

## **Chapter 4 – Identifying Fallacies**

### **4.1 Introduction**

Ludwig Wittgenstein once said that his aim in philosophy was to turn disguised nonsense into patent nonsense. What he was implying in this cryptic remark is that patent (obvious) nonsense, being easy to spot, is not as dangerously misleading as nonsense that is disguised as sense. Our task in this chapter is to unmask some common cases of disguised nonsense. When we do, we will be less prone to fall for their illusion of sense.

At one time or another, we have all had the illusion that some conclusion followed from a given set of premises when in fact it did not. We might have even acted on such an illusion. Logicians call such deceptive arguments, however psychologically convincing they may be, logical fallacies.

Some of these fallacies occur so often and are so psychologically convincing that we need to be on special alert to avoid them. The best way to do this is to identify (by name) examples of them, and to see exactly why the conclusions of such fallacious arguments do not follow from their premises. (There are a couple of exceptions to this rule. As we will discuss presently, the fallacy of complex question may not be formally invalid, but it is always invites bad reasoning. The other exception is the fallacy of begging the question, which is technically both valid and sound, but nevertheless a case of bad reasoning. I will say more about these exceptions in due course.)

The list of fallacies varies with different authors. Some, however, appear to be common to every list and our list includes most of these standard fallacies. As well, our list divides the fallacies into two general categories: **Fallacies of Relevance and Fallacies of Ambiguity.**

Fallacies in the first category occur in those cases in which the content of the premises bears little or no logical relevance to the conclusion. Fallacies of the second category occur in those cases in which a word, phrase, or passage has no clear meaning

### **4.2 Fallacies of Relevance**

#### **1. Force**

When a speaker or writer formulates an argument it is usually with the intention of convincing some audience to accept its conclusion. For example, suppose someone tries to convince a group that it ought to play soccer instead of basketball. The reasons offered are as follows: (1) the basketball court is in bad shape, and (2) most in the group would rather play soccer than basketball anyway. Giving reasons for taking one course of action rather than another is, however, not the only way of trying to get an audience to accept a conclusion. Suppose the owner of the basketball and the soccer ball says that he thinks that the group ought to play basketball and further that if the group does not agree but wants to play soccer instead he tells them he will not allow the group to use his soccer ball. We have now abandoned the technique of rational argument and entered the realm of coercion. And of course coercion is psychologically convincing and often works. Most likely the group will end up playing basketball. However, whenever a person attempts to coerce his or her audience to accept a conclusion on the basis of a threat, veiled or explicit, we say that a logical fallacy has occurred. We call this fallacy an appeal to force. (Sometimes this fallacy is referred to by its Latin name, **Argumentum ad Baculum**, which means “argument from the stick.”)

It should be obvious to you that appeals to force, while psychologically convincing, are not valid arguments. Consider the difference between the following two attempts of parents to convince their child to go to college.

**A. You ought to go to college because it will broaden your horizons.**

**B. You ought to go to college because if you don't we will disinherit you.**

Clearly B is not offering a reason in support of going to college, but A is. Rather than offering reasons, B is attempting to coerce the child into attending. Whether the prospective student is in or out of his or her parent's will is logically irrelevant to whether going to college has or does not have merit. B has clearly abandoned logic in favor of force.

## **2. Ignorance.**

How many times have you ever heard someone say something like: "Such and such must be true because nobody has ever proved it is false;" or "Such and such must be false because nobody has ever proved it is true." You can fill in the "such and such" with things like "ghosts" or "God" or "aliens." However psychologically convincing it may be, the fact remains that nothing follows logically from the absence of proof. From the fact that nobody has ever proven that the proposition "God exists" is false, it does not follow that it is true; and from the fact that nobody has ever proven that the proposition "God does not exist" is true, it does not follow that it is false. To reason this way is to commit the fallacy of appeal to ignorance (Sometimes this fallacy is referred to by its Latin name, **Argumentum ad Ignorantiam**.)

We need to be careful, however, not to dismiss every appeal to a lack of evidence as committing this fallacy. Sometimes an absence of evidence can count as positive evidence. For example, if the termite inspector tells you that you do not have termites because there is no termite dust to be found on the beams under your house, he or she has not committed the fallacy of appeal to ignorance. And if the doctor says that the absence of a bull's eye marking around the tick bite site on your skin is evidence that you do not have Lyme disease, this is not a case of the fallacy of appeal to ignorance. The facts are that if I did have termites I would likely have termite dust on the beams under my house and if I did have Lyme disease I would likely have a bull's eye marking around the tick bite site on my skin. These cases are very different from claims like, "I do not have a soul because it has not been proven that I do." This conclusion simply does not follow.

## **3. Pity**

I hope that you are beginning to see why these fallacies are classified as fallacies of relevance. Indeed, the "reasons" that are given in support of the conclusions of the fallacies of relevance are not logically relevant to the conclusion. What this means is that the truth of the conclusion is not guaranteed by the truth of the premises.

In this light consider the following argument. "You ought to change my failing grade on my logic test to a passing grade; for otherwise I will lose my basketball scholarship and I will have to drop out of college." Strictly speaking the appeal here is logically irrelevant to the conclusion, and yet it does carry psychological weight. In fact there have been college professors who have fallen for this appeal. Nevertheless, such arguments are fallacious. Grades are intended to reflect the level of mastery the student has achieved in the subject, not the level of pity the Professor feels for the student. Pity is logically irrelevant to assessments of mastery. Logicians call fallacies of this sort appeals to pity. (Sometimes this fallacy is referred to by its Latin name, **Argumentum ad Misericordiam**)

Compare the argument above to this one: "You ought to change my failing grade on my logic test to a passing grade, because the failing grade that I got reflects a calculation error that you made; if the points were accurately added, my grade would no longer be a failing one." In this case, the Professor has good reason to change the grade, while in the former case she does not. If we granted good grades on the basis of pity, grades would no longer measure the level of mastery of the subject that the student has achieved and hence would become meaningless.

#### 4. Desire

The fallacy of desire is not always included in lists of fallacies. I include it here because we hear it so often. This fallacy is committed when someone concludes that such and such must be true because he or she would like it to be true. Consider the following example: “Believing that I have a guardian angel that watches over me gives me all the comfort and security I want and need on the hard road of life. That’s the reason that I believe I have one.” Clearly this argument reaches its conclusion on the basis of wanting something to be true. Compare the following two arguments:

It makes me depressed to think that we human beings are nothing but causally determined mechanisms. I would be so much happier if I thought we had the freedom to make at least some choices in life. Therefore I believe that we are free.

It is not rational to believe x unless x is true and x is based on evidence that is accepted by the believer as warranting x. In other words, rational beliefs are possible only for beings that possess the power of accepting or rejecting evidence. This power of acceptance or rejection is called freedom. If someone were to come to believe that human beings are merely causally determined mechanisms, then he or she must have accepted certain evidence as warranting this belief. However, it is possible to accept (or reject) evidence only if we are free to do so. Amazingly, even the claim that we are not free shows that we are. Therefore, I believe that we are free.

What makes the first argument above a fallacy is that its conclusion is not guaranteed by the truth of its premises. This is not true in the second argument. The premises in this argument are logically relevant to its conclusion. Indeed, in this case it certainly seems obvious that the argument is valid, for if its premises were true then its conclusion would have to be true. Remember, however, two things: (1) first, an argument can be fallacious formally without committing one of the fallacies in our list; there are lots of examples of bad reasoning; (2) secondly, even if the argument in B were valid, it might still be unsound. Valid arguments are unsound, recall, unless *all* of their premises are true.

#### 5. Authority

How often we hear people say things of the following form: “Such and such must be true because “So” and “So” said so.” Here we have an argument that is based on an appeal to authority. Arguments of this form, however, may or may not be fallacious.

Let’s consider an argument of this form that is not fallacious. “The weapon used in the murder was a 9mm pistol, because the ballistics expert said so.” In this case the appeal to the authority of the ballistics expert provides a perfectly legitimate ground for the conclusion.

However, if we appeal to an authority that is not vested with the proper credentials for making the judgment, then we have committed the fallacy of appeal to authority. For example, if someone were to say, “You can bet that the economy is going to rebound shortly, because Pete Rose said it was going to,” then we have an obvious case of the fallacy. In this case, Pete Rose, a former baseball player, is not an economist and so lacks the relevant authority to make such a judgment. Appeals of this sort are often referred to as appeals to an inappropriate authority. (This fallacy is sometimes referred to by its Latin name, **Argumentum ad Verecundiam**.)

Appealing to an authority in order to provide a reason for accepting a particular conclusion becomes a fallacy when the authority appealed to lacks the appropriate knowledge or power to warrant its acceptance. Sometimes the appropriateness of the authority is not easy to discern. Consider the following two examples:

A. That pitch was not a strike because the TV commentator said that it was not.

B. That pitch was a strike because the umpire said it was.

In this case it might seem that the seasoned TV commentator knows enough about baseball to tell if the pitch was or was not a strike. However the fact remains that this commentator lacks the authority to make the call, whereas the umpire is vested with precisely that authority. Accordingly, the first argument may commit the fallacy of appeal to authority but the argument in B does not. Now consider this: “The umpire missed that call because (on the basis of a review of the play) the referee said so.” This is certainly not an appeal to an inappropriate authority when it comes to making a judgment about whether or not the umpire missed the call. As such it would not constitute the fallacy of an appeal to an inappropriate authority.

Let me issue this caution: sometimes even appeals to appropriate authorities may commit the fallacy of an appeal to authority, we need to know how to determine when they do and when they don't. Certainly if one appeals to an inappropriate authority the fallacy is committed. However, if one appeals to an appropriate authority this may not guarantee that the fallacy is avoided. Consider this example: “Abortion is morally wrong because the Pope said so.” If the person who says this is a Roman Catholic, then surely the Pope is an appropriate moral authority for this person. So does this argument commit the fallacy of an appeal to authority or not? It depends on what the person intends to be claiming, and of course in many cases this may be difficult if not impossible to determine. If the person is saying that he accepts the reasoning of the Pope in coming to the conclusion that abortion is morally wrong, this is a legitimate appeal. It is legitimate because the claim is not that the Pope's saying that abortion is morally wrong is what makes it morally wrong, but that the Pope says it is morally wrong because he has come to this conclusion on the basis of good reasons.

In some cases, saying that something is so is enough to make it so, but not always. If a jury says that you are innocent then you are; if an umpire says that the pitch was a strike then it was, and this is so even if in fact you really are guilty, and even if the pitch was in fact out of the strike zone. In most cases, however, saying something is so does not make it so, even if the one who says it is so has the relevant authority to make that judgment.

If I say that murder is morally wrong because the Bible says that it is and mean by this that the Bible's saying murder is morally wrong is what makes it morally wrong, then I have committed the fallacy of an illegitimate appeal to authority. If I say that I think that the Bible says that murder is morally wrong because its authors were convinced that it is morally wrong, then I do not commit the fallacy. A key to making this distinction is whether the appeal to authority is designed to stop further rational inquiry, or whether it is open to it. Appeals to the Bible are often of the former kind. As we hear: “The Bible says it and that settles it.” This attitude suggests that there is no room for further questions. If however we think that the Bible says what it says for good reasons, then there is room for further inquiry and assessment of these reasons. Appeals to the Bible of this second sort are certainly not fallacious.

## 6. False cause

It is quite obvious that causes and effects are connected. Usually that connection is a temporal one. That is, usually causes come before effects. For example, if a person has a headache and takes an aspirin or two and the headache goes away, he or she would probably say that the medicine caused the pain to subside. But not every such temporal sequence of events adds up to a cause and effect relation. It is biologically possible for a person's headache to go away before the aspirin takes effect. In this case a person might mistakenly think that the aspirin caused the headache to go away when the relief was due to other causes.

Causes and effects, however, are not always related in such a temporal sequence. Causes and effects can occur simultaneously. Consider the relation between the light beam and the illuminated bulb in a flashlight. Even though the light beam is caused by the illuminated bulb, the beam does not occur *after* the bulb is illuminated but at precisely the same time the bulb comes on. Again, not every such simultaneous relation of two events adds up to

the conclusion that the two events are causally related. It may well be true, for example, that every time Jupiter moves to a certain position in the heavens Mars simultaneously moves to a corresponding position in relation to Venus. Even though this alignment of Jupiter and Mars always simultaneously occurs, it would be a mistake to think that the movement of one causes the movement of the other. To think that because two events always, or even sometimes, occur at the same time or in a temporal sequence, that they are therefore causally related, is to commit what logicians call the fallacy of false cause. (The fallacy of concluding that because one event precedes another that it is the cause of the second event is sometimes referred to by its Latin name, **Post Hoc Ergo Propter Hoc**, which means something like “after therefore because”)

In general the fallacy of false cause is committed whenever some event is held to be the cause of another when in fact the events are not causally related at all. This fallacy occurs most frequently when we are dealing with the chance collation of events. If, for example, I fall and break my leg on the very day that a black cat crossed my path, and conclude that the first event caused the second, I have committed the fallacy of false cause. Superstition is full of such false cause fallacies.

Many have tried to take advantage of the fact that human beings are prone to see causal connections where they may not exist. A notable example of this is the chain letter. In such letters the recipient is asked to keep the chain going, and warned that some people who dared to break the chain met with some horrible disaster. The implication is that the failure to keep the chain going caused the disaster.

You might be thinking at this point that this example sounds awfully much like the fallacy of appeal to force. And you would be exactly right. So there is no better time than now to let you know that one and the same argument may commit more than one fallacy. Certainly the chain letter example does. In analyzing arguments in the Exercises Workbook, you must try to decide which fallacy is the most prominent one. Honest differences of opinion are clearly possible.

## 7. Popularity

However much we would like to think of ourselves as individuals forging our own unique paths in life, the fact is we are also deeply influenced by forces of conformity. Most of us want to be accepted and to win the approval of others. Accordingly we are very prone to be convinced by arguments that play on the psychology of public opinion. For example, we are likely to think that a certain brand of clothing is the best because everybody who is anybody wears that brand. To come to this conclusion is a mistake in reasoning. Reasons that make a certain brand preferable may include quality of workmanship but not popularity. Arguments of this sort commit what logicians call the fallacy of popularity. (Sometimes this fallacy is referred to by its Latin name, **Argumentum ad Populum**, which means “argument to the people.”)

We often hear commercials on TV that tell us that a certain brand of automobile sells more than any other in America. American consumers buy millions of these cars every day. Clearly this brand of car must be the best, for so many car buyers could not be wrong. Well, of course they could be. Just because a car is very popular it does not follow that it is the best car for consumers to buy.

On a less materialistic level, consider the attempt to provide grounds for thinking that God exists by citing the fact that ninety percent of Americans believe that He (She?) does. The fact that popular opinion is heavily weighted in favor of thinking that God exists is psychologically powerful but logically speaking it has no relevance in establishing or substantiating the truth of the claim that God exists.

The point here is not only that popular opinion can be mistaken and so is not a reliable ground from which to draw conclusions validly. The more profound point is that even if popular opinion turns out to be correct, it is still logically irrelevant in establishing the truth of a conclusion. It may be true that most people in America believe that God exists, but if the fallacy of popularity is to be avoided the claim that God exists needs to be established on different grounds, grounds that if true would guarantee the truth of the conclusion. Even if we grant the truth of the claim that most Americans believe in God, it simply does not follow that God exists, for the conclusion (that God

exists) could be false while the premise of the argument (that most Americans believe that God exists) is true. Recall that in good arguments, if the premises are true the conclusion must be true. Or put differently, a good (deductive) argument cannot have a false conclusion if its premises are true.

Sometimes the fallacy of popularity is committed by what we might call association. For example, the fallacy of popularity is committed when it is suggested in a commercial that a particular product has merit because it is associated with the wealthy, the famous, and the powerful. The fact that the rich and the famous use a particular product has no logical relevance as to whether it is a good product or not. However, because such images of extravagant lifestyles are so popular with American consumers, advertisers try to play the psychological trick of convincing their audience that they can have a little piece of this popular lifestyle if they buy this product.

Again, we meet here with the fact that more than one fallacy can be committed in a single “argument.” If the advertisers of a product not only place the product in an environment that is envied by the masses, but also have famous people endorsing the product, two fallacies may be committed. Just because Brittany Spears thinks that a certain brand of lawnmower is the best, it does not follow that it is. Here the fallacy is the appeal to an inappropriate authority. If the endorsement were placed within a lifestyle envied by the masses, the fallacy would also be popularity. To decide which fallacy is the primary one, we must decide which mistake is the most prominent. Again, we may meet here with honest disagreement. But even if we disagree about which fallacy is the most prominent, there can be no denying that examples of this type commit both fallacies.

## **8. Complex Question**

Although you may not have heard of the fallacy of complex question by name, you may have come across some examples of it. One of the most famous is found in the classic question: “Have you stopped beating your wife?” Now clearly if we are required to answer “yes” or “no” to this question we are condemned out of our own mouths as being either a current wife-beater (if you answer “no”) or as a past one (if your answer is “yes”). As we might put it, such questions are structured in such a way as to presume the answer to an unasked question; in this case: “Are you a wife-beater?”

It may be difficult to see at first why such questions are called fallacies, for clearly questions are not arguments and fallacies are bad arguments. What makes such questions fallacies is that they are designed to lead us to draw conclusions that are not warranted. Drawing conclusions from assumptions that one is tricked into granting, that is, that one would not grant if not so tricked, is indeed bad reasoning. Even if such arguments turn out to be formally valid, there is no way that such arguments could be sound for the simple reason that they begin with a false premise that one is tricked into granting.

As in our example above, the question is formulated in such a way that if I answer “yes” or “no” to it, then it does follow that I am a wife-beater, even if in fact I am not. In general then, complex questions are designed psychologically to trick someone into granting an assumption that is in fact false from which he or she wants to draw a conclusion that is also false, as well as incriminating. Even though the reasoning here may be valid, that is, even though it does follow that I am a wife-beater if I do say “yes, I have stopped beating my wife,” it could never be sound reasoning to conclude that I am in fact a wife-beater, at least if the premise of the argument is in fact false.

To avoid being tricked in this way, we must be careful not to answer such complex questions. If someone asks you: “Do you still cheat on your exams?” you must refuse to answer either “yes” or “no” because either answer would imply that you are a cheater. Probably the best strategy in dealing with such questions is to make their implicitly answered, but unasked question, explicit and simply deny it. That is, you may say, “Your question assumes that I am a cheater, and I am not.”

## **9. Begging the Question**

Even though the next fallacy is called begging the question, it, unlike the previous fallacy, has nothing to do with the interrogative grammatical form. In this case, “the question” is simply the issue that the argument is

attempting to settle. For example, if there is a question as to whether God exists, we might try to settle this by giving reasons for concluding that God does exist, or for concluding that God does not exist. We are said to commit the fallacy of begging the question if we smuggle the conclusion we are trying to establish (that God does or does not exist) into the premises we are assuming in our argument. Consider the following argument:

**If what the Bible says is true, then God exists.  
If God inspired the Bible, then what the Bible says is true.  
There is a God and He inspired the Bible.  
Therefore, God exists.**

Now clearly the third premise in this argument assumes that God exists, which is precisely the conclusion we are trying to establish. As this is usually put, this argument commits the fallacy of begging the question because it assumes what it is trying to prove. (Sometimes this fallacy is referred to by its Latin name, **Petitio Principi**)

Earlier, we said that this fallacy is an exception to the claim that fallacious arguments are invalid. In begging the question, we meet a fallacy that is formally valid and may even be sound. Let's see how this can be true.

Recall that every argument that commits the fallacy of begging the question is formally valid, for if  $x$  is true then it follows that  $x$  is true. The problem with this reasoning, however, is that it does not get us anywhere. This is why such reasoning is often referred to as circular. Of course, if God exists then it follows that God exists. But to assume just what you are trying to prove does not establish anything. Rather, it merely draws a conclusion and then restates that conclusion (usually in different words, but with the same propositional content) as one of the premises of the argument.

What may be surprising to you is that it is also possible for an argument to be sound and yet still be classified as a fallacy. Yet this is precisely the case with the fallacy of begging the question. Recall, a sound argument is a valid one with all true premises. Consider this argument: Since more electors voted for Bill Clinton than for his opponent in two consecutive US presidential elections, it follows that he was twice elected to the office of President of the United States. Now the premise of this argument is true and it is a formally valid argument. As such, we are forced to say that it is a sound argument. Nevertheless we also must say that this argument is a case of mistaken reasoning for it begs the question and establishes nothing other than a single assertion that is asserted twice in different words. One version of the assertion serves as the conclusion, the other as the premise of the argument. Arguments of this sort, even sound ones, get us nowhere.

Please reserve the phrase "begging the question" to name the fallacy I have just discussed; that is, the fallacy of assuming what one is trying to prove. Recently I have noted that the phrase is being misused in TV commentary and in casual conversations. In these cases "begging the question" is used simply as a way of pleading for a certain question to be asked.

## **10. Character-Abusive**

When someone is involved in a disagreement and is finding that he or she is losing the argument, it often happens that he or she makes a shift in strategy. Failing to support his or her position with good reasoning, he or she attempts to discredit his or her opponent in this disagreement by attacking his or her character. Consider this argument: "Your argument that abortion should be illegal is absurd. But what could we expect from a narrow-minded moral imbecile?"

More generally, we will say this: whenever a person turns away from trying to settle a particular issue by rational argument and turns rather toward an attack on the character of the person who holds a different view on the issue at stake, we have a case of fallacious reasoning. We will call this the character-abusive fallacy. (This fallacy is

often referred to by its general Latin name, **Argumentum ad Hominem**, which means “argument against the person.” Indeed sometimes this Latin name is shortened further to simply, “**Ad Hominem**.”)

Abuse of character comes in many forms, some obvious, some subtle. Calling someone a “moral imbecile” is a pretty obvious case of abuse of character. But it would also count as abuse of character to say that someone is “limited” in certain ways. To say that someone is limited is not necessarily to abuse him or her, but it may be. We may say that our young child is limited when it comes to understanding political discourse, and this certainly is not to abuse the character of the child. However, suppose someone said: “I don’t expect that you would see the moral absurdity of making abortion illegal, since you are extremely limited in your ability to feel sympathy for the rights of women in general.” This is no compliment of character, and in fact it is a form of abuse.

## 11. Character-Circumstantial

Closely related to the character-abusive fallacy is the character-circumstantial fallacy. Both are **Ad Hominem** fallacies that turn from considerations of the merits of the argument to an attempt to discredit the person making the argument. The assumption of the one who argues this way is that one will be psychologically convinced to discredit an argument if the one making it is discredited.

Abusing the person making the argument is not, however, the only way that we can attempt to discredit the person making an argument that we also want to discredit. We can call attention to the special circumstances of the person making the argument with the aim of showing that the person has a special interest in defending the conclusion that he or she is attempting to argue for. Consider this example: “Of course you think that abortion is morally wrong, after all you are a Roman Catholic.” Strictly speaking, however, the fact that the person making the argument that abortion is morally wrong is a Roman Catholic (assuming, of course, that Roman Catholics have taken a united stance on this issue as mandated by official Church dogma) is logically irrelevant when it comes to giving reasons in favor of the claim that it is morally wrong. Of course calling someone a Roman Catholic is not to abuse him or her, but it may be a psychologically convincing way to undermine the force of the argument. Consider the differences between the following two arguments:

A. Affirmative Action is a good policy because it aims at making sure that past injustices that have discriminated against minorities and women will be corrected.

B. Of course A thinks that Affirmative Action is a good policy; why wouldn’t she? After all A is a woman and stands to benefit from such a policy.

I hope you see that B commits the character-circumstantial fallacy, while A does not. We may of course debate A on the merits of affirmative action, but for considerations of this sort, knowing whether B is a member of a minority group or a woman is logically irrelevant to the merits of the policy itself. Even though such arguments are psychologically effective, they are logical fallacies.

## 12. Accident

The next two fallacies (accident and hasty generalization) that we will deal with are mirror images of each other. To reflect this, so to speak, the second of these fallacies, hasty generalization, is often called converse accident. Both of these fallacies involve mistakes in reasoning with regard to what we might call general rules and exceptions to general rules. Let’s see how this mistake is made first in the case of the fallacy of accident.

General rules almost always have exceptions. When we do not take proper account of this fact we are liable to draw unwarranted conclusions. Consider this example: As a general rule, it is morally wrong to lie. Therefore, when the Nazis knocked on the door at the house in Amsterdam during WWII where Anne Frank was being hidden in the attic and inquired: “Is Anne Frank here?” the owners of the house should not have lied. Clearly this was an exceptional case, that is, a case in which the general rule does not apply. Certainly most people would think that it



was morally wrong in this case to tell the truth, for after all, lying would save Anne Frank's life while telling the truth would have condemned her to death.

We certainly could multiply these examples with less dramatic consequences. Consider the following arguments, all of which commit the fallacy of accident:

**A. We ought always to help people who are having car trouble when we can. Therefore we ought to help those bank robbers over there that can't seem to get their car started.**

**B. We ought always to obey the posted speed limits. Therefore that ambulance driver should be given a speeding ticket.**

**C. We ought always to respect the right of every American to vote. Therefore we must allow convicted felons the right to vote.**

**D. Americans believe that it is morally unacceptable to exclude whole groups of people (like women) from having the right to vote. Therefore, in America it is morally unacceptable to exclude the whole group of convicted felons from having the right to vote.**

### 13. Hasty Generalization

Hasty generalization, like its opposite, accident, is a fallacy that involves general rules and exceptional cases. In the fallacy of accident the mistake comes in reasoning from a generalization to an exceptional case. In this fallacy of hasty generalization, we reason in the opposite direction. (This is why this fallacy is sometimes referred to as the fallacy of converse accident.) That is, in this fallacy we start from an exceptional case and proceed to draw a conclusion from it in the form of a general rule. If the sample of cases on the basis of which a generalization is made is very small these cases may be exceptional. As such a generalization on the basis of a small pool of particular cases may be too hasty and accordingly not justified. Again, exceptions do not make good rules. Consider the following examples:

**A. It is morally right to lie when the Nazis inquire as to whether Anne Frank is in the attic. Therefore, it is always morally right to lie.**

**B. We ought not to help Robbers get their getaway car started. Therefore, we never ought to help people with car trouble.**

**C. Ambulance drivers are allowed to speed, therefore everybody should be allowed to speed.**

**D. In America it is morally acceptable to exclude the whole group of convicted felons from having the right to vote. Therefore it is morally acceptable to exclude whole groups of people, such as women, from having the right to vote**

## 14. Irrelevant Conclusion

All of the fallacies we have looked at so far have been ones in which the premises, however psychologically compelling, are logically irrelevant to the conclusions they are offered in support of. So why do we have a separate fallacy entitled irrelevant conclusion? The reason is that we need a category of fallacy that will cover all of the cases of irrelevancy that are not covered by the other fallacies.

One such case is as follows. Sometimes in an argument premises are offered that do not in fact support the conclusion they are offered in support of, but another conclusion that is not at issue and is often readily agreed to. When this happens, we say that the argument commits the fallacy of irrelevant conclusion. (This fallacy is sometimes referred to by its Latin name, **Ignoratio Elenchi**, that is, “false refutation.”)

An example of this fallacy will help you identify it. Suppose that a Congresswoman is trying to convince her colleagues in the House to vote for Fair Housing Bill #4. Rather than giving reasons for supporting this particular bill, she offers reasons in favor of fair housing. Now virtually all of her colleagues agree that fair housing is a good thing. So, either from her own lack of clarity, or from an intentional attempt to get this bill passed, by hook or crook, as it were, she purports to argue for this particular bill but in fact argues the merits of fair housing. To make such an argument concluding that fair housing is a good thing is easy, since everyone, or nearly everyone, already agrees to it. But such an argument commits the fallacy of irrelevant conclusion because the real issue is not argued for. That is, why, given that fair housing is a good thing, is *this* bill worthy of being passed? Will *this* bill promote fair housing? We could all agree that fair housing is a good thing, but honestly disagree about whether passing *this* bill is the best way to get it.

Consider one more example of this fallacy: “I think that you ought to go to law school. The law profession is a very noble and respected one. As well, many successful lawyers make a fortune.” The premises, true as they may be, do not establish that I ought to go to law school. This may be convincing however, since this argument is actually directed to establishing that the practice of law is an esteemed profession, something most would readily agree to. However, the fact is that considerations of this sort are logically irrelevant to the question of whether law school is the best place for *me*, given my talents, interests, resources, etc.

## 4.3 Fallacies of Ambiguity

The fallacies we have been dealing with so far have all involved the issue of logical relevance. Arguments that commit these fallacies do so because the premises of these arguments, however psychologically relevant, are logically irrelevant to their conclusions.

Unlike these fallacies of relevance, the fallacies in the next group of fallacies—the fallacies of ambiguity—consist of mistakes in reasoning that are committed because of an ambiguity in the terms used in an argument. For example, a fallacy of ambiguity is committed whenever there is a word, or phrase, or whole passage that has more than one meaning and this lack of clarity of meaning leads to unwarranted conclusions. We will consider five of the most commonly committed such fallacies of ambiguity.

## 15. Equivocation

Many words in English have more than one meaning, including the word “word.” To see this, ask yourself: “How many words is the word “bark?” You probably want to say: “It depends.” And you would be right. If you mean by “word” simply that particular group of letters “b-a-r-k,” then the answer is one. If you mean by “word” its various meanings, then it has at least two literal meanings, the covering of a tree and the sound that a dog makes, and lots of metaphorical ones, as in “His bark was worse than his bite.” And certainly when one says: “You have my word on it,” this does not imply that some letters are printed on whatever “it” happens to be

Considerations of context are absolutely important in achieving clarity in what we say and write. However, sometimes context is not sufficient to avoid ambiguity. In such cases extra effort to avoid confusion is necessary. This may include changing the syntax (word order) of a passage, making it clear which meaning an ambiguous

word in that passage has, and making sure that it is used consistently with just that one meaning throughout the passage or argument. Inattention to these matters often leads to the fallacy of equivocation.

Consider this example:

***“If I have a mind, then I must not be completely a physical being. It was confirmed that I have a mind the other day at the hospital when my skull was x-rayed. Therefore, I must not be completely physical.”***

In this case, this person may not have been aware that he or she was using the term “mind” in one instance to mean something like “soul” and in another to mean “brain.” Quite obviously x-ray machines could establish that I have a brain, but they could not establish the presence of something non-physical. We can take a picture of the brain, but we cannot take a picture of the soul. We say in this case that the person who put the argument forth was equivocating on the term “mind.”

Sometimes there is an intentional playing on the ambiguity of a word. This may be done in order to trick some audience into drawing a conclusion that does not follow from a set of premises, and would obviously not follow if the ambiguity were eliminated. Consider the following example:

**“Professor Jones is a very bad professor. He must therefore be a very bad person.”**

Now assuming that we are not using “bad,” as some do, to mean “good,” we are still using "bad" in two very different senses. In the first case, “bad” is used to mean something like, “not good at” or if you will, “not competent.” In the second case, “bad” is used as a term of moral appraisal. Clearly there is a mistake in reasoning here; for just because one is bad at teaching it does not follow that the person is morally bad. In this argument, there is an equivocation on the term “bad” and the fallacy committed is thus the fallacy of equivocation.

## **16. Accent**

When speaking we can emphasize or accent a word or phrase and change its meaning. Consider this: “Woman, without her MAN would be lost.” It would seem that this might be the kind of thing that some country singer might croon. It certainly does not look like something that a feminist might embrace. From this claim we might well draw the conclusion that women need men.

Everything changes, however if we emphasize another of the words in this same statement. Consider this: “Woman, without HER, man would be lost.” From this we might well draw the conclusion that men need women, the very opposite conclusion from the first reading.

It is this kind of ambiguity, generated by accenting words or phrases that produces the fallacy of ACCENT.

And there are countless other examples. Consider this one: “We should be kind to our enemies.” What a difference an emphasis can make in this sentence. If we say “WE should be kind to our enemies,” we might be led to draw the conclusion that “they” are not under the same moral obligation. And if we say, “We SHOULD be kind to our enemies,” this may be taken to imply that being kind to our enemies is only a recommendation. And if we emphasize OUR, or ENEMIES, the meaning changes as well, and mistaken conclusions can be drawn on the basis of this ambiguity of meaning.

There are two other ways that the fallacy of accent can be committed. First, in writing we might simply resort to small print in an effort to mislead people into drawing conclusions that are not warranted. We see this on motel signs: ROOMS: \$50<sub>and up</sub>. And if we want to hide something in a contract we can always resort to putting it in what we call “fine print.” Such cases are instances of the fallacy of accent.

Secondly, we can accent something by pulling it out of context and leading people to draw mistaken conclusions. For example, suppose that some movie critic said in a review of a movie “It would have been a great

movie had the script been improved.” On the basis of this remark an advertising agent promoting the movie says: “Critics call it ‘...a great movie.’” This is the fallacy of accent.

### **17. Amphiboly**

Often ambiguities are generated by poor grammatical construction. Many cases of such poor construction involve syntax, or word or phrase order. The most common of these mistakes occurs when a modifying phrase or word is syntactically misplaced so that it modifies or qualifies some other word or phrase other than what it was intended to modify or qualify. Sometimes such words or phrases are called “dangling modifiers.” Consider this example: “He left her at home with much regret.” This is ambiguous, for it is not clear whether he had “much regret” for leaving her at home, or if she, being left at home had much regret for being left. Here we have the fallacy of amphiboly.

More generally, any time that such poor or loose grammatical construction leads to ambiguities that in turn lead to unwarranted conclusions being drawn, we have the fallacy of amphiboly. Sometimes mistakes of this sort can be quite humorous. For example, a child comes to his mother and asks her: “What is a yet?” And the mother replies that she does not know what he is talking about and further asks why he is asking that question. He replies that he just heard on the news that someone had been shot and that “the bullet was in her yet.” This is just a case of poor grammatical construction that generated the ambiguity that in turn led the young child to draw the mistaken conclusion that “yet” named a part of the human body. This confusion could have easily been avoided had the news reporter said something like “The bullet has yet to be removed from the victim.”

### **18. Composition**

Like the two fallacies of relevance, accident and hasty generalization, there are two fallacies of ambiguity that are mirror images of one another. These are the fallacies of composition and division. Let's take the fallacy of composition first. This fallacy, like its cousin, division, involves ambiguities generated by confusing properties of wholes with properties of parts, and properties of individuals with properties of collections.

Consider first the ambiguity of a collection and individual members of that collection. Suppose someone claims: “Buses use more fuel than cars. Therefore it is not economical to use buses for public transportation.” The fact is that individual buses use more fuel than individual cars. As a collection, however, cars use more fuel than the collection of buses. Given that it takes more cars to transport the same amount of people that one bus can transport, it does not follow that it is not economical to use buses for public transportation. In fact, the opposite follows.

In general we will say that whenever we conclude, that because a particular member of a collection has a particular attribute, that the whole collection has that attribute as well, we have the fallacy of composition. In the example above, we committed this fallacy because we drew the conclusion that because individual buses use more fuel than individual cars, that the same thing is true of the collection of buses vs. the collection of cars. This is simply a mistake in reasoning. Here we meet the fallacy of composition.

Now consider the ambiguity of wholes and parts. Again, the fallacy of composition is committed when one concludes that because the parts have certain attributes that the whole has them as well. From the fact that each part of a certain machine is light in weight, it does not follow that the whole machine is light in weight. This should be clear.

## 19. Division

Now let's simply go in the other direction. When we conclude that because something is true of a collection or of a whole, it must follow that the same is true of the members of the collection or of the parts of the whole, we have a case of the fallacy of division. We can use our examples above in reverse order to illustrate this fallacy of division.

Because cars use more fuel than buses, it will be more economical for my colleague and I to take the school bus to the meeting rather than drive in my car. (Here, of course, the mistake is to think that what is true of the collection is also true of each member of the collection.) Because this machine is heavy, its parts must be heavy. (Again, what is true of the parts is not necessarily true of the whole.)

As I said, we must be careful not to confuse composition and division with accident and hasty generalization. In fact these two sets of fallacies are so closely related that there is some chance that they will be confused. To avoid this mistake, just remember this simple distinction:

**A. Accident and Hasty Generalization: general rules and exceptions**

**B. Composition and Division: wholes and parts or individuals and collections.**

If you keep this distinction in mind, you will be less likely to confuse these two sets of fallacies. Even so, sometimes keeping these two sets of fallacies clearly distinguished is not easy to do. Consider the following argument:

***“Every third child born in New York City is a Roman Catholic. Therefore Protestants should have only two children.”***

Now this humorous argument is definitely fallacious. But what is the fallacy? Arguably, we could say the fallacy is division, for what is true of the whole collection of children born in New York City, is not true of the children born in each individual family. It may also be plausible to say that the fallacy here is the fallacy of accident, at least if we reasoned as follows: while the generalization that “every third child born in New York City is a Roman Catholic” may be true, it does not follow that we can apply this generalization to every particular case. To complicate things a bit further, it is also plausible to say that this argument commits the fallacy of equivocation. Clearly the phrase “every third child” is used in two very different senses. In the one case it means simply “one third of the children born in the general population of New York City,” in the other it means, “the third child in a particular family.”

Again, the moral of this is to remind you that one and the same passage can commit more than one fallacy.

Now it is time to have a go at identifying some fallacies of relevance and ambiguity in the *Workbook*. Just to keep you honest, there may be some passages in these examples that do not commit any fallacy at all. In this case, the correct answer is, “no fallacy.”

# STUDY GUIDE

## Chapter 4 – Identifying Fallacies

### Fallacies of Relevance

**Ignorance:** Committed when an attempt is made to justify a conclusion on the basis of a lack of evidence.

**Pity:** Committed when an attempt is made to justify a conclusion on the basis of pity.

**Desire:** Committed when an attempt is made to justify a conclusion on the basis of a desire that it is true.

**Authority:** Committed when an attempt is made to justify a conclusion on the basis of an appeal to authority.

**Begging the Question:** Committed when an attempt is made to justify a conclusion on the basis of a premise that is a disguised version of the conclusion

**Character-Abusive:** Committed when a conclusion is discredited on the basis of an attack of the character of the one making the argument. For example: “You must ignore his evidence. He is a thief.”

**Character-Circumstantial:** Committed when a conclusion is discredited on the basis of the special circumstances of the one making the argument. For example, “His conclusion that abortion is wrong is not convincing because he is a Roman Catholic priest.”

**Complex Question:** Committed when an attempt is made to justify a conclusion on the basis of an appeal to a question that contains a concealed assumption. For example, “Have you stopped beating your wife?” This question assumes that you have beaten your wife.

**False Cause:** Committed when an attempt is made to justify a conclusion on the basis of assuming that one event is the cause of another when in fact the events are not causally related at all.

**Popularity:** Committed when an attempt is made to justify a conclusion on the basis of an appeal to popular opinion. For example, “Everybody is doing it, so it is something I am justified in doing.”

**Force:** Committed whenever an attempt is made to justify a conclusion on the basis of a threat, veiled or explicit.

**Hasty Generalization:** (Converse Accident) Committed when an attempt is made to justify a generalized conclusion on the basis of an appeal to exceptional or limited cases. For example, arguing that because lying is morally permissible (perhaps to save a life) that all lying is morally permissible.

**Accident:** Committed when an attempt is made to justify a conclusion on the basis of an appeal to a general rule that does not fit an exceptional circumstance. It does not follow, for example, that because generally one should tell the truth, that one should tell the truth in every circumstance.

**Irrelevant Conclusion:** Committed when an attempt is made to justify a conclusion on the basis of an appeal to premises that do not in fact support the conclusion they are offered in support of, but another conclusion that is not at issue and is often readily agreed to.

### Fallacies of Ambiguity

**Equivocation:** Committed when an attempt is made to justify a conclusion on the basis of an ambiguity caused by using a word or phrase that occurs in the argument in two different senses.

**Amphiboly:** Committed when an attempt is made to justify a conclusion on the basis of an ambiguity caused by poor grammatical construction, usually in the form of a “dangling modifier.”

**Accent:** Committed when an attempt is made to justify a conclusion on the basis of an ambiguity caused by emphasizing or de-emphasizing a word or phrase in an argument, or by taking a word or phrase out of context.

**Composition:** Committed when an attempt is made to justify a conclusion on the basis of an ambiguity between the properties of the whole and its parts or between a collection and its members. This fallacy occurs when an inference is made that the whole or collection has a certain property because its parts or members have that property.

**Division:** Committed when an attempt is made to justify a conclusion on the basis of an ambiguity between the properties of the whole and its parts or between a collection and its members. This fallacy occurs when the inference is made that because the whole or collection has a certain property, its parts or members must also have it.