# CHAPTER THREE: INFORMAL FALLACIES

## INTRODUCTION

### 3.1 Concept and classification of Fallacies

**Fallacy refers**:

- to error in reasoning/a defect in an argument/creation of some illusion misleading idea, conception
- It is from Latin word**, *fallacia*** means delude/deeceive, illusion, cheat.
- Fallacies always seem good arguments; but in reality they are bad arguments.

## Cont…

Both deductive and inductive arguments may contain fallacies; if they do, they are either unsound or uncogent.

Can be formal and informal.

**Can be committed**

- Intentionally or unintentionally.
- When the speaker/writer fails to provide sufficient evidence or reason for his/her claim.
- If the argument involves the ambiguity
- If the premises are irrelevant to the conclusion

Fallacies are usually divided into two groups: formal and informal. (Based on **content** and **form** of an argument)

## A. Formal Fallacies

Identified through mere inspection of the form or structure of an argument

Fallacies of this kind are found only in deductive arguments.

inductive argument cannot contain a formal fallacy

*Fallacies due to invalidity of arguments.*

improper arrangement of terms or statements

Some of these forms: categorical syllogisms and hypothetical syllogisms.

**Example:** All elephants are animals. (T)

All mammals are animals. (T)

Therefore, all elephants are mammals. (T)

This argument has the following form:

Cont…

All A are B.

All C are B.

Therefore, all A are C.

The above example shows that the entries premises are true and the conclusion is true. But the argument is invalid since the information presented in the premises does not support the conclusion, so it is fallacies.

## Informal fallacies

can be detected only through analysis of content of the argument.

Informal fallacies are **logical errors in the content** of the argument but **not in the structure or form** of the argument.

**Example:** All factories are plants.

All plants are things that contain chlorophyll.

Therefore, all factories are things that contain chlorophyll.

This argument has the following form:

All A are B.

All B are C.

Therefore, All A are C.

Cont…

Since this form is valid, one might conclude that the argument itself is valid. Yet the argument is clearly invalid because it has true premises and a false conclusion.

Thus, the argument really has the following invalid form:

All *A* are *B*.

All *C* are *D*.

—

All *A* are *D*.

The various informal fallacies accomplish their purpose in so many different ways that no single umbrella theory covers them all. Some fallacies work by getting the reader or listener to feel various emotions, such as fear, pity, or camaraderie, and then attaching a certain conclusion to those emotions.

## ➢Factors of the major causes of informal fallacies when the premise:

becomes **irrelevant to the conclusion**(but the arguer presents it as if the premise was relevant to the conclusion) **- fallacies of relevance**;

becomes **unacceptable to the claims** of the conclusion (the arguer however states the premise as if it is correct) **- fallacies presumption**;

becomes **insufficient** to provide evidences to the conclusion(instead the arguer states the premise having adequate evidence to the conclusion)**- fallacies of weak induction**; and,

is expressed by **unclear language** (the arguer state the idea with the assumption that there is no problem of linguistic confusion)**- fallacies of ambiguity and grammatical analogy**.

## Characteristics of Informal fallacies

They are frequently backed by some motive on the part of the arguer to deceive the reader or listener;

the arguer may not have sufficient evidence to support a certain conclusion and as a result may attempt to win its acceptance by restoring to a trick;

sometimes the trick fools even the arguer and may mislead him or herself into thinking that he or she is presenting genuine evidence when in fact he or she is not.

# Types of informal fallacies

**Fallacies are generally categorized in to five types.**

*I. fallacies of relevance*

*II. fallacies of weak induction*

*III. fallacies of presumption*

*IV. fallacies of ambiguity and*

*V. fallacies of grammatical analogy.*

# I. Fallacies of Relevance

- An argument that commits a fallacy of relevance characterized

The arguments in which they have premises that are **logically irrelevant** to the conclusion.

**Ex:** *The earth revolves around the sun*.

Therefore, abortion should be legalized.

Yet the premises are relevant **psychologically**, so the conclusion may **seem** to follow from the premises, even though it does not follow logically.

**Ex:** *Dogs are cats. Cats are felines.*

Therefore, Dogs are felines.

The connection between premises and conclusion is emotional.

**Ex:** *Kebede is a high school principal*.

So kebede likely has a PhD.

- contains eight d/t types of informal fallacies( fallacy of relevancy)

*1. appeal to force*

*2. appeal to pity*

*3. appeal to people*

*4. argument against the person*

*5. straw man*

*6. red- herring*

*7. accident*

*8. missing the point.*

## 1. Appeal to Force (*Argumentum ad Baculum*: Appeal to the Stick)

Occurs whenever an arguer poses a conclusion by threatening the listener or reader.

*Telling the person either implicitly or explicitly that some harm will come to him or her if he or she does not accept the conclusion.*

Always involves a threat by the arguer to the physical or psychological well-being of the listener or reader.

The danger is on the second arguer.

a threat is logically irrelevant to the subject matter of the conclusion.

Cont…

**Example:**

Ethiopia is the best country that has its own precious cultures. If you don't accept this, I will blow your head by this pestle. (Physical threat)

You should accept what I say, unless you know that I am brother of your wife; you will miss her one day. (Physiological threat)

- If a threat provides genuine evidence for the conclusion to be true that is not fallacies.

Cont…

premises of an argument are full of threat, intimidation, scary words, etc.

while you should accept or believe conclusion as correct without providing evidences that are logically reliable.

attempt is made to persuade others of one's point of view by using threat of force, or psychological intimidation in any form,

some kind of unfortunate consequence will occur upon those who challenge to disagree with the idea presented in the argument.

Examples**:**

**1. Child to playmate**: "Meet EBC" is the best show on EBC; and if you do not believe it, I am going to call my big brother over here and he is going to beat you up.

Cont…

**2**. Anyone who believes the government has exceeded its proper authority under the constitution will be subjected to severe harassment by the provincial police. Therefore, the government has not exceeded its authority.

**3. A teacher to his student**: Aristotle has the only correct philosophical view on this matter. If you do not think so, wait to see what mark I give you on the final exam.

These three arguments fail to provide logical evidence to the truth of their conclusion. Instead they provide a kind of harm or threat as a reason to accept their conclusion. Thus, the first two examples involve a physical threat whereas the last example a psychological threat.

## 2. Appeal to Pity (*Argumentum ad Misericordium*)

occurs when an arguer attempts to support a conclusion by simply evoking pity from the reader or listener in an effort to get him or her to accept the conclusion.

the pity does not have any logical connection or relevance to the conclusion.

But it is psychologically relevant for the conclusion as the arguer can usually succeed in getting a pitting heart from his audience.

- It is quite common and frequently appears in:
  - ✓ schools b/n instructors and students;
  - ✓ court rooms b/n judges and defendants and their attorneys;
  - ✓ streets b/n traffic Police and illegal driver;
  - ✓ offices b/n employer and vacancy candidates; and the likes.

Cont…

**Examples:**

1. A student to his instructor**:** Professor, this paper deserves at least a ‘B’ grade. I stayed up all the night working on it. And if I do not get a ‘B’, I will be on academic probation.

the information the arguer has given might seem relevant and might even get the audience to consider the conclusion, but the information is not logically relevant, and so the argument is fallacious.

**2.** Your honor, it is true that I killed my parents. I fully admit that I murdered them in cold blood. But I should get a light sentence. After all, I am an orphan.

## 3. Appeal to People (*Argumentum ad Populum*)

occurs when the arguer attempts to persuade the reader or listener about a certain issue on the ground that most people approve it or disapprove the issue being in question.

It consist arguments with language that is calculated to excite enthusiasm, excitement, anger, or hate.

- Two approaches are involved: the direct and the indirect approach

The direct approach occurs when an arguer, addressing a large group of people, excites the emotions and enthusiasm of the crowd to win the acceptance for his/her conclusion.

The objective is to arouse a kind of mob mentality.

Cont…

usually used by propagandists, demagogues, preachers, advertisement workers etc

The indirect approach the arguer directs his or her appeal not to the crowd as a whole but, to some or more individuals separately,

focusing up on some aspect of their relationship to the crowd.

The heaviest reliance on this approach in particular is to be found in **advertising industry** where the products advertised are often associated with things that we like: luxury, success, riches, sex and so on.

The men associated with the advertisement are also usually beautiful or handsome, famous, clever, etc.

varieties of the indirect approach

*A. appeal to bandwagon*

*B. appeal to vanity*

*C. appeal to snobbery*

## A. Appeal to Bandwagon

emphasizes that the majority choice is a correct one and advises or informs audiences to join it.

a fallacy in which a threat of rejection by one's peer pressure is substituted for evidence in an argument.

This kind of reasoning is fallacious because peer pressure urges the acceptance of a claim on the ground of the approval of friends or associates.

Cont…

**Examples**

1. Chewing chat can not be all wrong because 70% of Hawassa university students see nothing wrong with it.

2. A film is good because there are long lines of people waiting to see it.

All these arguments suggest that the majority of people believe or do the products.

- they tell us nothing more than what large number of people does or believes and nothing about the quality of a thing or the truth of the idea.

✓The idea can be believed by everyone and yet not be true. So, it is fallacious

## B. Appeal to Vanity

Being flamboyant/ Pompous enough/Demonstrative

Associates the product with someone who is admired, pursued, or imitated, the idea being that you, too, will be admired and pursued if you use it.

**Example:**

The current television and billboard ads for the Ambassador suit .If you dress Ambassador Suit, then you, too, will be admired and respected, just like the handsome man in the uniform.

## C. Appeal to Snobbery

It is an appeal to the desire to be regarded as superior to others.

**Example**

This Jacket is not for ordinary people. If you want to be from among the selected few dignitaries buy the Jacket.

We have limited space, please. By appointment only, please.

"Snobbery is the opposite of Bandwagon"

- Snobbery propagates "be selected from few of others"

  This desrves you since you are intelligent.

- While Bandwagon provokes "joining and following others"

## 4. Argument Against the Person (*Argumentum ad Hominem*)

Always involves two arguers

One of them advances a certain argument, and the other then responds by directing his/her attention not to the first person's **argumenttt*** but to **the first person himself/ herself***. Or,

if someone refuses to consider his/her opponent's argument on its merit alone, and instead attacks his/her opponent on the ground of his/her belief, motive, religion, character, practice, and soon.

When this occurs, the second person is said to commit an **argument against the person.**

The argument against the person occurs in three forms:

A. the *ad hominem abusive*,

B. the *ad hominem circumstantial*, and

C. the *tu quoque*.

## A. the ***ad hominem*** **abusive**

the second person responds to the first person's argument by verbally abusing the first person.

The second person discredits the character of the opponent; deny his or her intelligence or reasonableness, and so on.

Cont…

But the character of the individual is logically irrelevant to the truth or falsehood of what that person says, or to the correctness or incorrectness of that person's reasoning.

The person can be abused for being untidy, ugly, smoker, gambler, conservative, sick, member of this or that political party, and etc.

**Examples**

1. How a stingy person can tell us about charity. Hence, let us stop discussing about these issue raised by Tamirat.
2. Her foreign policy plans are idiotic. Do not you know that she got bad grades in history when she was at university?

These arguments commit the fallacy ad hominem abusive because they are directed to attack or abuse the person who made the claim instead of attacking the claim or argument itself.

## *B. Ad hominem* circumstantial

the respondent attempts to discredit the opponent's argument by mentioning to certain circumstances that affect the opponent.

in some case, involves substituting an attack on person's circumstances such as the person's religion, political affiliation, ethnic background, position, etc for evidences in an argument.

just look at the circumstance that affects him." it is done by not attacking the person, but the person's circumstance.

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Cont…

**Examples:**

Dr. Shiferaw advocates a policy of increasing financial spending for higher education. But that is not innocent advocacy, for the reason that he is a university professor and would benefit financially from such a policy

I think that we should reject what Father Mathewos has to say about those ethnical issues of abortion because he is a catholic priest. After all, Father Mathewos is required to hold such view.

### *C. Tu quoque* (“you too”):

**pronounced as “too kwo_kway”**

begins the same way as the other two varieties of the *ad hominem* argument, except that the second arguer attempts to make the first appear to be hypocritical or arguing in bad faith.

“You also or you do it, too” implies that person’s action are not consistent (contradicts) with that for which he/she is arguing.

the second arguer usually accomplishes this by citing features in the life or behavior of the first arguer that conflict with the latter’s conclusion.

In effect, the second arguer says, “How dare you argue that I should stop doing *X*; why, you do (or have done) *X* yourself.’’

Cont…

**Examples:**

***1. Child to parent:*** Your argument that I should stop stealing candy from the corner store is not good. You told me yourself just a week ago that you, too, stole candy when you were a kid.

Obviously, whether the parent stole candy is irrelevant to whether the parent's premises support the conclusion that the child should not steal candy.

2. My doctor told me to lose some weight. Why should I listen to a doctor who is himself overweight?

Cont…

Determining what kind of person someone is includes determining whether that person is trustworthy.

This is committed when one of the arguers (the second arguer) rejects the other arguer (the first arguer) opinion by attacking or abusing him or herself (their personality, character, motives, and qualification) other than their argument.

Cont…

Personal factors are never relevant to truth and false.

In general, ad hominum arguments are effective due to:

Close connection between truth and believability.

They engaged the emotion of readers and listeners and their by motive them to transfer their negative feelings about the arguer on the argument.

## 5. Fallacy of Accident

It is committed when a general rule is applied to a specific case that was not intended to cover. (Misapplication of General Rule )

The general rule is cited in the premises and then wrongly applied to the specific case mentioned in the conclusion.

- Because of the “accidental’ features of the specific case, the general rule does not fit or is misplaced.

**Examples**

Freedom of speech is a constitutionally guaranteed right. Therefore, Abebe should not be arrested for his speech that inspired the riot last week.

Heven ! All good students obey the order of their teachers. Hence, you should not refuse when your teacher invites you for bed.

## 6. Straw Man Fallacy

committed when an arguer distorts an opponent's argument for the purpose of more easily attacking it, demolishes the distorted argument, and then concludes that the opponent's real argument has been demolished.

By so doing, the arguer is said to have set up a straw man and knocked it down, only to conclude that the real man (opposing argument) has been knocked down as well.

**It occurs when the arguer attack misrepresentation of the opponent's view. Exaggeration or Oversimplification of Opponents view.** Imaginary/hypothetical but not real.

**Example**

**Mengesha:** It would be a good idea to ban advertising beer and wine on radio and television. These advertisements encourage teenagers to drink, often with disastrous consequences.

**Tsegaye:** You cannot get people to give up drinking; they have been doing it for thousands of years.

Cont…

In the above example, Tsegaye attempts to oppose Mengasha's idea but with a distorted form.

**Mary:** We must not betray the principles of justice and democracy. Suspected terrorists must be granted basic rights as well as legal representation and access to a fair court.

**Tom:** Mary is advocating the release of known terrorists. We cannot afford to allow our enemies to move freely in our society.

## 7. The Fallacy of Missing the Point (*Ignoratio Elenchii*)

it occurs when the premise of an argument support one particular conclusion, but then a different conclusion, often vaguely related to the correct conclusion is drawn.

**Examples:**

1. Crimes of theft and robbery have been increasing at an alarming rate lately. The conclusion is obvious: We must reinstate death penalty immediately.

There are other conclusions or measures which would be logically correct to this argument rather than death penalty.

"we should provide increased police protection in the invulnerable neighborhoods" or

"we should initiate programs to eliminate the cause of the crimes."

## Cont…

The punishment for theft and robbery should be very serious. But it does not support the claim that the death penalty, therefore, reinstating the death penalty is not a logical conclusion at all.

2. Hawassa University has a lot of problems. Students' services and facilities are inadequate. Many of the instructors are inexperienced. It follows that, the university should be entirely closed.

The conclusion of the example misses logical implication from the premise.

The logical conclusion for the premise is not closing the university but it could have been stated in other ways like: providing additional facilities for students, getting experienced instructors from other countries, developing the capacity of the administration of the university, and the like

# Cont…

Abuse of the welfare system is rampant/ widespread nowadays. Our only alternative is to abolish the system altogether.

- the premises logically suggest some systematic effort to eliminate the cheaters rather than eliminating the system altogether.

- *In general, the fallacy of missing the point is called ignoratio elenchi* which *means* "ignorance of the proof."

This means the arguer is ignorant of the logical implications of his or her own premises and, as a result, draws a conclusion that misses the point entirely

## 8. Red-Herring (Off the Truck Fallacy)

Closely associated with missing the point

It is committed when the arguer diverts the attention of the reader or listener from the main argument by changing the subject to a different but sometimes subtly related one.

- He /she then finishes by either drawing a conclusion about this different issue or by merely presuming that some conclusion has been established.

**Examples:**

1. The minister's new education policy appreciative. Bezawit: Did you hear about his first son? He is going to marry an orphanage girl. Before the minister is talking about in practical education policy; he should give a lesson for his son to get a good wife. So, his new education policy is not appreciative.

Cont…

2. There is a good deal of talk these days about the need to eliminate pesticides from our fruits and vegetables. But many of these foods are essential to our health. Carrots are an excellent source of vitamin A, broccoli is rich in iron, and oranges and grapefruits have lots of vitamin C.

- ✓ the original issue is pesticides, and the arguer changes it to the value of fruits and vegetables in one's diet.

- A second way of using the red herring effectively is to change the subject to some flashy, eye-catching topic that is virtually guaranteed to distract the listener's attention.

Topics of this sort include sex, crime, scandal, immorality, death, and any other topic that might serve as the subject of gossip.

## Cont…

Example

Professor Conway complains of inadequate parking on our campus. But did you know that last year Conway carried on a torrid love affair with a member of the English Department? The two used to meet every day for clandestine sex in the copier room. Apparently they didn't realize how much you can see through that fogged glass window. Even the students got an eyeful. Enough said about Conway.

**The red herring fallacy can be confused with the straw man fallacy because both have the effect of drawing the reader/listener off the track.**

## Cont…

to distinguish the two fallacies, one should attempt to determine whether the arguer has knocked down a distorted argument or simply changed the subject.

straw man always involves two arguers, at least implicitly, whereas a red herring often does not.

In the red herring, the arguer ignores the opponent's argument (if there is one) and subtly changes the subject.

**Both the red herring and straw man fallacies are susceptible of being confused with missing the point, because all three involve a similar kind of irrelevancy.**

## Cont…

**Both red herring and straw man proceed by generating a new set of premises, whereas missing the point does not.**

**Straw man draws a conclusion from new premises that are obtained by distorting an earlier argument,**

Red herring, if it draws any conclusion at all, draws one from new premises obtained by changing the subject.

**Missing the point, draws a conclusion from the original premises.**

**In the red herring and straw man, the conclusion, if there is one, is *relevant* to the premises from which it is drawn; but in missing the point, the conclusion is *irrelevant* to the premises from which it is drawn.**

# II. Fallacies of Weak Induction

It occur *not because* the premises are *logically irrelevant* to the conclusion, as is the case with the fallacies of relevance, but because the connection between premises and conclusion is **not strong enough**.

when the premises provide a tiny bit of support for a conclusion, but not enough to believe the conclusion.

**Include:**

1.Appeal to Unqualified Authority (Argumentum ad Verecundiam)

2. Appeal to Ignorance (Argumentum ad Ignorantiam)

3. Hasty Generalization (Converse Accident)

4. False Cause

5. Slippery Slope

6. Weak Analogy

## 1. Appeal to Unqualified Authority

an arguer cites a statement made by someone else as evidence for a conclusion, and that person is not qualified to make such a statement.

Occurs when the cited *authority or witness is not trustworthy/ reliable*.

- reasons why an authority or witness might not be reliable. The person:

might lack the requisite expertise,

might be biased or prejudiced,

might have a motive to lie or disseminate ‘‘misinformation,’’ or

might lack the requisite ability to perceive or recall.

# Cont…

**Example:**

Dr. Paul who is a famous Engineer in Ethiopia told me that all development policies of Ethiopia are wrong. It implies that, Ethiopia is following wrong direction of development policy.

According to Paster Dawit, Catholic is simply a collection of people waiting for irrelevant mercy of God. I should stop attending churches of catholic.

## 2. Appeal to Ignorance (Argument ad Ignoratiam)

- The claim of the statement is true simply because it has not been provided false. (Not proved to be false)
- The claim of the statement is false because it hasn't proven true. (Not proved to be true)

**Example:**

1. People have been trying for centuries to provide conclusive evidence for the claims of astrology, and no one has ever succeeded. Therefore, we must conclude that astrology is a lot of nonsense.
2. No body has ever proved that school vouchers would improve public education. We can only conclude that they would not improve it.
3. Teams of scientists attempted over a number of decades to detect the existence of the luminiferousaether, and all failed to do so. Therefore, the luminiferousaether does not exist.

- Lack of proof is not evidence for anything.

**Exceptions:**

A. If qualified investigators search for s.th and fail to find it ,this may imply there is nothing to be found.

However some specific activities may not require special qualification.

Example;

No one has ever seen Mahlet smoking cigarettes, probably, Mahlet is not smoker.

B. Courtroom procedures:

A person is innocent until proven guilty.

## 3. Hasty Generalization (Converse Accident)

Reaching at conclusion based on little evidence/non representative sample.

**Example:**

1. I have asked 3 female students for marriage. 3 of them are financial oriented. This implies that all female students are finance oriented.

2. Yesterday two students were diagnosed as having mononucleosis. Today two more were given the same diagnosis. It’s obvious we have an epidemic. Every one on campus has mono.

Cont…

**NB.** Large sample may not always necessary**.** (A sample may be large does not guarantee that it is typical).

**Example:**

1. On separate occasions, I drank a bottle of wine and found tasty. Probably, I would find every bottle of wine tasty.

2. Ten milligrams of substance Z was fed to four mice and within two minutes all four went into shock and died. Probably substance Z, in this amount, is fatal to the average mouse.

- In the case of large samples, if the sample is not random, it may not be typical of the larger group.

## 4. Fallacy of False Cause

Committed when the link between premise and conclusion depend on some imagined causal connection that probably doesn't exist.

- Has three forms:

a. post hoc ergo propter hoc
b. non- causa pro causa,
c. oversimplifies cause
d. Gambler's fallacy

## a. Post hoc ergo propter hoc fallacy (after this, because of this)

Simply post hoc ( after this ,therefore on account of this)

Two things are causally connected merely b/c one happens after the other.

one event cause another simply because occurred before the proposed effect.

**Example:**

1. During the past two months, every time that the cheerleaders have worn blue ribbons in their hair, the basketball team has been defeated. Therefore, to prevent defeats in the future, the cheerleaders should get rid of those blue ribbons.

2. A black cat crossed my path and later I tripped and sprained my ankle. It must be that black cats really are bad luck.

## b. Non-causa pro causa

Not the cause for the cause.

Something as a cause but not in reality.

Two things are causally connected merely b/c they happen over the same interval of time.

Selecting, as the cause, the wrong factor from a number of factors.

**Example:**

1. There are more laws on the books today than ever before, and more crimes are being committed than ever before. Therefore, to reduce crime we must eliminate the laws.

2. Successful Instructors paid salaries more than 20,000 ETB. Therefore, the best way to ensure that Tewodros will become a successful Instructor is to raise his salary to at least 20,000 ETB.

## c. Oversimplified cause Fallacy

when a multitude of causes is responsible for a certain effect but the arguer selects just one of these causes and represents it as if it were the sole cause.

**Example:**

1. The quality of education in Hawassa University has been declining for years. Clearly, our teachers just aren't doing their job these days.

2. Today, all of us can look forward to a longer life span than our parents and grandparents. Obviously, we owe our thanks to the millions of dedicated doctors who expend every effort to ensure our health.

## d. The Gambler's Fallacy

Committed when an arguer supposes that events in a game of chance are causally related when in fact they are not.

**Example**

1. Abel has not won at bingo for the past 10 rounds. Therefore, he will certainly win in the next round.

Since one round of bingo has no influence on the next round is no more likely that Abel will win in the next round than it was in the first.

2. The last three tosses of this coin have come up 'tails'. Therefore, it is extremely likely that the next toss will come up 'heads'.

## 5. Fallacy of Slippery Slope

It occurs when the conclusion of an argument rests upon an alleged chain reaction and there is not sufficient reason to think that the chain reaction will actually take place. Chain of events.

**Example;**

1.I know the impetus for the whole tragedy in her life. She was jobless and has no other choice but to join bar ladies. While she was working in bars, she becomes infected with HIV/AIDS. Then, she becomes bedridden patient and in the lost her life. All these misfortune fall up on her due to her dismissal from the university in the first semesters of the first year.

2.Immediate steps should be taken to outlaw pornography once and for all. The continued manufacture and sale of pornographic material will almost certainly lead to an increase in sex-related crimes such as rape and incest. This in turn will gradually erode the moral fabric of society and result in an increase in crimes of all sorts. Eventually a complete disintegration of law and order will occur, leading in the end to the total collapse of civilization.

## 6. Weak Analogy

Committed when the analogy between two or more things become week.

Object “A” has attributes of a, b, c and z. object “B” has attributes of a, b & c. therefore, object “B” probably has attribute z.

**Example**

Tadesse’s new car is bright blue, has leather upholstery, and gets excellent gas mileage. Tewabe’s new car is also bright blue and has leather upholstery. Therefore, it probably gets excellent gas mileage, too.

# III. Fallacies of Presumption

These fallacies arise not because the premises are irrelevant to the conclusion or provide insufficient reason for believing the conclusion but because the premises assume what they claim to prove.

A belief that something is true even though it has not been proved. Includes:

**a. Begging the question**

**b. Complex question**

**c. False dichotomy**

**d. Suppressed evidence**

## a. The fallacy of Begging the question (*PetitioPrincipii*)

**circular reasoning**

the premises provide adequate support for the conclusion when in fact they do not.

Committed whenever the arguer creates the illusion that inadequate premises provide adequate support for the conclusion by:

leaving out a key premise

restating the conclusion as a premise, or

reasoning in a circle

**Example:**

Murder is morally wrong. This being the case, it follows that abortion is morally wrong.

Cont…

I believe the prime minister is telling the truth since he says he is telling the truth.

**Capital punishment is justified for crimes of murder and kidnapping because it is quite legitimate and appropriate that some one be put to death for having committed such hateful and inhuman acts.**

Anyone who preaches revolution has a vision of the future for the simple reason that if a person has no vision of the future he could not possibly preach revolution.

## b. Complex question

Committed when a single question that is really two (or more) questions is asked and a single answer is then applied to both questions.

**Example**

- Have you stopped cheating on exams?
- Where did you hide the cookies you stole?
- Are you still proud of yourself being a man having many wives.

## c. False Dichotomy

Called “false bifurcation” and the “either or fallacy”)

committed when one premise of an argument is an “either . . . or . . .” (disjunctive) statement that presents two alternatives as if they were jointly exhaustive (as if no third alternative were possible).

- occurred when a person provides two alternatives, which are false, as the only option in the argument and then eliminates one alternative and it seems that we are left with only one option. The one the arguer wanted to choose. But, there are many different alternatives that the arguer fails to provide.

Cont…

**Example**

1. Either you use Smart deodorant or you risk the chance of perspiration odor. Surely you don’t want to risk the chance of perspiration odor. Therefore, you will want to use Smart deodorant.

2. Either you buy only Ethiopian-made products or you don’t deserve to be called a loyal Ethiopia. Yesterday you bought a new jacket made in Japan. It’s therefore clear that you don’t deserve to be called a loyal Ethiopian.

3. If you are not member of FDRE, you are anti-democracy. I think you don’t want to be anti-democracy. So, be member of FDRE.

### d. Fallacy of Suppressed Evidence

It is committed when the inductive argument ignores some important pieces of evidences and entails an extremely different conclusion.

**Example:**

Hawassa University is the best university in Ethiopia; because, it has very fat and tall teachers, finest buildings and large number of students.

This tablet is very small, beautifully shaped and it smells good. So, it is good if I give to my child.

# IV. Linguistic Fallacies

Are the results of a misuse of language such as incorrect use of words, grammatical lack of clarity, vagueness and other linguistic defects.

- two types:

A. Fallacies of Ambiguity and

B. Fallacies of Grammatical analogy

## A. Fallacies of Ambiguity

Wrong conclusion is drawn from ambiguous words or statements.

- Has two prominent fallacies:

i. Equivocation and

Ii. Amphiboly.

# I. Equivocation

It is committed when word/words has/have two or more meaning in certain context.

**Example:**

All factories are plants. All plants have chlorophyll

Therefore, all factories are things that can contain chlorophyll.

- Any law can be repealed by the legislative authority. But the law of gravity is a law. Therefore, the law of gravity can be repealed by the legislative authority.

Mother is love. Love is blind. Therefore, Mother is blind.

Odd things arouse human suspicion. Fifteen is an odd number. Therefore, fifteen arouses human suspicion.

## II. Amphiboly

Similar to equivocation except that the double meaning is due to a syntactic deficiency, such as grammatical error or a mistake in punctuation rather than to an ambiguous word or phrase.

**Example:**

1. Beza told Almaz that ***she*** had made a mistake. It follows that Beza has at least the courage to admit her own mistakes.

2. Mrs. Alemitu stated in her will, “I leave my 500-carat diamond necklace and my Hammer Car to Helen and Hana.” Therefore, we conclude that Hana gets the necklace and Helen the car.

## Cont…

3. Mr. James signed a contract that reads, “In exchange for painting my house, I promise to pay David $5000 and give him20 gram of gold  only if he finishes the job by May 1.” Therefore, since David did not finish until May 10, it follows that he gets neither the $5000 nor the gold.

## B. Fallacies of Grammatical Analogy

Attributes of the whole are wrongly considered as attributes of parts

- ✓ conversely (composition fallacy)
- ✓ division fallacy

### Composition

Invalid inference from the nature of parts.

Attributes are improperly transferred from parts to whole.

**Example:**

1. Each atom in this piece of chalk is invisible. Therefore, the chalk is invisible.
2. Sodium and chlorine, the atomic components of salt, are both deadly poisons. Therefore, salt is a deadly poison.

## Division

Reverse of composition

Attributes are improperly transferred from whole to parts.

**Example:**

1. Salt is a nonpoisonous compound. Therefore, its component elements; sodium and chlorine, are nonpoisonous.

2. The Royal Society is over 300 years old. Professor Belay is a member of the Royal Society. Therefore, Professor Belay is over 300 years old.

3. The airplane is heavy. Therefore, each parts of it are heavy.