Appendix A: FALLACIES OF REASONING

From Philosophy, The Pursuit of Wisdom, Louis P. Pojman

. . . I would like to identify a number of common fallacies of reasoning. Good reasoning depends on justified beliefs (acceptable premises) and valid logical form. Many arguments, however, fail to satisfy these conditions. I have listed some of the main fallacies of reasoning. See if you can illustrate them with examples of your own.

- *Ad Hominem Argument* This is an argument "against the man." This argument attacks the person instead of the position—for example, "You can't trust what Joan says about abortion, for she is an immoral person." Her argument for or against abortion, however, may be sound on independent grounds. Even the devil has true beliefs. The character of the person is irrelevant to the soundness of the argument.
- *Argument from Authority* Suppose we are arguing about the death penalty, and I tell you that we should believe in the death penalty because Plato believed in it. Since you don't know Plato's reasons (I may not either), it is not sufficient grounds for either of us to believe in the death penalty. We need positive arguments, not simply authority. Advertisements are notorious for subtly and sometimes not so subtly using this device. In a beer commercial, a famous athlete (nicely remunerated for the exercise) may be seen gratifying his thirst, proclaiming the ecstasy of the beverage, as if that were proof of its quality.

  Of course, authority may sometimes be the best we can get and sufficient for justified belief, as when a physicist tells us the conclusions of a complicated physics research or a friend from Australia gives you pertinent information for your upcoming visit to that country. We sometimes do need to trust authority, but often it is an improper substitute for good reasoning.
- *Arguing in a Circle* This is sometimes referred to as "begging the question." Suppose I argue that you should believe that God exists. You ask why. I say, "Because the Bible says so." You ask, "Why should I believe what the Bible says?" I reply, "Because it's the Word of God." That is, I argue in a circle, using my conclusion as a premise to prove the conclusion. Note that all valid deductive arguments can appear as arguing in a circle, since the conclusion of such an argument is contained in the premises. The difference is that in a cogent argument the conclusion brings out a nontrivial feature of the premises. Essentially, arguing in a circle is not invalid, just trivial and unconvincing, having no power to convince an opponent.
- *Argument from Ignorance* This kind of argument occurs when I claim that, because you cannot prove a proposition is false, I am justified in believing it to be true. For example, because you can't prove God doesn't exist, I am free to believe that He does exist. Or because you can't prove that we do not have a soul, I am free to believe that we do.

- *False Dilemma* This happens when we reduce several possibilities to two alternatives. I once read of two travelers facing a swamp in which traveler A said to traveler B, "Since you admit you don't know the way through the swamp and there must be a way, follow me. I must know the way." Of course, neither may know the way. Similarly, someone may argue that since your answer to a problem isn't correct, his or hers must be. But, of course, both may be wrong.
- *Slippery Slope* This is sometimes called the "edge-of-the-wedge" argument (once you let the camel nose under the wedge of the tent, it will capsize the entire tent). Similarly, it will be argued, once we allow act A to occur, event B, which is evil, will occur. Robert Wright has argued that "once you buy the premise that animals can experience pain and pleasure, and that their welfare therefore deserves *some* consideration, you're on the road to comparing yourself with a lobster. There may be some exit ramps along the way—plausible places to separate welfare from rights—but I can't find any" Others have argued that if we allow voluntary euthanasia, we are on the slippery slope to involuntary euthanasia, even eventually to a holocaust. Still others have argued that if we pass a national health care bill, it will inevitably lead to socialism and communism. The slippery slope fallacy ignores the truth that, very often, wise policy is a moderate stance between two extremes and that rational people can hold to a rational position without going to an extreme.
- *Straw Man Argument* This is an instance of misrepresenting an opponent's position. It occurs when someone ignores the evidence for a position and instead attacks an inferior version of the position. In the heat of debate on whether our nation should reduce its military spending, a militarist may argue that his opponent wants to leave our nation defenseless or a willing prey to communism. I once heard of a Russian tourist guide who claimed that she knew that God didn't exist, because if he did, he would announce his presence from heaven. The straw man argument is often a distortion of the other person's position. There is a tendency in all of us to attack a weaker—less plausible—version of our opponent's position. The *principle of charity* is the opposite of the straw man argument. It instructs us to give our opponent's position the very best form we can find—and then try to show it is unsound.
- *Genetic Fallacy* This is arguing against a position or argument because its origins are suspect. Suppose I tell you not to believe in the principles of chemistry because they originated in superstitious alchemy or not to believe in an astronomical theory because it arose from astrological sources. The fact that a theory or position originated in discredited circumstances is irrelevant if the theory is supported by the evidence. For their theories, chemistry and astronomy can produce impressive evidence that is independent of the authority of alchemy and astrology. It doesn't matter where the truth comes from, as long as it is true.