decides to do something radical like, say, enable companies to fire service-sector workers who assault their customers. The unions see this as the first step on the road to slavery and call a national strike. After a week of posturing the government backs down and waiters and sales clerks go back to insulting customers just as they have done since time immemorial.

—S. Clarke, “No Sex, Please, We’re French,” 

10. Hiroyuki Suzuki was formerly a member of the Sakaume gumi, an independent crime family in Japan known for its role in gambling. Mr. Suzuki’s wife Mariko broke her kneecap, and when Mariko went to church the next Sunday, the minister put his hands on her broken knee and pronounced it healed. She walked away from church that day. Mr. Suzuki regarded her religion as a silly waste of time—but he was fascinated by the recovery of her knee. “In gambling,” he said, “you use dice. Dice are made from bone. If God could heal her bone, I figured he could probably assist my dice and make me the best dice thrower in all of Japan.” Mr. Suzuki’s gambling skills did improve, enabling him to pay off his debts. He now says his allegiance is to Jesus.

—Stephanie Strom, “He Watched over His Rackets,” 

4.6 Fallacies of Ambiguity

The meaning of words or phrases may shift as a result of inattention, or may be deliberately manipulated within the course of an argument. A term may have one sense in a premise but quite a different sense in the conclusion. When the inference drawn depends on such changes it is, of course, fallacious. Mistakes of this kind are called fallacies of ambiguity or sometimes “sophisms.” The deliberate use of such devices is usually crude and readily detected—but at times the ambiguity may be obscure, the error accidental, the fallacy subtle. Five varieties are distinguished here.

A1. EQUIVOCATION

Most words have more than one literal meaning, and most of the time we have no difficulty keeping those meanings separate by noting the context and using our good sense when reading and listening. Yet when we confuse the several meanings of a word or phrase—accidentally or deliberately—we are
using the word equivocally. If we do that in the context of an argument, we commit the **fallacy of equivocation**.

Sometimes the equivocation is obvious and absurd and is used in a joking line or passage. Lewis Carroll’s account of the adventures of Alice in *Through the Looking Glass* is replete with clever and amusing equivocations. One of them goes like this:

“Who did you pass on the road?” the King went on, holding his hand out to the messenger for some hay.

“Nobody,” said the messenger.

“Quite right,” said the King; “this young lady saw him too. So of course Nobody walks slower than you.”

The equivocation in this passage is in fact rather subtle. As it is first used here, the word “nobody” simply means “no person.” But reference is then made using a pronoun (“him”), as though that word (“nobody”) had named a person. And when subsequently the same word is capitalized and plainly used as a name (“Nobody”), it putatively names a person having a characteristic (not being passed on the road) derived from the first use of the word. Equivocation is sometimes the tool of wit—and Lewis Carroll was a very witty逻辑ian.*

Equivocal arguments are always fallacious, but they are not always silly or comic, as in the following excerpt:

There is an ambiguity in the phrase “have faith in” that helps to make faith look respectable. When a man says that he has faith in the president he is assuming that it is obvious and known to everybody that there is a president, that the president exists, and he is asserting his confidence that the president will do good work on the whole. But, if a man says he has faith in telepathy, he does not mean that he is confident that telepathy will do good work on the whole, but that he believes that telepathy really occurs sometimes, that telepathy exists. Thus the phrase “to have faith in x” sometimes means to be confident that good work will be done by x, who is assumed or known to exist, but at other times means to believe that x exists. Which does it mean in the phrase “have faith in God”? It means ambiguously both; and the self-evidence of what it means in the one sense recommends what it means in the other sense. If there is a perfectly powerful and good god it is self-evidently reasonable to believe that he will do good. In this sense “have faith in God” is a reasonable exhortation. But it insinuates the other sense, namely “believe that

---

*This passage very probably inspired David Powers, who formally changed his name to Absolutely Nobody and ran as an independent candidate for lieutenant governor of the state of Oregon. His campaign slogan was “Hi, I’m Absolutely Nobody. Vote for me.” In the general election of 1992, he drew 7 percent of the vote.
there is a perfectly powerful and good god, no matter what the evidence.” Thus the reasonableness of trusting God if he exists is used to make it seem also reasonable to believe that he exists.35

One kind of equivocation deserves special mention. This is the mistake that arises from the misuse of “relative” terms, which have different meanings in different contexts. For example, the word “tall” is a relative word; a tall man and a tall building are in quite different categories. A tall man is one who is taller than most men, a tall building is one that is taller than most buildings. Certain forms of argument that are valid for nonrelative terms break down when relative terms are substituted for them. The argument “an elephant is an animal; therefore a gray elephant is a gray animal” is perfectly valid. The word “gray” is a nonrelative term. But the argument “an elephant is an animal; therefore a small elephant is a small animal” is ridiculous. The point here is that “small” is a relative term: A small elephant is a very large animal. The fallacy is one of equivocation with regard to the relative term “small.” Not all equivocation on relative terms is so obvious, however. The word “good” is a relative term and is frequently equivocated on when it is argued, for example, that so-and-so is a good general and would therefore be a good president, or that someone is a good scholar and is therefore likely to be a good teacher.

A2. AMPHIBOLY

The fallacy of amphiboly occurs when one is arguing from premises whose formulations are ambiguous because of their grammatical construction. The word “amphiboly” is derived from the Greek, its meaning in essence being “two in a lump,” or the “doubleness” of a lump. A statement is amphibolous when its meaning is indeterminate because of the loose or awkward way in which its words are combined. An amphibolous statement may be true in one interpretation and false in another. When it is stated as premise with the interpretation that makes it true, and a conclusion is drawn from it on the interpretation that makes it false, then the fallacy of amphiboly has been committed.

In guiding electoral politics, amphiboly can mislead as well as confuse. During the 1990s, while he sat in the U.S. House of Representatives as a Democrat from California, Tony Coelho is reported to have said: “Women prefer Democrats to men.” Amphibolous statements make dangerous premises—but they are seldom encountered in serious discourse.

What grammarians call “dangling” participles and phrases often present amphiboly of a striking sort, as in “The farmer blew out his brains after
taking affectionate farewell of his family with a shotgun.” And tidbits in the *New Yorker* make acid fun of writers and editors who overlook careless amphiboly:

Dr. Salick donated, along with his wife, Gloria, $4.5 million to Queens College for the center.

*Gloria is tax-deductible.*

### A3. ACCENT

We have seen that shifting the meaning of some term in an argument may result in a fallacy of ambiguity. Most commonly that shift is an equivocation, as noted earlier. Sometimes, however, the shift is the result of a change in emphasis on a single word or phrase, whose meaning does not change. When the premise of an argument relies on one possible emphasis, but a conclusion drawn from it relies on the meaning of the same words emphasized differently, the *fallacy of accent* has been committed.

This fallacy can be very serious, and in argument it can be very damaging. But its name seems innocuous. This is due, in part, to the origin of the name in the classification of fallacies first presented by Aristotle. It happens that in the Greek language of Aristotle’s day, some words spelled identically had different meanings depending on the way in which they were pronounced, or accented. And those different meanings could result in a deceptive argument, appropriately called a fallacy of accent. In English today there are not very many cases in which changing the accent in a word changes the meaning of the word. Three of the most common are *increase* and *increase*, *insult* and *insult*, *record* and *record*. These pairs of words accented differently mean different parts of speech—one member of each pair is a noun, the other a verb—and thus it is unlikely that fallacious argument would now arise from those differently accented words.

Over the centuries, however, while the Aristotelian name has been retained, it has come to be applied to a much wider category, which includes the misleading uses of *emphasis* in various forms and the use of meanings deliberately taken out of context. We are greatly stretching the name “accent” that Aristotle used. If we could overcome the weight of tradition, we might wisely rename the argument that misleads in this way “the fallacy of emphasis.”

Consider, as an illustration, the different meanings that can be given to the statement

*We should not speak ill of our friends.*

When the sentence is read without any special stress on one of its words, this injunction is surely one with which we would all agree. But, if the sentence is
read with stress on the word “friends,” we might understand it to suggest that speaking ill of those who are not our friends is not precluded. Such an injunction is no longer acceptable as a moral rule. Or suppose we stress the word “speak” in this sentence. Then it might suggest that whereas nasty speech is to be avoided, one may work ill even on one’s friends—a very troubling conclusion. If the word “we” is emphasized, the suggestion arises that the injunction applies to us but not to others. And so on. The various arguments that emerge are plainly the outcome of the deliberate manipulation of emphasis; the sentence can be used to achieve assorted fallacious ambiguities. How is the sentence to be rightly understood? That depends on its context, of course. Often, a phrase or a passage can be understood correctly only when its context is known, because that context makes clear the sense in which the words are intended.

Therefore the fallacy of accent may be construed broadly to include the distortion produced by pulling a quoted passage out of its context, putting it in another context, and there drawing a conclusion that could never have been drawn in the original context. Quoting out of context is sometimes done with deliberate craftiness. In the presidential election campaign of 1996 the Democratic vice-presidential candidate, Al Gore, was quoted by a Republican press aide as having said that “there is no proven link between smoking and lung cancer.” Those were indeed Mr. Gore’s exact words, uttered during a television interview in 1992. But they were only part of a sentence. In that interview, Mr. Gore’s full statement was that some tobacco company scientists “will claim with a straight face that there is no proven link between smoking and lung cancer. . . . But the weight of the evidence accepted by the overwhelming preponderance of scientists is, yes, smoking does cause lung cancer.”

The omission of the words “will claim with a straight face” and of Gore’s express conviction that cancer is caused by smoking, unfairly reversed the sense of the passage from which the quotation was pulled. The argument suggested by the abbreviated quotation, having the apparent conclusion that Mr. Gore seriously doubts the causal link between smoking and cancer, is an egregious example of the fallacy of accent.

Deliberate distortion of this kind is not rare. A biography by Thomas DiLorenzo, purporting to show that Abraham Lincoln was not the advocate of human equality he is widely thought to have been, quotes words of Lincoln that appear to mock the principle that “all men are created equal.” Lincoln is quoted thus: “I am sorry to say that I have never seen two men of whom it is true. But I must admit I never saw the Siamese Twins, and therefore will not dogmatically say that no man ever saw a proof of this sage aphorism.” DiLorenzo then remarks that such mockery contrasts sharply with the
“seductive words of the Gettysburg Address, eleven years later, in which he purported to rededicate the nation to the notion that all men are created equal.” But DiLorenzo fails to report that those quoted words were in fact Lincoln’s account of the view of an unnamed Virginia clergyman, a view he goes on immediately to reject, saying that it “sounds strangely in republican America.” DiLorenzo’s failure to report the context of the words quoted renders his argument fallacious and disreputable.

Advertising often relies on the same device. A theater critic who says of a new play that it is far from the funniest appearing on Broadway this year may find herself quoted in an ad for the play: “Funniest appearing on Broadway this year!” To avoid such distortions, and the fallacies of accent that are built on them, the responsible writer must be scrupulously accurate in quotation, always indicating whether italics were in the original, indicating (with dots) whether passages have been omitted, and so on.

Physical manipulation of print or pictures is commonly used to mislead deliberately through accent. Sensational words appear in large letters in the headlines of newspaper reports, deliberately suggesting mistaken conclusions to those who glance hastily at them. Later in the report the headline is likely to be qualified by other words in much smaller letters. To avoid being tricked, by news reports or in contracts, one is well advised to give careful attention to “the small print.” In political propaganda the misleading choice of a sensational heading or the use of a clipped photograph, in what purports to be a factual report, will use accent shrewdly so as to encourage the drawing of conclusions known by the propagandist to be false. An account that may not be an outright lie may yet distort by accent in ways that are deliberately manipulative or dishonest.

Such practices are hardly rare in advertising. A remarkably low price often appears in very large letters, followed by “and up” in tiny print. Wonderful bargains in airplane fares are followed by an asterisk, with a distant footnote explaining that the price is available only three months in advance for flights on Thursdays following a full moon, or that there may be other “applicable restrictions.” Costly items with well-known brand names are advertised at very low prices, with a small note elsewhere in the ad that “prices listed are for limited quantities in stock.” Readers are drawn into the store but are likely to be unable to make the purchase at the advertised price. Accented passages, by themselves, are not strictly fallacies; they become embedded in fallacies when one interpretation of a phrase, flowing from its accent, is relied on to suggest a conclusion (for example, that the plane ticket or brand item can be purchased at the listed price) that is very doubtful when account is taken of the misleading accent.
Even the literal truth can be used, by manipulating its placement, so to deceive with accent. Disgusted with his first mate, who was repeatedly inebriated while on duty, the captain of a ship noted in the ship’s log, almost every day, “The mate was drunk today.” The angry mate took his revenge. Keeping the log himself on a day when the captain was ill, the mate recorded, “The captain was sober today.”

A4. COMPOSITION

The term fallacy of composition is applied to both of two closely related types of mistaken argument. The first may be described as reasoning fallaciously from the attributes of the parts of a whole to the attributes of the whole itself. A flagrant example is to argue that, because every part of a certain machine is light in weight, the machine “as a whole” is light in weight. The error here is manifest when we recognize that a very heavy machine may consist of a very large number of lightweight parts. Not all examples of fallacious composition are so obvious, however. Some are misleading. One may hear it seriously argued that, because each scene of a certain play is a model of artistic perfection, the play as a whole is artistically perfect. This is as much a fallacy of composition as to argue that, because every ship is ready for battle, the whole fleet must be ready for battle.

The other type of composition fallacy is strictly parallel to that just described. Here, the fallacy is reasoning from attributes of the individual elements or members of a collection to attributes of the collection or totality of those elements. For example, it would be fallacious to argue that because a bus uses more gasoline than an automobile, all buses use more gasoline than all automobiles. This version of the fallacy of composition turns on a confusion between the “distributive” and the “collective” use of general terms. Thus, although college students may enroll in no more than six different classes each semester, it is also true that college students enroll in hundreds of different classes each semester. This verbal conflict is easily resolved. It may be true of college students, distributively, that each may enroll in no more than six classes each semester. We call this a distributive use of the term “college students,” because we are speaking of college students taken singly. But it is true of college students, taken collectively, that they enroll in hundreds of different classes each semester. This is a collective use of the term “college students,” in that we are speaking of college students all together, as a totality. Thus, buses, distributively, use more gasoline than automobiles, but collectively, automobiles use more gasoline than buses, because there are so many more of them.
This second kind of composition fallacy may be defined as the invalid inference that what may truly be predicated of a term distributively may also be truly predicated of the term collectively. Thus, the atomic bombs dropped during World War II did more damage than did the ordinary bombs dropped—but only distributively. The matter is exactly reversed when the two kinds of bombs are considered collectively, because so many more conventional bombs were dropped than atomic ones. Ignoring this distinction in an argument permits the fallacy of composition.

These two varieties of composition, though parallel, are really distinct because of the difference between a mere collection of elements and a whole constructed out of those elements. Thus, a mere collection of parts is no machine; a mere collection of bricks is neither a house nor a wall. A whole, such as a machine, a house, or a wall, has its parts organized or arranged in certain definite ways. And because organized wholes and mere collections are distinct, so are the two versions of the composition fallacy, one proceeding invalidly to wholes from their parts, the other proceeding invalidly to collections from their members or elements.

A5. DIVISION

The fallacy of division is simply the reverse of the fallacy of composition. In it the same confusion is present, but the inference proceeds in the opposite direction. As in the case of composition, two varieties of the fallacy of division may be distinguished. The first kind of division consists of arguing fallaciously that what is true of a whole must also be true of its parts. To argue that, because a certain corporation is very important and Mr. Doe is an official of that corporation, therefore Mr. Doe is very important, is to commit the fallacy of division. This first variety of the division fallacy is committed in any such argument, as in moving from the premise that a certain machine is heavy, or complicated, or valuable, to the conclusion that this or any other part of the machine must be heavy, or complicated, or valuable. To argue that a student must have a large room because the room is located in a large dormitory would be still another instance of the first kind of fallacy of division.

The second type of division fallacy is committed when one argues from the attributes of a collection of elements to the attributes of the elements themselves. To argue that, because university students study medicine, law, engineering, dentistry, and architecture, therefore each, or even any, university student studies medicine, law, engineering, dentistry, and architecture is to commit the second kind of division fallacy. It is true that university students, collectively, study all these various subjects, but it is false that university students, distributively, do so. Instances of this fallacy of division often look like valid
arguments, for what is true of a class distributively is certainly true of each and every member. Thus the argument

- Dogs are carnivorous.
- Afghan hounds are dogs.
- Therefore Afghan hounds are carnivorous.

is perfectly valid. Closely resembling this argument is another,

- Dogs are frequently encountered in the streets.
- Afghan hounds are dogs.
- Therefore Afghan hounds are frequently encountered in the streets.

which is invalid, committing the fallacy of division. Some instances of division are obviously jokes, as when the classical example of valid argumentation,

- Humans are mortal.
- Socrates is a human.
- Therefore Socrates is mortal.

is parodied by the fallacious

- American Indians are disappearing.
- That man is an American Indian.
- Therefore that man is disappearing.

The old riddle, “Why do white sheep eat more than black ones?” turns on the confusion involved in the fallacy of division for the answer: “Because there are more of them,” treats collectively what seemed to be referred to distributively in the question.

The fallacy of division, which springs from a kind of ambiguity, resembles the fallacy of accident (discussed in Section 4.5), which springs from unwarranted presumption. Likewise, the fallacy of composition, also flowing from ambiguity, resembles the hasty generalization we call “converse accident.” But these likenesses are superficial. An explanation of the differences between the two pairs of fallacies will be helpful in grasping the errors committed in all four.

If we infer, from looking at one or two parts of a large machine, that because they happen to be well designed, every one of the machine’s many parts is well designed, we commit the fallacy of converse accident or hasty generalization, for what is true about one or two parts may not be true of all. If we examine every single part and find that each is carefully made, and from that finding infer that the entire machine is carefully made, we also reason fallaciously, because however carefully the parts were produced, they may have been assembled awkwardly or carelessly. Here the fallacy is one of composition. In converse accident, one argues
that some atypical members of a class have a specified attribute, and therefore that all members of the class, distributively, have that attribute; in composition, one argues that, because each and every member of the class has that attribute, the class itself (collectively) has that attribute. The difference is great. In converse accident, all predications are distributive, whereas in the composition fallacy, the mistaken inference is from distributive to collective predication.

Similarly, division and accident are two distinct fallacies; their superficial resemblance hides the same kind of underlying difference. In division, we argue (mistakenly) that, because the class itself has a given attribute, each of its members also has it. Thus, it is the fallacy of division to conclude that, because an army as a whole is nearly invincible, each of its units is nearly invincible. In accident, we argue (also mistakenly) that, because some rule applies in general, there are no special circumstances in which it might not apply. Thus, we commit the fallacy of accident when we insist that a person should be fined for ignoring a “No Swimming” sign when jumping into the water to rescue someone from drowning.

**OVERVIEW**

**Fallacies of Ambiguity**

A1. **Equivocation**
An informal fallacy in which two or more meanings of the same word or phrase have been confused.

A2. **Amphiboly**
An informal fallacy arising from the loose, awkward, or mistaken way in which words are combined, leading to alternative possible meanings of a statement.

A3. **Accent**
An informal fallacy committed when a term or phrase has a meaning in the conclusion of an argument different from its meaning in one of the premises, the difference arising chiefly from a change in emphasis given to the words used.

A4. **Composition**
An informal fallacy in which an inference is mistakenly drawn from the attributes of the parts of a whole to the attributes of the whole itself.

A5. **Division**
An informal fallacy in which a mistaken inference is drawn from the attributes of a whole to the attributes of the parts of the whole.
Unlike accident and converse accident, composition and division are fallacies of ambiguity, resulting from the multiple meanings of terms. Wherever the words or phrases used may mean one thing in one part of the argument and another thing in another part, and those different meanings are deliberately or accidentally confounded, we can expect the argument to be fallacious.

**EXERCISES**

A. Identify and explain the fallacies of ambiguity that appear in the following passages.

1. . . . the universe is spherical in form . . . because all the constituent parts of the universe, that is the sun, moon, and the planets, appear in this form.
   —Nicolaus Copernicus, *The New Idea of the Universe*, 1514

2. Robert Toombs is reputed to have said, just before the Civil War, “We could lick those Yankees with cornstalks.” When he was asked after the war what had gone wrong, he is reputed to have said, “It’s very simple. Those damn Yankees refused to fight with cornstalks.”
   —E. J. Kahn, Jr., “Profiles (Georgia),” *The New Yorker*, 13 February 1978

3. To press forward with a properly ordered wage structure in each industry is the first condition for curbing competitive bargaining; but there is no reason why the process should stop there. What is good for each industry can hardly be bad for the economy as a whole.
   —Edmond Kelly, *Twentieth Century Socialism*, 1910

4. No man will take counsel, but every man will take money: therefore money is better than counsel.
   —Jonathan Swift

5. I’ve looked everywhere in this area for an instruction book on how to play the concertina without success. (Mrs. F. M., Myrtle Beach, S.C., *Charlotte Observer*)
   You need no instructions. Just plunge ahead boldly.
   —*The New Yorker*, 21 February 1977

6. . . . each person’s happiness is a good to that person, and the general happiness, therefore, a good to the aggregate of all persons.
   —John Stuart Mill, *Utilitarianism*, 1861
7. If the man who “turnips!” cries
Cry not when his father dies,
’Tis a proof that he had rather
Have a turnip than his father.
—Hester L. Piozzi, *Anecdotes of Samuel Johnson*, 1932

8. Fallaci wrote her: “You are a bad journalist because you are a bad woman.”

9. A Worm-eating Warbler was discovered by Hazel Miller in Concord, while walking along the branch of a tree, singing, and in good view. (*New Hampshire Audubon Quarterly*)
That’s our Hazel—surefooted, happy, and with just a touch of the exhibitionist.
—*The New Yorker*, 2 July 1979

10. The basis of logic is the syllogism, consisting of a major and a minor premise and a conclusion—thus:
*Major Premise*: Sixty men can do a piece of work sixty times as quickly as one man;
*Minor Premise*: One man can dig a post-hole in sixty seconds; therefore—*Conclusion*: Sixty men can dig a post-hole in one second.
This may be called the syllogism arithmetical, in which, by combining logic and mathematics, we obtain a double certainty and are twice blessed.
—Ambrose Bierce, *The Devil’s Dictionary*, 1911

B. Each of the following passages may be plausibly criticized by some who conclude that it contains a fallacy, but each may be defended by some who deny that the argument is fallacious. Discuss the merits of the argument in each passage, and explain why you conclude that it does (or does not) contain a fallacy.

1. Seeing that eye and hand and foot and every one of our members has some obvious function, must we not believe that in like manner a human being has a function over and above these particular functions?
   —Aristotle, *Nicomachean Ethics*

2. All phenomena in the universe are saturated with moral values. And, therefore, we can come to assert that the universe for the Chinese is a moral universe.
3. The only proof capable of being given that an object is visible, is that people actually see it. The only proof that a sound is audible, is that people hear it: and so of the other sources of our experience. In like manner, I apprehend, the sole evidence it is possible to produce that anything is desirable, is that people actually desire it.

—John Stuart Mill, *Utilitarianism*, 1863

4. Thomas Carlyle said of Walt Whitman that he thinks he is a big poet because he comes from a big country.

—Alfred Kazin, “The Haunted Chamber,” 
*The New Republic*, 23 June 1986

5. Mr. Levy boasts many excellent *bona fides* for the job [of Chancellor of the New York City Public Schools]. But there is one bothersome fact: His two children attend an elite private school on Manhattan’s Upper East Side. Mr. Levy . . . should put his daughter and son in the public schools. I do not begrudge any parent the right to enroll a child in a private school. My wife and I considered several private schools before sending our children to a public school in Manhattan. Mr. Levy is essentially declaring the public schools unfit for his own children.

—Samuel G. Freedman, “Public Leaders, Private Schools,” 

C. Identify and explain the fallacies of relevance or defective induction, or presumption, or ambiguity as they occur in the following passages. Explain why, in the case of some, it may be plausibly argued that what appears at first to be a fallacy is not when the argument is interpreted correctly.

1. John Angus Smith, approaching an undercover agent, offered to trade his firearm, an automatic, for two ounces of cocaine that he planned to sell at a profit. Upon being apprehended, Smith was charged with “using” a firearm “during and in relation to . . . a drug trafficking crime.” Ordinarily conviction under this statute would result in a prison sentence of five years; however, if the firearm, as in this case, is “a machine gun or other automatic weapon” the mandatory sentence is 30 years. Smith was convicted and sentenced to 30 years in prison. The case was appealed to the U.S. Supreme Court.

   Justice Antonin Scalia argued that, although Smith certainly did intend to trade his gun for drugs, that was not the sense of “using” intended by the statute. “In the search for statutory meaning we give nontechnical terms their ordinary meanings . . . to speak of ‘using a firearm’ is to speak of using it for its distinctive purpose, as a weapon.” If asked whether you use a cane, he pointed out, the question asks
whether you walk with a cane, not whether you display “your grandfather’s silver-handled walking stick in the hall.”

Justice Sandra Day O’Connor retorted that we may do more than walk with a cane. “The most infamous use of a cane in American history had nothing to do with walking at all—the caning (in 1856) of Senator Charles Sumner in the United States Senate.”

Justice Scalia rejoined that the majority of the Court “does not appear to grasp the distinction between how a word can be used and how it is ordinarily used. . . . I think it perfectly obvious, for example, that the falsity requirement for a perjury conviction would not be satisfied if a witness answered ‘No’ to a prosecutor’s enquiry whether he had ever ‘used a firearm’ even though he had once sold his grandfather’s Enfield rifle to a collector.”

Justice O’Connor prevailed; Smith’s conviction was affirmed.

—John Angus Smith v. United States, 508 U.S. 223, 1 June 1993

2. *Time Magazine* book critic Lev Grossman was “quite taken aback” in the summer of 2006 when he saw a full-page newspaper advertisement for Charles Frazier’s novel, *Thirteen Moons*, that included a one-word quotation attributed to *Time*. Grossman had written, “Frazier works on an epic scale, but his genius is in the detail.” The one-word quotation by which he was struck was “Genius.”


3. In the Miss Universe Contest of 1994, Miss Alabama was asked: If you could live forever, would you? And why? She answered:

I would not live forever, because we should not live forever, because if we were supposed to live forever, then we would live forever, but we cannot live forever, which is why I would not live forever.

4. Order is indispensable to justice because justice can be achieved only by means of a social and legal order.


5. The Inquisition must have been justified and beneficial, if whole peoples invoked and defended it, if men of the loftiest souls founded and created it severally and impartially, and its very adversaries applied it on their own account, pyre answering to pyre.

—Benedetto Croce, *Philosophy of the Practical*, 1935

6. The following advertisement for a great metropolitan newspaper appears very widely in Pennsylvania:

In Philadelphia nearly everybody reads the Bulletin.
7. . . . since it is impossible for an animal or plant to be indefinitely big or small, neither can its parts be such, or the whole will be the same.
—Aristotle, *Physics*

8. For the benefit of those representatives who have not been here before this year, it may be useful to explain that the item before the General Assembly is that hardy perennial called the “Soviet item.” It is purely a propaganda proposition, not introduced with a serious purpose of serious action, but solely as a peg on which to hang a number of speeches with a view to getting them into the press of the world. This is considered by some to be very clever politics. Others, among whom the present speaker wishes to be included, consider it an inadequate response to the challenge of the hour.
—Henry Cabot Lodge, speech to the United Nations General Assembly, 30 November 1953

9. The war-mongering character of all this flood of propaganda in the United States is admitted even by the American press. Such provocative and slanderous aims clearly inspired today’s speech by the United States Representative, consisting only of impudent slander against the Soviet Union, to answer which would be beneath our dignity. The heroic epic of Stalingrad is impervious to libel. The Soviet people in the battles at Stalingrad saved the world from the fascist plague and that great victory which decided the fate of the world is remembered with recognition and gratitude by all humanity. Only men dead to all shame could try to cast aspersions on the shining memory of the heroes of that battle.
—Anatole M. Baranovsky, speech to the United Nations General Assembly, 30 November 1953

10. Prof. Leon Kass reports a notable response to an assignment he had given students at the University of Chicago. Compose an essay, he asked, about a memorable meal you have eaten. One student wrote as follows:

I had once eaten lunch with my uncle and my uncle’s friend. His friend had once eaten lunch with Albert Einstein. Albert Einstein was once a man of great spirituality. Therefore, by the law of the syllogism, I had once eaten lunch with God.


11. Consider genetically engineered fish. Scientists hope that fish that contain new growth hormones will grow bigger and faster than
normal fish. Other scientists are developing fish that could be introduced into cold, northern waters, where they cannot now survive. The intention is to boost fish production for food. The economic benefits may be obvious, but not the risks. Does this make the risks reasonable?


12. The multiverse theory actually injects the concept of a transcendent Creator at almost every level of its logical structure. Gods and worlds, creators and creatures, lie embedded in each other, forming an infinite regress in unbounded space.

This *reductio ad absurdum* of the multiverse theory reveals what a very slippery slope it is indeed. Since Copernicus, our view of the universe has enlarged by a factor of a billion billion. The cosmic vista stretches one hundred billion trillion miles in all directions—that’s a 1 with 23 zeros. Now we are being urged to accept that even this vast region is just a miniscule fragment of the whole.


13. When Copernicus argued that the Ptolemaic astronomy (holding that the celestial bodies all revolved around the earth) should be replaced by a theory holding that the earth (along with all the other planets) revolved around the sun, he was ridiculed by many of the scientists of his day, including one of the greatest astronomers of that time, Clavius, who wrote in 1581:

Both [Copernicus and Ptolemy] are in agreement with the observed phenomena. But Copernicus’s arguments contain a great many principles that are absurd. He assumed, for instance, that the earth is moving with a triple motion . . . [but] according to the philosophers a simple body like the earth can have only a simple motion. . . . Therefore it seems to me that Ptolemy’s geocentric doctrine must be preferred to Copernicus’s doctrine.

14. All of us cannot be famous, because all of us cannot be well known.

—Jesse Jackson, quoted in The New Yorker, 12 March 1984

15. The God that holds you over the pit of hell, much as one holds a spider or some loathsome insect over the fire, abhors you, and is dreadfully provoked; his wrath towards you burns like fire; he looks upon you as worthy of nothing else but to be cast into the fire; you are ten thousand times so abominable in his eyes as the most hateful and
venomous serpent is in ours. You have offended him infinitely more
than a stubborn rebel did his prince; and yet it is nothing but his
hand that holds you from falling into the fire every moment.

16. Mysticism is one of the great forces of the world’s history. For religion
is nearly the most important thing in the world, and religion never re-
 mains for long altogether untouched by mysticism.
—John McTaggart, Ellis McTaggart, “Mysticism,” Philosophical Studies, 1934

17. If science wishes to argue that we cannot know what was going on in
[the gorilla] Binti’s head when she acted as she did, science must also
acknowledge that it cannot prove that nothing was going on. It is be-
cause of our irresolvable ignorance, as much as fellow-feeling, that
we should give animals the benefit of doubt and treat them with the
respect we accord ourselves.
—Martin Rowe and Mia Macdonald, “Let’s Give Animals Respect They

18. If we want to know whether a state is brave we must look to its army,
not because the soldiers are the only brave people in the community,
but because it is only through their conduct that the courage or cow-
ardice of the community can be manifested.
—Richard L. Nettleship, Lectures on the Republic of Plato, 1937

19. Whether we are to live in a future state, as it is the most important
question which can possibly be asked, so it is the most intelligible one
which can be expressed in language.

20. Which is more useful, the Sun or the Moon? The Moon is more useful
since it gives us light during the night, when it is dark, whereas the
Sun shines only in the daytime, when it is light anyway.
—George Gamow (inscribed in the entry hall of the
Hayden Planetarium, New York City)

SUMMARY

A fallacy is a type of argument that may seem to be correct, but that proves
on examination not to be so. In this chapter we have grouped the major infor-
mal fallacies under four headings: (1) fallacies of relevance, (2) fallacies of
defective induction, (3) fallacies of presumption, and (4) fallacies of ambiguity. Within each group we have named, explained, and illustrated the most common kinds of reasoning mistakes.

1. FALLACIES OF RELEVANCE

R1. Appeal to the Populace (ad populum): When correct reasoning is replaced by devices calculated to elicit emotional and nonrational support for the conclusion urged.

R2. The Red Herring: When correct reasoning is manipulated by the introduction of some event or character that deliberately misleads the audience and thus hinders rational inference.

R3. The Straw Man: When correct reasoning is undermined by the deliberate misrepresentation of the opponent’s position.

R4. The Attack on the Person (ad hominem): When correct reasoning about some issue is replaced by an attack upon the character or special circumstances of the opponent.

R5. The Appeal to Force (ad baculum): When reasoning is replaced by threats in the effort to win support or assent.

R6. Missing the Point (ignoratio elenchi): When correct reasoning is replaced by the mistaken refutation of a position that was not really at issue.

2. FALLACIES OF DEFECTIVE INDUCTION

In fallacies of defective induction, the premises may be relevant to the conclusion, but they are far too weak to support the conclusion. Four major fallacies are as follows.

D1. Appeal to Ignorance (ad ignorantiam): When it is argued that a proposition is true on the ground that it has not been proved false, or when it is argued that a proposition is false because it has not been proved true.

D2. Appeal to Inappropriate Authority (ad verecundiam): When the premises of an argument appeal to the judgment of some person or persons who have no legitimate claim to authority in the matter at hand.

D3. False Cause: When one treats as the cause of a thing that which is not really the cause of that thing, often relying (as in the subtype post hoc ergo propter hoc) merely on the close temporal succession of two events.
D4. Hasty Generalization (*converse accident*): When one moves carelessly or too quickly from one or a very few instances to a broad or universal claim.

### 3. FALLACIES OF PRESUMPTION

In fallacies of presumption, the mistake in argument arises from relying on some proposition that is assumed to be true but is without warrant and is false or dubious. Three major fallacies are as follows.

**P1. Accident:** When one mistakenly applies a generalization to an individual case that it does not properly govern.

**P2. Complex Question:** When one argues by asking a question in such a way as to presuppose the truth of some assumption buried in that question.

**P3. Begging the Question (*petitio principii***): When one assumes in the premises of an argument the truth of what one seeks to establish in the conclusion of that same argument.

### 4. FALLACIES OF AMBIGUITY

In fallacies of ambiguity, the mistakes in argument arise as a result of the shift in the meaning of words or phrases, from the meanings that they have in the premises to different meanings that they have in the conclusion. Five major fallacies are as follows.

**A1. Equivocation:** When the same word or phrase is used with two or more meanings, deliberately or accidentally, in formulating an argument.

**A2. Amphiboly:** When one of the statements in an argument has more than one plausible meaning, because of the loose or awkward way in which the words in that statement have been combined.

**A3. Accent:** When a shift of meaning arises within an argument as a consequence of changes in the emphasis given to its words or parts.

**A4. Composition:** This fallacy is committed (a) when one reasons mistakenly from the attributes of a part to the attributes of the whole, or (b) when one reasons mistakenly from the attributes of an individual member of some collection to the attributes of the totality of that collection.

**A5. Division:** This fallacy is committed (a) when one reasons mistakenly from the attributes of a whole to the attributes of one of its parts, or (b) when one reasons mistakenly from the attributes of a totality of some collection of entities to the attributes of the individual entities within that collection.
End Notes


3Plato, Apology, 34; Jowett translation.


10Interview with Osama bin Laden, CNN, March 1997.


20Fulton J. Sheen, a well-known Catholic bishop, remarked that it would be as fatuous for Albert Einstein to make judgments about God as it would be for Sheen to make judgments about relativity theory. “Both of us,” Sheen wrote, “would be talking about something we know nothing about.” Cited by Laurence A. Marschall, in The Sciences, August 2000.

21The Latin name was originated by John Locke, whose criticism was directed chiefly at those who think that citing learned authorities is enough to win any argument, who think it “a breach of modesty for others to derogate any way from it, and question authority,” and who “style it impudence in anyone who shall stand out against them.” That argument Locke named ad verecundiam—literally, an appeal to the modesty of those who might be so bold as to oppose authority (J. Locke, An Essay Concerning Human Understanding, 1690).


33Weng Shou-Jen, *Record of Instructions* (c. 1518).

34See David Hume, “Sceptical Doubts Concerning the Operations of the Understanding,” in *An Enquiry Concerning Human Understanding*, sec. 4 (1747).


37In the work whose title is generally given as *On Sophistical Refutations*.
