

A WORKBOOK FOR ARGUMENTS

A Complete Course in Critical Thinking

Second Edition

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Chapter IV

Sources

No one can be an expert through direct experience on everything there is to know. We do not live in ancient times ourselves and therefore cannot know first-hand at what age women tended to marry back then. Few of us have enough experience to judge which kinds of cars are safest in a crash. We do not know first-hand what is really happening in Sri Lanka or the state legislature or even the average American classroom or street corner. Instead, we must rely on others—better-situated people, organizations, surveys or reference works—to tell us much of what we need to know about the world. We argue like this:

X (a source that ought to know) says that Y.

Therefore, Y is true.

For instance:

Carl Sagan says that there could be life on Mars.

Therefore, there could be life on Mars.

It's a risky business, though. Supposedly expert sources may be overconfident, or may be misled, or may not even be reliable. And everyone has biases, after all, even innocent ones. Once again we must consider a checklist of standards that truly reliable sources need to meet.

Cite your sources

Some factual assertions, of course, are so obvious or well known that they do not need support at all. It is usually not necessary to *prove* that the United States has fifty states or that Juliet loved Romeo. However, a precise figure for the current population of the United States does need a citation. Likewise, the claim that Juliet was only fourteen should cite a few Shakespearean lines in support.

NO:

I once read that there are cultures in which makeup and clothes are mostly men's business, not women's.

If you're arguing about whether men and women everywhere follow the gender roles familiar to us, this is a relevant example—a striking case of

Rule 14: Seek informed sources

different gender roles. But few of us know anything about this sort of difference first-hand. To nail down the argument, you need to call upon a fully cited source.

YES:

Carol Beckwith, in "Niger's Wodaabe" (*National Geographic* 164, no. 4 [October 1983], 483–509), reports that among the West African Fulani peoples such as the Wodaabe, makeup and clothes are mostly men's business.

Citation styles vary—you may need a handbook of style to find the appropriate style for your purposes—but all include the same basic information: enough so that others can easily find the source on their own.

The "Resources" section on this book's companion Web site has links to instructions and advice for different styles for citing sources. Your school's library or writing center may also have resources for you. (If you don't know whether your school *has* a writing center, find out! Writing centers usually offer help on papers and other writing assignments.)

Rule 14

Seek informed sources

Sources must be qualified to make the statements they make. Honda mechanics are qualified to discuss the merits of different Hondas, midwives and obstetricians are qualified to discuss pregnancy and childbirth, teachers are qualified to discuss the state of their schools, and so on. These sources are qualified because they have the appropriate background and information. For the best information about global climate change, go to climatologists, not politicians.

Where a source's qualifications are not immediately clear, an argument must explain them briefly. Carl Sagan says that there could be life on Mars, eh? But who is Carl Sagan? Here is the answer: Sagan was an astronomer and astrobiologist, a leader in the space program, and among the designers of the first Mars landers. (And, in the spirit of citing sources, I will add that you can find out more about him in William Poundstone's biography, *Carl Sagan: A Life in the Cosmos* [New York: Holt and Company, 1999].) When someone with a background like *that* says that there could be life on Mars, we should listen.

As you explain your source's qualifications, you can also add more evidence to your argument.

Rule 14: Seek informed sources

Carol Beckwith, in "Niger's Wodaabe" (*National Geographic* 164, no. 4 [October 1983], 483–509), reports that among the West African Fulani peoples such as the Wodaabe, makeup and clothes are mostly men's business. Beckwith and an anthropologist colleague lived with the Wodaabe for two years and observed many dances for which the men prepared by lengthy preening, face-painting, and teeth-whitening. (Her article includes many pictures too.) Wodaabe women watch, comment, and choose mates for their beauty—which the men say is the natural way. "Our beauty makes the women want us," one says.

Note that an informed source need not fit our general stereotype of an "authority"—and a person who fits our stereotype of an authority may not even be an informed source. If you're checking out colleges, for instance, students are the best authorities, not administrators or recruiters, because it's the students who know what student life is really like. (Just be sure to find yourself a representative sample.)

Note also that authorities on one subject are not necessarily informed about every subject on which they offer opinions.

Einstein was a pacifist. Therefore, pacifism must be right.

Einstein's genius in physics does not establish him as a genius in political philosophy. Likewise, just because someone can put the title "Doctor" before their name—that is, they have a PhD or MD in some field—does not mean that they are qualified to deliver opinions on any subject whatsoever. (Not to name any names or anything, but there are some quite prominently cited "Doctors" these days whose doctorates actually have nothing to do with the fields in which they make very self-assured and widely publicized pronouncements.)

Sometimes we must rely on sources whose knowledge is better than ours but still limited in various ways. On occasion the best information we can get about what is happening in a war zone or a political trial or inside a business or bureaucracy is fragmentary and filtered through journalists, international human rights organizations, corporate watchdogs, and so on. If you must rely on a source that may have limited knowledge in this way, acknowledge the problem. Let your readers or hearers decide whether imperfect authority is better than none at all.

Truly informed sources rarely expect others to accept their conclusions simply because they assert them. Most good sources will offer at least some reasons or evidence as well—examples, facts, analogies, other kinds of arguments—to help explain and defend their conclusions. Beckwith, for

example, offers photographs and stories from the years she lived with the Wodaabe. Sagan wrote whole books explaining space exploration and what we might find beyond Earth. Thus, while we might need to take some of their *specific* claims on authority alone (for instance, we must take Beckwith at her word that she had certain experiences), we can expect even the best sources to offer arguments as well as their own judgments in support of their general conclusions. Look for those arguments too, then, and look at them critically as well.

Rule 15

Seek impartial sources

People who have the most at stake in a dispute are usually not the best sources of information about the issues involved. Sometimes they may not even tell the truth. People accused in criminal trials are presumed innocent until proven guilty, but we seldom completely believe their claims of innocence without confirmation from impartial witnesses. Readiness to tell the truth as one sees it, though, is not always enough. The truth as one honestly sees it can still be biased. We tend to see what we expect to see. We notice, remember, and pass on information that supports our point of view, but we may not be quite so motivated when the evidence points the other way.

Therefore, look for *impartial* sources: people or organizations who do not have a stake in the immediate issue, and who have a prior and primary interest in accuracy, such as (some) university scientists or statistical databases. Don't just rely on interest groups on *one* side of a major public question for the most accurate information on the issues at stake. Don't just rely on manufacturers' advertisements for reliable information concerning that product.

NO:

My car dealer recommends that I pay \$300 to rustproof my car. He should know; I guess I'd better do it.

He probably *does* know, but he might not be entirely reliable, either. The best information on consumer products and services comes from independent consumer testing agencies, agencies not affiliated with any manufacturer or provider but answering to consumers who want the most accurate information they can get. Do some research!

YES:

Consumer Reports says that rust problems have almost disappeared in modern cars due to better manufacturing, and

advises that dealer rustproofing is not needed (see “Don’t Waste Money on Unnecessary Extras,” *Consumer Reports Buying Guide* 2006, 153). Therefore, I don’t need it!

Likewise, independent service professionals and mechanics are relatively impartial sources of information. On political matters, especially when the disagreements are basically over statistics, look to independent government agencies, such as the Census Bureau, or to university studies or other independent sources. Organizations like Doctors Without Borders are relatively impartial sources on the human rights situation in other countries because they practice medicine, not politics: they are not trying to support or oppose any specific government.

Of course, independence and impartiality are not always easy to judge, either. Be sure that your sources are *genuinely* independent and not just interest groups masquerading under an independent-sounding name. Check who funds them; check their other publications; look for their track record; watch the tone of their statements. Sources that make extreme or simplistic claims, or spend most of their time attacking and demeaning the other side, weaken their own claims. Again, seek out sources that offer constructive arguments and responsibly acknowledge and thoroughly engage the arguments and evidence on the other side. At the very least, try to confirm for yourself any factual claim quoted from a potentially biased source. Good arguments cite their sources (Rule 13); look them up. Make sure the evidence is quoted correctly and not pulled out of context, and check for further information that might be helpful.

Exercise Set 4.1: Identifying biased sources

Objective: To help you guard against biased sources.

Instructions: For each of the questions below, think of one source that would *not* be impartial. Explain why that source would not be impartial. You do not need to name a specific person; you can simply describe what kind of person you have in mind.

Tips for success: An impartial source is an unbiased source. This exercise asks you to find *biased* sources—sources that you would *not* want to use in your arguments because they are *not* impartial.

Here’s one way to come up with biased sources: Ask yourself what answers different people might give to each question in this exercise. Then,

for each answer, ask yourself whether there is someone who would benefit from convincing you of that answer.

People can benefit in various ways from convincing you of a particular answer. Sometimes people benefit financially. For instance, a sales clerk at a store gains financially by convincing you that the jeans you're considering look great on you. Sometimes people stand to gain in other ways. For instance, a candidate for political office can get extra votes by convincing voters that his or her opponent is corrupt. Thus, the sales clerk is a biased source about the jeans you're considering and the politician is a biased source about his or her opponent.

Remember, though, that sources can be biased even if they don't stand to benefit from pushing a particular answer. Sources who are likely to reach a particular answer regardless of the truth are also biased. For instance, suppose you asked the parents of the players on a high school basketball team whether their children are better than the average player on the team. A significant majority of parents would probably say that their child is above average, even though it's unlikely that a significant majority of the players really are better than average. The parents don't stand to gain anything by convincing you that their child is better, but they're still biased. This extends more generally to individuals' beliefs about how they compare to others: individuals are frequently biased when it comes to rating their own abilities. For example, a study published in 1981 by Ola Svenson, of the University of Stockholm, found that 93 percent of Americans rated themselves as better drivers than the median driver. A similar study published in 1986 by Iain McCormick and his colleagues at Victoria University of Wellington found that up to 80 percent of drivers consider themselves above average.

Sample

How much does smoking increase your chances of getting cancer?

An executive at a tobacco company is a biased source. The executive has a strong financial incentive to convince people that smoking does not increase your chances of getting cancer very much. If people believe that smoking doesn't increase your chance of getting cancer, more people will smoke and the company will do better. The executive may also prefer not to think that his company's product causes suffering and death.

1. Is it worthwhile to buy an extended warranty on a new appliance?
2. Are Macs better than PCs?
3. What is the best university in the United States?
4. Is Andrew Luck, who plays for the Indianapolis Colts, a better quarterback than the New England Patriots' Tom Brady?
5. Do vaccines weaken children's immune systems?
6. Is it better to save for retirement by putting your money in a savings account or by investing it through a stockbroker?
7. How often do women suffer dangerous complications from an abortion?
8. Do laws requiring background checks at gun stores reduce crime?
9. Would vouchers for private schools improve education in the United States?
10. Is there life after death?