

FALLACIES OF LOGIC: ARGUMENTATION CONS

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Introduction

NOWHERE, perhaps, can you be more easily conned than during an argument or discussion. You've taken a position on an issue, which you've thoroughly thought through. You have supporting data at your fingertips. You're a quick thinker and articulate. You unfold your argument in logical steps. Yet somehow you don't seem to be getting anywhere. The other guy keeps coming back with statements and questions that seem to be relevant, that seem to make sense. And yet somehow they're neither relevant, nor do they make sense. You become confused, frustrated, angry. What's wrong? The explanation may be simple — you're being conned.

Using con tactics to win an argument was raised to a high level of skill in Athens, in the Fifth Century, BC. It constituted the core of study at a school of philosophers called the Sophists. The school's faculty concentrated on teaching young Greeks how to win arguments and debates at any price, even if it included faulty reasoning, deception, trickery, or whatever was necessary as long as the opponent was not able to discern the difference between sound and specious argumentation.

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What's happening is that your opponent is using what are commonly known as *fallacies of logic*.

There are lots of these fallacies. Here are just a few of them.

The con of over-generalizing

This con is common, seductive, and dangerous. Its Latin name is *secundum quid*, meaning “in some one respect only.” It involves assigning a characteristic to an entire group on the basis of only one or two observations. For example: A politician is convicted of taking a bribe, therefore, all politicians are crooked; one malingering black person, and all black people are malingerers; one cowardly Italian, and all Italians are cowards; one drunken Irishman, and all Irishmen are drunkards; one grasping Jew, and all Jews are grasping; one welfare cheat, and everyone on welfare is a cheat; and so on.

To avoid being taken in by this con, always keep in mind that “One swallow a summer does not make.”

The “thin entering wedge” con

The next con is very similar to the previous one in that it also reflects over-generalizing. The major difference between the two is that the former deals with observations that lie in the past or present, and the “thin entering wedge” con (also known as the “camel’s nose in the tent” fallacy or the “give him a finger and he’ll take the whole hand” fallacy) deals with projecting present or past observations into the future.

Here are some examples:

- If the Democrats regain control of the White House, they will spend the nation into bankruptcy.
- If the Republicans maintain control of the White House, the U.S. will know only bread lines all over the country.
- If we grant this request for a variance so that the developers will be allowed to build a high rise apartment house, our city will look like mid-Manhattan in five years.
- If we ban the possession of hand guns, we’ll end up like Russia.

The con is illogical, because it completely ignores the vast number of possible outcomes that could follow a specific event, and focuses on only one with total certainty. But it is also vicious, because it puts you in a very difficult position if a con man uses it. All you can do in return is make the observation that this

enormous leap into the future will most probably not take place.

If the argument or discussion is taking place before onlookers, which of the two antagonists will prevail, if one uses this con, will depend to a great degree upon how clearly and rationally the audience is thinking at the time. If it is emotionally detached, the intended victim will be favored. However, if the listeners are passionate about the subject of the debate, it's just about all over for the one at whom the attack is directed.

The “ignoring the issue and attacking the opponent personally” con

The Latin name for this con is *ad hominem* meaning “to the man.” It indicates that the one making it is intellectually bankrupt on the subject at issue.

An American on tour in China many years ago was distracted from his sightseeing itinerary by loud, angry shouts which seemed to be coming from a cluster of people on a side street in downtown Peking. Close investigation revealed two peasant laborers, face-to-face, angrily shouting invectives at each other, surrounded by curious onlookers. After witnessing the altercation for a moment or two, the American turned to one of the older spectators and asked, “Why doesn't one of them punch the other in the mouth?” The old man recoiled in horror at what had just been asked him. “Oh no,” he replied, “each man knows that the first one who resorts to violence will be deemed by the onlookers as being the first one to have run out of ideas.”

The classical example of this con takes place in a court of law. As the attorney for the defense takes the floor, his associate hands him a note which says, “We don't have a case, so you'd better abuse the other attorney.”

It's difficult to defend against the “ignoring the issue and attacking the opponent personally” con. Often, all you can do is make your opponent aware that you know he's doing it.

The “What do you know about it? You're not an expert,” con

This con has a relation to the *ad hominem* con in that it fails to address the issue that's been raised by the opponent, but deplores, denies, or ridicules his qualifications instead.

During an edition of “Firing Line,” William F. Buckley mediated between two guests: the author of a book on the so-called Hillside Strangler and a psychiatrist who had been involved in examining one of the suspects. During the show, the author raised many questions concerning the psychiatrist's professional

competence and behavior during the investigation. The psychiatrist responded at times by holding that he wasn't aware that writers are qualified in psychiatry as well as in writing. At other times, he offered that he had written several books on psychiatry, or that the methodology he had used during the examination had mirrored that of "the world's greatest authority on...." Not once did he address the question or respond to the accusation.

Science comes by observation, not by authority... [and] ... whoever in discussion adduces authority uses not his intellect but rather [his] memory.

—Leonardo da Vinci

The "Oh, yeah? Well, you're one also," con

Another common con has the Latin name *tu quoque* meaning "Thou also." The classical example of this con is supposed to have taken place in a Moscow subway at the time the system first opened. It seems that an American was invited to inspect the facility accompanied by a Russian guide. During the tour, he was shown a magnificent station with posh rest rooms, self-registering turnstiles, etc. It was all very impressive. Then the American noticed that he had been in the station for almost an hour and had yet to see a train. When he mentioned that to the guide, the latter responded with, "Oh, yeah? Well, what about the lynchings in the South?"

The *tu quoque* response qualifies as a con because it leaves the assertion unaddressed — there is neither an acceptance nor a refutation of the opponent's position.

The "cause and effect" con

The Latin name for this is *post hoc, ergo propter hoc*. In English, "after this, therefore on account of this." Just because one event precedes another event, the first is deemed to be the cause of the second; there need be no other data or rationale to support that conclusion. Chanticleer, the rooster in Edmond Rostand's play of the same name, victimizes himself with this con when he says:

I fall back dazzled at beholding myself all rosy red,
At having, I myself, caused the sun to rise.

[He crowed every morning, after which the sun rose.]

This is a very common con because no thinking is necessary. And it's an

easy way to feed passion and emotion. For example, circa 1980, several pregnant women living near the Love Canal in New York State had difficulty in giving birth. In addition, several of the babies in that group were born with defects. Subsequently, it was revealed that the Hooker Chemical Company had been dumping toxic waste into the Love Canal for years. Obviously then, it was the toxic waste that had caused the birth defects and a lot of other things as well. The news media got hold of the story and ran wild with it. Later, a panel of independent scientists went over all the studies that had been done on the incident and found that every one of them was significantly flawed. The dumping of toxic waste into the Love Canal could have caused the birth defects, but the inference that it did merely because the dumping had preceded the birth defects in time was a con.

Soon after the 1964 presidential election, a joke made the rounds about a Republican pondering the notion that his Democrat friends had been right during the campaign. They had predicted at the time that if he voted for Barry Goldwater, the United States would become involved in a war in Indochina. It turned out to be true. He had voted for Goldwater, and America did indeed become involved in a war in Indochina.

You can blunt the *post hoc, ergo propter hoc* con by insisting on an inferentially plausible explanation of why A caused B, rather than merely because A had preceded B.

The “false analogy” con

An analogy can be a useful way to communicate an idea, thought, or concept, which is why analogies are commonly used in argumentation. Because something was true in one instance, your opponent in an argument will frequently take the position that it is true in another, because, he says, the two instances are analogous. But if one thing is to be truly analogous to something else, there must be a marked similarity or a fundamental resemblance between the two items. And herein lies the basis of the false analogy type of con — the comparison offered is not a true analogy.

Here is an example of a false analogy:

“Reagan’s decision to send U.S. aid to El Salvador, including military advisors, is sure to turn out to be another Vietnam for the U.S.”

Although the U.S. is referred to twice, and is ostensibly the “same” subject in each reference, there are different points in time involved and different contexts. Hence, the U.S. referred to is the same subject in name only. The circumstances

are quite different — the U.S. vis-à-vis El Salvador in 1981 was hardly the U.S. vis-à-vis Vietnam in the early 1960s.

So when somebody offers you an analogy to obtain your concurrence on a point he is asserting, better check out the analogy's rightness before nodding assent; it is likely to be false.

The “appeal to authority” con

There is a tendency to believe that those who are regarded as wise or famous cannot be wrong. Here we have the basis for another common argumentation con — the “appeal to authority” con.

This con involves quoting a respected person as support for a position. Its Latin name is *ad verecundiam*, or “appeal to revered authority.” Today it often includes an appeal to a celebrity.

Now there's nothing wrong *per se* in appealing to authority, but only with two provisos:

- It must be understood that the authority appealed to *could* be wrong; it is never certain that he is right.
- The subject matter involved must be one in which the authority appealed to is deemed to be an expert.

A common example of the “appeal to authority” con is the stock broker who is called upon by CBS (or NBC or ABC) to explain on the air why the Dow-Jones Average sharply rose (or fell).

The only sensible response I've ever heard or read to the often-asked question, “What do you think will happen to stock prices in the coming months?” was one given to a reporter by J.P. Morgan on his return from a trip abroad, “I predict they will continue to fluctuate.”

More recently, when asked a similar question, John Kenneth Galbraith responded to the effect that there are two kinds of forecasters: those who don't know and those who don't know that they don't know.

Another example of the “appeal to authority” con is the endorsement type of ad featuring a noted sports figure extolling the virtues of a specified product. For example, the winner in the women's division at Wimbledon claiming that a certain skin cream is just right for everyone; the lady may be an outstanding tennis player, but what she knows about skin care in general is likely to be limited.

The “appeal to authority” con is intended to intimidate. As a defense, keep in mind that i) most major undertakings that failed have been orchestrated by

experts and authorities and ii) all you may know about a celebrity is that he or she is held to be a celebrity, nothing more.

The “figures prove” con

This con is anchored in the arbitrary manipulation of statistics to the point of absurdity. Here’s how Mark Twain poked fun at it in his book *Life on the Mississippi*:

In the space of 176 years the Lower Mississippi has shortened itself 242 miles. This is an average of a trifle over one mile and a third per year. Therefore, any calm person, who is not blind or idiotic, can see that in the Old Silurian Period, just a million years ago next November, the River was upward of 1,300,000 miles long, and stuck out over the Gulf of Mexico like a fishing rod. And by the same token, any person can see that 742 years from now the Lower Mississippi will be only a mile and three-quarters long, and Cairo and New Orleans will have joined their streets together.

Here Mark Twain playfully projected a curve way, way back into the past and somewhat into the future, to the exclusion of all other considerations, in order to demonstrate the absurdity of the “figures prove” con.

Another kind of “figures prove” con is founded on the premise that if a certain cause produces a certain effect, then twice that cause would produce twice that effect. If one vitamin capsule a day is good for you, five should be five times as good. If one serving of carrots a day is good for you, five servings a day should be five times as good for you. Ten a day, ten times, etc.

To protect yourself from the “figures prove” con learn to go through the following steps, mentally, of course, every time someone throws a “figures prove” kind of assertion at you:

- How does he know?
- Is there anything that should have been considered that wasn’t?
- Is the working of numbers internally consistent, that is, was a scale or a base year changed, etc.?
- Does it make sense?

The “appealing to the crowd” con

In Latin, *argumentum ad populum*. This con is an attempt to win an argument

by appealing to the masses, a mob, or a crowd, rather than by appealing to reason. It generally takes the form of “Everybody knows that” as in “Everybody knows that Americans are imperialists (materialists, stupid, whatever).”

If “everybody knows” such-and-such, then it ain’t so, by at least ten thousand to one.

— Robert Heinlein, *Notebooks of Lazarus Long*

It may also take the form “They say that” as in “They say that jogging is good for you.” or “They say that so-and-so (usually someone in the public eye) is a boozer.” Don’t bother asking who “they” are; it won’t do you any good. The information came from some radio item or some newspaper report or it was in an article someplace or some such thing; there’s always a vague “something” or “someone” involved.

The purpose of the “appealing to the crowd con” is to overwhelm you with the “sixty million Frenchmen can’t be wrong” nonsense so that you won’t take the time or make the effort to do your own thinking. The defense is the knowledge that there isn’t *anything* that everyone knows.

The “arguing in circles” con

The *circulus in probando* con involves what is supposed to be proof turning out to be nothing more than the premise restated; hence, arguing in circles, also known as begging the question. For example,

True believers never die.
 Charlie Smith died.
 Charlie Smith was not a true believer.
 How do you know?
 Because he died.

or

Classical music is the best music.
 What’s your support for that contention?
 All the best music critics say so.
 Who are the best music critics?
 The ones who think classical music is the best.

A fine example of begging the question appeared in the January 14, 1988 edition of the *Wall Street Journal*. Dr. Meyer Friedman and a Ray H. Rosenman

had in the mid-'60s interviewed a group of men, classifying them into Type A and Type B. (Which right away is suspect, because classifying people as Type A or Type B is highly subjective.) They then tracked the men in the study and eventually concluded that Type A men were "... as much as 4.5 times more likely to develop coronary disease than those who [are] easygoing." Years later a different set of researchers took a look at the data, and concluded that among those who eventually developed heart disease, the Type A subjects were more likely to survive the disease and live longer than the Type Bs. Therefore, they said, the new findings "cast a long shadow indeed on the evidence supporting Type A behavior as a risk factor for heart problems." At this point, Dr. Friedman re-entered the fray. Not so, said he. My colleague and I were inexperienced in classifying men into Type A and Type B when we did that study, and we misdiagnosed a large number of the men as Type B when they were *really* Type A. How does he know they were Type A? Easy, "You can't get a heart attack before age 60 if you're a Type B. Here at the hospital I offer a bottle of expensive wine to any doctor who can bring me a Type B patient who's had a coronary, and so far no one has."

I wouldn't want to ever make a bet like that with the good doctor, because he can't lose. No matter who I bring to him with a coronary, Dr. Friedman would most likely insist that that patient is Type A. How would he know? Well, the man had a coronary before 60, didn't he? And everyone knows that "You can't get a heart attack before 60 if you're a Type B."

To avoid being taken in by this con, separate the assertion from the conclusion by dropping out all the stuff in between and see if they really are independent propositions.

The "self-evident truth" con

Every statement is an argument of some kind in the sense that it is designed to convince or persuade someone of something. It may, occasionally, be composed of one or more premises, presumably true, and a conclusion, presumably valid. An assertion presented to us in that form can be relatively easy to deal with — are the premises true or not and is the conclusion valid or not?

However, most arguments that are put forward are done so without stated premises; only conclusions are presented. In many cases, there's little harm done. "I think it's going to rain" or "This ice cream is delicious" or "Bill is a nice guy" are all conclusions without any stated premises upon which the conclusions are based. In a sense, we accept them as self-evident truths; we don't demand support for

the assertions made. In the case of the first statement, we see that it's overcast, that the barometric pressure is falling, that the sea gulls are hovering over land, and so on. The statement that it's going to rain appears to be a reasonable one. As to the ice cream statement, it's a matter of opinion or taste. And as far as Bill being a nice guy is concerned, perhaps, but really not worth fighting about in most circumstances.

It appears, then, that we accept many statements as self-evident truths when there is no such thing as a self-evident truth; every statement is subject to dispute, because every one of us sees things differently. But unless we are disputatious, we tend to go along with many assertions that are made to us without support of any kind being offered.

But there are times that outrageous assertions are made to us in the form of self-evident truths. If presented in isolation, with nothing before or after, they are generally easy to recognize and we can defend accordingly. For example, "Women are terrible drivers" or "No one works unless he has to" or "You get what you pay for." Among most people, a statement such as any of the foregoing would start a dispute going merrily. But there is a neat little trick that some people use to discourage a ready challenge to a supposed self-evident truth; they start the statement with something like "Now everybody knows" or "As every school boy knows" or "Unquestionably" or "All intelligent people agree that" or some such statement. Thus, the "self-evident truth" con usually resembles an *argumentum ad populum*. It can also have a bit of *ad hominem* thrown in, depending upon the way it is phrased.

Another form of the "self-evident truth" con to watch for is the one which depends for acceptance upon the words "by definition." For example, "Europeans, by definition, are more cultured than Americans." Now how can anyone quarrel with that contention? If, by definition, Europeans are people who are more cultured than Americans, then it must follow that Europeans are more cultured than Americans. Right? The big question, then, is, "By whose definition?" If two or more people agree to that definition, the statement must be, by definition, a self-evident truth, but only to those people; it may not be to others.

The "guilt by association" con

This argumentation con holds that two unlike persons, plants, animals, or things can be equated because of a single common trait or characteristic or attribute or belief, depending upon what's involved.

It has several subdivisions. There's guilt by physical association. You're seen in the company of some unsavory characters and, therefore, you've

been contaminated, and are now unsavory yourself. Then there's guilt by kinship association. Your brother or wife or whoever is an alleged subversive. Consequently, you are suspect as well. The most common form of guilt by association and the most heinous, because it is frequently used to silence opposition, is guilt by verbal or philosophical association. So if you believe in government-owned housing and government-owned housing is characteristic of socialism, then clearly you are a socialist. Or if you write a book and it is favorably reviewed in a conservative publication, then clearly you are a conservative.

Summary

Following is a summary of the argumentation cons just discussed.

- The con of **over-generalizing** involves assigning a characteristic to an entire group on the basis of only one or two observations.
- The con of **the thin, entering wedge** involves directly projecting past or present observations into the future without considering factors that could alter the direction or the magnitude of the projection.
- The con of **ad hominem** involves ignoring the issue and attacking the opponent personally.
- The **you're-not-qualified** con involves failing to address the issue that's been raised by an opponent and deploring, denying, or ridiculing his qualifications instead.
- The **Oh, yeah? Well, you're one also** con involves leaving an assertion unaddressed by either reversing its direction, or by focusing attention on a related but completely different issue.
- The **cause-and-effect** con involves assuming that just because event A preceded event B, event A must necessarily be the cause of event B.
- The con of the **false analogy** involves offering an item (or an event) as analogous to another item (or event) despite the absence of a marked similarity or resemblance between the two items (or the two events).
- The con of **appealing to authority** involves believing that those held to be wise or those who are famous cannot be wrong.
- The **figures prove** con involves a totally arbitrary manipulation of statistics to the point of absurdity.

- The con of **appealing to the crowd** involves the attempt to win an argument by appealing to the masses, the audience, a mob, or a crowd instead of appealing to reason.
- The con of **arguing in circles** involves offering a conclusion, which turns out to be the premise, just restated.
- The con of the **self-evident truth** involves stating a conclusion without first offering the necessary premises for that conclusion.
- The con of **guilt by association** involves holding that two unlike persons, plants, animals, or things can be equated, one with the other, because of a single common trait or characteristic or attribute or belief, depending upon what's involved.

The foregoing has entailed a look at only the more common cons of argumentation; there are many more. Become familiar with them. Learn to spot them. And also be aware that argumentation cons usually come in very complex packages. So it's highly unlikely that you'll be subjected to only one con at a time. It's much more likely that you'll be the target of several, nested within one another. That's the bad news. The good news is that with time and practice, you can develop a discerning ear for them.