MANUSCRIPTOLOGY AND TEXTUAL CRITICISM

(SKT3 E03)

III SEMESTER

ELECTIVE COURSE

M A SANSKRIT

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Study Material

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UNIT I

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1.1 General Study of Manuscriptology

The term 'manuscript' is derived from the Latin words 'manu' (hand) and 'scriptus' (to write) that means something which is written by hand. The term manuscript in a broader sense means any document written or incised by hand such as documents or texts written on materials like palm leaf, birch bark, paper etc. or inscriptions on rocks, pillars, potteries, copper plates etc. Manuscriptology is the scientific study of manuscripts and it can otherwise be called manuscript studies. It is the branch of learning concerned with the searching, collecting, cataloguing, preserving, transcribing, reading, collating, editing and publishing of manuscripts.

Though Manuscriptology is a separate discipline, it has close affinity with many other subjects. In the preparation of manuscript materials and in their preservation and conservation, it dependents on sciences like Chemistry, Physics, Biology and even to Information Technology. As for writing and reading, it draws information from Palaeography. With regard to the collection of manuscripts,

it requires field work similar to that of Social Sciences. But the techniques used for the same has similarity with those adopted by Business Executives. In the arrangement of manuscripts in the stack room and in their cataloguing, Manuscriptology is related to the Library Science.

In the reading and also in the editing of the texts, knowledge of linguistic, literary, paleographic, historical and cultural aspects are highly essential and thus it is related to subjects like Linguistics, Literature, Sociology, History etc. Proper editing is possible only through knowledge of the subject dealt with in the text. The Manuscriptologist who edits the text needs mastery over the subject concerned or else he seeks the helps of a subject expert. Thus regarding the subjects dealt with in manuscripts, Manuscriptology has connection to almost all branches of knowledge. In short, one cannot compartmentalize Manuscriptology as a discipline belonging to anyone of the sciences or to subjects like arts, fine arts, language, literature etc. It is one of the very few branches of knowledge which has a wider relationship with a good number of disciplines.

Significance of Manuscriptology

Manuscriptology provides authentic records for tracing the cultural, social, political and economic history of the people of a region or a country. Written records are the best source materials for linguists to study the history of a language. The sound changes, changes in the grammatical structure, addition, loss or change of forms for the lexical items at different periods of the development of a language are reflected in inscriptions and manuscripts.

It is to be borne in mind that further advancement to the existing knowledge is possible through some rare and hitherto unknown manuscripts. For example such advancements are made in subjects like Ayurveda, Architecture, Astronomy, Mathematics etc. The changes over the years in customs, practices and social attitudes of the people to a great extent can be understood through the corpus provided by manuscripts.

Even in this modern age, manuscripts provide information for the advancement of knowledge. For instance, hitherto unknown events in history may be revealed through the publication of manuscripts. For example, a Malayalam commentary on the *Arthaśāstra* of Kauṭalya was of great help to Dr. Radha Kumud Mukherji for writing his book *'Chandragupta Maurya and His Times*'. Similarly *Āryamañjuśrīmūlakalpa*, an 8th century Buddhist work in which authentic details of history for fourteen centuries are given, was helpful to K. P. Jayswal in writing his book *'Imperial History of India*'. Many of the unread and unpublished manuscripts may be useful for filling up the existing gaps in history or even for rewriting it. Similar is the case for manuscripts on technical literature like Vaidyaka (Medicine), Jyotiṣa (Astronomy), Śilpaśāstra (Architecture) and Rasāyanaśāstra (Chemistry). A good number of hitherto unknown scientific principles or even theories might be found in manuscripts and the discovery of such manuscripts can be helpful for further scientific discoveries or to make necessary amendments to the existing theories.

In a country like India, Manuscriptology has a special significance when considering our hoary past and the invaluable contributions made by our forefathers in all fields

of knowledge. Manuscripts are one of the major sources for the present day Indians to have a realization of our own cultural heritage.

1.2 History of writings in ancient India (scripts)

Writing is one of the most important inventions ever made by human beings. The place and time of origin of writing are the matter of conjecture. As regarded the time of origin of writing, there have been no conclusive evidences. However writing may be originated sometime in the 8000 century BCE. A wide variety of materials have been used by mankind in various part of the world. For writing, stone of different kinds, metals like gold, silver, copper, lead etc. animal skins, bones, shell, leather, clay, wax, pottery, silk, cotton, wooden plank, bamboo, ivory, bark, leaves, linen, papyrus and paper were used.

The type of materials used for writing has influenced the form of script. The availability of material was the principal reason behind the use. The Chinese used bamboo and shells. The Mesopotamians used clay and Egyptians used papyrus. In India, the oldest evidence of material used for writing as well as the oldest record of writing are the Indus seal discover at the Indus sites. Pottery and metals have been in use in the period of the Indus valley civilization, though the clear evidence for writing in ancient India is available as early as 5th century BCE.

The manuscripts now available are not generally older than about 600 years because of the fragile nature of the materials used for writing. Though many manuscripts of the earlier period are not to be identified, and the history of writing can easily be traced from numerous inscriptions and epigraphs.

While almost all of them are dated, they are also available in large numbers almost continuously throughout the period from 3rd century BCE to till date in various parts of the land from Kashmir to Kanyakumari.

The earliest positive evidences available for a full-fledged script are the inscriptions of Aśoka (3rd century BCE) found all over the country. The inscriptions are found to be written in two scripts in the main Brāhmī and Kharoṣṭhī. While those in Brāhmī are distributed all over the country, those in Kharoṣṭhī are restricted to North-western parts.

1.3 Manuscript Studies in other languages

The manuscript heritage of India is unique in its linguistic and scriptural diversity. Dearth of skill or expertise in scripts in contemporary researchers has, however, posed a threat to the study and understanding of this textual heritage. Indian manuscripts are found in a variety of languages and scripts—Newari, Gaudi, Tibetan, Kannada, Naskh, to name a few. But sadly, the number of people who can read such scripts is very few. Consequently, these are in danger of being extinct.

Script is a particular system or style of writing. It can be comprehended as symbolic representation of sounds of a particular language. Since the time immemorial India is one of the countries multifaceted in terms of language, scripts, and culture. There are hundreds of languages and dialects are spoken in different parts of the country even today. This perhaps has prompted Indian manuscripts to cover a wide range of themes.

The Eighth Schedule to the Constitution of India lists only 22 official languages of the Republic of India. Most of the

Indian scripts have been used for writing. 70% of manuscripts are in the Sanskrit language. Other 30% of manuscripts are in languages like Assamese, Bengali, Dogri, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Maithili, Malayalam, Meithei /Manipuri, Marathi, Nepali, Newari/ Nepal Bhasa, Odia, Punjabi, Tamil, Telugu, Urdu, Chakma etc.

1.4 Evolution of scripts in India – Grantha, Brāhmi, Vaṭṭezhutt, Kolezhutt, Śāradā

Script is a set of visual symbols representing language depending upon public convention. There is no inseparable relation between language and script. One script can be used for writing several languages and vice-versa. The most ancient scripts of India are Brāhmī and Kharoṣṭhī. Among these, Brāhmī is considered as the mother of all the later scripts of India. In early Jain works like *Samavāyaṅgasutta* (300 BCE) and *Paṇṇavaṇāsutta* (168 BCE) this script is referred to as 'Bambhī', subsequently it might have been named as Brāhmī. The Piprahwa Buddhist vase inscriptions of Basti district, Uttar Pradesh and Badli inscriptions found from Ajmir district of Rajasthan, both belong to 5th century BCE are the earliest inscription in Brāhmī so far obtained. Brāhmī had regional variation even at the time of Aśoka. The regional variation can be broadly classified into two major groups: Southern Brāhmī and Northern Brāhmī.

Southern Brāhmī

The Brāhmī varieties found in the Deccan and the Southern regions of India belong to this group. It has two major sub-divisions, the Deccan variety and the Drāvidi variety. The Deccan variety is also known as Andhra script. The period of

its existence is considered as from 2nd century BCE to 1st century CE. It was prevalent in Deccan and in a major part of Andhra Pradesh. The cave inscriptions of Nanaghat, Nasik and Pitalkhora belong to the Deccan variety. The scripts used by Śātavāhana-s and Pallava-s are also of this type. The Drāvidi script has two sub-varieties the Kaliṅga variety (Northern Drāvidi) and the Tamil Cave Brāhmī (Southern Drāvidi). The Kaliṅga type was used in the Kaliṅga region.

The cave inscriptions found in different parts of Tamil Nadu, the period of which ranges from 3rd century BCE to 1st century CE, are of Southern Drāvidi. The inscriptions of Idakkal in Waynad district of Kerala are also of this type. Proto Telugu - Kannada script evolved from the Deccan and the early Kaliṅga scripts. The Telugu and Kannada scripts originated from the Proto Telugu - Kannada script. Vaṭṭezhuttu, Tamil script and Grantha script were the developments from the Southern variety of Drāvidi. Vaṭṭezhuttu was the writing system of the Tamil language and when Malayalam became a separate language it was used also to write Malayalam. Kolezhuttu and Malayanma were two regional varieties of Vaṭṭezhuttu found in Kerala. In addition to Vaṭṭezhuttu, Tamil script was also used in ancient times to write Tamil language. Both these two scripts might have co-existed but Vaṭṭezhuttu appears to be more ancient. The present day Tamil script is a development from the ancient Tamil script. But Vaṭṭezhuttu ceased to exist. Grantha script was used to write Sanskrit language in the entire Tamil Nadu and Kerala regions and also in the Tulunadu region of Karnataka. Modern Malayalam script is an adaptation of the Malabar variety of Grantha script (Arya Ezhuttu). Tigalāri, a script once used in the Kasargod district of Kerala and the adjacent Tulunadu region of Karnataka can also be

considered as a development from Grantha script since it evolved out of Malayalam, Grantha and Kannada scripts. The genesis of many of the writing systems of Southeast Asian countries like Sri Lanka, Maldives, Myanmar, Cambodia, Siam and Indonesia is the Grantha script.

Northern Brāhmī

The spread of Northern Brāhmī was quite extensive comprising the whole Indian subcontinent north of Deccan. The Brāhmī script underwent further from the period of Aśoka to the period of later Maurya-s and then again to the Gupta period. The writing systems Neo Indo-Aryan languages are the developments from the Brāhmī characters used during the Gupta period. The Brāhmī of the Gupta period is very often referred to as Gupta characters. In addition to the Central Asian scripts like Agnean, Kuchean and Khotanese, the Indian language scripts like Sāradā, Nakri, Lānda and Gurumukhi originated from the western variety of Gupta characters. Tibetan is related to both Khotanese and Siddhamātṛkā. Similarly Gurumukhi has affinity not only with Lānda but also with Devanāgari.

The eastern variety of Gupta characters had two sub-divisions, the Western and the Eastern. The Western sub-variety developed into Siddhamātṛkā. Both Kaithi and Kuṭilalipi are developments from Siddhamātṛkā. Bihāri script used by the Kāyastha community and the Bhojpuri characters originated from Kaithi. The origin of Nāgari scripts was from Kuṭilalipi. The Nāgari scripts are classified into Eastern (Pūrva Nāgari), Western (Ardha Nāgari), Central (Devanāgari) and Southern (Nandināgari). Yet another broad classification divides Nāgari scripts into Northern and Southern. In this classification, Northern

variety is Devanāgari and the Southern variety is Nandināgari. Rājasthāni, Mahājani and Gujarati are related to Devanāgari. Modi the script of Marathi language has close affinity with both Nandināgari and Devanāgari.

Nandināgari, the Southern variety of Nāgari was in existence in Mysore and its adjacent regions. Newari (Nepali) and Old Bengali scripts originated from Proto-Bengali which in turn was a development of the Eastern Gupta characters. Assamese, Oriya, Mythili, Manipuri and modern Bengali scripts are developments from Old Bengali characters. The script of Saurashtrian language (the language spoken by the Saurashtrian community found in Madurai, Virudunagar and Salem regions of Tamil Nadu) is also an off-shoot of Northern Brāhmī.

According to the written evidence of the deciphered Indian scripts, Brāhmī comes first having the earliest inscriptions found in India. The date of early Brāhmī inscriptions go back to 5th century BCE. Kharoṣṭhī inscriptions come next in antiquity having inscriptions from 3rd century BCE. The language of early inscriptions was Prākṛt. Among the Modern Indian languages, Tamil has the earliest inscriptions, the script used being Tamil Cave Brāhmī, the period of which ranges from 2nd century BCE to 3rd century CE. Vaṭṭezhuttu, the script of the Tamil language might be next in antiquity with regard to the use in inscriptions.

An epitaph found at Tirunātarkunru belonging to 4th century CE is the earliest Vaṭṭezhuttu inscription. The origin of Tamil script according to Bühler is of 4th or 5th century CE, and Mahalingam states that two labels found in Tamil script in Tiruchirappally are of 6th century CE. He states a label in Grantha script obtained from Tiruchirappally is of 5th century

CE. The inscriptions in early Telugu-Kannada script are obtained from 5th century onwards. Inscriptions in Neo-Indo Aryan language scripts are obtained from 10th century onwards.

1. Brāhmī: Brāhmī is considered to be one of the most ancient scripts used in the sub-continent of India. The earliest surviving records of the use of the Brāhmī script are found in the form of the inscriptions of Aśoka (269 BCE to 232 BCE). He had his messages to his subjects written on rocks and pillars at various places in his empire. His inscriptions on the trade routes and at important Buddhist places have provided us with evidence of a completely evolved alphabetical writing system in ancient India. Over a period of time, with the regional preferences and specialties the script changed its form and developed into almost all modern Indian scripts.

2. Tamil: The earlier Tamil inscriptions were written in Brāhmī, Grantha and Vaṭṭezhuttu scripts. Inscriptions after the seventh century CE contain Tamil characters similar to the one now in vogue. This prompted some scholars to argue that Vaṭṭezhuttu and Tamil scripts originated from Brāhmī scripts. This view has no solid base, for one can see a copious description of Tamil scripts in Tolkāppiyam, which belongs to third century BCE. It is obvious therefore, that Tamil language had a distinct script of its own even at that early period.

3. Kannada: One of the early scripts of South India evidenced from about 450 CE. in Karnataka. Compared to Grantha, Nandināgarī and Telugu, Sanskrit manuscripts in Kannada script are small in number.

4. Grantha: This script was prevalent in the Tamil Nadu area from about 7th century CE. But manuscripts date from the end of 16th century. It has two varieties: (1) the 'square' hand founds around Tanjore and (2) the 'round hand of mostly Jains around Arcot and Madras. Grantha ran parallel to Tamil and was used in writing Sanskrit only, hence the name. The term appears in the 14th century.

5. Śāradā: Originally Śāradā appears in about 8th century CE. The earliest manuscript in this script current in Jammu and Kashmir and North-Eastern Punjab, dates from 11th -12th century.

6. Devanāgarī: This script developed fully by the 10th - 11th centuries CE and manuscripts also date from the same period. But, Devanāgarī is not confined to any one particular region; it is not regional. The origin of the name 'Nāgarī - lipi' is variously interpreted. Some argue that it is related to the Nāgalipi of the *Lalitavistara*. It is shown that, in Tibetan, it is called Kliu-Yeg, the script of the Naga-s. Others relate it with the Nāgara-s, the Gujarat Brahmins. The third and simpler explanation of the term as "writing used in cities", "town script", seems more plausible. The words "Nagara' and 'Nāgarika' may be compared with this. On this basis, the meaning of Nāgarī could be extended to mean 'cultured' or 'sophisticated'. Another point worthy of note here is that palm leaf manuscripts in Devanāgarī are very rare, may be one in ten thousand.

7. Nepāli or Newāri: This script exists in Nepal and adjoining areas. Manuscripts are available from 12th century. A manuscript dated 1063 CE deposited in Bodleian Library, Oxford, is said to be the oldest.

8. Tigalāri: This script, employed mostly in the coastal Karnataka - Karwar to Kasargod, is a mixed one. It contains the elements of Malayalam, Grantha and Kannada in order of dominance. There is a large number of manuscripts mostly in private possession; only a fraction has been acquired by the modern libraries. Because this is found in manuscripts only, it has not come to the notice of palaeographers who speak of it as Tuḷu or Tuḷu-Malayāḷam (Western Grantha). It is evidenced since 12th century.

9. Modi: This is the running hand of 'Bālabodha', the Devanāgarī of Maharashtra, a survival of Southern Nāgarī. The documents available since 13th century are all non-literary private correspondence and official records.

10. Nandināgari: The Nāgari in South India developed into what is called 'Nandināgari'. Why the script was called 'Nandi' is only a matter of conjecture. This is evidenced since the Yadava-Hoysala period (13th century) and the frequency of its use grew during the Vijayanagar period. This script must have developed as a pen-style or stylus-style script and not as a chisel-style one. The absence of the horizontal top-line is suitable to write on palm leaves, otherwise there was the possibility of the leaf splitting due to the line.

11. Telugu: This is the script employed in the Andhra Pradesh area. It is not easy to identify Telugu from Kannada in early palm leaves. But it is Telugu by and large. This attitude may be seen in many of the Sanskrit texts printed in Karnataka in the last century and early part of the present; they are in Telugu script. Actually Kannada and Telugu branch off only around 14th century till which time they were one.

12. Maithili: Eastern Bihar (Tirhut) and western West Bengal form the location of this script. The Tirhuti variety was used for writing books. There was also a running hand, Kaithi, used for non-literary purposes. The documents date from 15th century.

13. Malayāḷam: Malayalam started to develop as a separate language from the 13th century onwards. It's the major language of Kerala and Lakshadweep. While 'Vattezhuthu Script' was the script used for Malayalam from 9th century onwards, the modern script of Malayalam Language evolved from the 'Grandha Script' which came into existence by the 16th century. Malayalam, one among the Dravidian languages, most likely originated as a split from Tamil in even more ancient times and became an independent language by AD 9th century.

14. Odia: The Odia script is used for writing the Odia language, the official language of the Indian state of Orissa, as well as a number of Dravidian and Munda minority languages spoken in that region. It is also used in Orissa for transcribing Sanskrit texts. The earliest inscriptions in the Odia language have been dated to 1051 AD, written in the Kalinga script from which modern Odia writing is derived. This script current in Orissa has two varieties in accordance with its use: (1) that which was used to write on palm leaf manuscripts, Brāhmaṇi and (2) Karaṇi that which was used for non-literary purposes by Karaṇs.

15. Vaṅga or Bengali: This script is current in Bengal (both West and East). It fully developed by 15th century. Assamese is a variety of Bengali and Oriya and Maithili are related to this.

UNIT II

- **Importance of preservation of Manuscripts**
- **Preservation techniques**
- **Tools and writing materials for manuscripts**

2.1 Importance of Preservation of Manuscripts

Preservation of manuscripts is a technical topic for which a scientific background is necessary. It forms part of the broad branch of conservation science in general and the science of conservation of old documents in particular. Mere knowledge of manuscripts is not enough for the proper preservation of them. The problems connected with the preservation of manuscripts are varied. It is not possible here to go into all the details of the problem of preservation of manuscripts. In fact, preservation of manuscripts can be properly carried out only after obtaining on the job training.

Preservation is the general term used, but it includes conservation, reconstruction, restoration and preventive conservation. Preservation of manuscripts has two main aspects: one is the proper storage of manuscript and the other is the use of preservation agents. In both cases the material used for writing the manuscripts and also the polluting agents play the major role.

Paper and palm leaf, the chief materials for writing books, get destroyed in course of time. The durability depends on the quality of the material and care one takes about them. Thus, the care of manuscripts pre-supposes knowledge of the

conditions for their destruction. They are generally speaking: time, fire, water, heat, dust, humidity, atmosphere, gases, fungi, ants, rats and last but not the least, human beings.

Causes of Destruction of Manuscripts

The causes of destruction of modern printed books apply to manuscripts as well. The manuscripts, however, require more attention than printed books because of the nature of the material, also each manuscript is unique and can never be replaced. Hence each manuscript has to be given individual attention. The manuscripts are to be protected from the adverse effects of environment, climatic conditions, pests and the human being.

Water, fire and wicked men are the primary enemies of books, observes the 10th century critic, Rājasekhara. The couplet usually written at the end of manuscripts says that the manuscript exhorts one to protect it from oil, water and loose binding and from falling into wicked hands. A wicked person, a mūrkha, has no respect for the books and even is envious of them. Hence, the books may not be safe in such hands. The book, in our tradition, is regarded as an object of worship. That eloquently speaks for having care in handling manuscripts. It is too well known to repeat here that books are susceptible to fire. Water, if it wets, is dangerous as also oil which causes the growth of fungus. If the binding is loose, the leaves are liable for damage. The palm leaf bundles are also to be bound tightly; otherwise the edges of the leaves get damaged.

Climatic conditions

The manuscripts are affected by the variation in the level of humidity. If it is low, the leaves become brittle; high humidity helps the growth of mould. Low humidity with heat is the greatest enemy of palm leaf manuscripts. Palm leaf is found to be four times as strong as wood or hand-made paper. It loses its strength due to age but slightly. From the point of view of permanence, palm leaf is an excellent material for records, but for the fact that its resistance to wear and tear is very poor.

Environment

Air is hazardous as carrier of dust and chemical gases. Chemical gases are not easy to detect and have an adverse effect on ink and modern paper. Dust, though minute, poses a threat to books by providing breeding resorts to worms and insects.

1. **Fungus:** Fungus or mildew or mold (or mould) are particles found in air. While they settle on damp wood, paper, etc., they grow horizontally on the surface of the material and disfigure it. If fungus should occur between leaves, they stick together and they cannot be separated ordinarily without damaging the leaves.

2. **Insects:** There are more than a million varieties of insects noticed by biologists. Only a few of them are harmful to books.

a) Silver-Fish: The insect is so called because its form resembles that of a fish, tapering backwards and is silver-grey in colour. It bores holes in the books and is fond of

starch (used to smoothen the writing surface), gum and gelatin. Silver-fish shuns light and its activity increases in darkness.

b) Cockroach: Though this name applies to a group of insects - Blattidae - it usually refers to one species, the black beetle. Some three varieties are found in libraries throughout the world especially those in hot climate. It is a wonderful creature in that it can squeeze itself in a very small crevice. While it can eat anything, it can live without food for days together. It also disfigures books by its black excreta. Cockroaches are active in darkness.

c) Book-worm: Though any worm in the book may be called 'book-worm', it is more usually applied to the larvae of the beetle of many varieties. The beetle lays eggs on the edges of books. The larva moves into the book or palm leaf bundle boring horizontally and vertically. Lyctus brunneus is another species which destroys books, it is called ghoon (ghuna) in India.

d) Termites: Termites are usually called white ants. The colour of termites is pale yellow or dark brown. Termites are small in size and their body is soft. Still, they are veracious eaters of cellulose. However, they are selective feeders. Thus the damage inflicted by these insects need not be due to their eating. It may be due to the holes bored through by them or due to corrosion because of moisture or bodily secretions.

e) Wasps: Wasps do not feed on books. One variety bores holes in wood to build its nest. The other variety called mud-wasp, builds mud-nests which stick hard to a surface. The books are liable for damage or disfigurement, if these nests are built in their edges.

f) Book-lice: These are minute insects of the order Corrodentia that attack books. They are also called Psocids. There are also wood-boring beetles.

3. **Rats:** It is well-known that rats attack manuscripts and books and reduce them to pieces. They can easily bore holes in brick walls and wooden cabinets.

4. **Man-made problems:** The damages caused due to improper storing and careless handling are purely of man-made in nature. The manuscripts are not to be dumped as a pile. Suitable storing places are to be selected. Each codex, to the extend needed is to be tightly tied. More loosing or more tightening is injurious to manuscript materials.

2.2 Preservation techniques

In India, there existed effective traditional methods for preserving manuscripts. Since the climatic conditions show regional variations, the traditional methods for preservation also exhibit corresponding variations and the methods adopted in another region. Though these methods are now almost neglected, such methods are best suited since they are evolving according to the weather conditions of the concerned regions. Also, the materials used for preservation are easily available locally.

If the floor and walls are neatly cement-plastered, there is no fear from termites. If the library is housed in an old building, one has to be constantly vigilant to check every nook and corner, periodically. To fight termites, the almirahs may be kept at least 15 cms away from ground, wall and roof. Not only is this measure precautionary against termites, but also adds to general cleanliness of the library and allows free air

circulation. In case of ink eating away the paper, the manuscripts might be immersed in slightly alkaline solution to reduce the acid contents of the dried ink.

The methods utilized for the preservation of manuscripts can be classified into two types, they are traditional methods and modern methods.

Traditional Methods

The traditional way of keeping manuscripts is in wooden or in cane boxes and in wooden almirahs. The folios of the manuscripts are bound tightly before keeping them in the box so as to protect them from easy access to insects and worms. The codices are tied properly with upper and bottom wooden plates (pieces of wooden planks). These wooden plates are in the size of the manuscripts. These protecting wooden plates are generally made out of teak wood, jack wood or neem wood. In some rare instances they are made out of ivory.

The wooden boxes in which the manuscripts are to be kept are generally out of teak-wood since teak-wood is not easily susceptible to termites and is more durable. These boxes have four stands so that the bottom of the box does not touch the floor. Around the stands turmeric powder is sprinkled. In certain cases each manuscript is kept in separate boxes specially designed for the same. It is also seen that the manuscripts are protected from dust by covering it with a silk cloth and kept in boxes. In some places each manuscript bundle is wrapped up in coloured cloth usually red or blue. These coloured cloths having flaps which can be tied together are made according to the size of the manuscripts. The red or blue coloured cloths are used since they are supposed to be not attractive to insects. The dried neem

leaves are spread inside at the bottom of the boxes in which manuscripts are kept. Also black pepper and camphor are strewed inside the box. The black pepper is considered to be an efficient material for absorbing moisture and camphor is useful for protecting the manuscripts from fungi and insects. Though not very common, instead of black pepper, black cumin is found to be used. Similarly dry tobacco leaves are also used by some. Black cumin and dry tobacco leaves are not allowed to have direct contact with the manuscripts and hence they are placed in small cloth bags called 'kizhi' in Malayalam and then only they are placed inside the box. In some cases, with regard to the manuscripts in the private custody it is noticed that the boxes containing manuscripts are kept in 'Thattinpuram', usually near to the kitchen portion.

The palm-leaf manuscripts are taken out from the boxes occasionally. The boxes will be cleaned and placed in sunlight for a few hours. After removing the dust particles by rubbing the leaves with a piece of nice cloth or by brushing, each folio is oiled with lemon-grass oil.

Modern methods

Naphthalene balls or camphor may be kept with paper manuscripts, as it works against silver fish. Use of Mercuric chloride ($HgCl_2$) is an old method. The chemical is not only very poisonous but also persistent. 5% solution of this is effective against American cockroach. A less poisonous insecticide is Ammonium thiocyanate (NH_4SCN) or Pottasium thiocyanate (KSCN). But one should take care to avoid iron. Against mold in manuscripts, inter-leaves of tissue paper impregnated with thymol $(CH_3)_2$ $CHC_6H_3(CH_3)$ OH and an insecticide are recommended. The chief techniques used in modern times for preservation of

manuscripts are Air-conditioning, Deep-Freezing, Moisture Absorbents, Photo copying, Microfilming, Digital archiving and Fumigation.

Air-conditioning

Maintaining constant temperature prolong the period of longevity of manuscripts. In India where extreme climatic conditions exist air-conditioning of the library is highly essential. To a great extent it helps to reduce the problem of dust. The air-conditioned rooms are not congenial for the survival of many of the worms and insects. However, attention is required to have the air-conditioning throughout the day. Switching off the air conditioner for hours together will adversely affect the manuscripts.

Deep-Freezing

When the temperature is at freezing point or below, the insects and worms cannot survive. Hence documents which are to be preserved can be kept at freezing point. Since insecticides are not used in this method it is non-toxic. For deep-freezing a specially designed Deep-freezer is used. The books or manuscripts are placed inside polythene bags and are tightly sealed. These loaded bags are placed on a trolley fitted inside the freezer. After closing the lid, the deep-freezer is switched on. The loaded bags are kept inside the chamber for about three days. Then the bags are taken out from the freezer and keep them in the open air for a few hours to remove the dews if any on the outer surface of the polythene bags. Then the manuscripts are taken out of the bags and are placed in their original storing place.

Moisture Absorbents

To protect the manuscripts from getting wet due to moisture, different types of moisture absorbents are found to be used. The chief among them are silica gel, anhydrous calcium chloride and charcoal. Among all the moisture absorbents, silica gel is the most efficient and is considered to be very safe. For reducing the humidity in non-air conditioned manuscript libraries, the use of moisture absorbents is very suitable. Such absorbents can be placed in different parts of the room.

Photo copying

Whatever may be the care one takes, it may not be possible for one to preserve the manuscripts for ever. Hence preservation of the contents becomes essential. Photo copying is used for preserving the contents of manuscripts. Having copies is also a preservation technique in the sense that for references and studies these photo copies can be utilised and thus the original manuscripts are kept untouched. This helps in the safe protection of the original manuscripts.

Microfilming

With the help of a microfilm camera, manuscripts can be microfilmed and when needed they can be read through a microfilm reader. By using microfilms frequent handling of the original manuscripts can be avoided. However, it may be noted that in the case of both photo copying and microfilming the heat emitted is injurious to the manuscript material.

Digital Archiving

The written lines of the manuscripts as such can be transferred to CD ROMS and whenever necessary they can be read either from the computer screen or from their print out. For this purpose computers with scanning facility are used. Both palm-leaf and paper manuscripts can be directly scanned with the help of a scanner.

Fumigation:

The manuscripts infested by mildew and insects may be subjected to fumigation in a specially prepared chamber. A fumigation-chamber is an air-tight almirah with shelves made of wire mesh and with glass doors. If the total height is about 180 cms., 4 to 5 shelves may be arranged at about 30 cms. intervals, leaving more space below. In the middle of the lower cover plank, a round (7.5 cms. diameter) hole may be cut and a stainless-steel plate fixed there. The infested manuscripts are to be spread on the shelves A glass plate containing the chemical, Thymol (100-150 gms. per one cubic metre) is kept on the steel plate. Under the steel plate, a vacuum electric bulb of 60 watts is made to burn for about 4 to 5 hours. The heat sublimates the chemical. The vapours pass through the manuscripts above and the insects are destroyed. The manuscripts are to be left in the chamber for two days, then cleaned and restored.

Use of chemicals may smudge carbon inks. Proper precautions are necessary before subjecting the manuscripts to fumigation. Naphthalene ($C_{10}H_3$), can be used as a fumigant. It is a cheap and a readily available insect repellent. In the Oriental Research Institute, Mysore, a special kind of oil, an Ayurvedic preparation, is being employed since about

40 years to keep the palm leaf in good condition. The sesame (tila) oil is treated with herbal juice and other insecticide ingredients. The oil when smeared thinly and evenly on the palm leaf (both sides) with a brush, not only cleans the dirt off the palm leaf making the letters legible, but also keeps the insects away and the leaf is made pliable.

Repair of Manuscripts

The manuscripts tend to be damaged, howsoever one may be very careful, due to frequent handling for study and research. Therefore, periodical repair of manuscripts must be one of the items of preservation. The torn pieces are to be carefully glued. Paper manuscripts in book-form are to be checked towards mending injured bindings. Physical care of manuscripts is to be taken over on priority. Each manuscript has to be given individual attention.

Worm eaten sheets or leaves may also be given tissue paper support. Broken leaves or torn sheets or gaps may be filled with blank leaves or hand-made paper sheets cut to the required size. This ensures uniformity of size of sheets arrests any further mutilation. Manuscripts drenched in water should be dried under a fan. The leaves are to be carefully separated and spread for drying. They should not be exposed to sun or dried in an electric heater.

Lamination

Lamination is the process of enclosing each leaf or sheet in cellulose acetate or polythene foil. Some use chiffon also for the purpose. There are now automatic machines that do the work. Paintings and unique manuscripts are to be laminated so that they do not deteriorate due to pests or climatic

aberrations. However, the experts say that lamination has its own limitations.

Both in the traditional methods and also in modern methods, the importance of the care of manuscripts is well recognized. The techniques adopted for it are also almost same. Once the causes of destruction of manuscripts are known, it is easy to look after them. Darkness is to be avoided where manuscripts are stored. The place must have sufficient light, but direct sun-light should not fall on the manuscripts. When artificial light is necessary, it must not produce heat. Shelves are to be arranged in such a way that there is free movement of air. Precautionary measures against fire like installation of fire-fighting gadgets - extinguishers, smoke alarm etc., need to be undertaken. Mention may be made here that tests have shown that Indian paint is fire resistant.

Dust must be controlled scrupulously. The manuscripts as well as shelves are to be cleaned regularly and frequently by the use of duster-cloth. The dust is to be wiped and not made to spread. The red-cloth of manuscript bundles are to be cleaned regularly. The floor of the stock-room is also to be wiped frequently with a wet cloth. With regard to palm-leaf manuscripts, arrangements must be made to see that every bundle is cleaned, leaf by leaf at least once in six months. Each leaf is to be wiped on both sides with a cloth. While wiping the leaf, it must be remembered, the hand should not return on the leaf, for that may break it; the hand should move from centre outwards. The manuscripts, paper or palm leaf, may be cleaned mechanically by using vacuum cleaners. The insects, if any will have to reveal itself through this process.

Maintenance of cleanliness goes a long way in checking the menace of insects and fungi. The person in-charge should be

ever watchful. To control insects like silver fish, bookworm and cockroaches, chemical insecticides could be used.

2.3 Tools and Writing materials for manuscripts

The introduction of history of writing and writing materials are already mentioned in the first unit. Hence it is not mentioning in this unit.

Writing Tools

The instruments used for writing are termed as writing tools. They are also known as writing instruments or writing aids. Stylus, reeds, spines of porcupine, strong quills of birds and suitable twigs of plants were used for writing manuscripts. At a later stage pen was also introduced especially to write on paper. We can distinguish the instruments into three types : (i) Those with hard and sharp tips to incise; (ii) Those with a soft and smooth tips to write and (iii) Brush or such material to paint.

The term 'lekhanī' however, stands for any writing instrument and is as old as the Mahābhārata and the Rāmāyana. Even so, the verb 'likhati' refers to scratching, engraving, writing and includes painting too.

(i) The stylus for incising on palm leaves is called kaṇṭaka', 'loha-kaṇṭaka' or 'śalākā'. It is a rod made of iron about 10-30 cms. in length and with the thickness of a pencil. It tapers to one end and has a sharp tip. The other end is made flat and sometimes decorated with jingles. The stylus was made of gold, silver, copper or brass and was plain or ornamented. It was tipped with a steel point which was sharpened from time to time on an oiled stone. The point was

of four varieties beside the fine point and the length of the style also varied. The choice depended on the type of work on hand - 10 to 20 lines per page. The four points were: chatra (sun shade), patra (leaf), nāḷa (tube), and gaṇḍa (ball).

(ii) The quill of porcupine or bamboo twig or lālada kaḍḍi - a kind of reed (thin bamboo) is used as pen to write on birch-bark. It is called Kuñca or Vartikā. The rich house-holders in Bengal employ the Vṛṇāla or Khakra reed that North-West provinces the reed or lalamus (kalam) is generally used.

(iii) Kuñcika, Maṣikuñcika, Tūlī or Tūlikā or Dūṣika or Varti is a brush. Brushes are made of reeds, wood, iron and fibres and hairs. Varṇaka or Varṇika is a small colour stick, usually white - a pencil - to draw letters on a board. Subandhu, Harisena and Sriharsa employ a term 'khaṭini' in the sense of chalk. Manahśilā - naturally available soft stones like the pot-stone for writing. Varṇa-Vartikā stands for coloured pencil. The affluent had golden coverings for the pens/pencils.

Other instruments and materials

Instruments like ruler and compasses or bow pen are used to draw lines and circles while writing patterns and designs. For drawing parallel lines on paper and birch-bark, a board is fixed with strings horizontally at equal distances: Paper to be ruled is placed over it and rubbed with a piece of cotton. This is called Rekhāpaṭṭi or Samāsapaṭi. Burnishing stone and conch or shell is useful in polishing. Cinture is employed to bore holes in palm leaves. Knife is also part of the kit.

The pens are kept in a box with or without cover. Sometimes, an ink-pot will have an attached pen-holder. The box to keep the ink-pot/s is often decorated. The manuscripts are also kept in decorated boxes. While reading, the manuscript is kept on a stand, a sort of low stool or frame called 'Vyasapīṭha' ('lipyāsana' of *Rāyapaseṇiyasutta*). Bāṇa calls it Śaraśalākā-yantra, a frame about eighteen inches in height. Kambī or Kamba noted earlier, is a kind of ruler. The word 'Kambī' means a 'strip' and therefore, it may be the strip of wood on either side of the bundle. Chisel and hammer and such materials are used in inscribing on stones. But, these are not exclusive writing instruments. Ink, Juice of plants, black ashes, gall nut (ink nut) paste, and carbon are some of the many varieties of substances used for writing.

Writing materials in Ancient India

Our ancestors record some of the important event in their lives through pictures. We got these pictures from the caves like Ajanta, Ellora, and Idakkal. With the help of sharpened material they have drawn pictures on the rocks inside the caves. Later, they have inscribed scripts instead of pictures. The scholars argue that the first Indian script might be the Indus script. But the script is not known to people till 1922, the year which Indus valley or Harappan civilization excavated by Punjab Provenance of British India. After 1922, the scholars know that there existed a script and they have given the name of that script as Indus script, the script is written on clay plane and some type of metallic bodies.

From that period people use different types of material for writing. Palm leaf, Bhurjapatra, Kumbhika bark, Agarutvak, leather, cloth, Tulāpat, rock material and paper are the

popular writing material used in India for preserving the knowledge.

Palm leaf

Palm leaves were one of the main and most popular writing materials in all south Asian countries including India, Sri Lanka, Nepal, Myanmar and Indonesia. Three species of palm tree are grown in India, and the botanical names are:

1. Coryphaumbraculifera, (Gujarat and Rajasthan)

2. Corypha Faliera (Costal areas of South India)

3. Borassus Flabellifera (south India)

Traditionally two kinds of palm leaves are used of writing. They are Palmyra palm leaves (Borassus Flabelliferalinn) and Fan palm leaves (Coryphaumbraculifera). Tālapatra or Kharatāla and Tāli or Śrītāla in Sanskrit is known as Nuṅkkuppanai and Tāḷippanai in Tamil respectively, where as in Malayalam they are referred to as Karimpana and Tāliyolappana. The leaves of Palmyra palm leaves (Tālapatra) are thicker and their surface is rougher and hence they can be used only for writing with stylus.

The Fan palm leaves (Tālī) are relatively thinner, flexible and light colored. So it is possible to write with stylus and other writing aids. It is believed that the earliest among them used for writing is Tālī. Palmyra is found in all parts of India but Tāḷīpatra is found mostly in South India, especially in the regions of Palakkad and Malabar. The life of Palm leaf manuscript is usually around five hundred years. But if we cared properly they can be long last for much longer periods.

The processed palm leaves are taken for writing using a metallic stylus made by iron. After the writing they were tied together using a thread with in between two bricks of wooden pieces. In north India the written letters were darkened by charcoal powder or leaf juice. After all these process these codex were covered with cotton and kept in a place which wet and dry. To avoid insects like bees add some cardamom along with it.

Bhūrjapatra

Bhūrjapatra or Bhojapatra (Birch Bark) was one of the most popular writing material used in North India. There are four varieties of Bhojapatra available. Yellow Birch (Betulaluta) mostly grown in England and Georgea, Black birch (Betula Lenta) North America, White birch (Betula Parifera) North East Canada, Himalaya silver Birch (Betula Utilisis) in Himalaya.

The inner bark of this tree was used for writing in Himalayan regions, especially in the region of Kashmir. The inner bark consists of several thin layers. These layers are carefully separated; each layer is as thin as manifold paper. the sheet are white or pinky white outside and reddish inside. The bark is slowly dries and applied oil on the surface then polishing is done by rubbing with a polishing stone to make it smooth.

Then sheet cut according to the required size and write on it. It peels off in thin layers and flexible like paper consisting of cellulose and lignin and natural gums and essential oils. Holes are pierced in the centre of the birch bark sheet for a cord to pass through it to keep them together before wrapping them between two wooden covers. Insect repellent is an

important property of birch bark. Fungus cannot attack the birch bark easily.

Kumbhuki Bark

The bark of Kumbhi or Kumbhika tree (Careyaarborea) is known as Kumbhi bark, a writing material used in ancient India. Kumbhika trees grow abundantly in the jungles of Orissa, so the popular use of Kumbhika is in the regions of Orissa.

Agarutvak (Sāñcipāṭ)

The agaru or Aguru or Aloe tree (Acqulairaagullocha) is a tall fragrant tree usually grown in the hilly area, especially in the areas of Assam. In Assam it is known as Sāñcī. Many manuscripts in Sāñcīpaṭ have been discovered in Assam and preserved in Guwahati University Library. Agaru bark which consists of cellulose and lignin. It absorbs ink. Sheets are dried for many days before curing, seasoning and polishing. This is followed by treatment with Orpiment to make them immune from insects and rubbing them with a conch shell to make it smooth. Painting is done by using both organic and inorganic colors. Carbon as well as iron gall ink are used as per requirement of the manuscript beside a special ink called 'Sāñcī Mahī'. The Agaru is also found in the forest of Kerala, and its name is Akil, no evidence is obtained from its use as writing material in Malayalam.

Cloth

For writing purposes a special type of cloth, cotton cloths were often used in India. Some Jain scriptures were found to be written in silk cloth. A type of cotton cloth known as

kaḍata or kaḍita was used for writing manuscript in the Mysore regions. The complete work is not copied in or writes on cloth because it is not durable: it easily get infected. To make the surface smooth, layer of rice or wheat pulp was spread on it, dried and polished with a smooth stone.

Phalaka

Wooden planks are also in use for writing documents. It has been used for temporary writing for special purposes. As such phalakam has attained the meaning of signboard and even name board.

Metals

Copper, gold and silver are the most popular metals used for writing. The copper plate is called Tāmra-paṭa, or Tāmra paṭṭika, patra, phalaka, śāsanapatra, dānapatra etc… The use of copper between 6th and 15th centuries is quite frequent and late frequency grows in the South India. In the Jātaka stories, it can be seen that in those days, gold plate (Suvaṇṇa patta) was used to preserve poetic verses of moral sayings. Writing on gold goes back to quite an early period. Writing on silver is very rare, only a few instances have been discovered so far. Besides coins in silver, some documents in silver sheets have been recovered from stūpa-s at Bhattiprolu in Taxila.

Tulāpaṭ

Tulāpaṭ is a type of paper made out of cotton. It was found to be used in Assam from the beginning of the 19th century. In some other regions a paper like writing material was made out of torn cloth.

Stone

Stone and rock were also freely used to record royal deeds especially, exploit and grants. The earliest known stone and rock edicts are those of Aśoka found in different places of the country. The cave temples and rock temples of various locations have imperishable record on rocks.

Paper

Paper was invented by Tsai Lun of China in 105 CE. And it was introduced to India by Mughal rulers from Persia. Most of the official documents began to written on paper at that period. The use of paper in the royal courts and its easy availability, since then due to import and also due to its better convenience for writing, paper become very popular all over India and ultimately replaced other writing materials when printing was introduced. Kākala, kākali, kakala and saṇapatra are the other word in Sanskrit for paper. The earliest paper manuscript now available is from Patna.

UNIT III

- **Textual Criticism**
- **Lower Criticism**
- **Higher Criticism**
- **Cause of errors**
- **Various readings**
- **Forms and size of manuscripts**
- **Necessity of critical edition**
- **Scribe and scribal errors**

3.1 Textual Criticism

Considering history of textual criticism, the contributions from Greek, Roman and Hebrew are highly significant. Collection of the old manuscripts was carried out in Athens, (600 BCE -300 BCE) and Alexandria (300 BCE – 1 CE). Likewise, the same work was done in Rome (168 BCE - 530 CE). Collection and study of the old manuscripts were being done chiefly in the areas belong to Byzantium up to 1530 CE. Study of old literature was done with much vigor in the era of renaissance (1350 - 1521 CE). Modern age of Manuscriptology started thenceforth.

The Hebrew Bible was translated into Greek during the reign of Ptolemy. Seventy scholars were in translation committee. This translation took variants in course of time. A scholar

namely Origen, (186- 253CE) dweller in Alexandria edited it. After one or two centuries Manuscriptology assumed dignity once again when Immanuel Bekker (1685-1771AD) edited 60 works with the help of 400 manuscripts. Karl Lachmann (1793-1851) is responsible for the taking the Manuscriptology to the height of Science.

After carefully studying the problems in editing manuscripts on the lines of European Manuscriptology, V.P.Sukthankar shaped Textual Criticism that can be applied to Indian manuscript. Indispensability of study of manuscripts in detailed critical inspection of our past is clearly shown by these and other Manuscriptologists.

The most important scholarly aspect of Manuscriptology is Textual Criticism and edition of the manuscripts for publication. The process of Textual Criticism has four stages which are called 1. Heuristics, 2. Restoration or Recensio, 3. Emendation or Emendatio and 4. Higher Criticism. Since the last one is called Higher Criticism, all the other three are together considered Lower Criticism also. As such, Textual Criticism is often divided into two major parts called Lower Criticism and Higher Criticism.

3.2 Lower Criticism

Lower Criticism can be distinguished into three stages. They are (i) Heuristics, (ii) Recensio and (iii) Emendation.

(i) Heuristics

The text is arrived at after a critical evaluation of the available data. Hence the necessity of putting together all the material available in a methodical way. This in turn requires

knowledge of the availability of the material. When one decides to prepare a critical edition of a text, the *New Catalogus Catalogorum* is to be perused and the libraries where copies of the text are deposited are to be noted. The entries under known alternative titles of the work on hand or a possible alternative are also be checked. Suppose one has taken up *Meghadūta* or *Dhvanyāloka*, then the entries *Meghasandeśa* or *Sahṛdayāloka* are also to be checked.

The details of the beginning and end of copies of works which may bear similar titles are to be compared. For this, the descriptive catalogues are to be consulted. The originals of all the copies available are to be collected. Then each copy of the work is to be studied thoroughly from the point of view of orthographic peculiarities and scribal stylistics. Thus the trustworthiness of the codices can be determined. After the study of individual copies, the evidence provided by all the extant copies are to be considered together for constituting the text. The text-tradition in respect of even single letters is to be observed and studied. This encourages the editor to discover the original or near-original readings for himself. Not only the evidence found in the extant codices but also that in the commentaries, anthologies and allied works is to be taken into consideration. Variants have to be compared for agreement and disagreement. In other words, they are to be collated. For the purposes of collation, the readings are to be recorded methodically. The manuscript which appears more trustworthy than others is to be taken as the basis and the readings of this copy should be collated with the readings of others.

Siglum

To identify the reading as of a particular codex, the several codices consulted are to be given an identification mark. It is called siglum (pl. sigla). A very simple mode would be to name the codices A B C etc. or use Indian alphabets Ka Kha Ga Gha etc. But an intelligent way would be to use a symbol by which the codices are better identified. The codex may be named after its script. Eg. D(Devanāgari), G(Grantha), O(Oriya) etc. Sigla may refer to the source of the codex. Eg. M(Madras), Ar(Arah), My(Mysore), B(Baroda) etc. If more than one codex are to be identified in the above scheme, then numerical figures inferior or normal could be used

Collation

When there are three codices to work on, the following method may be adopted. The text as in one of the codex, selected as the better than either of the two, is copied on sheets of paper. Sufficient margin is left on either sides of the page. Or the lines may have sufficient space in between. This copy is compared with the other two manuscripts, word by word. Whatever divergence discovered is recorded on the nearest margin or in the space above the concerned part. The siglum must be recorded with each such entry without fail. Or the variants of each of the codices may be entered in one coloured ink each. Not only simple variations that are to be recorded, but other related evidence like erasures, interlinear addition, addition in the margin, blank spaces etc., also to be duly noted. Some convenient abbreviations may be formulated. For example:

w for worm-eaten

m for mutilated

b for blank space

a for addition in the text part

am for addition in the margin; this may be accompanied by t(top),

r(right) l(left) or b(bottom)

cr for corrected to (text part)

crm for corrected to (in the margin)

nf for not found

(d) for deleted using curved brackets

ḍ for deleted with dots below

b for deleted by striking out

il for interlinear writing

tr for transposed

h may be added for a different hand, if clear

c for commentary

This method holds good where the number of codices to be collated is two or three. If the readings are not too many, this can be adopted to collate more than three manuscripts also. A different method will have to be adopted if the codices are

too many and the readings are also expected to vary. Collation has to be done on a specially prepared sheet called collation sheet. Lines are drawn horizontally and vertically so that small squares are formed. The squares are to be as wide as to write a single letter.

As in the earlier case, a comparatively better or more trustworthy codex of those under consideration is selected and its text is written in the first row of squares, one letter in each square. Length of the text may be conveniently divided. If the text is versified, two pādas of Anuṣṭup metre (16 letters) or one pāda of a bigger metre (upto, say 22 letters) may be taken as a unit, one line in the collation sheet. In case of text in prose, the length of line depends upon one's practical convenience. Of course, the preparation of sheet is to be planned before-hand or adapt the same to the text on hand. In the subsequent rows the readings from other codices are to be recorded. On the left side and against a row, the siglum of the codex is entered. Some space may be left on the right side for recording any relevant information. In recording the evidence from the sources, it is not necessary to fill all the squares, but only those which are different from that in the top line. In other words, a blank square in a row means that that letter in the particular source is identical with the one in the top line.

Collating the evidence of manuscripts in this way makes it possible to arrive at fixing the mutual relationship of the codices consulted. The relationship between two codices can be in two ways: they may either be exemplar and copy or sister copies i.e. copies of one and the same exemplar. This helps in tracing the genealogy of the codices of a work. Such a chart wherein we can show the relation of the codices of a

work is called stemma codicum, tree of codices. Chalking out the pedigree of codices aid in determine the possible earlier reading.

Secondary Sources of Evidence

The evidence of manuscripts are the primary ones for fixing the readings of a text. The manuscripts of a text may also be called the direct evidence. Apart from this source, a commentary on a text or its translation will also provide the basis for a critical appraisal of the text. Such of the works as forming source of evidence are called testimonia (sing. testimonium). It is also referred to as external or indirect evidence. This includes not only all those works which are directly and closely related to the text on hand but also those that may contain quotations from it. Thus there are many sorts of secondary evidence. Commentaries, translations, anthologies, quotations, obvious imitations, epitomies and adaptations and parallel versions are considered as secondary sources.

(ii) Recension

The first stage is thus, the methodical collection and analysis of all the evidence in respect of the readings of the text concerned and their study with a view to form a pedigree of the codices. This paves the way for the next stage. The second stage, recensio, calls for the critical acumen of the editor. The editor has now before him a table of various readings and other information gathered from the codices as well as the evidence culled from the testimonia. It has also been possible to know the mutual relation of the codices.

The problem now is to choose from among the variants a reading which might have been intended by the author or the one nearest to it and formulate a recension. The editor will have to interpret and weigh the evidence presented. He has to be careful and open minded. Just because a codex is late or a codex is full of obvious mistakes, the codex cannot be brushed aside or disregarded. For, that may give a hint to, if not a chance preservation of, the acceptable reading against the doubtful reading of the oldest or best codex. The method may appear ecletic i.e. choosing one here and another there, but it is not so because the choice does not depend on the whim and fancy of the editor.

On the other hand, the choice is guided by certain principles. Every reading is decided only after a debate over its aptness. That is why the recension formulated thus is called critical recension. However an element of personal attitude of the editor affecting the interpretation cannot be ruled out. It is because of this that an editor is required to place all his material before the scholars.

(iii) Emendation

The editor may come across a point where none of the readings may satisfy him as having been composed by the author. Or the evidence may not be adequate enough to arrive at a conclusion. This difficulty is not peculiar to codex unicus but may arise even if there may be several copies.

If none of the variants is meaningful in a context or is grammatically incorrect or does not satisfy the metrical and other contextual requirements, the editor may effects an emendation. He may suggest a reading which is more plausible so that the text presented may be understood

properly and easily. However, one has to exercise utmost discretion while resorting to emendation. An emendation if it should be conceivable, should satisfy the two probabilities - the external and the internal.

3.3 Higher Criticism

This aspect is not directly connected with the selection of readings but concerns itself with a text and its contents as a whole. Because the sources of the author and his influences are probed, and not mere genuineness of a particular text, it is called higher criticism. In fact, higher criticism cannot strictly be spoken of as a stage, for, this aspect of study begins along with the selection of a text for editing. It continues during the course of the editorial work as well. It even forms the basis for the entire editorial process. Its completion follows the finalisation of the recension. From this point of view, it may be conceded as the fourth stage.

Lower criticism involves much of mechanical work: recording, comparing, collation and so on. Higher criticism rises above. It is an assessment of the author's work. The style, the language, the literary aspects, the sources of the work, the life of the author, his equipment, the circumstances that made an author compose the work, the situation in which the work might have been written, the influence of earlier writers in the field on the author and the author's influence on later writers, the contribution of the author to the field concerned, thereby determining the place and value of the work on hand, leading to its popularity or otherwise- all these as well as other allied issues fall under this category. Obviously, tackling these questions requires critical acumen, a keen sense of appreciation and a thorough grasp of the history of the particular branch of learning in addition to a

good understanding of every line of the text. With all these equipment, the lower criticism too will be smooth and will have optimum results.

Higher criticism need not necessarily follow the editing of a work. Any person can independently take up the study on these lines of a work in print. This aspect is considered here because an editor of a critical edition of a work will be in a better position as he will have done close study of the text enabling him to a critical appraisal easily.

3.4 Cause of errors

Generally author doesn't make several copies of his own work. He may give some money to a scribe and tell to copy the work he has written. And the scribe starts copying. Even scholars may make copies. During copying from the original source there may occur errors. Even the most reliable scribe sometimes nods, his copy will different from the exemplar in so far as a line here or a line there is concerned. This difference grows inversely to the scribe's grade of fidelity. It is also depends to an extent, on the distance of the copy from the archetype and the popularity of the work; greater the distance, greater the possibility of divergence. However, it must be accepted that the scribes may not be responsible for all the variants. It is possible that authors may have revises their works after sometime.

Types of Errors

Broadly speaking there can be only four major types of errors, whatever may be their causes: (a) Deletion, (b) Addition, (c) Substitution (d) Orthographic confusion and (d)

Transposition. These may be with reference to a letter, a word, a line/sentence or a paragraph,

a. Deletion or omission

This is mostly a mechanical error. Generally, no scribe voluntarily omits any word or passage. There are deliberate omissions, but they are mostly restricted to works like Purāṇa-s where sectarian views find a place among the contents which are by and large miscellaneous. In copies of such works, it is possible for a scribe having a particular orientation to omit such passages as are not palatable to him.

(i) Simple omission

Due to oversight and more due to carelessness or negligence of the scribe, there occurs omission of a letter, a word or even a line.

Examples:

1. Ye mad viṣa-vāsinaḥ for *ye mad viṣaya-vāsinah.*

2. upacārmātram bhakti. t omitted in between.

3. kṣoda-kṣamatva for *-kṣamatattva.*

(ii) Omission of serifs

The vowel signs that are put above and below the letters are called serifs - those of i/ī, e/o, ai/au; u, ū and ṛ. These are sometimes omitted.

Examples:

1. *kinta yā* for *kintu ya*.

2. *subhravaḥ* for *subhruvaḥ*

3. *vātāśanā* for *vātaśoṇa.*

(iii) Haplography

When the same or similar phonemes occur in a series, one or two of them tend to be dropped. This is called haplography. Words between two words having similar phonemes are often dropped along with one of the similar phonemes. Such an error is called tele-haplography. It is possible for the scribe to jump to a line further off instead of going to the very next line, if those lines began or ended with the same phonemes, thus skipping one or several lines.

Examples:

1. *prada -hanumat* for *pradahatu hanumat*

2. *gurvakṣaram tadbhavanāmśakeṣu tadbhavanam* omitted in between.

3. *śaraśaśivakrta-* for *śara-sasi-siva-krta*

4. *dakṣiṇam ca abhimata ... ceṣṭam dakṣiṇam cakṣuh.* Words between ca and cakṣuh omitted.

5. *kṣmāpa-padma-* for *kṣmāpa-pāda-padma*

b. Addition

It can be seen that additions in a text from a letter to a whole chapter. Such additions may occur not only accidentally or mechanically but also voluntarily or deliberately. The intentional insertions are termed interpolation. This term usually has a derogatory sense as meddling with the text.

Such interpolations will have to be undetectable. So this could be expected of a text the language of which is easy. Works like the Purāṇa-s and the *Mahābhārata* are the first to be considered in this connection. Not only the language but also the versification does not need any sophistication. The contents are varied making it easy to insert passages and they cannot be detected.

Insertions or interpolations may be found in other works also. But not all insertions deserve to be condemned this way. Addition of letter/s may be with a view to give a readable and understandable text when the exemplar was in a bad state being mutilated, torn, worm-eaten or worn out. Some conscientious scribes have marked their insertion by encircling them. There is only a reference to such practice in literature, but so far no evidence is reported. Rāmabhadradīkṣita says so in his *Patañjalicarita*:

vaṭadru-parna-sthita-varṇa-melenād

athaiva bhāṣyam nikhilam patañjaleḥ

lilekha vatsakṣata-durgrahākṣare

sthale kvacit kuṇḍalanām akalpayat...

vatsa-kṣatam sa pitṛkuṇḍalitan yathāvat

buddhyākalayya lipi-jālakam antarantaḥ...

The unintentional or involuntary additions are mostly instances of dittography, repetition of single letter/s etc. For example, *agre pradarśāyiṣyate* for *agre darśayiṣyate.* Sometimes marginalia gets inadvertently incorporated into the text. For example *jīvanti śvetagirikarṇikā muṣkaka* for

jīvanti śvetamuṣkaka. Sometimes addition is resorted to with a view to improve the reading for easy understanding. For example *matipravivekana* for *matipravekana.* Devotion and convention cause an unnecessary addition. For example *tasmai(śrī) gaṇapataye namaḥ* and (*śrīman*) *nārāyanāyeti samarpayāmi.*

c. Substitution

Substitution is mostly an intentional error. The intention may be wanton, i.e., a substitution for which there can be no valid explanation. Or it may be to solve a difficulty of a reading either faulty or having an unusual word or form and therefore mistaken as faulty. For example *vyavahitaṃ* for *vyavasthitaṃ, yena brūmaḥ* for *tena brūmaḥ* etc.

The substitution occurs semi-voluntarily also. A synonym is substituted for a frequently occurring word. For example, for king, mahārāja, janādhipa and narādhipa are substituted. And *kaiścit paṭhyamānaḥ* for *kvacid dṛśyamānaḥ.*

Substitution may result from false recollection. When one is copying certain phrases which may be similar to the phrase in another part of the same text or in an entirely different text, may be recollected and words following the phrase in that context will be written. For example, *praṇamya paramaṃ jyotiḥ vāmanena* is copied as *praṇamya paramātmānaṃ jyotiḥ vāṃnena.* And *rātrau atra vivāhamaṇḍapatale* for *rātrau atra vihāramaṇḍapatale.* Substitution is resorted to in avoiding archaisms and such textual difficulties. For example *naiko munir yasya* for *naiko ṛṣir yasya.*

d. Orthographic confusions

When a copyist conversant with one script and familiar with another, copies from either of them to the other, the scribe is liable to commit certain errors due to confusion of letters. The orthographic similarities cause this semi-voluntary error. For example the editor of *Kapphaṇāphyudaya* notes that there are many instances of confusion in Oriya script. *aṅga* comes to be written as *aṃśa, rāga* as *rāsa, gaja* as *gada, bala* as *nala* etc. There are such similarities between Śārada and Devanāgarī scripts as for example *m* and *s, u* and *t, ṣ* and *tha.* Sometimes *tathā* is read as *uṣā.*

e. Transpostion (Anagramatism)

Phonemes and words get transposed involuntarily. It may be effected voluntarily to guard against possibility of meta-analysis. Example: *jñāne na cānyo* becomes *jñāne ca nānyo* and *svabhāvajātāni ratnāni* becomes *svabhāvāt ratnāni jātāni*

3.5 Various reading

As mentioned earlier, different manuscripts of a text possess various readings due to various reasons. Even the most reliable scribe sometimes nods, his copy will be different from the exemplar in so far as a line here or a line there is concerned.

This difference grows inversely to the scribe's grade of fidelity. It also depends to an extent, on the distance of the copy from the archetype and the popularity of the work; greater the distance, greater the possibility of divergence. Popularity of a work will naturally occasion the production of a large number of copies, most of which may not be by competent or professional hands.

However, it must be accepted that the scribes may not be responsible for all the variants. It is possible that authors may have revised their work after sometime. Since neither the revision nor the original is dated, there is no way to differentiate when the copy is separated from the author in space or time.

Each individual has one's own idiosyncracies and these are reflected in one's writing pattern too. Hence each copy comes to have its own peculiarities. In other words, each extant copy of a text will be more or less at variance with another. The divergence may be in the form of addition, deletion, substitution or interchange of a letter, word, sentence etc. upto a paragraph. The form or version of a given passage or its part in a particular text is called reading (pāṭha) When two copies of a text vary in their reading, one reading is spoken of as the variant of the other. Such divergence are generally called various readings or varia lectio.

When there is a variant reading, either of them may possibly be the original reading. Hence one reading is a corruption of the other; it is also possible that both of them may be corruptions of a third lost reading. In other words, all various readings may be called corruptions or errors. These terms here have both literal and figurative meanings. Literally, they refer to all those scribal errors, like jumble of letters making no sense or those writings which are grammatically untenable. Figuratively, it includes all deviations from the 'original reading or the reading of the exemplar. When one of the variants comes to be accepted, the others are termed corruptions. Eg. in *Rājasekharacarita,* we have:

T: kāvyam vā syān no ya-.

N: kāvyam vā na syād ya-.

If T is accepted N is a corruption. It is necessary to repeat that corruption or error has nothing to do with a reading being intrinsically unsound but refers to the swerving from the original. That is, when a scribe transcribes something different from his exemplar, he is deemed to have erred; though his writing may be grammatically 'correct', it is 'corrupted'.

3.6 Forms and size of manuscripts

Form of a manuscript

The leaves of a manuscript might be either stitched together or unstitched. So far as palm leaf and birch bark are concerned, there is no question of stitching them all. To keep the leaves from slipping away or from being shuffled, a cord is passed through them. Birch bark sometimes does not have the cord. Hand-made paper sheets are not stitched, but kept as loose sheets. No cord is used to keep the order in tact. But, this is not difficult in view of the fact that paper can be easily handled. Machine-made paper manuscripts are available both in stitched and unstitched form.

Daśavaikālikasūtra which gives some names of manuscript types. They are: Gaṇḍī, Kacchapī, Muṣti, Sampuṭa-phalaka, and Chedpaṭi or Chivaḍi or Sṛpāṭikā. Gaṇḍī is a manuscript thickness of which corresponds to its length and appears like slab. The book that is wider in the middle than at the ends, is Kacchapī (tortoise-like). Muṣti ('fist') is as small as can be held in one's fist. A manuscript with wooden side-boards is

Samputa-phalaka. Chedpaṭi is a thin book with only a few leaves.

There are different kinds of paper manuscripts too. The different types of stitched paper manuscripts, as current in North India: Pothī, Potho, Guṭka and Pānāvali. Pothī and Potho are centre-stitched books. The size of the paper and thickness of the pothi is smaller than that of potho. Guṭka is a book of the size 15 x 10 cms. It is either centre-stitched or side-stitched. Pānāvalī, also sometimes called pothī, is oblong and stitched at the shorter side.

Size of a manuscript

The manuscripts available today are of varied sizes. But all the leaves of one manuscripts will be of uniform size as of any modern book. Selection of particular size, however, depends on the extent of the work to be copied and the purpose, much as in the same way as the size of a book is decided today. Personal liking too plays an important factor. A very small size like 3.5 x 2.5 cms. is chosen, for example, to copy certain religious tracts for personal use. But the purpose of the other sizes cannot be determined easily.

In case of paper, one has a wide range of sizes to choose. As regards palm-leaf, choice is only in regard to its length as the width of palm-leaves is almost uniform. Incidentally, it may be noted that the size of loose sheet (unstitched) paper manuscripts is always oblong.

Bāṇa describes how a manuscript is read. And this indirectly throws light on the nature of a manuscript and how it was handled. The 'book' (pustakaṃ) is kept wound by a thread which is unwound just before reading is begun. The 'opened'

book is kept on a low stool probably made of cane or reed (Śaraśalākāyantra). A leaf, evidently of a lesser length than that of the 'book', is kept in it as the book-mark (antaram patram). A few leaves are taken and held together in hand and read out.

3.7 Necessity of Critical edition

A critical edition is an edition that takes into account all the different known versions of the same text. If the text is mainly known through a great number of manuscripts that include known trivial differences, the critical edition often looks rather daunting for readers unfamiliar with the subject. The manuscripts preserved in libraries can be utilized only by a limited number of people. For making their contents, reach to a wider circle they are to be got published. In addition, the materials of the manuscripts cannot be kept safe forever and hence they are to be transferred to print media for future generation.

Indian manuscripts form as it were, an invaluable treasure house of ancient and medieval wisdom of the land, not only in the field of general literature like poetry and drama, but of religion and philosophy, social law and statecraft, culture, and last but not least, the technical science including mathematics, astronomy, architecture, medicine and the fine arts and other allied subjects. For an understanding and appreciation of the origin and development of Indian literature and culture and their comparative study with sister civilization, it is incumbent that Indian wisdom embedded in manuscripts is properly and precisely presented to modern scholars. It is also incumbent that the texts so presented are to be correct, error free and complete.

3.8 Scribe and Scribal errors

Scribe

The scribe is a professional copyist who copies a manuscript or document for others. Lipikara, lipikāra, lekhaka are the Sanskrit terms. The professional document-writers today have kept up the age-old profession against much odds due to advent of typewriters. The government offices in the past had official scribes (as there are typists today). They were called Karaṇika, Kāyastha, Rāja-lekhaka, Rāja-lipikāra. There was Akṣapaṭalika or Divirapati, the keeper of records. Kauṭilya lays down the qualifications of such scribes.

It is indeed a pity that we do not always have the names of scribes who have helped in keeping the torch of learning burning bright down to this day. Most scribes have declared themselves at the end, by giving their names, date on which the copying was completed, patron or the person for whom the copy was made, the source of the example and so on. Mostly, only a few of these details are furnished. Often the scribe's name is mentioned at the end of Copper plates. Copying is indeed a very strenuous job. Usually at the end, the scribe craves for the indulgence of the readers to bear with any possible scribal errors and to take utmost care of the copy as it has been the result of strenuous labour on his part.

A scribe's job is, it must be remembered, mostly mechanical. He need not compose a work; he is expected to copy a text fairly and correctly. He may be compared to a modern typist or a type-setter in a printing press. A compositor or a typist composes or types from the author's copy. A proof-reader checks the matter set in types. If there are errors, i.e. if the composed matter is not true to the original in any part,

corrections are introduced; a typed copy may be revised; thus the copy is set right. A scribe too may have before him the author's copy or a copy of it made by a person like himself. But this work may or may not be subject to a revision with reference to its exemplar. Thus, it is possible that his errors may remain in the new copy without being corrected. A copy made out of such a copy in similar circumstances, contains not only the possible errors freshly committed but also the errors of the earlier one.

A scribe is prone to visual and psychological errors while copying and each scribe has his own idiosyncracies. That handwriting is highly individualistic is very well-known. In fact, handwriting has been the subject of serious study and it is said that it is an index to one's traits. Even as the mode of writing is different from person to person, particular type of errors can be associated with each scribe. Therefore, what is required of a scribe is faithfulness and carefulness. A scribe must cultivate honesty more than scholarship.

Howsoever utmost care one might take, there are chances of failure as it is a manual effort going on for a good length of time and calls for physical strength like vigilant eyes, ability to sit tight continuously etc., as well as mental calmness. Thus, manual reproduction of a book will have its defects and we can have gradations in the trustworthiness of a copy depending upon the fidelity of the scribe manifested therein. However, scribal errors also occur on account of the imperfect knowledge of the script of the exemplar.

No hard and fast rule can be prescribed to identify a trustworthy scribe. One has to make a thorough study of the manuscripts for the purpose. As an example, one or two points can be made here: The scribe who makes kuṇḍalas

(circles) around letter/s and thus indicates his doubt or inability to decipher the same in his original may be taken as more trustworthy. Similarly, a scribe whose copy contains blank spaces for one or more letters in a line may be considered honest in leaving out the lacunae or those letters that are not decipherable in his original, thus avoiding the temptation of himself making up the lacunae. Similarly, careful and systematic writing may be distinguished from the haphazard writing.

Qualifications of a scribe

The prime qualifications of a scribe were a legible hand, correct lettering and attractive writing. The *Nandipurāṇa* wants his writing to be *śubham ślakṣṇam ramyam ca* (Quoted by Hemādri in his *Caturvargacintāmanī*). The Hayaśīrṣapāñcarātra wants his lettering to be uniform and thick: *samśirṣaih sumāṃsalaih* (2.31.10). The same text adds on the manner of his writing:

नातिकृशैर्नातिदीर्घैर्ह्रस्वदीर्घादिलक्षितैः ।

सम्पूर्णावयवैर्मात्राबिन्दुसंयोगलक्षितैः ॥ (2.31.11)

The letters should not be too broad or too thin, the short and long vowel signs marked properly, all parts of the letters inscribed fully and the dots and conjunctions marked clearly. The *Matsyapurāṇa* has this to say about the writing of a good scribe:

शीर्षोपेतान् सुसम्पूर्णान् शुभश्रेणीगतान् समान् ।

अक्षरान् वै लिखेद्यस्तु लेखकः स वरः स्मृतः ॥ (Quoted in *Vīramitrodaya*)

With proper upper strokes, fully outlined, in straight rows and equalsized-he who inscribes syllables in this manner is a master scribe'.

However, a good hand alone did not make a good scribe. For correct decipherment from an original or proper understanding from dictation, he had to be well read in the different disciplines. To gaze for long at an original manuscript or to ask for a repetition during dictation did not augur well with a good scribe. Cāṇakya specifies:

सकृदुक्तगृहीतार्थो लघुहस्तो जिताक्षरः ।

सर्वशास्त्रसमालोकी प्रकृष्टो नाम लेखकः ॥ (*Cāṇakyasaṅgraha*.)

A scribe had to know the metres and be a poet himself so as to understand and transcribe. He should have the sagacity to decipher smudged writing and reconstruct minor omissions in the archetype. This qualification is specified in the Vahni Purāna, which says:

तथा सम्पूजयेद् वत्स लेखकं शास्त्रपारगम् ।

छन्दोलक्षणतत्त्वज्ञं सत्कविं मधुरस्वरम् ॥

प्रणष्टं स्मरति ग्रन्थं श्रेष्ठं पुस्तकलेखकम् । (Quoted by Hemādri in Dānakhanda)

The Garuda Purāna demands of qualities also of the head and the heart, when it says:

मेधावी वाक्पटुः प्राज्ञः सत्यवादी जितेन्द्रियः ।

सर्वशास्त्रसमालोकी ह्येषः साधुः स लेखकः ॥ (Quoted in *Vīramitrodaya*)

UNIT IV

- **Manuscript Libraries in India and abroad**

- **General awareness on major manuscript libraries in ancient India**

4.1 Manuscript Libraries in India and abroad

The Saraswati Bhavan Library of the Government Sanskrit College, Benaras (now, Sampurnanand Sanskrit University) is the earliest modern Manuscripts Library in India, It was established in 1791. It had a Journal, Pandita Patrikā, in which Sanskrit works were printed serially. Later, books were issued in the series Princess of Wales Sarasvati Bhavana Sanskrit Series.

Maharaja Serfoji of Tanjore (1798-1832) established a Library in the modern sense. The Madras Government recognised it as a Library in 1918. Tanjor Palace Library was its nucleus. 1857 saw the establishment of Ranvir Sanskrit Residential Institute in Jammu. The Government Oriental Manuscripts Library (GOML), Madras, has been taking care of manuscripts from 1870. The Adyar Library and Research Centre was found in Madras in the year 1886.

The Government of His Highness the Maharaja Chamaraja Odeyar, Mysore, established in 1891 the Government Oriental Library in Mysore which included then the Archaeological Section also. Pt. A. Mahadeva Sastri was its first Curator. He was followed by Dr. R. Shama Sastri of

Arthaśastra fame. Publication work was also started quite early, i.e. in 1893. With the establishment of the University of Mysore in 1916, the administration of the Library was transferred to the University. In 1943, the Library was recognised as Oriental Research Institute. In 1966, the Kannada manuscripts were transferred to the newly established (1964) Institute of Kannada Studies of the University.

In 1893, the Central Library, Baroda, started a section for Sanskrit manuscripts. By 1927, this section developed so as to be rechristened Sayaji Rao Gaekwad Oriental Institute. Many rare texts have been published. The manuscripts collected by the Government of Bombay were made in 1917 the nucleus of the world-famous Bhandarkar Oriental Research Institute named after the great savant R.G. Bhandarkar. It has since been a well known International centre for Sanskrit studies.

Maharaja Svati Tirunal Rama Varma (1812-1827) developed the Maharaja's Palace Library in Thiruvananthapuram (Kerala). The Curator's Office established a library of manuscripts collected. These two were amalgamated into the Oriental Manuscripts Library ushered in by the Kerala University (1937). Sri Venkateswara University established an Oriental Research Institute in 1939. The Kuppuswami Sastri Research Institute, Madras, takes its name from the renowned scholar Mahamahopadhyaya S. Kuppuswami Sastri of Madras. It came into existence in 1944.

There are many more Universities, Institutions, Math-s, Jain Bhandara-s, where Sanskrit manuscripts have been collected. There are more than 300 libraries, small and big, all over India.

List of manuscripts libraries in India

1. Agartala : Tripura Sikşā Bibhāga

2. Agra : Jaina Temple

3. Ahmedabad : B.J.Institute of Learning and Research

4. Ahmedabad : Brahmacari Vadi

5. Ahmedabad : Gujarat Vidyapitha Granthalaya

6. Ahmedabad : Lalbhai Dalapatbhai Institute of Indology

7. Ahmedabad : Ahmednagar College Manuscripts Library

8. Ahmedabad : Sanatan Dharma Sabha

9. Ajaigarh : State Library

10. Aliganja : Sri Santinatha Jaina Temple

11. Aligarh : Muslim University

12. Aligarh : Subhanallah Oriental Library

13. Aliyoor : Adinatha Grantha Bhandar

14. Allahabad : Ganganatha Jha Kendriya Sanskrit Vidyapitha

15. Allahabad : Ganganatha Jha Research Institute

16. Allahabad : Hindi Sahitya Sammelan

17. Allahabad : Municipal Museum

18. Allahabad : University Library

19. Allahabad : Uttar Pradesh State Archives

20. Alwar : Government Museum

21. Alwar : Library of H.H. the Maharaja of Alwar

22. Amritsar : Guru Nanak Dev University

23. Amritsar : Khalsa College 24.

24. Amritsar : Sikh Itihas Research Board

25. Annamalai Nagar : Annamalai University

26. Arrah : Jaina Siddhantha Bhavan

27. Aurangabad : Balavant Vachanalaya

28. Badami : Sri Sivayogamandira

29. Bandha : Chanda Das Sahitya Sidhan Institute

30. Bangalore : Sri Chamarajendra Sanskrit College

31. Bangalore : Sri Vidyadhisha Sanskrit Manuscripts Library :

32. Bangalore : University Library

33. Bangalore : Sri Uttaradi Mutt Granthalaya

34. Bangalore : B.M.Sri. Foundation 35.

35. Baroda : Arya Jambusvami Jaina Muktabai Jnana Mandira

36. Baroda : Atmananda Jnana Mandira

37. Baroda : Jaina Jnana Mandira 38.

38. Baroda : Oriental Institute (MS University)

39. Berhampur (Orissa) : University Library

40. Bhagalpur : Bhagavan Pustakalaya

41. Bharatpur : State Library

42. Bhaskeri : Subrahmanya Pracya Vidyapitha

43. Bhor : Palace Library

44. Bhuvaneswar : Orissa State Museum

45. Bhuvaneswar : Utkal University Library

46. Bikaner : Abhaya Jaina Granthalaya

47. Bikaner: Anup Sanskrit Library 48.

48. Bikaner: Library of H.H. the Maharaja of Bikaner

49. Bodh Gaya : The Buddha Gaya Library

50. Bodh Gaya : Magadha University

51. Bombay : Sri Ailka Pannalal Digambara Jaina Sarasvati Bhavan

52. Bombay : Anantacarya Indological Research Institute

53. Bombay : Bharat Samsodhan Mandala

54. Bombay : Bharatiya Vidya Bhavan

55. Bombay : Bombay Asiatic Society

56. Bombay : Forbes Gujarati Sabha

57. Bombay : Jaina Svetambara Conference

58. Bombay : Jama Masjid Madrassah-e-Muhmmadiya

59. Bombay : K.R.Kama Oriental Institute

60. Bombay : Maharashtra Archives

61. Bombay : Marathi Samsodhana Mandala

62. Bombay : Mulla Firoze Library

63. Bombay : Parsi Pancayat

64. Bombay : University Library

65. Burdwan : Palace Library

66. Burdwan : University Library

67. Calcutta : Asiatic Society

68. Calcutta : Bangiya Sahitya Parishad :

69. Calcutta : Bengali Manuscripts Library

70. Calcutta : Bishop's College Library

71. Calcutta : National Library

72. Calcutta : Private Library of the Maharaja Tagore Castle

73. Calcutta : Sanskrit College

74. Calcutta : Sanskrit Sahitya Parishad

75. Calcutta: Sri Sri Gaurang Grantha Mandira

76. Calcutta: University, Post Graduate Dept. of Sanskrit

77. Calcutta: Victoria Memorial Museum

78. Calicut : University, Department of Malayalam

79. Calicut : University, Department of Sanskrit

80. Cambay : Santinatha Jaina Bhandara

81. Chamba : Bhuri Singh Museum

82. Chhani : Jaina Svetambara Jnana Mandira

83. Chhatarpur : Palace Library

84. Cochin : Sukritindra Oriental Research Institute

85. Coochbehar : Sahitya Sabha

86. Coochbehar : State Library

87. Darbhanga: Sri Kamesvara Singh Sanskrit University

88. Darbhanga : Mithila Institute of Post-graduate Studies & Research in Sanskrit

Learning

89. Darbhanga : State Chandradhari Museum

90. Datia : Sri Pitambara Pitha

91. Delhi : Archaeological Survey of India Library

92. Delhi :: Digambara Jaina Sarasvati Bhandara, Nayamandir, Dharmpura

93. Delhi : Indian Institute of Islamic Studies

94. Delhi : International Academy of Indian Culture

95. Delhi : Jamia Milia Islamia

96. Delhi: Mahavira Jaina Pustakalaya

97. Delhi : National Archives

98. Delhi : National Museum

99. Delhi : University Library

100. Devaband : Kitubkhana Darul-ulm

101. Devaprayag : Pracya Vidya Academy

102. Devasram : Sri Devakumar Jain Oriental Library

103. Dharampuram : Abhinam Library

104. Dharamsala : Central Tibetan Secretariat

105. Dharmasthala: Sn Manjuunatha Temple

106. Dharwar : Kannada Research Institute

107. Dhilaoli : Jaina Temple

108. Dhulia : V. K. Rajawade Samsodhana Mandala

109. Dibrugarh : Sri Samartha Vagdevata Mandira

110. Dwaraka : Dwaraka University Library

111. Dwaraka : Dwarkadhish Sanskrit Academy and Indological Research Institute.

112. Guwahati : Assam, Department of History and Antiquarian Studies

113. Guwahati : Kamapura Anusandhan Samiti

114. Guwahati : Narayan Handiqui Research Institute

115. Guwahati : Chamariya Satha

116. Guwahati : University Library

117. Gaya: Sri Mannulal Pustakalaya

118. Gondal : Sri Bhuvanesvari Pitha

119. Gulbarga : Institute of Kannada Studies, University

120. Gwalior : Jiwaji University Library

121. Gwalior : Matrabhumi Karyalaya

122. Haridwar : Gurukul Kangri Visvavidyalaya

123. Hombucca : Jaina Matha

124. Hoshiarpur : Visvesvaranand Vedic Research Institute

125. Hoshiarpur: Visvesvaranand Visva Bandhu Institute of Sanskrit & Indological Studies

126. Hospet : Sri Uttaradimutt Granthalaya

127. Hubli : Moorusavira Matha

128. Hyderabad : Andhra Pradesh Government Oriental Manuscripts Library & Research Institute

129. Hyderabad: Gadval Samsthanam

130. Hyderabad : Idra-e-Ababiyate-Urdu

131. Hyderabad: Krsnadevaraya Andhra Bhasa Nilaya

132. Hyderabad: Newab Salar Jung Library

133. Hyderabad: Osmania University Library

134. Hyderabad: Salar Jung Museum

135. Hyderabad: State Central Library

136. Imphal : Manipur Government Secretariat

137. Imphal: Manipuri Sahitya Parishad

138. Imphal: Manipur State Kala Academy

139. Indore : Oriental Museum

140. Jaipur : Acarya Sri Vinayacandra Jnana Bhandara

141. Jaipur: Amar Sastra Bhandar

142. Jaipur: Jaina Grantha Bhandar

143. Jaipur: Maharaja of Sawai Man Singh II Museum

144. Jaipur: Maharaja Public Library

145. Jaipur: Mahavir Bhavan

146. Jaisalmer : Jaina Bhandar

147. Jambusar : Jaina Temple

148. Jammu : Library of H.H. Maharaja Sri Hari-Singhji Bahadur

149. Jammu: Ragunatha Temple Library

150. Jammu: Sri Ranbir Sanskrit Research Institute

151. Jamnagar : Gujarat Ayurveda University

152. Jamshoro : Sind University Institute of Sindhology

153. Jeypore : Palace Library

154. Jhalarapatan: Sri Ailak Pannalal Digambar Jain Sarasvati Bhavan

155. Jodhpur : Maharaja Man Singh Pustak Prakash

156. Jodhpur: Rajastani Research Institute, Chopasani

157. Jodhpur: Rajastan Oriental Research Institute

158. Karanja : Balatkara Gana Temple

159. Karwal: Danasala Jaina Matha

160. Keladi: Keladi Museum Historical Research Bureau

161. Keonjhar : State Library

162. Keri : Gomantak Sanskrit Parishad

163. Kokinada : Telugu Academy

164. Kolhapur : Ayurvedic Chemical Works

165. Kolhapur : Jinasena Mutt

166. Kolhapur: The Mutt of Sri Laksmisena Bhattaraka Pattacarya Mahasvamin

167. Kota: State Library

168. Kumbhakonam: Sadhu Sesayya Oriental Library

169. Kumilla : Rammala Granthagar

170. Kurukshetra: Visvavidyalaya, Bharatiya Vidyasamsthan

171. Limbadi : Jaina Jnana Bhandara

172. Lucknow : Akhil Bharatiya Sanskrit Parishad

173. Lucknow: Provincial Museum

174. Lucknow: University Library

175. Ludhiana : Punjab Sahitya Akademy

176. Madhurantakam : Ahobila Mutt Sanskrit College

177. Madras: Adyar Library and Research Centre

178. Madras: Board of Examiners Library

179. Madras: College Library

180. Madras : Connemara Public Library

181. Madras : Fort Saint George College

182. Madras: Government Oriental Manuscripts Library

183. Madras: Kuppuswami Sastri Research Institute

184. Madras : University Library

185. Madras: U.V.Swaminath Aiyar Library

186. Madras: Sri Kallalagar Devasthanam Library

187. Madurai : Ramesvaram Devasthanam Pathasala

188. Madurai: Tamil Sangam

189. Madurai: Kamaraj University

190. Malladihalli: Anathasevasram Trust

191. Melkote : Sanskrit College

192. Melkote: Academy of Sanskrit Research

193. Moodbidri : Sri Veera Vani Vilasa Jaina Siddhanta Bhavana

194. Mysore : Institute of Kannada Studies, Mysore University

195. Mysore: Maharaja's Sanskrit College

196. Mysore: Oriental Library of the late Tippu Sultan

197. Mysore : Oriental Research Institute, Mysore University

198. Mysore : Parakala Mutt

199. Mysore : Sarasvati Bhandaram Library of H. H. The Maharaja of Mysore

200. Nabadwip : Sadharana Granthagar

201. Nabha : Sardar Kahnisingh Pustakalaya

202. Nadiad : Dahi Laksmi Library

203. Nagpur : Bhonsla Veda Sastra Mahavidyalaya

204. Nagpur: University Library

205. Nalanda : Nava-NalandaMahavihara,

206. Nanjangud : Sri Parimala Samsodhana Mandira

207. Nasik : Hansraj Pragji Thakersey College

208. Navsari : First Dastur Meharji Rana Library

209. Negapatam : Trichinopoly Krishna Iyar Collection

210. Nelbari (Assam) : Purva Bharati

211. Ollur: Kumarapuram Palace

212. Paingin : Sri Kamalanatha Tirtha Sanskrit Grantha Sangrahalaya

213. Panipat : Jin Mandira

214. Panna: Private Library of the Maharaja

215. Patan: Hemacandracarya Jaina Jnana Mandira

216. Patiala: Central Public Library

217. Patiala : Moti Bagh Pustakalaya

218. Patiala : Punjabi Bhasa Vibhag

219. Patiala : Punjabi University

220. Patiala: Punjab State Archives

221. Patna: Bihar and Orissa Research Society

222. Patna : Bihar Rastrabhasa Parishad

223. Patna : Bihar Research Society

224. Patna : Chaitanya Pustakalaya

225. Patna : Khuda Baksh Oriental Public Library

226. Patna : K. P. Jaiswal Research Institute

227. Patna: University Library

228. Pondichery : Institute Francais d' indology

229. Pudukottai : Vani Vilas Veda Sastra Pathasala

230. Pune: Bhandarkar Oriental Research Institute

231. Pune: Bharat Itihasa Samsodhana Mandala

232. Pune : Deccan College

233. Pune: Deccan College Post-graduate &Research Institute

234. Pune : Fergusson College

235. Pune : Mimamsa Vidyalaya

236. Pune : Tilak Maharastra Vidyapitha

237. Pune : Vaidika Samsodhana Mandala

238. Pune : Veda Sastra Uttejaka Sabha

239. Pune: University Library

240. Raipur: D. S. V. Sanskrit Mahavidyalaya

241. Rajahmundry : Andhra Historical Research Society

242. Rajapur : Sanskrit Pathasala

243. Rajashahi : Virendra Research Society

244. Rajkot : Saurashtra University

245. Rampur : Raza Library

246. Rangpur : Sahitya Parishad

247. Rewa: Private Library of the Maharaja

248. Sambalpur : University Department of History

249. Sangrur : Jind State Public Library

250. Santiniketan: Visvabharati

251. Sardarshahar:Gadia Pustakalaya

252. Sikar : Sri Mahavira Pustakalaya

253. Sravanabelaogola : Jaina Mutt

254. Srinagar : Directorate of Library, Museumand Research

255. Srinagar: Kashmir University Library

256. Srinagar: Sanskrit Manuscripts Library, Kashmir University

257. Sringeri : Mutt of H. H. Sri Sankaracarya of Saradapitha

258. Sriperumbudur : Ubhayavedanta Sanskrit College

259. Srirangam : Ahobila Mutt

260. Srirangam: Ranganathasvami Devasthanam Museum and Library

261. Srirangam: Chunilal Gandhi VidyaBhavan

262. Srirangam : Sri Mohanlal Jaina Jnana Bhandara

263. Svadi: Jaina Mutt

264. Sylhet: Ani Pandit Library

265. Thanjavur : Palace Library

266. Thanjavur: Tamil University

267. Thanjavur : Maharaja Serfoji's Sarasvati Mahal Library

268. Thanjavur: Kendriya Sanskrit Vidyapitha

269. Thanjavur: Sri Venkatesvara Oriental Research Institute

270. Thanjavur : Sri Yenketesvara University

271. Tiruvanantapuram: Curator's Office Library

272. Tiruvanantapuram: Maharaja's Palace Library

273. Tiruvanantapuram: Oriental Research Institute and Manuscripts Library,

Kerala University

274. Tonk : Arabic and Persian Research Institute, Rajasthan

275. Trichur: Brahmasva Matham

276. Trichur: Brahmasva Vaddakke Matham

277. Trichur: Naduvil Matham

278. Trichur: Tekkamatham

279. Tripunithura: Government Sanskrit College

280. Tumkur: Sri Siddalingesvara Sanskrit College and Veda Pathasala

281. Udaipur: Sri Aurobindo Sangrahalaya

282. Udaipur: Hindi Vidyapitha

283. Udaipur: Nathadvara Library

284. Udaipur: Sahitya Samsthan, Rajasthan Vidyapeetha

285. Udaipur: Sarasvati Bhandar Library of H.H. the Maharaja of Udaipur,

Mewar

286. Udavada : Dastura Kaioji Mirja Institute

287. Udipi : Krsnapur Mutt

288. Udipi: Mutt of Sri Madhvacarya Samsthan

289. Udipi: Pejavar Mutt

290. Udipi: Sanskrit College

291. Udipi: S.M.S.P. Sanskrit College

292. Ujjain: Scindia Oriental Institute

293. Ujjain: Oriental Manuscripts Library

294. Vaishali: Pali Research Institute

295. Varanasi: Banaras Hindu University

296. Varanasi: Bharat Kala Bhavan, Banaras Hindu University

297. Varanasi: Goenka Sanskrit Mahavidyalaya Library

298. Varanasi: Sri Jnansimhasana Mutt

299. Varanasi: Nagari Pracarini Sabha University

300. Varanasi: Sampurnanand Sanskrit Uni. Library

301. Varanasi: S. R. Gaekwad Library

302. Varanasi: Sri Syadvada Digambara Jaina Mahavidyalaya

303. Varanga: Jaina Matha

304. Vengurla: College Library

305. Vijayawada: S.R.R. College

306. Vizianagaram: Maharaja's Sanskrit College

307. Vrindaban: Vrindaban Research Institute

308. Wai: Prajna Pathasala Mandala

309. Waltair: Andhra University Library

310. Warangal: Historical Research Society

311. Warangal: Kakatiya University

312. Yavatamala: Sardasram

Manuscript libraries: Abroad

There are about 78 major libraries which contain different kinds of manuscripts outside India. They are:

1. Aberystwyth: National Library

2. Berlin: Deutsche Staatsbibliothek

3. Berlin: Stastsbibliothek Preussischer Kulturbesitz
4. Berne: Musee Historique
5. Bonn: Universitatsbibliothek
6. Breslau: Staats Und Universitatsbibliothek
7. Calw: Hermann-Gundert Museum
8. Cambridge: Fitzwilliam Museum
9. Cambridge: King's College Library
10. Cambridge: University Library
11. Cambridge: Trinity College
12. Canberra: Australian National University Library
13. Colombo: National Museum Library
14. Colombo: The Ceylon Government Oriental Library
15. Copenhagen : Bibliothecae Universitatis Havniensis
16. Copenhagen : Royal Library
17. Dacca : University Library
18. Darlington : Public Museum
19. Dublin : Trinity College
20. Edinburg : New College
21. Edinburg : University Library

22. Erlangen Nurnberg : Universitatsbibliothek

23. Evora : Bibliotheca Publica

24. Geneva : University Library

25. Glasgow : Hunterian Museum

26. Goettingen : Universitats-bibliothek

27. Gotha : Landesbibliothek

28. Halle : Deutsche Morgenlandische Gesellschaft

29. Heidelberg : Sudasien Institute

30. Kandy : Oriental Library

31. Karachi : Anjuman Tarakoqi-e-Urdu

32. Karachi: Kutub Khanah-yi Hamdard

33. Karachi: Urdu Development Board

34. Kathmandu : Bir Pustakalaya

35. Kathmandu: Durbar Library

36. Kazan : Biblioteke Imperatorskago Kazanska Universiteta Charniascimsja

37. Lahore : Central Urdu Board

38. Lahore: D.A.V.College

39. Lahore: Museum Library

40. Lahore : Panjab Public Library

41. Lahore: Panjab University Library

42. Lahore: Research Society of Pakistan

43. Lahore: Shafi Mohammed Library

44. Leiden : University Library

45. London : British Museum

46. London : India Office Library

47. London : Royal Asiatic Society

48. London : School of Oriental and African Studies, London University

49. London : Wellcome Historical Medical Res. Library

50. Lund : Universitetsbibliotek

51. Manchester : John Rylands Library

52. Mandalay : Palace Library

53. Mannanam : Vatican Library

54. Marburg : Staatsbibliothek

55. Melbourne : National Gallary of Victoria

56. Muenchen : Bayerische Staatsbibliothek

57. New York : Army Medical Library

58. Oxford : Bodlein Library

59. Oxford: Indian Institute

60. Paris: Bibliotheque Nationale

61. Paris: Societe Asiatique

62. Paris: Universite Sorbonne

63. Philadelphia : Free Library John Frederick Collection

64. Princeton : University Library

65. Providence : Brown University Library

66. Rangoon : Bernard Free Library

67. Rangoon: Government High School

68. Rome: BibliothekaVaticana

69. Stockholm : State Ethnography Museum

70. Strasbourg : Bibliotheoue Nationale Universitaire

71. Stuttajurt : Linden Museum

72. Tokyo : University Library

73. Tuebingen : Universitatsbibliothek

74. Uppasala : University Library

75. Warzburg : University Library

76. Washington : Library of Congress

77. Wien : Universitatsbibliothek

78. Wolfenbuettel: Bibliothecae Regiae Dresdensis

4.2 General awareness on major manuscript libraries in ancient India

From at least the fourth century BCE, mendicant groups including Buddhists, Jains and ājīvikas, whose vows included a peripatetic lifestyle, were permitted to stay in one place for the three months of the rainy season. These monsoon sojourns evolved over the centuries into monastic institutions that included educational functions. New monastic centresof learning that became particularly famous included Nālandā (Bihar, from ca. 4 century–1200), Valabhī, Jagaddala (Bengal, ca. 1100–1200), Odantapurī (Bihar, from ca. 700), and Somapura (Rajshahi, Bangladesh, ca. 8–12 centuries). Many of these institutions developed libraries. From the detailed descriptive accounts of the Chinese pilgrim Xuanzang (602-664), it has been estimated that there were at least 212,130 ordained monks involved in scholarship and education in the middle of the seventh century.

The figures for Jaina monks and institutions of the period are not so well known, but the Jainas too developed a large network of temple libraries for the use of peripatetic monks, and groups of Jaina monks were also present at monasteries like Nalanda that are usually thought of as Buddhist. Many of the Buddhist monastic libraries were destroyed by the Islamic incursions of Muhammad Bakhtiār Khiljī (d. 1205), and others, and medieval Buddhist manuscripts from India are very rare. Jaina libraries seem to have fared slightly better, although the many libraries established by the twelfth-century kings Kumārapāla and Vastupāla in Pāṭaṇ are thought to have been destroyed during the Muslim conquests. But there are many great Jaina library collections that have survived to the present day. These include the Koba Tirth

collection mentioned above, as well as the L. D. Institute in Ahmedabad, the Jñāna Bhaṇḍāra in Jaisalmere, the Hemacandra Jñāna Bhaṇḍāra in Pāṭaṇ and many others.

Libraries were often kept in semi-secret chambers or cellars, with access strictly limited to monks. The broad cultural and philosophical interests of Jaina scholars over the ages have meant that Jaina scribes also copied non-Jaina works in relative abundance. Jaina manuscript libraries today are of the greatest importance both for the history of Jainism itself, but also for all aspects of early Indian cultural and literary history. Today, there are hundreds of major Indian manuscript libraries in India, and scores abroad, especially Europe and the USA. Some are the result of government collection policies, others are royal libraries created by former maharajas. Yet others are parts of religious endowments, schools, temples, and monasteries. Finally, there are many private collections.