Phil 2302 Logic Dr. Naugle

## Fallacies of Relevance Continued<sup>1</sup>

#### FALLACIES OF DIVERSION

Fallacies of diversion attempt to win an argument by changing the subject, hoping that you will be distracted long enough not to notice that your opponent has diverted attention away from the subject and has focused on something else (generally something humorous, emotional, or unsolvable).

I. Irrelevant Conclusion or Missing the Point (*Ignoratio Elenchi* = Ignorance of the Proof)

#### A. Definition

This fallacy occurs when the premises of an argument appear to lead up to one particular conclusion, but then a completely different conclusion is drawn. The arguer is ignorant of the logical implications of his/her own premises, and draws a conclusion that misses the point entirely. Or the listener/reader draws a fallacious conclusion from the arguers premise.

Whenever this occurs, you should attempt to identify the correct conclusion that the premises actually imply. The true conclusion must be different from the one mistakenly drawn. In *Ignoratio Elenchi* the premises entail conclusion A, but conclusion B is fallaciously drawn; seek conclusion A!

A particular form of this argument could be designated *Operat ergo veritat*: it works, therefore it is true. But drawing the conclusion that something is true because it works is not necessarily the case. If something works, it may be true, but not necessarily. Those who assert this are called pragmatists who believe that results guarantee truth, but this is not so. Whether something works and whether it is true are two different issues. So, don't miss the point because of our pragmatism!

#### B. Examples

<sup>&</sup>lt;sup>1</sup> NB: This material is taken from several logic texts authored by N. Geisler, H. Kahane, and others. I make no claim to originality in this material.

- 1. Crimes of theft and robbery have been increasing at an alarming rate lately. The conclusion is obvious: we must reinstate the death penalty immediately.
- 2. Abuse of the welfare system is rampant nowadays. Our only alternative is to abolish the system altogether.
- 3. Past life regression answers a lot of questions and helps make sense out of their lives. It is obvious, therefore, that reincarnation is true.

# II. Red Herring (Diverting the Issue)

#### A. Definition

This second device for changing the subject is less sneaky: it just does it! This fallacy is closely related to both missing the point and the straw man. The red herring fallacy is committed when you divert the attention of the reader/listener by addressing a number of extraneous issues unrelated to the subject at hand, and then assume that the issue has been addressed, and a conclusion established. Often times, a joke or a story, one that is even superficially related to the subject, does the trick quite nicely!

The arguer ignores the opponent's question or argument, and subtly changes the subject. The question is: has the hearer misinterpreted something, or simply changed the subject deliberately. Red herring arguments are especially difficult to discern in long, protracted discourses, and so close attention must be paid to the line of thought expressed. This could be called the Politician's Fallacy, because they often change the subject entirely when a difficult issue or question is addressed to them and they don't know how or what to answer.

The name red herring comes from a procedure used to train hunting dogs to follow a scent. A red herring or bag of them (they are known for their potent smell) is dragged across the trail with the intent to mislead the dogs on the quest for the game being pursued (e.g., a fox).

#### B. Examples

1. Minority pressure groups have argued that the Beta General Corporation should employ a larger number of minority workers. But Beta General already has plenty of minority workers. The problem is that minority pressure groups have too much power.

Soon they will take over the country. They think Beta General has a negative view of minorities, but that's not true. Minority employees work hard.

- 2. Environmental groups have argued that the construction of the new dam will have an adverse effect on the scenic beauty of the lake area. But if we followed the advice of environmentalists, the economy will go to pot. Environmentalists freak out every time a bird, or any other specie is the least bit threatened. This is silly. Plants and animals are under the control of evolution, and truly the fittest will survive. They should not worry so over what nature does.
- 3. Acts 23:1 And Paul, looking intently at the Council, said, "Brethren, I have lived my life with a perfectly good conscience before God up to this day." Acts 23:2 And the high priest Ananias commanded those standing beside him to strike him on the mouth. Acts 23:3 Then Paul said to him, "God is going to strike you, you whitewashed wall! And do you sit to try me according to the Law, and in violation of the Law order me to be struck?" Acts 23:4 But the bystanders said, "Do you revile God's high priest?" Acts 23:5 And Paul said, "I was not aware, brethren, that he was high priest; for it is written, '\You shall not speak evil of a ruler of your people.\" Acts 23:6 But perceiving that one part were Sadducees and the other Pharisees, Paul (began) crying out in the Council, "Brethren, I am a Pharisee, a son of Pharisees; I am on trial for the hope and resurrection of the dead!" Acts 23:7 And as he said this, there arose a dissension between the Pharisees and Sadducees; and the assembly was divided. Acts 23:8 For the Sadducees say that there is no resurrection, nor an angel, nor a spirit; but the Pharisees acknowledge them all. Acts 23:9 And there arose a great uproar: and some of the scribes of the Pharisaic party stood up and {began} to argue heatedly, saying, "We find nothing wrong with this man; suppose a spirit or an angel has spoken to him?" Acts 23:10 And as a great dissension was developing, the commander was afraid Paul would be torn to pieces by them and ordered the troops to go down and take him away from them by force, and bring him into the barracks.

### **FALLACIES OF GENERALIZATION**

Some fallacies come from trying to make everything fit into one or two categories, thinking that everything is black or white, when in fact there are several shades of grade or even color that must be considered. To generalize is to over simplify a situation, but in logic it is necessary to consider carefully important distinctions.

"Men are more apt to be mistaken in their generalizations than in their particular observations." Machiavelli

"One swallow does not make a summer." Proverb

I. Fallacy of the General Rule or Fallacy of Accident (*Dicto Simpliciter* =simple saying)

"Seek simplicity and then distrust it." —A. N. Whitehead

"The love of simplicity has been the source of much false reasoning in philosophy." —D. Hume

#### A. Definition

This fallacy is committed when a general rule is applied wrongly to a specific case, that is, when you presume that what is true in general, under normal conditions, is true under all circumstances without exception. In arguing, the general rule is directly or indirectly cited in the premises, and then wrongly applied to the specific case in the conclusion. Because of the "accidental" features of the specific situation under consideration, the general rule does not exactly apply or fit. Very "simply," a general rule is misapplied to a specific case.

To avoid this mistake, be suspicious of sweeping generalizations based on just a few samples which are then used as premises. Generic truths can have many exceptions. Ask if the general assertion being made really applied to this specific situation.

### B. Examples

- 1. "It is my duty to do unto others as I would have them do unto me. Therefore, if I am puzzled by this question on my logic test, then I would like my neighbor to help me out. Therefore, it is my duty to help this person taking a logic test who is having trouble.
- 2. "I have a right to control my own body." Therefore, I have a right to an abortion.
- 3. Freedom of speech is a guaranteed constitutional right. Therefore, the NEA has the freedom to support anykind of art and any kind of artists regardless of subject matter.

4. Property should be returned to its rightful owner. The man next door whose gun I borrowed wants it back so that he can shoot his wife (self, etc.). Therefore, I should give the gun back.

# II. Hasty Generalization

"Those who jump to conclusions usually leap right over the facts!"

"Many people get their mental exercise by jumping to conclusions!"

#### A. Definition

This is the *dicto simpliciter* fallacy in reverse. Here, instead of applying general rule to specific cases, you take a few cases (insufficient in number), and then establish a general rule. You commit this fallacy when you jump to a conclusion before you have sufficient evidence or data, when you base a general statement on a small sample, or when you formulate general rules from atypical or exceptional situations. It is a fallacy that affects inductive generalizations. It concludes too much from too little (like special pleading). Thus, be quick to hear, but slow to speak and slow to anger!

Here are two questions to ask to determine if you or someone else is jumping to conclusions:

- 1. Is the generalization based on a sufficiently large sample?
- 2. Is the sampling proportionately and/or widely representative?

Be careful of sweeping generalizations based on just a few samples

Hasty generalizations get established in our minds and evolve into stereotypes which become the basis of our judgments from then on. What do you think about when you think of: philosophy professors, used car salesmen, blondes, Yankees, southerners, fundamentalists, cab drivers, etc? Have you jumped to any conclusions about these types of people?

### B. Examples:

1. Immanuel Kant's notion of categorical imperative may possibly be faulted by this logical fallacy. How will one know if one's action is one "whereby thou canst at the same time will that it should become a universal law"? One must jump to the conclusion that his action can become a universal law only on the grounds of insufficient evidence or a small sample.

- 2. I'll never go out with Suzy again. She was late for our first date, and I could never marry some one who is always late.
- 3. Personnel Director: "Mike was very nervous during the interview. I am convinced he isn't the right man for the job."
- 4. After only one year, the alternator went out on Mr. Smith's Chevrolet, and Mr. Jones' Olds. Cars made by GM are just a pile of junk these days.
- 5. Since all religions offer miracles to show that they are true, no claim of miracles can be used as proof for any religion.

# III. Cliche Thinking or Maxim Mongering

"I do not say a proverb is amiss when aptly and reasonably applied; but to be forever discharging them, right or wrong, hit or miss, renders conversation insipid and vulgar."

—Cervantes, Don Quixote

"Most maxim mongers have preferred the prettiness to the justness of a thought, and the turn to the truth."

—Lord Chesterfield

#### A. Definition

Proverbs, maxims, familiar quotations have special power to persuade because they are pity, terse, memorable, rhythmic, and old. Like general rules, cliches may fit perfectly sometimes, but sometimes they over generalize and therein is their fallacy. Cliche thinking says: "Accept this, because it roughly accords with a popular maxim." Cliches often are figurative in meaning, and thus elusive. Cliches main defect, however, is that they overgeneralize. Cliche thinking is thus a form of *dicto simplicter*.

The remedy for cliche thinking is to strip the cliche of its cute rhetoric, to demythologize it, and translate it into cold, hard propositional logic and see (1) if it is true; (2) if its truth applies to the situation to which it is being applied. For example: "Silence is golden" = "Saying nothing is the best thing to do." Is this always true? Does it apply to this situation?

#### B. Examples:

- 1. In theology: Since "to err is human," the Bible must contain errors since the Bible was written by humans.
- 2. In dating: "Dance with the one that brung you."
- 3. In politics: "Don't change horses in the middle of the stream."
- 4. Are these *always* true: "Haste makes waste." "Bird in hand is worth two in bush." "Nothing ventured, nothing gained." "Better safe than sorry." "Silence is golden." Cliches themselves may be in need of proof!

### REDUCTIVE FALLACIES

Reductive fallacies are best described as fallacies of oversimplification. They attempt to make a complex issue look simple by considering only one aspect of it; they reduce a many faceted question to a single point. The simplification process results in misunderstanding because only a caricature of the issue is presented. One example might be: man is just thinking protoplasm. Sounds like an oversimplification!

### I. Reductive Fallacy

#### A. Definition

This fallacy is committed when you stop with a one-level description of a multi-faceted issue when there are many levels to be described. This is when you reduce a complex issue to only one of its many aspects. We often err by supposing that a description on one level excludes a description on another. What we want and need is a coherent, comprehensive, wholistic understanding or description of the matter (or world) at issue. Neglecting some levels of description can only diminish our total understanding of a matter (or the world). Some have called this fallacy "nothing buttery" since it argues that something is nothing but some aspect of it. "The mind is nothing but the brain." "Human personality is nothing but the interaction of chemical and physical properties"

We can guard against this reductive fallacy by being suspicious (hermeneutic of suspicion) of oversimplified analyses, and by remembering how very complex reality is.

# B. Examples:

1. "The cosmos is all there is, ever was, and ever will be." C. Sagan, *Cosmos*, p 4.

- 2. "I am a collection of water, calcium, and organic molecules called Carl Sagan. You are a collection of almost identical molecules with a different collective label. But is that all? Is there nothing in here but molecules? Some people find this idea somehow demeaning to human dignity. For myself, I find it elevating that our universe permits the evolution of molecular machines as intricate and complex as we are." *Time*, Oct. 20, 1980, p. 68.
- 3. Evangelical Christian student: "I think that Christians should live only for eternal, sacred things, rather than involving themselves with the secular and the temporal."
- 4. Naturalism as a world view asserts that only the universe exists; God does not exist.
- 5. Pantheist: "Forget this world; forget your pain; forget your relations; negate your daily needs and desires: seek union with Brahmam!"
- 6. Deist: God is the Creator of the world, but He does not actively involve Himself in the affairs of this world."

(Note: many if not all non-Christian world views tend to reduce some aspects of creation, while elevating other aspects to prominence, and thereby distorting the comprehensive nature of reality).

- 7. Compare CNN's Headline News with the McNeil/Leher Newshour.
- 8. What is the "sound bite?" A thirty minute sit com? A sixty second commercial?
- 9. "Man is what he eats."
- 10. Love is sex.
- 11. A wedding ring is nothing but metal.
- II. The Genetic Fallacy (The Nazareth Fallacy)

"Never search for the origin of a saint, a river, or a woman." Hindu proverb.

"The beginnings of all things are small." Cicero

#### A. Definiton

This is a special type of the reductive fallacy that focuses on the source or origin (genesis) of an idea. The genetic fallacy is committed when you irrelevantly attack the genesis of the view, not the view itself. "Reject this because it comes from a bad source."

"Can anything good come out of Nazareth?"

However, the beginnings of something do not always tell us about its present state, value, or truthfulness. We cannot refute an idea simply by asserting that "it came out of Nazareth."

## B. Examples

- 1. Creation science is not science because it came from the Bible.
- 2. Tae Kwon Do is not appropriate for Christians because it originated in Eastern religion.
- 3. Human religion has its roots in the superstitious fears of early man; therefore, religion should be rejected by the thinking man. (Esp. S. Freud who said that religion originated from man's projection of a need for God onto the universe).
- 4. Psychoanalysis attempts to determine the validity of an idea by discerning its origin, especially in human unconsciousness. If its psychogenetic roots can be discovered, it is often discredited.

### III. Complex Question (Certs Fallacy)

#### A. Definition

This fallacy is committed when a single question that is really two or more questions is asked and the single answer is then applied to both questions. Since every complex question presumes the existence of a certain set of conditions, the respondent's answer implicates him in the nature of those additional hidden dimensions that the question presupposed. Thus, a complex question involves an implicit argument (enthymemically). This tactic is usually designed to trap the respondent into acknowledging something that he or she does not want to acknowledge. It could be put like this: "I acknowledge this implication by my direct answer to your (complex) question." The following will illustrate:

- 1. Have you stopped cheating on exams?
- 2. Where did you hide the cookies you stole?

If you answer "Yes," to the first question, the implication is: you were cheating on exams.

If you answer "Under the bed," to the second question, the implication is: you stole the cookies.

If you answer "No," to the first question, the implication is: you are still cheating.

If you answer "Nowhere," to the second question, the implication is: you stole and ate them.

Obviously, the above two questions are really two questions in one (like a Certs candy mint--two, two, two questions in one!").

- 1. Did you cheat on exams in the past? If so, have you stopped now.
- 2. Did you steal the cookies? If so, where did you hide them?

## B. Examples

- 1. Have you stopped beating your wife?
- 2. Do you believe the world was created in six days as the Bible says?
- 3. Are you going to be a good little boy and eat your hamburger?
- 4. Is Tom Smith still doing drugs?
- 5. How long must I put up with your sassy behavior?
- 6. When are you going to stop talking nonsense?
- 7. When are you going to stop acting so insecurely and show some maturity?

### IV. Faulty Analogy

"To compare is not to prove." French Proverb

"Comparisons are odious." Anon.

#### A. Definition

Reasoning by analogy is one of the oldest and most fruitful (and dangerous) ways of arguing. It can go wrong however, because some analogies are not as relevant as they may seem or claim to be because of a critical difference in the things compared. If these differences are ignored, then nothing has really been proved by the comparison. You commit this fallacy by saying: "Accept this because of its superficial similarities with that." But analogies are

good only when there are strong similarities and nonessential differences between the things compared. But if the similarities are only accidental, and the differences essential, then the argument suffers and can be fallacious.

Remeber two things in this case: 1. two things may be alike in many ways, and yet very different in others. How germane are the similarities and how significant are the differences to the argument? 2. Metaphors do not prove, but only illustrate. After you have heard the analogy, still ask: Where is your evidence?

## B. Examples:

- 1. The brain is like a sponge.
- 2. If we have to teach the creation theory along with evolution, then we would have to also to teach the stork theory along with how babies really originate.
- 3. The Clinton presidency will definitely be like the Carter administration in the 70s.
- 4. Eight rats in a cage become violent; crowded conditions in cities produce violence, too.
- 5. Believing in Jesus is like believing in the tooth fairy.

# V. Argument of the Beard (The Skeptics Fallacy)

"Fools! who from hence into the notion fall That vice or Virtue there is none at all. If white and black bend, soften and unite A thousand ways, is there no black or white?

—A. Pope, Essay on Man, II. 211

## A. Definition

How many whiskers does it take to make a beard? Surely one is not enough, but what about 25? We have difficulty in determining the exact number of hairs necessary for a beard, and we have difficulty in life determining where things fall out along a continuum. Life is full of cases, like a beard, that are arranged on a continuum from less to more. This fallacy is committed when you assert there is no real difference between extremes on the continuum. Here you get lost in the middle ground, in the inbetween state of shading or gray between the two extremes, and begin to doubt the existence of real differences between such obvious poles as good and evil, strong and weak, black and white, true and false. If a line is hard to draw, it is impossible to draw. Committing this fallacy reveals your inability to distinguish or recognize small differences where they are

really significant. You are shade blind, and may also suffer from the paralysis of analysis.

This is the fallacy of the skeptic who refuses to notice differences, sees all arguments as counter-cancelling, and thus is unable to decide matters of truth and morality. Rather than inclining toward black or white, the skeptic remains in the gray, uncertain about the "beard."

But you should remember that small difference do make a difference, and the differences should help you determine when you have a beard!

## B. Examples:

- 1. Homosexuality may be a choice, but it sure seems like environment and genetics play a big role in sexual preference. I cannot tell if its right or wrong.
- 2. Stalin was an evil man; St. Francis a good man. But saints have faults, and sinners have virtues. Thus, you can't really call one man good, and the other bad.
- 3. It makes no difference is one gets drunk or is a leader of nations.
- J. P. Sartre.
- 4. Man and ape are so similar I hesitate to call one an animal, and the other a human.

## OTHER TYPES OF FALLACIES

## I. Category Mistake

#### A. Definition

This fallacy, based on confusion, is the "apples and oranges" error because it mixes up two ideas that do not belong together. It says: "Accept this apple because it falls into the orange category." But they really do not belong together at all. This error is like putting one dollar bills in the twenty dollar bill slot; it's like asking: "What does blue taste like?"

## B. Examples:

- 1. Who were Adam's parents?
- 2. Who made God?
- 3. What caused Lucifer to sin?
- 4. What happened the moment before time began?

In each of these there is the mistake of asking: What came before the first? But is there a category before first to put the answer in? No. The category "before" does not apply to the category "first." Such is logically impossible. Hence, Adam and Eve were the first parents; God is the first cause of all things; Lucifer caused his own sin by his free will; there was no moment before time began, just eternity.

## II. Faulty Dilemmas

"There is small choice in rotten apples." Shakespeare, *Taming of the Shrew*, 1. 1 134-35.

#### A. Definition

Here you will remember the opponent forces one into an "either/or" answer when the question has a third alternative. He says: "Accept this or that," both of which are contrary to your viewpoint, but does not mention the third alternative.

- B. Examples (see also material under dilemmas considered earlier)
  - 1. 1. "Rabbi, who sinned, this man or his parents, that he should be born blind?" John 9: 2-3.
  - 2. Everything happens either by determinism or by free will.
  - 3. If all is determined, we are wrong to talk about free choices.
  - 4. If there is a free will, we are wrong to say that God is in control of all things.
  - 5. Therefore, either we are wrong about free will or we are wrong about God's control.
  - 6. 3. "Since there can be no talk of an independent ideology being developed by the masses of workers in the process of their movement, the only choice is: "either bourgeois or socialist ideology." There is no middle course. Hence, to belittle socialist ideology in any way, to deviate from it in the slightest degree means strengthening bourgeois ideology." V. I. Lenin.

# III. Hypothesis Contrary to Fact (Golfer's Fallacy)

"For all sad words of tongue or pen, the saddest are these: "It might have been."

—John Greenleaf Whittier

## A. Definition

This is playing the "what if," "what might have been" game. When you take a "what if," a condition that never actually existed, and

then make it a genuine premise in a serious argument, then you have committed hypothesis contrary to fact. It says: "Accept this because it might have (or could have) been this way." Or, "If only I had made that putt, I would have parred that hole."

Things would have been different if this other hypothesis were true, but the fact of the matter is that the other hypothesis is not true. And even if it were true, there are so many other variables that could alter the perceived consequences of the hypothesis, you really don't know how things would have turned out anyway.

Argumentation is not about how things might have been, but how things actually are. No amount of what if can change it, and on factual grounds you will have to make your argument. You must leave the realm of speculation, and stick with the realm of reality. An argument that begins with "peradventure" has little to commend it beyond imaginative conversation and speculation.

Committing hypothesis contrary to fact can sometimes lead to unnecessary guilt feelings. If you make a decision that leads to unfortunate consequences, it is easy to think that if you had not made that decision, things would be much better now (this is true in regard to sin, however). But in amoral decisions (jobs, dates, major, marriage, etc.), you must remind yourself that better circumstances do not necessarily and automatically follow from different decisions (that would be *non sequitor*). No one is perfect; no one is omniscient. Don't blame yourself for a regrettable decision if at the time you followed the best procedures of sound reasoning you knew at the time.

# B. Examples

- 1. What would have happened to Jesus if the Jews had accepted Him.
- 2. If President Bush had only won the 1992 Presidential election, then we would not be in the this present economic mess.
- 3. If the Democrats had only been in power in the 1920s, the Great Depression would have been avoided.
- 4. If Hitler had only been assassinated, there would have been no WWII.
- 5. If only I had married Edith, I would be happy now.
- 6. If only I had majored in philosophy, I would have a high paying job!

#### III. Prestige Jargon (and other language tricks)

#### A. Definition

We have spoken about chronological snobbery; here we address linguistic snobbery. This is the error of attempting to prove something by expressing it in complicated, impressive language. It is the error of fancy talk. When you say things is a complex way, people often will not question what is said because it sounds right. But remember the following quotations:

"Your argument is sound, nothing but sound.

There is a difference between good sound reasons, and reasons that sound good.

You're not right; you just sound right!

This argument simply confuses complexity with authenticity; it attempts to gain credibility via profundity, and substitutes technical terminology for truth.

## B. Examples

- 1. Are you suffering from circumorbital haematoma? (a black eye).
- 2. You obviously possess no follicle appendages on the cutaneous apex of the cranial structure (bald headedness).
- 3. "We do respectively petition, request, and entreat that due and adequate provisions be made this day and the date hereinafter subscribed, for the organizing os such methods of allocation and distribution as may be deemed necessary and proper to assure the reception by and for said petitioner of such quantities of baked cereal products as shall, in the judgment of the aforesaid petitioners, constitute a sufficient supply thereof."
- 4. See addendum: "Faking It with Work Content Language."

#### C. Other types of language tricks

- 1. Equivocation (see earlier material)
- 2. <u>Emotive language</u>: the use or abuse of positively or negatively charged emotional terms often called snarl or purr words (e.g., government official = bureaucrat or public servant).
- 3. <u>Euphemisms</u> (= to sound good): to soften the impact of a harsh term by the use of a milder one (old folks = senior citizens; abortion = termination of pregnancy; tax increase = revenue enhancement; genocide = final solution; died = passed away)
- 4. Name calling: a tactic that always lowers the rational temperature in a discussion, and angers opponents and yet makes the name caller look stupid (bozo; swine; shark; imbecile; demagogue; pig; radical relativist; etc.; this method commits the combined

- fallacies of emotive language, hasty generalization, and *ad hominem* all at once).
- 5. <u>Poisoning the wells</u>: here the tactic is to cast verbal aspersions on the source of an argument before the argument itself is heard. You must consider the source, and show the source is shown to be highly suspect and unreliable for many possible reasons and by many possible ways.

# IV. Slippery Slope Fallacy

#### A. Definition

This fallacy says: "Reject this position because it will automatically and irreversibly slip into that." This is the domino fallacy that suggests that an initial first position should be rejected because it will lead to other unhappy conclusions that are unacceptable. If A, then B, C, and D. And in some cases this might be true; but the fallacy is especially clear when the connection between one position and another is psychological in nature, and not logical in nature. Will B, C, and D necessarily follow, if at all. Don't reject A just because B, C, and D may follow. The fallacy is to assert that the connection is necessary or inevitable, but it may not be, and since it may not be, then A does not have to be rejected necessarily.

Some have called this fallacy the "camel's nose in the tent" fallacy because if a camel can get his nose in the tent, then the whole camel is sure to follow! Or it could be called the salesman's "foot in the door" to follow through with the same kind of imagery.

We must rather ask not if a position will lead to other things necessarily, but rather does the position itself have any independent evidence to justify it.

### B. Examples

- 1. If we establish a medicare program in the USA, then soon we will have socialized medicine.
- 2. If we don't defend Viet Nam, then all the other countries in Southeast Asia will go Communist.
- 3. If we don't stop the Communist threat in Nicaragua, then Communists will soon be crossing the Rio Grande.
- 4. If we feed the Russians, soon we will have to fight them.

Are these below slippery slope or not?

- 5. If we tolerate abortion, soon we will also have infanticide and euthanasia.
- 6. If we don't accept some parts of the Bible as inspired (science, history, etc), then soon we will not accept any of it.
- 7. If we build nuclear weapons, then certainly one day we will use them.

## V. Fallacies of Composition and Division

"And I thought like Dr. Faustus, of the emptiness of art, how we take a fragment for the whole, and call the whole a part."

—Oliver Wendell Holmes

## A. Fallacy of composition

1. Definition: this is the mistake of assuming that what is true of the parts must be true of the whole, or to say it differently, that an organized whole retains the simple features of its constituent parts. But this fails to take the concept of synergy into consideration: "When parts interact after a pattern to form a whole, the whole frequently has a set of properties which are characteristic of this patterned interaction but are not deducible directly from the parts that make up the whole, and which require description on a higher level."

—Richard Bube, *Human Quest*, p. 142.

## 2. Examples:

- a.  $H^2$  O is the same as  $H^2$ , and O separately.
- b. Cells separate, and cells that make up a human being are identical.
- c. Two singles tennis champions will make up a championship doubles team.
- d. The all star team must be better than the regional champions because it is made up of the best players (here the whole may be less than the sum of its parts)
- e. I don't need to see the Dallas Arboretum; it's just made up of a bunch of flowers (here the whole will be more than the sum of its parts).

## B. The fallacy of division

1. Definition: this is the fallacy of composition in reverse. Here the mistake is that what is true of an organized whole is necessarily true of its constituent parts. This would suggest that a person is a good lawyer because he is employed by a good law firm; and the

same would apply to doctors and hospitals, members of a family, citizens in a country, etc.

# 2. Examples

- a. Since Being is eternal, I must be eternal too. (New age).
- b. How can there be such hypocrites in the church? (Agnostic)
- c. He's an American citizen; how could he act this way?
- d. Guilt by association: His family is communist; he must be too (McCarthy era); his family is heretical; he must be too (Inquistion)
- e. Innocence by association: Judas Iscariot was a good man; he was one of Jesus' disciples. But remember: "Before judging a man by his associates, remember that Judas Iscariot traveled in the best company."
- C. Conclusion: The critical thinker must learn to handle propositions about the parts and the whole very carefully, realizing that the whole is often more than the sum of its parts, and the parts do not always bear the characteristics of the whole!
- VI. Fallacy of False Cause (Astrologer's Fallacy)

"Happy is he who has succeeded in learning the causes of things." Virgil.

"To know truly is to know by causes." Francis Bacon

#### A. Definition

This fallacy is committed when you conclude that B was caused by A simply because the two were closely associated together in space, time, or are simply coincidental. This fallacy assumes an imagined causal connection that in fact does not exist. It comes in two technical varieties:

B. Post Hoc Ergo Propter Hoc ( = "after this, therefore, because of this")

This is the temporal or spatial fallacy that assumes that because two things are so closely associated, that one caused the other:

- 1. The cock crows, and the sun rises.
- 2. You carry a rabbit's foot, and all the day you have good luck.
- 3. The entire science of astrology and superstitious practices could be said to be premised upon and thus guilty of the post hoc fallacy!

- 4. When the cheerleaders wear blue ribbons in their hair, the basketball team always wins.
- 5. A black cat crossed my path, and later that day I tripped, fell, and sprained my ankle.
- 6. My psychic said I would make much money this week, and I did!

## C. Non Causa Pro Causa (= "not the cause for the cause")

This simply is the mistake of taking something to be the cause of something when it is really not the cause at all (the mistake being other than temporal or spatial proximity as in the *post hoc* fallacy).

- 1. Successful business executives are paid at least \$50,000. Let's raise Hufford's salary to that amount and no doubt he will be a successful executive.
- 2. There are more laws on the books today than ever before, and more crimes are being committed too. To reduce crime, we must eliminate the laws.