may be fenced off into a separate budget category (often akin to operational costs) which may have a separate financing arrangement.[58] The first approach to this separate financing arrangement is where the scientific costs are absorbed by national governments and as such do not appear within budgetary considerations of the IO. For example, with the World Meteorological Organization (WMO) working groups composed of experts nominated by national weather administrations, are financed directly by the national governments (operating primarily within their own territory, who share information within the WMO system) thus relieving the budget of the WMO of considerable expense.[59] A slightly different approach is where the signatories effectively lend their scientists (and other personnel) to the relevant scientific committees of the IOs. In these situations, as the expenses of the national delegations in the general conferences are swallowed by their national authorities, so too are

those relating to the (scientific) members who participate in 'any other organ'[60] of the IO. For example, with the regime designed to deal with oil spills at sea, it is specified: 'Each Contracting State shall bear the salary, travel and other expenses of its own delegation to the Assembly and of its representatives on subsidiary bodies'.[61] A slightly more ad hoc version of this can be seen with the Agreements for the Establishment of a General Fisheries Council for the Mediterranean, whereby it was agreed that after the administrative costs were dealt with by separate financing arrangements, the expenses of research would be paid by contracting governments either individually or co-operatively, 'in the form and proportion to which they shall mutually agree'.[62]

Operational Budgets

Some IOs have created broadly autonomous subset IOs which may be entrusted with a specific operational mandate.[63] The first example of this comes from the World Heritage Fund which operates under the 1972 World Heritage Convention.[64] This fund, which carries out strong operational objectives of the World Heritage Convention, is financed from a separate mechanism which is fenced off from the regular budgetary contributions.[65] Likewise, the regime designed to protect, prevent, rehabilitate and compensate after accidents involving oil pollution at sea, is built around a series of conventions dealing with multiple aspects of essentially the same problem.[66] Nevertheless, the fund which ultimately addresses the issue of compensation[67] and is responsible for a large budget, is kept separate not only in terms of finance, but also by having its own assembly and secretariat.[68] Another example of this trend to separate out operational budgets can be seen with the regime designed to protect the ozone layer,[69] whereby a separate financial mechanism isolated from the traditional costs of the greater IO, has been established for funding an operational objective.[70] These costs are met by a stand-alone trust fund[71] which not only has its own budget, but also its own executive committee.[72]

One of the more notable examples of this approach whereby operational costs have been isolated from administrative costs is with the Global Environment Facility (GEF).[73] This largely autonomous facility[74] which promotes international co-operation and fosters actions to 'assist in the protection of the global environment'[75] is, *inter alia*,[76] the interim financial mechanism for the CBD[77] and the Framework Convention on Climate Change.[78] However, although being clearly designed to help *inter alia* the FCCC and the CBD, it operates under a separate budget. As such, a strong part of their operational component is kept clearly separate.

4 FINANCING INTERNATIONAL ORGANIZATIONS

The vast majority of IOs rely for their funds on the same sources as private (international) organizations. These are compulsory contributions levied on members, gifts or voluntary contributions, and retributions for services rendered. Typically, it is the signatories who are the full members to the organization who provide the largest share of the income. Nevertheless, clear exceptions exist where 'associated' members, or other IOs or NGOs make financial contributions for their differentiated membership.[79]

Self-funding International Organizations

Some IOs do not require contributions from their signatories because they are fully self-funding. Although many IOs generate some small income from their activities or related external activities (often from the sale of documents, publications, refreshments, and souvenirs and so on)[80] few are completely self-funded. Nevertheless, some IOs generate larger amounts of finance by charging for the performance of a specific requested task. This practice, whereby nations have agreed to share the costs of specialist ad hoc activities is evident from the League of Nations[81] to the UN.[82] This situation is unlike scenarios where signatories essentially buy a service from an IO which is part of their normal function. For example, both the IAEA[83] and the supply agency of EURATOM[84] may charge members for materials, services, equipment and facilities furnished by the organization.

Some IOs achieve a very high degree of financial independence via other forms of revenue generation that make them near independent in their need for additional contributions from their members. Examples of this approach range from the nineteenth-century European Commission of the Danube,[85] the World Bank (and associated lending institutions) and the International Monetary Fund,[86] the World Intellectual Property Organization,[87] and the European Coal and Steel Community[88] which was to become part of the European Union.[89] Despite these examples and the attractions of this type of funding at the highest levels such as with the UN[90] and some early attempts at utilizing the ideal of some forms of international revenue-generating schemes[91] the idea has remained largely isolated in international polity.

Equal Contributions

A number of IOs utilize the financial mechanism whereby all the signatories pay exactly the same amount. The justifications for equal contributions range from administrative simplicity, through to a broad conception of equity. That

is, if all countries have the same rights in international forums, they should all pay the same amount. Because of such considerations, in some IOs, some countries have opted to pay more than they would under 'capacity to pay' scales, as they wish to be recognized as fully equal to other countries.[92]

The principle of equal contributions was utilized by the Mannheim Convention[93] (from the nineteenth century) and remains in use by OPEC.[94] The IWC originally utilized this approach,[95] as did the ICCAT.[96]

A modified version of this approach is where equal contributions form only a percentage of the overall scheme. For example, with some international fishery organizations, equal contributions make up only a set percentage of the overall budget (typically one-third). The remaining two-thirds is divided from other considerations, such as total catch quotas. This approach can be seen within the 1969 Convention on the Conservation of the Living Resources of the Southeast Atlantic,[97] the Convention on Fishing and Conservation of Living Resources in the Baltic Sea and the Belts,[98] the Convention on the Conservation of Antarctic Marine Living Resources,[99] the Convention on the Conservation of Southern Bluefin Tuna,[100] the Convention for the Conservation of Salmon in the North Atlantic Ocean,[101] the North Atlantic Fisheries Organization,[102] the North East Atlantic Fisheries Commission,[103] the Inter-American Tropical Tuna Commission[104] and the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.[105]

Another variant version of this is with the Indian Ocean Tuna Commission which has a scheme with 'an equal basic fee and a variable fee (based on catch and per-capita income)'.[106] The equal fee was set at 10 per cent (for membership) and a further 10 per cent divided equally among the members having fishing operations in the area targeting species covered by the Commission. Likewise, with the Agreements for the Establishment of a General Fisheries Council for the Mediterranean, the signatories could agree (but not on anything else in the contributions debate) that a 10 per cent of the total budget should be determined by a 'basic share' issue.[107] This reduced share divided by an equal percentage goes all the way down to 2.94 per cent of the IMO's budget which is divided equally among the members.[108]

Optional Classes of Contributions

It is also possible to finance IOs through states voluntarily adopting their own class of contributions[109] which they think best suits them. The theory of this approach is that because of national pride and sovereign integrity, each state will register in the most appropriate class.[110]

This approach has been utilized for over one hundred years by the Universal Postal Union (UPU),[111] the International Telecommunication Union

(ITU),[112] (in part) by the World Intellectual Property Organization (WIPO)[113] and by the Scientific Committee on Antarctic Research (SCAR).[114]

Despite the clear viability of these examples, questions have been raised about the utility of such a method with the larger IOs whereby states feel neither ashamed because of their economic status nor sufficiently responsible for the work of the organization to pay as much as they can. Indeed, it was partly because of such allegations and the magnitude of the finances that needed to be collected that the League of Nations which had initially adopted the UPU approach revised their covenant towards the now more common unit approach based on a scale of assessment which reflected the economic and financial position of its members. [115]

Scales of Assessment Based on 'Equity'

It is common to seek 'equitable' arrangements within contributions regimes for IOs via scales of assessment. The necessity to have the full participation of all members of the international community is a core value of the international system generally,[116] and is also specifically recognized in certain areas such as international environmental law, whereby the 'special situation and needs of developing countries'[117] is clearly recognized along with the special 'responsibilities' of developed countries and their 'common but differentiated responsibilities'.[118] Similar calls have been made in other international forums. For example, with regard to international fisheries, the FAO Code Of Conduct For Responsible Fisheries calls upon the need to 'work for the adoption of measures to address the needs of developing countries, especially in the areas of financial and technical assistance [and so on, with a view to helping them, *inter alia*] to participate in high seas fisheries'.[119] The 1995 Straddling Stocks Agreement contained similar exhortations.[120]

To date, one of the more common ways to address this problem has been to tinker with the contributions regime. However, it is important to note that there are multiple ways of achieving the necessary contribution of developing countries to IOs without doing this.[121] If it is accepted that the contribution regime performs an integral function of an IO, especially in terms of the underlying principles it is trying to reflect, then all the more effort to find alternative ways to increase the participation of developing countries (without playing with the contributions regimes) should be made. Finally, if 'equitable' regimes are to be pursued, it may be useful to consider what percentage of the total contributions regime they comprise.

The Debate about Equitable Contributions in the United Nations

The foremost examples of IOs which utilize 'equitable contribution regimes' are those of the League of Nations and the United Nations and a number of

their specialized agencies.[122] Although the UN scale of assessment and its 'equitable approach' is utilized in a number of forums, it is important to note that this approach has been bedevilled with controversy since its inception in 1946.[123] Indeed, despite over fifty years of effort on this quest for equitable contributions, distinct difficulties have arisen. These have centred on both accounting questions such as why are per capita considerations taken into account for equity equations by some IOs[124] yet not by the UN,[125] and broader 'political' issues. The most notable of these has been raised by the United States with its insistence that the principle of sovereign equality calls for reasonable maximum and minimum limits.[126] This claim is supported by the vast distinction between those who pay the largest possible percentage (the United States at 22 per cent)[127] and the 152 developing nations of the UN (out of a total of 185) who are assessed at between 0.001 and 0.2 per cent.[128]

There are an additional four concerns about the current UN approach. The first is that those who make the lion's share of the contributions have little say in how those funds are utilized, because unlike in the Bretton Woods institutions, weighted voting does not correlate to financial contributions.[129] A second consideration is that this situation – whereby those who provide most of the finances have little control over how they are utilized – is the antithesis of one of the cornerstones of democratic theory: that those who contribute towards governmental structures, should have a representative say in how those funds are spent.[130] The third difficulty relates to the contention that no state should vote in matters with financial consequences if it does not bear a reasonable share of the financial burden. As such at the most basic level, a meaningful minimum bottom rung (a long source of debate) [131] must be established. The fourth problem is that if one country (or a few) is (are) responsible for the lion's share of contributions, the IO may become overtly dependent on a single source of revenue[132] which may lead to financial vulnerability if they withdraw from the IO.[133]

With such considerations in mind, important players in the international arena such as Olof Palme proposed that the cap on maximum assessment by any one country be reduced from 25 to 10 per cent. To do so, argued the former Swedish prime minister, would make the UN better reflect that it was an organ of all nations.[134] Some IOs have taken a lead from this type of approach, and have adopted considerably different lower and upper limits than those utilized by the UN.[135] A prominent example of this was with the League of Nations, where the upper limit of contribution was 11 per cent.[136]

Voluntary Contributions

The suggestion that financial contributions should be on a voluntary basis first arose after the former USSR and France both refused to contribute towards the

cost of the first two peacekeeping operations carried out by the United Nations. Although there were numerous arguments involved[137] when the issue was resolved by the ICJ, the conclusion was that the costs need not reflect the special responsibility of those who caused the problem. Nevertheless, the intransigence of both the Soviet Union and France to pay their contributions meant that after a prolonged debate, new mechanisms for funding peacekeeping were established. While these do not reflect the idea of causation and responsibility, they do retain an underlying ideal that a state may not necessarily be forced to contribute towards an international regime if they consider it is acting *ultra vires*.[138] Moreover, the political movements following the débâcle in which the USSR and France almost lost their vote in the UN, were such that the ideal of moving away from compulsion for controversial contributions became much more prominent.[139] The eventual solution to this problem – voluntary funding – has the clear advantage of bypassing the possibly unpalatable aspect of funding operational parts of budgets with which signatories disagree. Moreover, politically popular projects tend to receive increased funding.[140]

This softer approach to seeking contributions via a voluntary approach is also followed by the majority of economic, social and humanitarian programmes (other than peacekeeping) offered by the UN's specialized agencies.[141] The active solicitation of voluntary contributions dates back to the League of Nations.[142] Within the UN, the idea is so well established that the principle of receiving voluntary contributions (which must be kept in separate trust funds) was clearly built into the constitutions of a number of UN agencies.[143] In addition, some established IOs, as diverse as the WHO[144] and the IWC (in part)[145] have moved towards voluntary funding arrangements on their own volition for parts on their financial considerations. In both instances, the voluntary funds, which may come from signatories, non-signatories and even non-state actors,[146] are designed to supplement the traditional regular funding arrangements. For example, UNEP, in addition to its regular budget which is derived from the UN budget for core activities (via compulsory assessed contributions), operates three specialized funds which are all based on voluntary contributions.[147] Likewise, with the UNFCCC (after the science funds have been farmed out to the IPCC, and a significant part of the operational budget to the GEF) a further four trust funds operate. With these, only the core budget ('the special trust fund') is funded by indicative contributions from all parties based on the UN scale of assessments. The other trust funds are all strictly voluntary, and as such, receive much more irregular contributions than those directed to the core budget.[148]

Although voluntary funds may be irregular, and they are ultimately 'voluntary', it is commonly hoped that these contributions will be both regular and follow pre-set patterns. For example, with the Global Environmental Facility

Trust Fund,[149] contributions are linked to detailed annexes[150] within the instruments whereby the parties make a 'grant' of a specified amount.[151] Likewise, with the Montreal Protocol Fund, '[the (voluntary) contributions] are based on the United Nations scale of contributions'.[152] Moreover, although the contributions are clearly voluntary, the decisions from each of the meetings of the parties to the Montreal Protocol have continually 'urge[d] all Parties to pay their outstanding contributions promptly and also to pay their future contributions promptly and in full'.[153]

Direct Benefits Derived from the Work of the Organization

Special responsibility because of primacy in the organization

The question of who pays for the increasingly expensive costs of the UN peacekeeping forces is something which has had a long history of debate within the United Nations.[154] After the first peacekeeping efforts of the UN were reassessed,[155] the contribution of the poorer states towards peacekeeping costs was set (and has continued)[156] at a much smaller percentage than their regular contributions to the UN regular budget.[157] Conversely, the permanent members of the Security Council (who pay more than half of the total peacekeeping expenditure), have to pay a premium on top of their regular UN assessment. This premium is because of their special responsibility for the maintenance of international peace and security.[158]

Direct benefits from the work of the international organization

The idea that those who directly benefit from the results of the work of an IO should pay a fair amount that reflects these benefits, is well recognized in international law. For example, the Intergovernmental Organisation for International Carriage by Rail[159] (which dates back to the nineteenth century) explains that 'the expenditure of the Organisation shall be financed by the Member States in proportion to the length of the lines listed'.[160] A similar approach is utilized by the International Maritime Consultative Organization[161] whereby most of the budget (87.5 per cent) is based on the gross tonnage registered by each member.[162] For that reason, Liberia, which pays the minimum (0.01 per cent) to the UN budget, has a far larger share (10.17 per cent) in the IMO budget. Likewise, Panama pays 0.02 per cent to the UN, and 15.80 per cent to the IMO. Conversely, the United States, which is the largest contributor at the UN, is responsible for only 4.12 per cent of the budget at the IMO. Another organization which utilizes a similar approach is the WTO, whereby contributions made to the organization are calculated on the basis of the member's share of world trade.[163]

With the World Tourist Organization, contributions for full members reflect, *inter alia*, 'the importance of tourism in each country'.[164] In a similar

sense, the Convention on International Civil Aviation has funding arrangements which reflect a user-pays approach whereby 'charges are related to the provision of air navigation services'.[165] A similar version of this principle may be seen with the IWC, whereby (originally) it was decided to keep part of their operational budget (dealing with I&O for pelagic whaling) separate from their general budget and to finance it via a scheme divided 'pro rata on the basis of the respective national catches of whales'.[166] This problem has been largely avoided in the IWC since the mid-1980s, due to the moratorium on commercial whaling and the subsequent lack of need for a compliance regime. However, by 2002, when the details for a new inspectorate regime were being considered, an estimate of £844,960 (considered a conservative estimate) was suggested. This figure would nearly double the IWC's current budget.[167] As such, the question of who pays comes once more to the forefront.

With particular regard to some of the IOs that deal with resource utilization, the principle is clear that those who are primary users of the organization should pay larger shares of the costs of running that organization. For example, with the 1983 International Tropical Timber Agreement,[168] the system of contributions is derived for each member 'in proportion' to the amount of votes that the signatory has in the organization. The number of votes is determined by how big a player each member is in either the consumption or production of tropical timber.[169] Other approaches involve votes being allotted according to the importing and exporting capacity of nations dealing with the commodities of sugar,[170] coffee,[171] jute[172] and tin,[173] whereby the determination of the budget and assessment of contributions is in proportion to the number of votes that a country possesses. A similar (but somewhat less complicated) approach is followed by a number of IOs that serve international fisheries agreements. Within this area, the FAO Code of Conduct on Responsible Fisheries suggested:

> States and sub-regional or regional fisheries management organizations and arrangements, as appropriate, should agree on the means by which the activities of such organizations and arrangements will be financed, bearing in mind, *inter alia*, the relative benefits derived from the fishery . . .[174]

However, inasmuch as the FAO Code of Conduct also noted that 'the differing capacities of countries to provide financial and other contributions'[175] was also an important consideration, so too, with only a few exceptions are contributions determined solely on the amount each signatory utilized and what percentage this is of the total.[176] Rather, in this domain, the general principle appears to be that the total catch taken by all of the signatories should form the basis of two-thirds of the overall contributions (and the individual contributions within this two-thirds bracket are divided on a percentage basis relating to how much of the catch was theirs). For example, in the CSSBT, 30 per cent

of the budget is based on equal division, whereas the remaining 70 per cent is 'divided in proportion to the nominal catches of southern bluefin tuna among all the Parties'.[177] Similar approaches can be seen with the 1969 Convention on the Conservation of the Living Resources of the Southeast Atlantic,[178] the 1973 Convention on Fishing and Conservation of Living Resources in the Baltic Sea and the Belts,[179] the CCAMLR,[180] the Convention on the Conservation of Salmon in the North Atlantic Ocean, the NAFO[181] and the IATTC.[182] With the IOTC only 40 per cent of the contribution is in relation to their proportion of the catch.

Causation of problems that international organizations have to address

A long-standing question within a number of IOs is: 'Would it be reasonable to require states to pay an extra share of the expenses which they directly or indirectly caused?'.[183] This question first arose after both the former USSR and France refused to contribute towards the cost of the first two UN peacekeeping operations. Although there were numerous arguments involved, one of the primary reasons for their refusal was that the costs should, at least for the larger part, be borne by the states which attacked Egypt in 1956 (Britain and France) as it was their aggression that required the creation of the peacekeeping force in Egypt[184] and Belgium's actions (allegedly) necessitated the peacekeeping force for the Congo.[185]

However, when the issue was resolved by the ICJ, the result of the decision was, *inter alia*, that the costs did not reflect the special responsibility of those who caused the problem. This principle, whereby a signatory to an IO could not be compelled to meet the extra costs of a problem it caused (especially on an ad hoc basis) is relatively common.[186] This is not surprising when the labyrinth of difficulties of establishing causation (especially in general political problems in the international sphere) is considered.

A clear exception to this trend has developed with regard to international environmental law. In this field, it is becoming apparent that those who are responsible for the environmental damage, should pay the associated costs. By contrast, international environmental agreements where neither direct benefits nor issues of causation are dealt with by funding mechanisms, do not need to reflect these special interests. This is particularly so with some conservation agreements such as the CITES, RAMSAR[187] the CMS[188] and its associated regional agreements on waterbirds[189] and small cetaceans.[190] Within all of these conservation treaties, the UN scale has been applied as there are no strong questions concerning either benefits of utilization or causation of the problem, and the operational aspects of the budgets typically do not necessitate differing contribution regimes. Another example of this type of realization is with the special fund for the operation of the World Heritage Fund. This mechanism, which does not involve direct questions of benefit or causation, is

drawn from the signatories donating 1 per cent equivalent of their UNESCO contributions. As such, the traditional 'equity' approach is followed. Likewise, where the operational aspects of some international environmental agreements have been farmed out, the remaining sections of the budgets – typically the administrative section – are dealt with via the UN scale of assessment. The CBD[191] and the IMO both utilize this idea.[192]

Within international environmental conventions where operational questions, with an underlying theme of utilization or causation are central, an evolving principle with regard to financial responsibilities is the overlap with liability and compensation regimes.[193] Here, sovereign responsibility for international environmental damage[194] and the general recognition that 'the polluter, should, in principle, bear the cost of pollution'[195] have become important. These principles have been set down clearly in the 1993 Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment.[196] This Convention, which is premised on the need to provide adequate compensation for damage resulting from activities which are dangerous to the environment,[197] stipulates:

> Each party shall ensure that where appropriate, taking due account of the risks of the activity, operators conducting a dangerous activity on its territory be required to participate in a financial security scheme or to have and maintain a financial guarantee up to a certain limit, of such type and terms as specified by internal law, to cover the liability under this Convention.[198]

Similar principles are also reflected in a number of international environmental regimes. The earliest manifestation of them can be seen with the 1960 Convention on Third Party Liability in the Field of Nuclear Energy,[199] which provided a basic schema for liability for damage caused by nuclear energy accidents. This scheme evolved into the creation of public funds, established to provide adequate compensation[200] via a formula for contributions to each country's accounts.[201] Quite clearly within this IO, the (possible) polluter is required to have an adequate compensation scheme available in case of accidents.

With regard to oceanic pollution, a number of international regimes have also come to reflect the necessity that those responsible for the damage, should bear the brunt of the costs. Interestingly in these regimes, those who are liable for the extra costs for damage caused are not necessarily those who are directly responsible, but rather, may be related by being involved in the same industry which creates the overall risk at hand. For example, the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances By Sea,[202] is premised on the idea that 'the economic consequences of damage caused by the carriage by sea of hazardous and noxious substances should be shared by the shipping

industry and the cargo interests involved'.[203] With regard to annual contributions, these are 'calculated . . . on the basis of the cargo received or . . . discharged' over the previous year, as well as the type of cargo involved.[204] Likewise, with regard to oil pollution, a strong regime built up around the idea of civil liability for any accidents caused is strongly complemented by the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage.[205] The fund makes certain that those suffering as a result of the liability are able to obtain 'full and adequate compensation'[206] if the liability conventions prove 'inadequate'.[207] Annual contributions to the fund relate to how much sea transportation of oil each signatory is involved with.[208] In both of these oceanic examples, the broad ideal that the polluter should pay is extended to encompass a broad selection of who exactly the polluter is, and the users who generally create the risk all contribute towards a safety fund which any one of their members may activate.

Finally, an interesting idea developed within CCAMLR in 2000, with the suggestion that the proceeds of the sales of seized or confiscated illegally taken tooth-fish should be set aside in a special fund, dedicated to improving compliance with CCAMLR conservation objectives (and combating illegal fishing in particular).[209]

5 CONCLUSION

The current debate before the IWC over whether or not to adopt the UN scale of contributions as the primary mechanism to fund the organization is both myopic and misplaced. Over the last fifty years, principles have evolved in international administrative law which would suggest that there are a number of considerations which should be reconciled in any meaningful reconsideration of the IWC's contributions mechanism. Against this backdrop of principles is the over-riding realization that the funding mechanisms for IOs are today much more innovative and dynamic than the earlier blunt approaches based upon compulsion for members, irrespective of benefits or causation of problems. Moreover, mechanisms which are totally based on equal contributions, user pays, or UN scales of assessment are too inflexible to meet all situations. These have not only given the wrong messages in the past, they have also led to deep conflict within a number of IOs.

The first step that the IWC should consider is the division of its budgets into administrative and operational segments. Once these divisions are completed, separate financing arrangements may be contemplated.

The operational costs of budgets should reflect compulsory contributions regimes whereby those who directly benefit (typically in economic terms) from the organization, or are primarily at fault from the problems at hand,

should be responsible for the lion's share of the costs. To argue otherwise is to contradict basic ideals of equity as fairness, whereby those who use the resources, those who pollute, and those who may have caused the problem should bear a proportionate response. These principles should stand, as they already do in a number of regimes, irrespective of the economic status of countries. With an organization such as the IWC this would encompass the costs associated with the lethal utilization of whales, ranging from the directly relevant scientific research, through to the I&O compliance regimes from ASW all the way through to scientific whaling and large-scale pelagic whaling. Conversely, if there is no obvious benefit to any one nation, the costs should be divided equitably along the lines of the UN scale of assessment.

With regard to the administrative costs of the budget, the principles of equity and equality need to be reconciled. The best way to achieve an equitable result is to adopt compulsory contribution regimes such as the UN scale. However, it is important to realize that the UN scale has been the source of heated contention since its inception over fifty years ago. As such, it may need to be tempered by two considerations. First, it should not be stretched to cover operational aspects of budgets where direct benefits or questions of causation are divorced from those primarily responsible. Second, even when restricted to either organizations where there are no such questions, or sections within organizations where such questions are distant (such as with the administrative sections of budgets) it is still useful to involve a minimum base percentage of equal division between all the signatories. Accordingly, at the most basic level, in an international forum where one nation equates with one equal vote, each nation can say that it contributed (at a basic level) on a purely equal basis.

The final area for consideration is the scientific costs within the budget. In some IOs, where expert or scientific components form a considerable cost factor, the signatories should decide whether they wish to keep this in the administrative or operational wing of the budget. With some areas of the IWC's scientific research, such as that connected with the resumption of commercial whaling, these specific scientific costs should be clearly allocated within the operational wing and its associated principles. Likewise, if the science is related to species that were traditionally overexploited to dangerous levels then it is arguable that those nations that were broadly responsible for such actions should bear a greater responsibility for the associated scientific costs. Finally, when dealing with scientific research which does not involve issues of either causation or benefit, then a dedicated optional budget should be created. As such, research into multiple issues from bycatch to environmental contaminants to whalewatching should be contingent on voluntary contributions that effectively reflect the interest of the signatories in these areas.

NOTES

1. See the Report of the Commission on Global Governance (1995). *Our Global Neighbourhood* (Oxford University Press, Oxford): 273.
2. See Plano, J. (1995). *Forging World Order: The Politics of International Organisation* (Macmillan, London): 65, 70. Bennet, A.L. (1984). *International Organisations* (Macmillan, London): 90–92.
3. See Press Release (2000). 'Non-Payment of Dues is Undermining Financial Stability Again.' (UN Press Release. GA/AB/3395. October 17).
4. See, for example, the IWC in the mid- to late 1980s, when the problem of non-payment of fees was deemed a very serious problem. IWC. 33rd Report. (1983). 32–4; IWC. 34th Report. (1984). 27, 32; IWC. 35th Report. (1985). 24–5; IWC. 36th Report. (1986). 25; IWC. 37th Report. (1987); IWC. 38th Report. (1988). 26.
5. Although a number of Greek federated organizations existed, it is only with the Hellenic Confederacy, formed under Philip of Macedon in 337, that details of their weighted voting and contribution regime (typically in kind) exist. This is reprinted in Botsford, D. and Sihler, G. (1915). *Hellenic Civilisation: Columbia University Records of Civilisation* (Columbia University Press, New York): 420–21.
6. IWC. 1st Report. (1950). 8.
7. At the 48th meeting, the budget was set at £1,146,124. Of this, the secretariat was responsible for £680,700; the annual meeting at £183,500; and research at £185,000: Appendix 9. 'Approved Budgets 1996/97 and 1997/98.' IWC. 47th Report. (1997). 53.
8. See McDermott, A. (1999). *The New Politics of Financing the United Nations System* (Macmillan, London): 21, 22, 38. Report of the Commission, supra n1: 297–9.
9. IWC. 26th Report. (1976). 13, 31.
10. IWC. 27th Report. (1977). 11.
11. IWC. 28th Report. (1978). 26. See Appendix 9, 'Contributions from Contracting Governments.' 28th Report. (1978). 32.
12. IWC. 28th Report. (1978). 26.
13. IWC. 31st Report. (1981). 27.
14. IWC. 32nd Report. (1982). 32.
15. The original budgetary division of the North East Atlantic Fisheries Commission was based on equal shares in relation to commission and related committee membership. See North East Atlantic Fisheries Convention. 486 UNTS. 157. This was reworked into two divisions – equal capacity, one-third, and take, two-thirds in 1982.
16. IWC. 32nd Report. (1982). 32. With this last factor, annual meeting representation of five to 12 delegates equated to one share, 13 to18 delegates to two shares and 19 or more delegates to three shares. See Appendix 8: 'New Method of Calculating Financial Contributions.' IWC. 32nd Report. (1982). 37.
17. '[T]he present arrangements for funding the IWC are not in practice as efficient as they might be'. IWC. 36th Report. (1986). 25.
18. IWC. 37th Report. (1987). 23–4.
19. IWC. 36th Report. (1986). 25.
20. IWC. 37th Report. (1987). 23.
21. The intersessional working group dealt with two issues on the question of contributions. The debate revolved around whether to share 60 per cent of the IWC membership equally between all members, with the balance being made up by countries' participation, interest and influence in the Commission's work; as opposed to a scale based on membership, whaling and nationally funded research activities. However, after prolonged discussion the situation was not resolved. IWC. 38th Report. (1988). 26.
22. IWC. 39th Report. (1989). 28; IWC. 40th Report. (1990). 33–4.
23. IWC. 41st Report. (1991). 43.
24. IWC. 42nd Report. (1992). 42–3.
25. That is: 1–3 delegates one share; 4–7 delegates two shares; 8–13 delegates three shares; 14–22 delegates four shares; 23+ delegates five shares. Appendix 8: 'Procedure for Calculating Financial Contributions.' IWC. 42nd Report. (1992). 50.

26. At the 46th meeting, Japan and Norway both suggested that whalewatching considerations should also come into the share allocation consideration for IWC contributions. IWC. 45th Report. (1995). 39.
27. Ibid.
28. See IWC. 50th Meeting in 1998. (1999). 37; IWC. 51st Meeting in 1999. (2000). 44.
29. At the Adelaide meeting, Antigua and Barbuda argued that 'Special consideration for membership must be given to small island states whose economies, cultural and environmental vulnerability is greater owing to their geographic location and the size and the scale of their economies' and 'Current membership of the IWC does not include all countries that hunt whales. In part, their reluctance to join may be due to the heavy financial burden of the current system of assessing members' contributions, a system that places a disproportionate cost on poor countries'. Government of Antigua and Barbuda. 'Proposal for the Reassessment of Membership Contribution.' IWC/51/28. Agenda Item 21.2.2. For the debate at the 2000 meeting, see 'Report of the Finance and Administration Committee.' IWC/52/9. Appendix 5: 'The Contributions Sub-Committee.' IWC. 52nd Meeting in 2000. (2001). 61.
30. See 'Report of the Contributions Task Force.' Intersessional Meeting. IWC/53/TF1. The 2001 debate is in 'Report of the Finance and Administration Committee.' IWC. 53rd Meeting in 2001. (2002). 43–5.
31. See 'Report of the Contributions Task Force,' Intersessional Meetings. IWC/54/TF. Also, 'Report of the Finance and Administration Committee.' IWC/54/12.
32. 'Costs for An International Observation Scheme.' IWC/54/RMS53.
33. IWC. 54th Meeting in 2002. (2003). 48–50. 'Proposal for Interim Measures for Financial Contributions.' IWC/54/59. Agenda Item 18.2. See also 'Preliminary Estimates of Financial Contributions.' IWC/54/63. 'Report of the Finance and Administration Committee.' IWC/55/Rep 2. 15–16.
34. 'Report of the Finance and Administration Committee.' IWC/56/Rep 2.2.
35. 'Proposal to Take Into Account the Very Small Countries in Calculating Their Financial Contributions.' IWC/56/40.
36. See Schermers, H.G. and Blokker, N. (1995). *International Institutional Law* (Nijhoff, Dordrecht). 679.
37. Wolfrum, R. (1995). *United Nations: Law, Policies and Practices* (Nijhoff, London). Volume 1: 85–6. In the 1994 Agenda for Development, the UN Secretary-General noted a trend among donors towards thematic and special-purpose funding. See Agenda for Development. UN Doc. A/48/935. At 26.
38. McDermott, supra n8: 41. Bowett, D. (1982). *The Law of International Institutions* (Stevens, London): 412.
39. International Agreement on Jute and Jute Products, 1989. ATS. 1991. No. 41. Article 18.
40. Statute of the International Atomic Energy Agency, <http://www.iaea.org/worldatom/Documents/statute.html>. Article 14.1.
41. The Fifth International Tin Agreement, 1976. ATS. 1976. No. 20. Article 16, 19–21.
42. Constitution of the United Nations Industrial Development Organization. Available from <http://www.unido.org/userfiles/KayalarJ/Constitution.pdf. Article 13.
43. Administrative costs can sometimes be compared between similar IOs. Nevertheless, mutual comparison between budgets is difficult as there are no standardized budgetary regimes. In 1986, the Group of High-level Intergovernmental Experts to Review the Efficiency of the Administration and Financial Function of the United Nations (Group of 18) recommended harmonization in the format of programme budgets within the UN. UN Doc. A/41/49, at 9 (Recommendation 13).
44. See Recommendation I–XIV: 'Administrative Arrangements for Consultative Meetings.' Reprinted in 'Seventh Antarctic Treaty Consultative Meeting: The Antarctic Treaty and Earlier Recommendations' (MFAT, Wellington, 1972). See also Recommendation XII–6: 'Operation of the Antarctic Treaty System.' In 'Antarctic Treaty Report of the Twelfth Consultative Meeting' (Canberra, 1983). With regard to the costs associated with hosting the meeting, see Ministry of Foreign Affairs and Trade, 'New Zealand and the XXIst Antarctic Treaty Consultative Meeting.' (MFAT, Wellington, 1997): 5–8. Another example

of this type of regime is the Nordic Council. With no secretariat and with each government meeting the expenses of its own representatives and delegates to meetings, the Nordic Council is free of all the fiscal and financial problems with which many other organizations have had to grapple. See Blaisdell, D. (1986). *International Organisations* (Ronald Press, New York): 371.

45. See Schermers and Blokker, supra n36: 591–2.
46. See Amerasinghe, C. (1996). *Principles of Institutional Law of International Organisations* (Cambridge University Press, Cambridge): 292.
47. See Schermers and Blokker, supra n36: 600.
48. The budget at the 44th meeting was set at £1,046,570. Of this total, £609,000 went to the running of the secretariat. See Appendix 16: 'Approved Budget 1994/95.' IWC. 45th Report. (1995). 50. At the 48th meeting, the budget was set at £1,146,124. Of this, the secretariat was responsible for £680,700. Appendix 9: 'Approved Budgets 1996/97 and 1997/98.' IWC. 47th Report. (1997). 53.
49. At the 48th meeting, the budget was set at £1,146,124. The annual meeting at £183,500. Appendix 9: 'Approved Budgets 1996/97 and 1997/98.' IWC. 47th Report. (1997). 53.
50. The FAO, UNESCO the IAEA, (parts of the) ILO and one of the IOs which operates under the Montreal Protocol on Substances that Destroy the Ozone Layer are all examples of IOs which pay very little for their buildings. See Schermers and Blokker, supra n36: 603, 653. With regard to the ozone example, Canada offered to host the executive committee meetings for the Fund for the Montreal Protocol, and 'assume the administrative costs of those initiatives'. See Decision 11/8B. 'Acceptance of the Offer by Canada.' In UNEP (2000). *Handbook for the International Treaties for the Protection of the Ozone Layer* (UNEP, Nairobi): 179.
51. The European Organization for Nuclear Research spends approximately one-quarter of its expenditure on equipment necessary for its work. Schermers and Blokker, supra n36: 604.
52. See Decision 1/6: 'Financing of, and Budget for, The Convention.' See Annex II in particular. (COP 1, Bahamas, 1994).
53. The 1980s figure can be seen in IWC. 37th Report. (1987). 22. The budget at the 44th meeting was set at £1,046,570. Of this total, £609,000 went to the running of the secretariat, £173,000 to research, and a further £173,000 to the cost of the annual meeting. See Appendix 16: 'Approved Budget 1994/95.' IWC. 45th Report. (1995). 50. At the 48th meeting, the budget was set at £1,146,124. Of this, the secretariat was responsible for £680,700, the annual meeting £183,500, and research £185,000. Appendix 9: 'Approved Budgets 1996/97 and 1997/98.' IWC. 47th Report (1997). 53; IWC. 52nd Meeting in 2000. (2001). Appendix 4. The research budget for 2001–02, was £274,500. For the following year, the scientific budget was £275,261. 'Report of the Scientific Committee.' IWC/54/4. 101.
54. In the mid-1960s, with the IWC beginning to struggle with the fact that whale stocks were plummeting, it became apparent that 'large increases' were required to meet all the incoming costs of the new scientific advice. At these times of pelagic whaling, these extra costs were covered by levying one shilling for every whale caught. IWC. 18th Report. (1968). 20. Recent suggestions that separate funds for scientific research should be established may have some merit. See 'Annual Report of the International Whaling Commission 1998.' (50th Annual Meeting, Oman). IWC, Cambridge. 32.
55. See 'Funding Considerations in Relation to the Conservation Committee.' IWC/56/12. For the specific funds on environmental concerns, see IWC Resolution 1998–6. 'Resolution for the Funding of Work on Environmental Concerns.' IWC Resolution 1999–5. 'Resolution for the Funding of High Priority Scientific Research.'
56. See IPCC (1998). 'Principles Governing the IPCC.' Appendix B: 'Financial Procedures.' <http://www.ipcc.ch/about/about.htm>.
57. See the Scientific Committee on Antarctic Research Constitution. http://www.scar.org/intro/Constitution%26RoP.html. Article 10 (Finance).
58. The Treaty Establishing The European Atomic Energy Community contains a good example of this type of approach whereby the 'operating' budget (which includes administrative costs) is clearly separated from the 'research and investment budget'. Article 174 of the

1957 Treaty Establishing The European Atomic Energy Community is available from <http://europa.eu.int/abc/obj/treaties/en/entoc384.htm>.

59. WMO. 'Basic Facts, Resources.' <http://www.wmo.ch/web-en/wmofact.html>.
60. Article 12 of the Constitution of the United Nations Industrial Development Organization. <http://www.unido.org/userfiles/KayalarJ/Constitution.pdf>.
61. Article 31 of the Oil Fund.
62. Agreements for the Establishment of a General Fisheries Council for the Mediterranean. BH 245. txt. 126 UNTS. 237. Article VI.
63. See Churchill, R. and Ulfstein, G. (2000). 'Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little Noticed Phenomenon in International Law.' *American Journal of International Law*. 94: 624–59.
64. Convention Concerning the Protection of the World Cultural and Natural Heritage. 11 ILM. 1358.
65. World Heritage. 'Funding and Support.' (Fact Sheet, UNESCO, 1997, April).
66. The Convention on Civil Liability for Oil Pollution Damage, 1969. UKTS 106 (1975) Cmnd. 6183. 9 ILM. 45. For the relevant amendments, see Birnie, P. and Boyle, A. (eds) (1994) *Basic Documents on International Law and the Environment* (Oxford University Press, Oxford): 107–15.
67. 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 11 ILM. 284. This was updated in 1992. The 1992 text is reproduced in Birnie and Boyle, supra n66: 91–106.
68. The Oil Fund. Article XVI.
69. Montreal Protocol on Substances that Deplete the Ozone Layer. Reprinted with updated amendments, in UNEP, supra n50: 35.
70. These were providing new financial needs of 'providing financial and technical co-operation, including the transfer of technologies to [developing countries]'. Article 10.
71. See Article 10.
72. 'Terms of Reference for the Administration of the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer.' Annex II of the Report of the First Meeting of the Parties. Point 7. In UNEP, supra n50. See also 'Terms of Reference for the Executive Committee.' Ibid. 260–61.
73. See 'Instrument for the Establishment of the Restructured GEF.' 33 ILM. 1273.
74. The GEF has an assembly, a council and a secretariat. See Article 11.
75. Preamble, Paragraph 1.
76. The funds distributed by the GEF are for meeting the 'agreed incremental costs' incurred when a national, regional or global development project also targets global environmental objectives. For a useful overall study of the GEF, see Porter, G. (1998). 'Study of GEF's Overall Performance.' (GEF, Washington).
77. See Articles 20, 21 and especially 39 of the United Nations Convention on Biological Diversity. 31 ILM. 818. See also Decision 1/2: Financial Resources and Mechanism (COP 1, Bahamas, 1994). Decision III/8: Memorandum of Understanding Between the Conference of the Parties to the Convention on Biological Diversity and the Council of the Global Environment Facility (COP 3, Buenos Aires, 1996).
78. The financial provisions of the FCCC and its ultimate link to the GEF are found in Article 11, which stipulated: 'A Mechanism for the provision of financial resources on a grant or concessional basis, including for the transfer of technology, is hereby defined'.
79. For example, the WHO makes a distinction between 'Membership and Associated Membership'. Constitution of the World Health Organization, Chapter III. See <http://www.who.int/aboutwho/index.html>. In some organizations, the difference of distinction, leads to different financial assessments for membership. For example, the World Tourism Organization is primarily financed by members' contributions, calculated according to the level of economic development and the importance of tourism in each country. See http://www.world-tourism.org/main/frameset/frame_aboutwto.htm. In addition, private agencies (typically NGOs) may (or may not) be asked to pay towards their membership of the organization. For example, the ITU clearly stipulates that 'Any entity or organizations appearing in the lists mentioned . . . shall share in defraying the expenses

of the Sector'. See Article 33, Modifications 477 & 478. Instrument amending the Convention on the International Telecommunication Union (Geneva, 1992). <http://www.itu.int/ITU-SG/pp94/table2.html>.

80. UNICEF, for example, receives nearly 7 per cent of its budget (a $61 million contribution) from the sale of greetings cards. In some instances, this type of funding is supplemented with a considerable input from the sale of postage stamps. The WHO and the UN High Commissioner for Refugees have both received (one-off) contributions from these devices. However, typically these types of fund do not provide self-sufficiency in revenue.
81. In 1934 the League of Nations sent an international force to the Saar to ensure order during and after the plebiscite. The necessary finances would be advanced by the benefiting states (Germany and France) and the winner would ultimately bear the entire costs.
82. For example, the Yemen Observation Mission, paid for by Saudi Arabia and the United Arab Emirates. SC Res. 179 (1963).
83. 14 E of the IAEA statute stipulates that the Board of Governors shall establish periodically a scale of charges, including reasonable uniform storage and handling charges, for materials, services, equipment, and facilities furnished to members by the Agency. The scale shall be designed to produce revenues for the Agency adequate to meet the expenses and costs incurred.
84. EURATOM. Statute of the Agency. (276. UNTS. 3.). Article 6.
85. This commission, which operated before 1914, was authorized to levy tolls on the Danube River traffic. With funds raised in this way the commission paid its officials, built and maintained a port and maintained other works necessary along the river. See Blaisdell, supra n44: 74–5.
86. See Bowett, supra n38: 370–71, 415.
87. This IO receives over 70 per cent of its income from the registration of marks, industrial designs, patents and so on. See Schermers and Blokker, supra n36: 663.
88. This was self-financing by means of a levy on coal and steel production paid by enterprises to the Commission. Under the 1952 Treaty Establishing The European Coal And Steel Community (ECSS) <http://europa.eu.int/abc/obj/treaties/en/entoc29.htm>, see Article 49 and 50.
89. Apart from the ECSC levy, the income of the EU is composed of levies and contributions under the common agricultural policy customs duties imposed under the Common Customs Tariff (which makes up about 20 per cent of the total) a part of a maximum of 1 per cent of the value added tax, and a contribution from member states based on their GNP. See the Council Decision of 31 October 1994 on the System of the European Communities Own Resources. This is available via <http://europa.eu.int/abc/obj/treaties/en/entoc118.htm>. See also Articles 199–209 of the 1957 Treaty Establishing the European Community (as Amended by Subsequent Texts). BH343.txt. Initial financial considerations were contained in the Act of Council of 21 April 1970, 13 OJ (1970) No. L.94. In 1988 a new source of income derived from the member states' GNP was established. See Decision 88/376/EEC.
90. Typically via ideas such as surcharges on international communications, travel, tourism, international lotteries, or utilization of the ocean, atmospheric or frozen commons. See McDermott, supra n8: 117–31; Bennet, supra n2: 94.
91. For example the UN used a system of taxation to repay the loans contracted for financing the clearance of the Suez Canal between 1956 and 1957. This was done via a 3 per cent surcharge on all shipping and trade using the Suez Canal. See GA Res. 1212 (XII). December 14, 1957.
92. Italy entered into the Community as an equal partner to France and Germany and wished to be treated in a like manner. See Schermers and Blokker, supra n36: 616.
93. This convention created the Central Commission for the Navigation of the Rhine. Within this forum, all members were to pay equal contributions to the organization. Mannheim Convention. 1869 (October 17). Article 47. See Mannheim Convention, via <http://www.ccr-zkr.org/>.
94. OPEC Statute, Article 38.c.
95. In its first year of operation, the cost of £1,200 was divided equally among its 12 member governments. IWC. 1st Report. (1950). 8.

96. See Article X.2. However, if excess costs are incurred by the Commission, one-third of the cost shall be made up in equal proportion and the further two-thirds on the basis of 'the total of the round weight catch of Atlantic Tuna and tuna-like fisheries and the net weight of canned products for each Contracting Party'. See Article X.(c). See also the New Method of Calculating Contributions, 1991.
97. Article XIV.
98. 1973 Convention on Fishing and Conservation of Living Resources in the Baltic Sea and the Belts. In Kiss, A. (ed.). (1983). *Selected Multilateral Treaties in the Field of the Environment* (Cambridge University Press, Cambridge). Volume 1. 317. Article VII.3.
99. BH779.txt. 19 ILM. 841. Article XIX.3.
100. Article 11.
101. The convention is available from <http://www.nasco.org.uk/html/the_convention.html>. Article 16(2).
102. Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries (1978), October 24. 19 ILM. 830. Article XVI. Thirty per cent of the budget is divided equally among all the contracting parties.
103. The North East Atlantic Fisheries Commission 1959 Convention, 486 UNTS. 157. Article 4.3. Renewed in 1982, with the Convention on Future Multilateral Co-operation in North East Atlantic Fisheries. BH794.txt. Article 17(4). Some 33 per cent of the budget is divided equally.
104. Note, with the IATTC, the percentage has not yet been set. In 2000 the Commission decided to create a mechanism that was 'transparent, fair and equitable, stable and predictable, and yet flexible to allow for redistribution as new parties join'. IATTC. 'Resolution on Financing the IATTC.' June 2000. Preamble, and Article 4.
105. Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. Available from <http:www.oceanlaw.net/texts/west-pac.htm>. Article 18(2).
106. Article XIII.3.b. Annex to the Financial Regulations. 'Scheme For Calculation of Contributions to the Administrative Budget of the Commmission.' In IOTC. First Special Session of the Indian Ocean Tuna Commission. Rome, 21–24 March 1997. FAO Fisheries Report No. 554. FIPL/R554(Bi).
107. Agreements for the Establishment of a General Fisheries Council for the Mediterranean. BH 245. txt. 126 UNTS. 237. See General Fisheries Commission for the Mediterranean. Report of the Extra-Ordinary Session. Alicante, Spain, 7–9 June 1999. (Published by the FAO, Rome).
108. See IMO (2001). 'Structure and Purpose.' <http://www.imo.org/imo/structur.htm>.
109. The classes are typically narrower than the more common scale of assessments. The difference between the smallest and largest scales is different. That is, in the UPU, the difference in the largest is 5.32 per cent and the smallest 0.05 per cent. In the ITU it is 8 and 0.02 per cent.
110. See Schermers and Blokker, supra n36: 607–8.
111. The UPU was effectively created in the 1874 Treaty of Berne. Article 21of the (new) constitution of the UPU deals with the Expenditure of the Union. Subsection 3 stipulates 'each member country shall choose the contribution class in which it intends to be included'. See also General Regs 125 & 126. An additional contribution class of one-half unit is reserved for the least-developed countries. The constitution may be found at http://www.upu.int/ap/layout.startup?p_language=AN&p_theme=UPU_acts&p_content_url=/manuals/an/>.
112. Decision 2. Procedure Concerning Choice of Contributory Class. This relates directly to Articles 28 & 33 of the (updated) 1992 Convention on the International Telecommunication Union. See <http://www.itu.int/ITU-SG/>.
113. Convention Estabishing the WIPO. <http://www.wipo.int/members/convention/con3-eng.html>. Article 11. Seventy per cent of their income was generated from the registration of marks, industrial designs, patents and so on.
114. 'Full members select the category in which they will contribute annually to SCAR according to their own assessment of the scale of their national scientific activity in the Antarctic'. See Rule 6.2. The Rules of Procedure are available from the SCAR site, supra n57.

115. The original Article 6.5 was revised in 1921. See Walters, F. (1952). *A History of the League of Nations* (Oxford University Press, Oxford). See also Northedge, F. (1986). *The League of Nations: Its Life and Times* (Leicester University Press, Leicester): 70–73; Blaisdell, supra n50: 356; Schermers and Blokker, supra n36: 609.
116. Gillespie, A. (2001). *The Illusion of Progress: Unsustainable Development and International Law* (Earthscan, London). Chapter 5.
117. Principle 6 of the Rio Declaration on Environment and Development. A/CONF. 151/5. 1992. June 3–14.
118. Principle 7 of the Rio Declaration. Ibid.
119. FAO Code of Conduct for Responsible Fisheries. In (1995) 6 YBIEL. Document 10. Paragraph 5.2.
120. United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. 34 ILM. 1542. See Articles 24 & 25.
121. These may range from other states, organizations paying their contributions or their funds coming from a dedicated voluntary pool. The direct (free) assistance to developing countries (from science to policy formation) may also be utilized, so as to fully achieve the objectives of the IO.
122. For example, with the IAEA, Article XIV.1.D. Statute of the International Atomic Energy Agency. <http://www.iaea.org/worldatom/Documents/statute.html>.
123. In 1946 it was agreed that 'the expenses of the organization shall be borne by members 'according to the scale of assessments determined by the general assembly'. United Nations Financial Regulations. Rule 5(1). The UN Committee on Contributions suggested that the scale should be based on 'comparative estimates of national income' which they suggested was the 'prima facie . . . fairest guide'. In 1946 the GA decided that three other factors should also be taken into account. These were comparative income per head of population, temporary dislocation of national economies (due to the Second World War) and ability of members to secure foreign currency. See GA Res. 14 (1). A 3 of 13 February 1946. In 1965 the GA decided to add one more factor to be taken into account, namely in the case of developing countries, their special economic and financial difficulties. See UN Doc A/46/11. At 7–9. See also GA Res. 2118 (XX). In 1981, the GA listed seven factors other than national and per capita income to be taken into account in measuring capacity to pay. Here, particular attention was given to the least developed countries, economic disparities between developing and developed, conditions adversely affecting ability to pay, heavy dependence on one or two export products, ability to secure foreign currency, accumulated national wealth and different methods of national accounting. GA Res/ 36/231A. (December 18, 1981). See also Baehr, P. (1994). *The United Nations in the 1990s* (Macmillan, London): 57–61. Wolfrum, supra n37. Volume 1: 74. Dupuy, R. (1995). *A Handbook on International Organisations* (Routledge, London): 319.
124. For example, with the Indian Ocean Tuna Commission, 40 per cent of the scale of contribution is related to 'the per capita income of each Member'. Article XIII.3.b. Annex to the Financial Regulations. 'Scheme For Calculation of Contributions to the Administrative Budget of the Commmission.' In IOTC. First Special Session of the Indian Ocean Tuna Commission. Rome, 21–24 March 1997. FAO Fisheries Report No. 554. FIPL/R554(Bi). The economic status of the members in accordance with World Bank classifications. Per capita considerations also play a role in the scales of assessments for a number of other fisheries organizations. Another interesting example of this is with the North East Atlantic Fisheries Commission 1959 Convention (North East Atlantic Fisheries Convention. 486 UNTS. 157) which was renewed in 1982. Article 4.3. Here, the general principle of contributions (broadly determined in proportion to catch levels of fish) carries the caveat that 'the annual contribution of any Contracting Party which has a population of less than 300,000 inhabitants shall be limited to a maximum of 5% of the total budget'. 1982 Convention on Future Multilateral Co-operation in North East Atlantic Fisheries. BH794.txt. Article 17(4).

125. With regard to the use of per capita considerations for the UN scale of assessment, although these were earlier incorporated into the scale, they were later abolished, before being re-introduced in a different form. This remains problematic. McDermott, supra n8: 59, 62–3; Amerasinghe, supra n46: 300; Report of the Commission, supra n1: 246; Schermers and Blokker, supra n36: 623.
126. See Bowett, supra n38: 416.
127. The genesis of this problem goes back to the strong economic position of the United States directly after the Second World War when its pure assessment (that is, not counting its voluntary contributions) amounted to almost 40 per cent of the total UN budget (which was down on the original estimate of 49.89 per cent). The US representative opposed this, saying that no one state should pay more than 25–30 per cent of the expenditure of an IO. This was accepted by the UN only in 1947 with the recognition that 'in normal times' no member should contribute more than one-third of the ordinary expenses for any one year. GA Res. 238 (III) A (a). As such, 'in principle' the maximum contribution should not exceed 30 per cent. GA Res. 1137 (XII). Accordingly, during the 1960s, the American contributions were closer to 30 per cent (although when their voluntary contributions were added they were closer to 50 per cent). In 1972, the upper (25 per cent) limit of contributions was introduced after the United States stipulated that they would not pay more than this. GA Res. 2961 (XXVII) (December 13, 1972). See 12 ILM. 163 (1973). This process was repeated during the 1990s, before the ceiling of the amount paid by any one country was taken from 25 to 22 per cent in 2001. See UN (2000). 'Assembly Approves New Scale of Assessments.' Press Release. GA/9850. Japan pays close to 20 per cent, Germany 10 per cent, France 6.5 per cent, Britain and Italy both 5 per cent, and Russia 4 per cent. See Lynch, C. (2001). 'UN Votes to Reduce US Dues as Ted Turner Pledges $35m.' *Guardian International*. January 4: 4.
128. Before the 1998 budget round, the lowest rung was 0.01 percentage. See GA Res. 31/95. See 35 *UN Yearbook*, 1981, p. 1271. Before 1973, it was 0.04 per cent before being first decreased to 0.02 per cent. Plano, supra n2: 65; McDermott, supra n8: 59.
129. With regard to the financing of the UN (as found in Articles 17 and 18 of the UN Charter) it was at one point suggested that for decisions concerning expenses, a weighted voting system (in proportion to their share in expenses) be implemented. However, this was not adopted. Rather, it was felt that budgetary questions were important issues that were best left to a two-thirds majority of the UNGA (as now specified in Article 18). Accordingly, Article 17 stipulates, '1. The General Assembly shall consider and approve the budget of the Organisation. 2. The expenses of the Organisations shall be borne by the Members as apportioned by the General Assembly'. For a general discussion of this, see Wolfrum, supra n37. Volume 1: 78; McDermott, supra n8: 56–8. See also Dupuy, supra n123: 314.
130. This point has been raised by both Japan and America. See McDermott, supra n8: 60–61.
131. For example, the Council of Europe has a minimum contribution of 0.12 per cent. The Organisation of American States has a minimum contribution of 0.02 per cent (including many of the smaller Caribbean countries) and the Organization of African Unity has a minimum contribution of about 1 per cent. For the World Trade Organization, the minimum contribution is 0.015 per cent – even if its share in the total world trade is less than 0.015 per cent. See WTO (2001). 'Secretariat and Budget.' <http://www.wto.org/English/thewto_e/secre_e/budget_e.htm>.
132. Plano, supra n2: 65.
133. The US withdrew from the ILO and UNESCO (as did the UK) and the contributions to the organizations fell by one-third. See Kirgis, F. (1993). *International Organisations in their Legal Setting*. (American Casebook Series, West Publishing, St Paul, MN); McDermott, supra n8: 37–8. Schermers and Blokker, supra n36: 617.
134. This was contained in his speech of 21 October 1985, made to the General Assembly commemoration of the UN's fortieth anniversary.
135. '[N]o member shall be assessed an amount exceeding twenty percent of the yearly budget of the organization'. Article 23. Organization of African Unity Charter. <http://www.oau-oua.org/oau_info/oaucharter.htm>.

136. This was paid by the UK, while Canada, Australia, South Africa, New Zealand, India and Ireland paid a further 15 per cent between them. See Walters, supra n115: 130.
137. See Amerasinghe, supra n46: Chapter 6.
138. This argument stems from the separate opinion of Judge Fitzmaurice in the Expenses Case. [1962] ICJ. At 205. Nevertheless, he recognized the risk of abuse if every member state could unilaterally determine that a particular expense is *ultra vires*, so he concluded that there is a strong prima facie presumption that duly voted expenditures are proper. This position was furthered when the United States eventually decided not to push for the expulsion of the USSR and France and, rather, noted that since France and the USSR had effectively got away with their protest, they (the USA) reserved for themselves 'the exception to the principle of collective financial responsibility' if there were 'strong and compelling reasons to do so'. This is known as the Goldberg reservation, and may be seen in full in Kirgis, supra n133: 250–51. McDermott, supra n8: 34; Amerasinghe, supra n46: 310–14.
139. See Baehr, supra n123: 57; Plano, supra n2: 72–3.
140. For example, within the UNDP, Denmark, Norway, the Netherlands and Sweden contribute 36 per cent of the costs. In the regular UN budget, they contribute 3.81 per cent. See UN Doc. DP/1993/44/Add. 1. At 3–6.
141. Note, because so many UN agencies are involved with voluntary contributions, special rules of procedure have been introduced. See UNGA Res. 33/149.
142. See Schermers and Blokker, supra n36: 641.
143. Article IX (3). UNESCO Constitution (1945). Available from <http://www.unesco.org/general/eng/about/constitution/.>. UNIDO, supra n42. See Articles 13, 15, 16 and 17. 'Terms of Reference for the Administration of the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer.' Annex II of the Report of the First Meeting of the Parties. Point 3. In UNEP, supra n50: 273.
144. The WHO has changed its funding base from one predominantly dependent on the UN regular budget to increasing reliance (about 50/50) on voluntary funding. See McDermott, supra n8: 73.
145. The IWC has established a Small Cetacean Voluntary Fund, with the explicit purpose 'to allow for the participation from developing countries in future small cetacean work'. See Appendix 10: 'Amendments to the Commissions Financial Regulations.' IWC. 47th Report. (1997). 54–5.
146. The importance of contributions from individuals and NGOs should not be underestimated. For example, John D. Rockefeller gave US$8.5 million for the acquisition of land for the UN headquarters. This was accepted by GA Res. 100 (I). In a more contemporary context, Ted Turner has made very important contributions. See Lynch, C., supra n27. Likewise, NGOs may also be pivotal. For example, in the early 1990s, over 25 per cent of UNICEF's total income (at that point, US$938 million) came from NGOs. This was mainly through national committees of UNICEF, through the sale of greetings cards and private fund raising. See UN Doc. E/ICEF/1993/2 (Part II), at 66, 75–6. Noted in Schermers and Blokker, supra n36: 655.
147. These are an environment fund (a voluntary fund established to provide additional financing for environmental programmes under UNEP with the guidance of its governing council), trust funds (extra-budgetary resources directed towards specific projects negotiated by UNEP and the donor) and counterpart contributions (which often fall into both the environment and trust funds). See UNEP (2001). 'Funding Mechanisms.' <http://www.unep.org/Documents/Default.asp?DocumentID=43&ArticleID=208>.
148. These are the Participation Fund for Developing Countries, and the Special Trust Fund for Supplementary Activities and the Trust Fund for the Host Country (the Bonn Fund). See UNFCCC. Issues in the Negotiating Process: Administrative and Financial Matters.' http://www.unfccc.int/issues/fmaa.html. For the trust funds, see UNFCCC. 'Designation of a Permanent Secretariat and Arrangements for its Functioning.' FCCC/CP/1995/5/Add.1/Rev.1. 29 March 1995.
149. Articles 7 and 10.
150. See Annex C in particular.
151. See Annex C. Point 1.

152. 'Terms of Reference for the Administration of the Trust Fund for the Montreal Protocol on Substances that Deplete the Ozone Layer.' Annex II of the Report of the First Meeting of the Parties. Point 4. In UNEP, supra n48: 273. The importance of the UN Scale of Assessments for the Trust Fund is also recorded in Article 10 (6) of the Montreal Protocol.
153. See Decisions 111/21; iv/19; v/21; vi/17; vii/37; viii/ 28; IX/37; X/30; XI/21. All of these are reprinted in UNEP, supra n50: 207–11.
154. See Abraszewski, A. (1993). *Financing the Peace Keeping Operations of the United Nations* (International Geneva Yearbook): 81–3. See also UN, (2000). 'Assembly Approves New Scale of Assessments.' Press Release. GA/9850.
155. GA Res. 1089 (XI). December 21, 1956. The same pattern was followed for ONUC. GA Res. 1619 (XVI). April 21, 1961.
156. See UN, supra n154.
157. GA Res. 1575. (XV). GA Res. 1875. (S-IV). GA Res. 1619 (XV) and GA Res. 1732 (XVI). GA Res. 3101 (XXVIII) and GA Res. 3374 (XXX).
158. Schermers and Blokker, supra n36: 619.
159. See the Convention Concerning International Carriage By Rail. Berne, 9 May 1980. http://www.unece.org/trade/cotif/Welcome.html. Its precursor was the Central Office for International Carriage by Rail which was created in 1893.
160. Article 11.1. See also Bowett, supra n38: 416.
161. The 1948 convention establishing the IMO Intergovernmental Maritime Consultative Organization can be seen at <http://www.imo.org/imo/introd.htm>.
162. See IMO (2001). 'Structure and Purpose.' <http://www.imo.org/imo/structur.htm>.
163. Article VII of the WTO Agreement sets out the need for a 'scale of contributions' which ultimately derived from its share of international trade (based on trade in goods, services and intellectual property rights for the last three years). See WTO (2001). 'Secretariat and Budget.' http://www.wto.org/English/thewto_e/secre_e/budget_e.htm. The United States was the largest contributor in 2000 at 15.7 per cent.
164. See <http://www.world-tourism.org/main/frameset/frame_aboutwto.htm>.
165. See ICAO 'Rio Conference Explores Innovative Approaches to Financing.' *ICAO Journal*, June 1998: 12–15. See also 'Joint Financing of Certain Air Navigation Services.' http://www.icao.int/cgi/goto.pl?icao/en/pub/memo.htm. The Convention on International Civil Aviation is available from ATS. (1957). No. 5.
166. IWC. 23rd Report. (1973). 22.
167. See 'Cost Estimates for an International Observation Scheme.' IWC/54/RMS3.
168. International Tropical Timber Agreement. 1983. BH837.txt. These principles were largely reiterated in the 1994 International Tropical Timber Agreement. 33 ILM. 1016–42. Note, the special Bali (sustainable forestry) Partnership Account is financed by contributions from donor countries, resources donated from private and public funds, and 50 per cent of the income earned from the special account. See Article 21.
169. Article 19 with the administrative budget reflects the 'in proportion' principle. Membership in the organization is divided between producing and consuming nations (Article 4) with votes being divided equally (1000 each) between producers and consumers (Article 10 (1)) and within each subset the 1000 total is divided up by considerations of where the producing regions are (four hundred votes divided equally between Africa, Asia Pacific and Latin America), their shares of the total tropical forest resources individually (a subtotal of 300 votes to be divided in accordance with their respective shares) and the final 300 in proportion to the average values of their respective net exports of tropical timber during the most recent three year period. See Article 10(2)(a)–(c). With regard to consuming members, each member is given ten votes, and the remaining 'shall be distributed among the consuming countries in proportion to the average volume of their respective net imports of tropical timber during the [previous] three year period'. Article 10(5).
170. See the International Sugar Agreement of 1959. ATS. (1959). No 5. Article 33 and Article 38.
171. The 1983 International Coffee Agreement. ATS. (1983). No. 17. Article 13 and Article 25.
172. International Agreement on Jute and Jute Products, 1989. ATS. (1991). No. 41. Article 10 and Articles 18–22.

173. The Fifth International Tin Agreement, 1976. ATS. (1976). No. 20. Article 13 and Articles 19–21. Note, the International Tin Council became defunct in the mid-1980s.
174. FAO Code of Conduct, supra n119. Paragraph 7.7.4.
175. Ibid.
176. One of the exceptions is the 1994 INFOPESCA Agreement (on the Constitution of the Centre for Marketing Information and Advisory Services for Fishery Products in Latin America and the Caribbean). Available from <http://www.oceanlaw.net/texts/summaries/infopesca.htm>. This is a system of contributions which takes into account 'the total value of fish and shellfish exports and imports of each Member State as reported in the annual statistics of the FAO'. Article 15(5). Contributions are then equated into four cost categories, of which the quotas are set.
177. Article 11.
178. Article XIV.
179. 1973 Convention on Fishing in the Baltic Sea, supra n98: 317.
180. CCAMLR, supra n99. 'The Commission shall determine by consensus the proportion in which these two criteria shall apply'. Article XIX.3.
181. Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries (1978), October 24. 19 ILM. 830. Article XVI. Sixty per cent is divided among all contracting parties in proportion to their nominal catches in the convention area, and the final 10 per cent is divided among the coastal states in proportion to their nominal catches in the convention area in the years ending two years before the beginning of the budget year.
182. Note, with the IATTC, the percentage has not yet been set, supra n104.
183. Schermers and Blokker, supra n36: 661.
184. Ibid.
185. Baehr, supra n123: 57.
186. Schermers and Blokker, supra n36: 661.
187. 1972 Convention on Wetlands of International Importance. 11 ILM. 963. Article 6. The eventual mechanism may be found in Resolution III.2. 'Financial and Budgetary Matters.' Available from <http://www.ramsar.org/key_res_3.2.htm>.
188. See Resolution 6.8. 'Financial and Administrative Matters.' CMS. Proceedings of the Sixth Meeting of the COP. Volume 1. 60–64.
189. The 1995 Agreement on the Conservation of African-Eurasian Migratory Waterbirds. Reprinted in Austen, M. and Richards, T. (eds) (2000). *Basic Legal Documents on International Animal Welfare and Wildlife Conservation* (Kluwer, Dordrecht): 271–6. Its contributions regime is in accordance with the UN scale of assessment. See Article V.2.a.
190. Paragraph 7.1 of ASCOBANS.
191. See, for example, the CBD, and Decision 1/6: Financing of, and Budget for, The Convention. See Part II of the Decision in particular and the Annex. (COP 1, Bahamas, 1994).
192. Some 12.5 per cent of the IMO budget is based on the UN scale, and the primary section of the budget (87.5 per cent) is based on the gross tonnage registered by each member. See IMO (2001). 'Structure and Purpose.' <http://www.imo.org/imo/structur.htm>.
193. For example, Principle 22 of the 1972 Stockholm Declaration on the Human Environment stipulated: 'States shall co-operate to develop further the international law regarding liability and compensation for victims of pollution and other environmental damage caused by activities within the jurisdiction or control of such States to areas beyond their jurisdiction'. See Final Report of the Working Group on the Declaration. UN Doc. A/Conf.48/14/Rev.1/Annex II.
194. '[F]or adverse effects of environmental damage caused by [sovereign] activities within their jurisdiction or control to areas beyond their controls', Principle 13 of the Rio Declaration, supra n114.
195. Principle 16 of the Rio Declaration, supra n117.
196. 32 ILM. (1993). 1228.
197. See Preamble and Article 1.
198. Article 12.
199. 956 UNTS. 251. There have been a number of amendments to this treaty. For a discussion of these, see Birnie and Boyle, supra n66: 90.

200. See the Text of the 1964 Brussels Supplementary Convention. In Birnie and Boyle, supra n66: 79–90.
201. Article 12 specifies that the contributions shall be determined: 'As to 50%, on the basis of the ratio between the gross national product at current prices of each Contracting Party and the total of the gross national products at current prices of all Contracting Parties . . . for the year preceeding in which the nuclear incident occurs' and 'As to 50%, on the basis of the ratio between the thermal power of the reactors situated in the territory of each contracting Party and the total thermal power of the reactors situated in the territories of all the Contracting Parties'.
202. 35 ILM. 1406.
203. Preamble.
204. See Article 17 (2).
205. 11 ILM (1972) 284. The convention was updated in 1992. The 1992 text is reproduced in Birnie and Boyle, supra n66: 107–31.
206. See Article 4 of the Oil Fund Convention. In Birnie and Boyle, supra n66: 108. Note, the Convention on Civil Liability requires the owner of applicable ships to have, in essence, insurance up to a certain level to be set aside in suitable institutions to satisfy any possible claims against them. See Article V.
207. Article 2. The fund is established 'to provide compensation for pollution damage to the extent that the protection afforded by the 1992 Liability Convention is inadequate'. Article 4 then specifies a number of situations where the Liability Convention may prove insufficient.
208. Contributions apply to any contracting state receiving over 150,000 tons of oil per year via sea transport (Article 10) by which the assembly determines the total amount of contributions levied 'on the basis of a fixed sum for each ton of contributing oil received by the relevant state' (during the previous year) and 'in so far as the contribution is for the satisfaction of payments . . . [for claims for compensation] . . . on the basis of a fixed sum for each ton of contributing oil received by such person during the calendar year preceding that in which the incident in question occurred, provided that State was a party to this Convention'. Article 12 (2).
209. See CCAMLR. 'Report of the Nineteenth Meeting of the Commission.' Hobart, 2000. Paragraphs 5.24–5.32.

PART IV

Conclusion

17. Conclusion

1 INTRODUCTION

Having worked through thousands of words, it is now possible to state my conclusion. In doing so, I intend to keep this final chapter quite brief, so that it is possible to see my overall thesis, rather than a collection of reconstituted chapter conclusions. My thesis is that there are three primary issues before the international community operating within the IWC. Depending on how the IWC comes to terms with each of these, will directly affect the success or failure of its enterprise.

2 THE THREATS ARE CHANGING

Historically, the greatest threat to cetaceans was overharvesting. In the present and future it is likely that whales, dolphins and porpoises will face different threats. These will be less visible than, but just as deadly as, the traditional forms of whaling that have commonly led to their overexploitation and population decline. The new threat to a majority of cetacean species which are still threatened, and may yet become the greatest ever threat, is that of anthropogenic environmental change and the multiple sources of pollution that the change manifests itself in. The responses by the international community to threats from the oceans, from oil to marine dumping, are being confronted in specifically related forums. Likewise, the international threats from POPs and the ozone layer are also, arguably, being confronted. However, in addition to the numerous loopholes in all of the above regimes, is the general failure of the international community to adequately confront the multiple sources of land-based pollution, or the intersecting international difficulties pertaining to potentially massive problems like climate change. Exactly what the long-term results of this will be for an organization like the IWC are far from clear. This obscurity is unfortunate as the IWC may be losing part of the ability to ultimately fulfil its mandate to adequately protect cetaceans, due to the fact that the decisions on the ultimate health of the oceans are made within distant international forums. This problem may, in some instances, be double-barrelled as there is not always evidence that the attempts by the international community to confront the problems in these other forums have been successful.

Another primary threat to the future of cetaceans is bycatch. This is a problem that is not unique to the IWC, and is being dealt with adequately by a number of other forums. However, unless the IWC fully replicates their practices (via modifying technology where necessary, having a release when alive principle, and active disincentives to the utilization of stocks subject to specific conservation measures) then a problem of a vast magnitude may appear.

3 ETHICAL AND PHILOSOPHICAL QUESTIONS

Whaling under scientific auspices presents a rather unique problem, in which a large part of the answer to the quandary exists via examination of relevant practices in the international community. These practices show that science does not exist in a vacuum. Ethical considerations are closely intertwined with modern scientific endeavour. These considerations have become well recognized in the context of scientific procedures that use other animals and demand that the research be necessary, and lethal research only be used where non-lethal alternatives are not available. The same framework, when applied to scientific whaling, leads to the conclusion that the results obtained are not necessary for the management needs of the IWC, and the information that is obtained can often be obtained via non-lethal means. In a nutshell, this suggests that scientific whaling is unethical, rather than illegal.

The issue of humane killing presents another ethical difficulty. The humane ideal in dealing with animals is to cause as little pain as possible. This ideal is common in most (if not all) of the world's major philosophies, both Western and non-Western alike. Thus, it is no surprise to find that the principle of humane killing is a very common international custom, which is recognized in a number of international forums which deal with related issues. Therefore, the current suggestion before the IWC that humane considerations have no applicability in such international forums is remarkably ill-informed. This is not to suggest that inhumane practices do not continue in both national and international practices. This would be a foolish suggestion. Rather, it is to suggest that humane considerations are a large part of the recognized national picture of many sovereign countries, and many international forums. The fact that lacunas exist and progress has (in places) been slow cannot negate the overall recognition that a concern with humane killing is an ethical epicentre which should not be taken lightly.

The attempts to break the deadlock at the IWC with the so-called 'Irish Proposal' also represent some important philosophical questions. Specifically, is it a legitimate choice for countries to pursue an alternative form of development and utilization of the whale stocks that does not involve the killing of

whales on the high seas? The answer to this, when taken from the international precedent of the mining ban in Antarctica, is yes. Conventional development paradigms can quite legitimately be discarded, if the signatories to the convention have a broader vision they wish to adopt. In the case of the ICRW, it is possible to suggest that non-lethal alternatives, such as whalewatching, represent part of this paradigm. A number of the signatories to the ICRW already recognize this. However, the critical mass necessary to make the jump from the current moratorium on commercial whaling, to a more permanent arrangement that would allow the non-lethal alternative to be adopted has not yet occurred because there are uncertainties over whether it is a legitimate choice to make. The answer is in the affirmative.

The final area of real philosophical difficulty relates to aboriginal subsistence whaling. Although indigenous concerns should be given due regard and appropriately pursued, the current practice of the IWC does not facilitate this objective. This is because of difficulties within the IWC, due to overly flexible definitions of indigenous peoples, nutritional need and local utilization. With regard to the last two considerations, confusion over exactly what non-commercial hunts means has arisen as biological and cultural considerations have become confused. This is especially so with the consideration of 'culture' where the IWC has increasingly been dragged into debates which would be better suited to Arts faculties at universities, than international forums with a different mandate.

4 INSTITUTIONAL AND OPERATIONAL QUESTIONS WITHIN THE IWC

This category includes the issues of sanctuaries, small cetaceans, competing international organizations, compliance, the integrity of the organization with regard to the reservations debate, transparency, vote buying and financing the organization. The chapters dealing with these issues contribute towards the overall debate over whether the institution of the IWC can evolve in its mandate, its place in the international community, and its overall integrity as an international organization.

The creation of international sanctuaries is another flashpoint within the IWC. This is ironic, as sanctuaries/protected areas have a long and distinguished history within international law generally, and in the last fifty years, the reasons for the creation of these have expanded into more holistic considerations. However, when the ICRW was drafted, this broader approach was not in currency. As such, the establishment of sanctuaries has had to be achieved within the much narrower bounds of the text of the convention. On a prima facie level, arguments may be adduced that there is a scientific basis for the

existing Southern Ocean Sanctuary and the advocated sanctuaries in the South Pacific and South Atlantic. On a secondary and somewhat deeper level, it is possible to justify these sanctuaries via a method of statutory interpretation of the ICRW text which reflects that although the language of the convention has not changed, the way it has been interpreted has. As such, it is possible to construe the terms 'optimum use', 'best interests of the whaling industry' and the 'interests of the consumers of whale products' in non-consumptive ways. This type of interpretation may be supported under international law if examples of previous practice demonstrating interpretative usage within such a context can be cited. Clearly, the earlier Indian Ocean Santuary and the moratorium do this.

A concern for small cetaceans has been evident within the IWC since the early 1970s, when the IWC's scientific committee gradually began to examine the status and trends on a number of these species. From such information, it has issued resolutions calling for restraint, often directed to specific countries, where certain species of small cetaceans are clearly at risk. Despite this slowly evolving approach, a number of countries have continually objected to this practice, suggesting that any questions concerning small cetaceans are not within the competence of the IWC as the power to make such moves was not conferred by the governing ICRW; small cetaceans were not singled out for coverage, and nor were they listed in the nomenclature. This approach is misplaced due to a number of reasons. First, the language of the convention suggests that 'all' cetaceans were to be covered. Second, international law evolves and the signatories can expand their mandate through subsequent practice which allows them to encompass species of whales which were not specifically listed or utilized in earlier times. Closely aligned to the argument that the IWC does not have competence over small cetaceans, is the assertion that coastal states do have such competence. This contention is typically bolstered by the UNCLOS. However, this is mistaken as the UNCLOS does not accord to coastal states a complete sovereignty in territorial seas. Rather, it affords them a limited sovereignty. This is especially so when dealing with endangered species, migratory species or cetaceans in general.

The issue of other international organizations competing with the IWC is something which is becoming increasingly difficult, as disgruntled IWC members seek to move their grievances to other forums such as CITES or other regional organizations such as NAMMCO. The key thing to remember with all of these developments is that there is a principle of primacy international law which should not be lightly transgressed. As such, the signatories to the ICRW should remain content that they are the masters of this agenda, and it cannot be legitimately second-guessed by any other competing forum without their consent.

The debate relating to the future compliance of whaling vessels in any

possible future regime is one which represents the anti-whaling countries trying to bring IWC procedures in line with current best practice if commercial whaling was to be resumed. This is a big 'if' as many substantive questions have not yet been addressed. In addition, many basic requirements for a compliance regime, comparable to those in other international organizations (from debates about CDS to penalties for substantive non-compliance) remain far from settled.

Chapter 13 dealt with the issue of reservations and procedures to treaties. This became a controversial issue within the IWC in 2001, when Iceland, which had earlier been a member of the IWC but later left, attempted to readhere to the ICRW. However, its attempted readherence was refused on a majority vote by the IWC because of the 'conditional' reservation to the schedule which is attached to the ICRW. On rejection of its membership, Iceland made a number of allegations, suggesting that the IWC's actions were inconsistent with international law. This chapter challenged Iceland's assertions, and showed that the IWC acted in harmony with international doctrine on this question, and, importantly, the method followed – whereby the IWC as a whole ultimately voted on the acceptability of the reservation – reflected an organization in charge of its own integrity, as opposed to individual countries.

In terms of transparency, the IWC is improving. Although not as transparent and facilitative as some comparable international organizations, for example NGOs, the IWC has done well to open its doors to the media, and keep secret voting largely off the agenda. However, of late, a far more sinister threat – that of vote-buying – has arisen. Although the IWC has come out against this, it is questionable whether the practice will actually be curtailed. Vote-buying has become associated with the 'conditions' that countries attach when giving foreign aid. This has become a big issue at the IWC, where vote-buying was recognized as the antithesis of good faith, good neighbourliness, and any form of reasonable diplomatic practice. It may also be a representation of corruption. However, although this may be the case, the question now becomes: where to from here? The answer to this question is in two parts: first, the problem of vote-buying must be identified as illegal corruption and squarely rejected by the international community; and second, appropriate international mechanisms to deter this practice need to be invoked.

The final area within the IWC which has shown little sign of progress, despite repeated attempts to confront it, is that of financial contributions. In this area, the IWC has a policy which is both unique and out of step with many comparable international organizations which have developed funding mechanisms that are much more innovative and dynamic than the earlier blunt approaches (which the IWC largely maintains) based upon compulsion for members, irrespective of benefits or causation of problems. In this area,

divisions between operational, administrative and scientific costs should be carefully considered.

Here is my thesis in a nutshell: if you want to protect whales, be aware that the debate is about ethics, politics and law. Only when all three of these overlapping considerations are fully factored into the equation, will there be a meaningful understanding of this debate.

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