Recognizing Microstructural Fallacies in Argumentation and Public Advocacy

It is difficult to understand the gravity of making well-reasoned arguments without being able to recognize instances of fallacious reasoning. A fallacy is an argument that appears on its face to be sensible, but contains a structural, logical flaw that mitigates its reasonableness. Below is a list of 34 of the most common fallacies of argument found in public discourse. The expectation of this course is that an able public advocate must be prepared to name, define, recognize, and evaluate the structure of each of them. An important goal in this class is to equip everyone with the critical ability to spot fallacies as an autonomic mental reflex. Simply put, an advocate should be able to know immediately – without having to stop and think of every possibility – that an argument is fallacious, how it violates the conventions of ordinary and formal logics, and how one might go about explaining its weaknesses to an interested audience. The assumption is that knowledge of microstructural fallacies will make you a much more constructive and persuasive critic and advocate.

We provide an initial definition for the term “fallacy” above, but as you will learn in this class, definitions are rarely so clear and simple as to avoid the need for some degree of qualification. The first thing to note is that fallacies are relatively ambiguous (but they are not arbitrary). While many of the illustrations below may come off as black and white, there are gray areas, and much of the work of an advocate involves weighing the appropriateness of particular claims. As we indicate above, a fallacy is an argument that appears to be reasonable and/or defensible but is in fact not. A fallacy is specious. It is not, however, enough for an advocate simply to point this out. An advocate must always provide their own reasoning as to why an argument is fallacious and thus problematic. This can be done in a number of ways, not least of which includes calling attention to (a) unsound or insufficient proof for a proposition, (b) errors in the form of reasoning, (c) misleading claims that are incorrect as a result either of mistake or intent, (d) conclusions unjustified by propositional and/or evidential support, and so on. The point, again, is that an advocate must be able to name, define, recognize, and evaluate fallacies in order to give good reasons as to why they should be interpreted as such.

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Group I: Causal Fallacies

Causal fallacies represent errors in the establishment of cause-and-effect relationships. Many arguments are set up to appear as if a line of reasoning, or a piece of evidence, proves that one phenomenon is the cause of another. Advocates often assert causality because it provides strong proof of a linear, chronological relationship between two phenomena. The crux of a causal fallacy tends to lie in the assertion that correlation (relatedness, mutuality, or association) necessarily entails cause. For example, some argue that the so-called “failing education system” in the United States is the result of an increased focus on standardized tests. “Teaching to the test” has been a recent trend in primary and secondary schools, to be sure, but this is not necessarily responsible for poor outcomes in education. Advocates who take such errors in reasoning or evidence and run with them end up reaching a mistaken conclusion of cause and effect.

1. INSUFFICIENT CAUSE

In seeking to establish a cause-effect relationship, an advocate may settle on a “cause” which, by itself, does not have the potency or power to produce the alleged “effect.” The fallacy of insufficient cause can exist in (a) the distance between an asserted cause and an asserted effect or (b) the conjunction or inappropriateness of relating causes and effects from different categories of experience. Consider the following:

(a) the error of distance.

“The shooting in Tucson in January 2011 – which left six people dead and critically wounded U.S. Representative Gabrielle Giffords, the suspected target – was a tragedy. But more importantly, it was an unfortunate outcome of Sharon Angle’s insistence on “Second Amendment remedies” to political problems. A media sound byte caused the shooter, Jared Lee Loughner, to attempt an assassination of a political official.”

(b) the error of conjunction or inappropriateness.

“Violence plays a big part in the bar scene in Albany. In early 2011, mayor Jerry Jennings requested that all city bars be closed at two a.m. rather than four a.m. ‘It’s my conclusion,’ he said, ‘that between 2 and 5 [a.m.] not a lot of good things happen.’ Given Jennings’ testimony, and the increase in police calls for fights, disorderly behavior, and sexual assaults between those hours, it is obvious that criminal activities are a direct result of the time until which city bars are open.”

2. MULTIPLE CAUSATION

Nearly everyone has a tendency to oversimplify objective reality to rational principles. Most common is the belief that there is a single, definitive explanation for social problems. In argumentation, this impulse leads an advocate to assert, sometimes intentionally, that there is a single cause of a problem when, in fact, most problems are the result of several causative factors working in concert. The fallacy of multiple causation is committed when (a) an
advocate asserts that a partial cause is the cause or (b) an advocate asserts that modification of a partial cause will in any way modify the effect (or problem). Consider the following:

(a) the assertion that a partial cause is the cause.

“The NYPD’s CompStat program, adopted in the 1990s, allowed police officers to track crime more effectively and distribute their resources accordingly. And the effects were astounding—crime dropped by 60% over the next decade. Surely this program should be celebrated as one of the greatest innovations in policing within our lifetimes.”

(b) the assertion that modification of a partial cause will modify the effect.

“The main cause of childhood obesity in the U.S. is the consumption of fast food. If we could just get children and adolescents to stop eating at restaurants like McDonald’s and Burger King, we could solve the problem of childhood obesity.”

“As syndicated columnist George Sill argues, cable television talk shows and partisan pundits are to blame for the public’s misunderstanding of political debates. If these talk shows were cancelled, and if punditry was contained, the public would better understand contemporary politics.”

3. **POST HOC, ERGO PROPTER HOC**

“After the fact, therefore because of the fact.” As aforementioned, a cause-and-effect relationship is defined by linearity and chronology: the cause invariably occurs before the effect. An advocate commits the fallacy of post hoc, ergo propter hoc when a cause-and-effect relationship is said to exist between two phenomena simply because they occur sequentially in time. For example:

“In 1993, President Bill Clinton increased taxes on the highest marginal tax rate. The tax increase created a disincentive for the wealthy, essentially penalizing them for increasing their wealth while growing the economy. Is it any surprise that a mild recession ensued soon thereafter? In August 2011, President Obama again proposed a tax hike on the wealthy. If enacted, history tells us what will follow.”

“In August 2011, Standard and Poor’s (S&P) – a well known credit rating agency – downgraded the United States’ credit score from AAA to AA+. The Dow Jones industrial average then plunged. It rebounded, though, because the very next day the Federal Reserve promised ‘exceptionally low’ interest rates through 2013.”

4. **REDUCTIO AD ABSURDUM**

Occasionally, advocates will advance propositions that are either self-contradictory, ridiculous, erroneous—in a word, absurd. This is apparent when they assume a claim for the sake of argument, reach an obviously absurd conclusion, and then confirm the falsity of an original assumption based on the absurd outcome. A reductio ad absurdum, or a “reduction to the absurd,” occurs when an advocate attempts to push the logic of another’s claims to its
most absurd conclusions. It is thus a tactic of refutation, and sarcastic refutation at that. Specifically, since cause-and-effect chains invite extensions, either in the past (Why? Why? Why?) or into the future (What is the result of that? And that? And that?) – and since increasing distance in either direction decreases the confidence of the original claim – causation chains ultimately result in comic conclusions, humorous because of an obvious absurdity. *Reductio ad absurdum* is a means by which an advocate can ridicule an opponent’s reasoning by performing a cause-end-effect chain. Of course, even though it might appear as an illustration of an opponent’s error, it does not prove either that an opponent is wrong or that his or her detractor is right. *Reductio ad absurdum* is, after all, not itself reasonable.

“My opponent has claimed that smoking marijuana leads to heroin addiction. He says that 98 percent of heroin addicts once smoked pot. I believe that. I’ll bet they also smoked cigarettes. Better yet, I’ll bet they all drank coffee—and every one of them tasted mother’s milk! Freud missed something: If you suckle your mother, you’ll become a heroin addict!”

“My opponent argues that one’s ability to discriminate between ‘good’ and ‘bad’ art is a sign of intelligence. This makes sense. Furthermore, I wouldn’t be surprised if it was a sign of sexual prowess, athleticism, or even one’s facility to roll or fold his or her tongue. I discovered I could roll my tongue as early as age three. Parents, test your children: If they can fold or roll their tongues, they could be geniuses, if not closet art critics.”

5. **SUBSTITUTION OF SIGN FOR CAUSE**

A sign is an indication of presence. It is not the *reason* for a phenomenon’s occurrence. An advocate substitutes a sign for a cause not simply by establishing a single relationship between two phenomena A and B, but in doing so to assert that A *causes* B. A rooster’s “cock-a-doodle-doo” may be a sign of sunrise, but that doesn’t mean that the sunrise *causes* the crowing. Again, correlation is not causation.

“College students who work ten hours a week tend to earn better grades than those who do not work at all. You should seek part-time employment during college; you’ll get higher grades.”

6. **ARGUMENTUM AD BACULUM**

This is literally an “appeal to the stick.” In more contemporary terms, it is an appeal to force, oftentimes manifest as a more or less explicit threat of either physical or psychological violence that will befall those who do not accept an advocate’s proposition or conclusion. It is a causal fallacy insofar as it positions the effect of force as directly resultant of an audience’s disagreement. In this way, it is the use of coercion rather than reason to incite – that is, to cause – agreement. Do not confuse this with an argument such as, “Global warming is a pressing problem. Left unheeded, we will all experience significant changes in weather patterns and severe transformations of habitats – even human habitats – with potentially disastrous outcomes, from more violent storms to widespread death and disease.” Such a claim is, after all, actually a conclusion drawn from scientific proof, not a threat (even though similar argumentative forms are sometimes used as scare tactics). Consider the following:
“We, the members of the Republican Study Committee, admonish President Obama to withdraw his executive order that would require government contractors to publicly disclose political contributions. Should President Obama proceed with a draft of the order, ‘we would immediately introduce legislation in the House of Representatives to prevent it from taking effect.’ Rest assured that this is not an empty threat.”

Or, consider this direct quote from an official statement by the White House in response to House Speaker John Boehner’s initial “Cut, Cap and Balance” debt plan:

“If the President were presented this bill for signature, he would veto it.”

Note: The fallacy of argumentum ad baculum is comparable to the fallacy of argumentum ad populam. However, in an argumentum ad populam, there is an explicit attempt to attain, if not coerce, popular assent based upon the assumption of common sense agreements, e.g., “everyone should believe that....” An argumentum ad populam endeavors primarily to charm the multitude; argumentum ad baculum strives rather to employ the pale of assent to intimidate.
Group II: Circumstantial Fallacies

In uncertain situations, when we cannot know all the facts, we must make judgments based on what we do know. We must reason from signs, or what courts refer to as “circumstantial evidence.” Signal reasoning is a powerful mode of informal logic. However, it can lead advocates to put much weight on the strength of a sign. One example of this pitfall appears above in the substitution of a sign for a cause. Others, which are not causal, appear below.

7. **HASTY GENERALIZATION**

Almost all signal relations require *corroboration*. That is, we need to have more than one sign to have confidence that the phenomenon signaled actually exists—a doctor needs to know that you have a fever, are lightheaded, and have itchy, sore eyes *in addition* to having little red bumps before she will diagnose the measles. An advocate commits the fallacy of hasty generalization when he or she draws a conclusion from one, or just a few, fallible signs without diligently searching for additional corroboration. In short, an advocate is too quick to offer an unwarranted judgment.

“I was in Indianapolis and watched a homeless man use the money a passerby so generously gave him to purchase a handle of whiskey. The homeless take charity only to piss it away—literally. It should be illegal to give them money. All they do is use it to get drunk.”

*Note*: Hasty generalizations can also appear as overgeneralizations in statistical analysis, as when a conclusion about a small sample is used to make a far-reaching claim about a population as a whole.

8. **THE FALLACY OF COMPOSITION**

This is a sophisticated and more specific version of the hasty generalization. It occurs when an advocate assumes that what is true of the “parts” is true of a “whole.” In other words, an advocate *composes* a conclusion about a whole based upon its parts. For example, one might argue that every player on the Indiana Pacers is outstanding and so, then, must be the team itself. Of course, any sports team is much more than just the sum of its parts; it is also a function of who organizes the parts, how they interact, etc. The fallacy of composition occurs when an advocate ignores such considerations in the course of making his or her generalized judgment.

“My professor Johnson and Professor Roseland are going to team-teach a course in the fall. Both of them are great teachers, so the course will undoubtedly be great.”

“My every member of the jury has been deemed reasonable. When they deliberate, we can be sure that their judgment will be both reasonable and unanimous.”

9. **THE FALLACY OF DIVISION**

As the name suggests, the fallacy of division is the obverse of the fallacy of composition. It occurs when an advocate assumes that which is true of a “whole” is also true of the “parts.” In other words, an advocate *divides* a whole into parts and apportions equal judgments across
the board. Here, one might argue that, because the Indiana Pacers has an outstanding team, so must be each player on the team. It should be easy to see why such a claim is problematic.

“The Catholic Church is pro-life, and does not believe in abortion. It recently decided to excommunicate a nun for performing an abortion that actually saved the mother from fatal complications with the pregnancy. Some people have voiced concern, but we can be sure that none of them were Catholics. After all, the Catholic Church is pro-life and so, we can assume, are all of its members. They must have agreed with the Church’s decision.”

“The number one concern of Republicans is taxes. House Speaker John Boehner might express concern over governmental revenues, but he lest we forget that he is a Republican—he is really only concerned with lenient tax codes and lower interest rates.”

10. **EQUIVOCAL SIGN**

Very often, signs are open to more than one interpretation. This has much to do with the fact that signs are often associated with many phenomena. A fever and lightheadedness, for instance, can signal many illnesses, not just the measles. An advocate commits a fallacy of the equivocal sign when he or she argues, *without adequate evidence*, that a sign which could be associated with several different things signifies *one particular thing*.

“Anyone who says that the characters on Sarah Palin’s electoral map are surveyor’s symbols is either dead wrong or lying. They are obviously crosshairs, used only to mark the congresspersons she wishes to be physically attacked.”

A fallacy of equivocal sign is not confined to a multiplicity of meanings. Constancy is, for instance, one way in which equivocation can manifest, specifically via the *topoi* of time. In other words, just as signs are open to more than one interpretation, so are they frequently time and culture bound. Anti-communist sentiments might have been a signal of the Red Scare in the 1940s and 50s, but that does not mean anti-communism today signals the presence of anything comparable to concurrent fears of communist espionage. If an advocate establishes a signal relationship between two phenomena, A and B, and subsequently assumes that this relationship will continue *ad infinitum*, he or she may have committed the fallacy of the equivocal sign in assuming its constancy. This can be a difficult variation to detect. Some signs are (or are at least considered to be) both necessary and constant—the presence of red bumps with measles, for example. A careful critic will look for those signs that are not inherent to the phenomenon under consideration. For example:

“i came of age in the 1960s, so I know what it means when a young man goes around making a fool of himself with hair halfway down his back. Only radicals and hippies grow their hair that long!”
Group III: Synthetic Fallacies

Statistics, in today’s world, reflect the language of inductive reasoning. Consider its prevalence as a means for gathering, interpreting, and transmitting information. Consider also how much weight is given to statistics as supposed forms of knowledge. But statistical knowledge is synthetic insofar as it is fabricated; it is made—specifically from matters of numbers, not just matters of words. Before delving into a few of the fallacies that follow certain statistical representations, some definitional work of key terms is in order:

Survey – A statistical analysis of answers to questions that purports to determine opinions, preferences, impressions, etc. of a sample or a population. For example, if one wants to know how many people in Bloomington, Indiana drive hybrid cars, and if one then asks as many people as he or she can who lives in Bloomington, one has conducted a “survey.”

Population – The entire group of people (or items) in a particular space, place, assemblage, etc. that is selected for statistical inspection. Following the survey example, the population would be all the people who live in Bloomington, of which those who drive hybrid cars represent a percentage.

Sample – Rarely is it possible to count everyone in a particular population. It is usually only possible to count/measure/etc. a selection of the population and then assumes that their responses will be typical or representative of the responses of the entire group. As such, those who are actually counted/measured/etc. are known as the “sample.” Samples can be random, in which case each member of the population has an equal chance of being selected, or stratified, in which case the population is divided into subgroups or “strata” on the basis of factors such as gender, age, or income level (the strata are then sampled independently). Almost all statistical knowledge is derivative of some process of sampling.

While numbers are efficient means of “interpreting” data, it should be remembered that serious mistakes in reasoning can occur if an advocate is not wary. As British Prime Minister Benjamin Disraeli put it in the 19th century, “there are lies, damn lies, and statistics.” Some common synthetic fallacies appear below.

11. UNNAMED BASE

The “base” is synonymous with the population. An advocate commits the fallacy of unnamed base when he or she cites percentages without identifying the population from which they are drawn. For example, if an advocate asserts that 48 percent of people surveyed support the President, we should feel compelled to ask: Really? 48 percent of whom? The entire citizenry of the U.S.? The citizens of Durham, New Hampshire? The “red” states? The “blue” states? Put simply, for statistics to be worthwhile as pieces of evidence, we need to know their base.

“The war in Iraq began in 2003. Since then, U.S. policy has floundered at best and Iraqi Prime Minister, Nuri al-Maliki, could not as of late 2010 secure any political grounding for his country, let alone for his precarious governing body. Plus, violence and outrage persist. Is it any surprise, then, that 90 percent believed that Iraq was
worse off in 2006, as a survey indicated? And would it be any surprise to find that 90 percent or more still believe that Iraq is worse off today?”

“Reports show that 7 percent more Americans believe after the debt ceiling crisis that the Tea Party Movement is having a negative effect on Congress.”

12. **INADEQUATE SAMPLE**

An advocate commits the fallacy of an inadequate sample when (a) he or she gives the impression of having taken a survey when in fact he or she has only looked at a sample, and when (b) the sample is not large enough to be representative or typical of the population to which an advocate’s generalization applies. Note that it is conventionally assumed that a sample size of 800 to 1,000 is necessary for statistically determining public opinion.

“CBN reports that a nationwide survey of 100 voters indicates that 77 percent of citizens believe prayer helped saved U.S. Representative Gabrielle Giffords’s life following the January 2011 shooting in Tucson. Only 17 percent of voters do not believe prayer helped save her.”

13. **FAULTY SAMPLE**

An advocate commits the fallacy of a faulty sample when he or she accurately identifies a population, indicates the statistics’ basis on sampling, reports on a sample which is large enough, but fails to account for all groups to which a generalization applies.

“After interviewing 5,000 students at 5 different schools nationwide, we found that over 65 percent of college students eat fast food at least once per week. We were surprised to find that such a great majority of college students eat fast food so frequently.”

“Of some 10,000 white, middle class male residents polled in America, 73 percent supported Arizona’s controversial immigration law. It seems silly that the general public appears to be so up in arms about it. If the people support the law, why should it be a problem?”
Group IV: Formal Fallacies

As the name suggests, formal fallacies have to do with mistakes in the form – that is, the structure or organization – of a unit of reasoning. Accordingly, a critical observer attends to patterns of reasoning as well as to the characteristics of what an advocate considers to be the good reasons for an argument. One should also be attentive to the motives that underwrite forms of reasoning and thus the (purposeful) errors they may provoke.

14. AFFIRMING THE CONSEQUENT

A “consequent” is that which follows as a result of something else. In argumentation, it is the second part of a conditional (if...then) statement. One affirms the consequent when he or she starts with the premise that “if $x$ is true, then $y$ is true,” and then reasons that “if $y$ is true, then $x$ is true.” This is a mistake because such relationships are not inherently reversible. For example:

“The teacher said that if I am to get an ‘A’ I must work hard. I worked hard, so I should get an ‘A’.”

In this case, the argument is faulty because there are other factors that might keep one from getting an “A,” such as incompetence, failing an exam, missing class, etc. Hard work, in other words, is a necessary condition but not a sufficient condition. But be cautious. Not all instances of affirming the consequent appear as explicit “if...then” clauses. Be on guard for variants of the argumentative form. For example:

“Several studies have shown that the risk of melanoma increases when one uses a tanning bed at least once a week. One of my co-workers just let us know that she has a melanoma that she needs to get treated. I was shocked, because I never would have thought she’d be the type to go tanning constantly.”

Note: Also be careful not to confuse this with the fallacy of multiple causation. The two involve a similar error, because they take for granted that a cause is both necessary and sufficient, when that is not the case. The difference is that the fallacy of multiple causation occurs in the process of trying to establish (conclude) that a causal relationship exists. The fallacy of affirming the consequent occurs when one begins with a causal relationship (as a premise) and then concludes that a particular phenomenon must result.

15. DENYING THE ANTECEDENT

In denying the antecedent, an advocate commits another fallacy of the “if...then” variety. In this case, an advocate denies the “if” and reasons as though such a denial also entails the rejection of the “then.” In other words, if the “if” is denied, the “then” follows suit. For example:

“My opponent claims that if 18 year-olds are old enough to be drafted into the military, then they should be allowed to vote. But if this were the case, we would have to take the vote away from women and elderly citizens who are ineligible for the draft.”
16. UNSTATED ASSUMPTION (OR FAULTY ENTHYMEME)

Good reasons are built on clearly stated premises. When an advocate reasons on an unstated assumption, he or she does so from a premise never named. By not naming the assumption, an advocate does not (technically) have to prove it – in other words, he or she lets an audience supply the missing proof out of their own reservoir of common/shared beliefs and/or general knowledge. If the missing assumption is indeed a matter of general knowledge, we call this an enthymeme and there is no inherent fallacy. But if the missing assumption is actually highly debatable – a thing which the audience would be inclined to question seriously or even to reject if it were brought specifically to their attention – then the advocate has committed a fallacy.

“Many people who say they want to be fit oftentimes forget that actions speak louder than words. Put simply, they don’t actually work out! They also don’t eat right. However, if we look at memberships in fitness clubs we can determine not only people’s concern for but their commitment to fitness.”

The unstated, debatable assumption appears in the notion that membership in fitness clubs is the only way consumers can demonstrate their willingness to workout” and is thus an instance in which they don’t just speak but act on their willingness. Certainly, people can be committed to being – and even be – fit without attending a gym.

17. BEGGING THE QUESTION (PETITIO PRINCIPI)

Begging the question, or petitio principii, literally means “assuming the principle,” or assuming precisely what one wants to prove. It is a species of circular reasoning. When committed, an advocate attempts to “prove” an assertion with the assertion itself (or a variant of it). As a result, he or she reasons in a circle: “A is true because B is true, and we all know that B is true because A is true.” An advocate thus begs a question by stating a premise that is a restatement of a conclusion. When simply put, the tautology, or redundancy, is easy to spot and often sounds silly. For example:

“How can you give me a C on that paper? I am a straight A student!”

This is a fairly straightforward example. However, in the hands of a skilled advocate, the tautology can be concealed in a persuasive argument. Consider the following:

“Don’t be fooled by deceptive claims to academic freedom. Liberal professors know that claims to freedom eclipse their attempts to indoctrinate students to particular left-leaning ideologies. Don’t believe the claims. If you buy into them, you buy into a lie.”

18. FAULTY DILEMMA (OR FALSE DICHOTOMY, OR BLACK AND WHITE FALLACY)

“Either-or” arguments are powerful. They reduce the problem of choice and appear as if they contain a good and bad, a right and wrong. However, an advocate posits a faulty dilemma when he or she reduces logical alternatives in an argument to only two: the advocate’s way
and the wrong way. There are certainly times when this is good argumentative strategy. But if an advocate fails to take into account all possibilities – if he or she asserts that there are only two when there are or could be more – he or she creates a false dichotomy. Such reasoning generally occurs (at the policy level of argument) in two ways:

(a) with reference to defending one’s own idea (or policy), by asserting that one course of action is desirable while the other is dysfunctional, counterproductive, disadvantageous, or counterintuitive. A simple example might be something like:

“Either you support the United States and its ‘War on Terror’ or you support the terrorists.”

A more developed and nuanced faulty dilemma might appear as such:

“Given our cultural interest in social welfare, people would do well to read Part Two of Ayn Rand’s book, Atlas Shrugged. In it, Rand puts forth an warning that is more appropriate today than ever: ‘the choice is clear-cut: either [we adopt] a new morality of rational self-interest, with its consequences of freedom, justice, progress and man’s happiness on earth – or the primordial morality of altruism, with its consequences of slavery, brute force, stagnant terror and sacrificial furnaces.’ This is not ethical egoism; it is a question of right and wrong.”

(b) with reference to attacking someone else’s asserted idea (or policy), asserting that an opponent’s proposal will result in one of two effects, both of which are bad.

“We should be skeptical about the numerous state-sponsored initiatives to legalize the adoption of foster children by same-sex couples. While they represent a more wide-ranging respect for gay lifestyles, such adoptions can really only result in one of two things: either the children will grow up being ostracized, ridiculed, and tormented by their social peer groups, or they will run the risk of becoming gay themselves. I understand that we need homes for the tens of thousands of foster children in America; legalizing adoption by same-sex couples is not the way to get them.”

Note that neither form of the dilemma is necessarily fallacious. A dilemma is fallacious, or a dichotomy false, only when an advocate fails to consider all reasonable alternatives. Faulty dilemmas are committed if there are any reasonable alternatives other than the two isolated by the advocate who proposed the “either-or” situation.

19. FALSE CONTINUUM

If a false dichotomy reduces the problem of choice to two distinct alternatives, a false continuum reduces the problem of complexity to a blending of difference. In other words, an advocate who posits a false continuum argues that two sides which appear to be distinct are actually not; they are simply two opposite extremes of a continuum. For example, an advocate might establish a false continuum if he or she argues that, whether or not you support the troops or the terrorists, you sanction the “War on Terror.” Such an argument takes two extremes – support for the troops, support for the terrorists – and calls them twin
endorsements. Though potentially convincing, a false continuum – like a dichotomy – closes off choice. Consider the following:

“Tea Party activists push an ‘originalist’ agenda, arguing that the Founding Fathers’ conception of American politics should continue – or better, should once again – reign supreme. They read the constitution as if it were gospel. It is not difficult to grasp that their ‘originalism’ is just another name for ‘fundamentalism.’ The two are one.”
Group V: Propaganda Devices

Hannah Arendt once wrote that, while individuals can be won over by reason, “the masses have to be one by propaganda.” In other words, nearly any reasonable person can recognize propaganda when he or she is exposed to it, but many of us respond anyway—especially when it is presented persuasively and persistently as so many public appeals. Technically, major propaganda devices employ multiple fallacies at the same time, so it is quite possible to see in some of the examples one or more of the fallacies covered in other groups. Propaganda devices, however, should be recognized as common, repetitive, psychological appeals that resemble reason, but which do not possess even the basic requirements of rationality in order that one might call them “fallacies.” After all, the concept of “fallacy” implies that an advocate simply makes a mistake and probably would be willing to adjust faulty reasoning, if reasonably corrected. When an advocate uses a propaganda device, it is rarely a mistake; instead, it is used on purpose to short-circuit a listener’s reasoning faculty. Some common propaganda devices appear below.

20. **ARGUMENTUM AD NAUSEAM**

To argue *ad nauseam* is to argue “to the point of nausea.” Think about how often pundits point out that we see in American politics the conceit of power *ad nauseam*. That is, arguments about the arrogance of politicians are repeated to the point of making people “sick.” An advocate commits the fallacy of *argumentum ad nauseam* when he or she repeats the same argument over and over again in an attempt to convince an audience of its veracity. Consider an (obvious, if not notorious) example: George W. Bush’s assertion after 9/11 that Iraq was harboring weapons of mass destruction. The important thing to keep in mind is that an *argumentum ad nauseam* never appears in the course of one argument. Instead, it is an argument repeated over time; it is recurrent. Notice, however, that it is only fallacious when it is clear that the supposed veracity of an argument has everything to do with its mere repetition and nothing to do with logical reasoning. For instance, a false statement is a false statement no matter how many times it is repeated. Of course, repetition is not a substitute for argumentation even when a “truth” is assured. An *argumentum ad nauseam* is therefore propagandistic only when it is deceptive, distorted, or intentionally misleading.

Note: Be careful not to confuse this with the fallacy of *petitio principi*. An *argumentum ad nauseam* is circular in that it is recurrent across time. It is not itself an instance of circular reasoning, however, since it is manifest in multiple moments of public argumentation, not just one.

21. **GLITTERING GENERALITY**

Glittering generalities are, in general, easy to spot. They are manifest in an advocate’s attempt to advance an argument by way of rousing affect. In other words, an unproven proposition is couched in *heavily emotional, highly evaluative* language, relying on *the force of words* to push an audience along. Such an argument is “glittering” insofar as it is showy and oftentimes alluring; and it as a “generality” in that it ignores detail for the sake of oversimplification. Consequently, a glittering generality never actually “proves” a point, but rather persuades an audience to belief through “pretty” language.
“Many political figures are speaking out about the growing concern of Islamic extremism – and rightfully so. Islamic fundamentalism runs, well, fundamentally counter to Western values. If people are racist, we are right to denounce them. Islamic extremists are worse than racist. We need to stand against them. We need to assert our values and resist our own fears of being condemned. Let’s move forward with a new tolerance – a tolerance of Western values!”

“[The U.S.] will always be a superpower. But one thing that has kept us a superpower has been freedom, free market economists. We are in the process of watching the deconstruction of free market economists before our very eyes, something we have never seen. But as the ice ripped that hole in the Titanic, water started being taken on, and the engineer came out and brought the blueprints of the Titanic. Water came into the first chamber, spilled over to the second, spilled over to the third, and by the time it filled up so many chambers, it was over. It was impossible to resurrect that ship.”

This second example is pulled from the transcript of a speech Congresswoman Michelle Bachman delivered on the floor of the House of Representatives in 2009. Notice how the argument does nothing to “prove” a point—either through evidence or reasoning. Instead, it makes a sweeping generality about a “sinking” appreciation for free market economics and thus could be transposed into any sort of appeal for (or against) economic reform.

22. BANDWAGON

It is common knowledge that when one “jumps on the bandwagon” he or she joins a movement or cause because it is either fashionable or potentially advantageous. Hence when an advocate asserts that an audience should accept a proposition because “everyone else” does, he or she probably commits the “bandwagon” fallacy. Consider the popular admonishment parents issue to their kids in the form of a rhetorical question: “If everyone else jumped off a bridge, would you do it?” Silly as it seems, this query provides a heuristic for testing out possible bandwagon appeals. The phrase “everyone else,” after all, can refer either to important others or significant numbers of people (thus implying that opting in aligns you with the “in”-group, whereas opting out puts you in the undesirable minority).

“All the cool kids are doing it” is another hackneyed example, specifically with regard to its coercive force. In general, advertisements are the stomping ground of bandwagon appeals. But they occur elsewhere as well. For example:

“I have had two 8:00 a.m. classes in the last two semesters. And so far, I have yet to meet one student who thinks that 8:00 a.m. classes are necessary. I have written a petition to have 8:00 a.m. classes banned from IU course schedules indefinitely, beginning next semester. Any self-respecting student would sign it.”

Notice how this example takes on a sort of “if it’s good for the goose it’s good for the gander” feel. This is quite common in political discourse, especially when appeals to public opinion polls are used to support the “truth” or “validity” of an advocate’s position. A more private example might be: “But professor, everyone copies off of Wikipedia, even if they don’t reference it. If I did it, it’s only because I didn’t think it was a problem. Everyone does it.”
23. **PLAIN FOLKS**

An appeal to an audience as “plain folks” is an assertion that “like goes with like.” Such an appeal is propagandistic when an advocate asks an audience to accept an argument *solely on the basis* of blind faith *in their membership* in that audience. A common format in politics follows this line of reasoning:

> “Above all else, you should vote for me because I am one of you. I attended the same schools, I shop at the same stores, I face the same problems, and I have the same hopes, dreams, and goals. The choice should be simple: A vote for me would be a vote for you!”

This can be a powerful appeal, and even an acceptable one. There is, after all, no inherent fallacy involved in seeking identification with an audience. As Kenneth Burke argues, we come to persuade another person in large measure by getting him or her to identify with our interests and values. “Identification is affirmed with earnestness precisely because there is division,” in Burke’s words. Appeals to identification therefore offer opportunities for people to come together. Accordingly, the appeal to “plain folks” is fallacious only when it is used to bypass a critical reasoning process.

**Note:** An appeal to plain folks differs from a bandwagon appeal insofar as the former presumes an audience’s (perceived) membership in a particular group, whereas the latter implores an audience to join a group of which they are not already a part. Plain folks says, “I am one of you,” while bandwagon says, “don’t you want to be one of us?”
Group VI: Ethical Appeals

An ethical appeal is not an appeal to practical reasoning per se, but to the character of an advocate. The ancient Greeks called this *ethos*, or credibility, which was established in and through an advocate’s speech. Ethical appeals are fallacious when an advocate attempts to make one’s opponent appear to be a bad fellow—one who should not be followed. There is nothing wrong with an advocate attempting to make him- or herself a more credible source of information for an audience; conversely, there is nothing wrong with making an opponent seem less credible. But such attempts are ethically specious when they appear as high-flown arguments or aggressive attacks that displace rational argument. If these attempts are used as common and repetitive public appeals, they can take on the form of propaganda devices. (Note, too, that the *reductio ad absurdum* might fit within this group as well).

24. **ARGUMENTUM AD HOMINEM**

An *argumentum ad hominem* is an “argument against the person.” An advocate who commits this fallacy attacks the character of an opponent rather than the substance of his or her argument. The advocate will also oftentimes couple such an attack with an assertion that nothing such an opponent might say could possibly be correct or believed. This is a relatively common fallacy in politics (and usually dubbed a “personal attack,” or a “character attack”), but even more so when political debates become defined by vitriol. Consider the following example:

“When Sarah Palin criticized President Obama’s nuclear defense policy, the president responded by saying: ‘The last time I checked, Sarah Palin is not an expert on nuclear issues.’ Oh, how right he is. Palin isn’t a nuclear expert. In fact, I’m not sure she’s an expert in anything, except perhaps buffoonery. When she opens her mouth—especially on matters of grave import—I just laugh.”

It is important to note that quite often – especially in the case of politicians – it is precisely the person’s character which is it at issue. In other words, an advocate is not necessarily advancing an *ad hominem* attack if and when the character of a political figure is the appropriate substance of an argument. It is also the case that to impugn Sarah Palin for her lack of expertise in nuclear issues is *not necessarily* a fallacy. Expertise, after all, is a function of credibility (and vice versa). If Palin is not an expert, her criticisms are not credible. Of course, to call her a “buffoon” is to impugn her character. It goes too far. When someone’s character is at stake, an *argumentum ad hominem* is not a fallacy per se, but rather a subject of debate itself. Here it is an ideological decision whether we believe that the “issue” is properly “the person him- or herself” or, on the contrary, that which he or she stands for.

Further, the fallacy of “poisoning the well” is a variant of *argumentum ad hominem*, but dependent upon the *topos* of time. Medieval myth has it that the black plague was a result of Jewish dissidents poisoning town wells. Well poisoning is also a Draconian war tactic, so named because of the practice of soldiers poisoning the water sources of their adversaries once they crossed enemy lines. It is a crude analogy, to be sure. Yet it indicates an attempt by an advocate to “poison” an argument by introducing information that might preemptively defame, discredit, vilify, or deride his or her opponent. In contemporary politics, this fallacy
can manifest either before or after (or even while) an issue is introduced—we call them “smear campaigns.” As such, poisoning the well is a present-day form of “mudslinging.” An example:

“[George] Soros is the sugar daddy of the Democratic Party and the modern left. [...] Almost every major liberal organization, think tank or media outlet has been the beneficiary of Mr. Soros’ largesse. The Nation magazine, Mother Jones, Media Matters, MoveOn.org, NPR and the Center for American Progress – all together they have received tens of millions of dollars from the financier. They serve as front groups and propaganda vehicles to promote Mr. Soros’ brand of transnational socialism.”

This is an actual quote from an October 2010 article by Jeffrey T. Kuhner of The Washington Times, entitled “The Soros Empire.” Of course, attempts at “poisoning the well” go way back in modern politics. Consider this quote from Senator Joseph R. McCarthy, as he attempts to tar the presidential candidacy of Democrat Adlai Stevenson in 1952 by alloying it to “communism,” the bête noir of Cold War America.

“Next, and perhaps the key figure in the Stevenson camp, is his speech writer, Arthur Schlesinger, Jr., former vice-chairman of the same ADA. Now Schlesinger has been a writer, incidentally, for the New York Post – New York Post whose editor and his wife admit – admit that they were members of the Young Communist League. Now, in 1946, Stevenson’s speech writer wrote that the present system in the United States makes, and I quote [...]. He says, ‘The present system in the United States makes even freedom loving Americans look wistfully at Russia.’ I wonder if there’s anyone in this audience tonight who is looking wistfully at Russia. And I wonder also if some calamity would happen and Stevenson would be elected, what job this man would have.”

25. ARGUMENTUM AD POPULAM

An argumentum ad populam is an argument “to the people,” or an appeal “to the popular.” An advocate who commits this fallacy intentionally avoids what an opponent says by asking the audience to make an immediate emotional decision regarding the subject of argument. Ideally, one should have some rational basis on which they are persuaded to believe one thing or another. One should, in other words, try not to make a priori decisions, or decisions from prior knowledge (or feeling). Instead, one should attempt to honestly evaluate the good reasons advocates (should) use to warrant their judgments. Obviously this does not always happen.

“A recent news report headline read: ‘Too Many Babies Are Delivered Too Early: Hospitals Should Learn To Just Say No.’ There is a reason it channels the language of anti-drug campaigns: ‘Just Say No!’ There is a reason natural pregnancies last 40 weeks. Doctors know that inducing birth early is wrong. They know they are simply doing it for their own convenience and for the purpose of keeping schedules. Can we let this continue? Can we threaten the lives of thousands of newborns for the sake of convenience? Something must be done.”
Many people confuse the fallacy of *argumentum ad populam* with glittering generalities. Both are “emotive,” to be sure, but notice that the example above does not have “pretty” language. It *does* have language that is meant to provoke previously held feelings of an audience. Hence why it is an *argumentum ad populam* and not a glittering generality. Consider another, more explicit example:

“My opponent has tried to trick you, but you know in your heart that this man is a menace. He has thrice been imprisoned for criminal acts, and now stands accused again. Will you let him go free to hurt your family or terrorize your neighborhood? Of course not. You must act now. You know what you must do.”

Note: An *argumentum ad populam* is one fallacy that can be easily categorized as a propaganda device. However, we include it within ethical appeals because it is often advanced as an intentional attempt to coerce an audience into following a particular, popular viewpoint. Also, recall its resemblance to an *argumentum ad baculum* so as not to confuse the two (see above).

26. **TU QUOQUE**

Literally translated, *tu quoque* means “you’re another,” but it might make more sense as “you, too.” The fallacy resides in an advocate’s use of precedent as an excuse for acting or speaking in a certain way, suggesting that *because someone else did something*, he or she should be justified in doing so. While common sense has it that two wrongs don’t make a write, this line of reasoning holds that two (or ten or twenty) wrongs *make a right*. It also frequently prompts an advocate to do precisely what he or she might otherwise criticize in others. For example:

“High ranking executives at AIG wrote themselves 165 million dollars worth of bonus checks after receiving a massive government bailout. In support of reclaiming as much of that money as possible, Keith Obermann felt that we should ‘screw these guys out of these bonuses the way they screwed us.’ I couldn’t agree more. If one does the screwing, so too should he or she get screwed.”

“The death penalty is a mechanism of retaliatory punishment visited by the state on those who commit heinous and irreparable acts—usually murder. John McAdams of the Marquette University Department of Political Science says the following: ‘If we execute murderers and there is in fact no deterrent effect, we have killed a bunch of murderers.’ An eye for an eye and a tooth for a tooth makes for a fair and just legal system.”
Group VII: Strategic Fallacies

This group is distinct from all others except the propaganda devices in that the advocate knowingly and purposefully commits the fallacies within it. The word “strategic,” then, signifies intent, premeditation, calculation, and deliberateness. It also points to the fact that an advocate who commits the following fallacies specifically and often unequivocally seeks advantage over an opponent, knowing full well that the opponent will end up having to concentrate energies in such a way as to disadvantage her or him. While these are technically fallacies, they are easily dispelled with additional argumentative development or additional evidence. One engages in them as stratagem only when it is known that an opponent will have limited opportunity to respond to them, or when doing so would detract from the opponent’s opportunity to advance her or his own agenda. They are incredibly common in adversarial situations (especially political campaigns), so much so that we cannot even think of them as fallacious until the complete argument (including refutation and rebuttal) has been heard. As such, strategic fallacies take a bit more time and/or attention to assess critically.

27. FAULTY DEFINITION

Arguments often hinge on the meaning of a key term and there is nothing wrong with specifying the definition of a term as you intend to employ it. However there are times when advocates employ definitions of terms more to confuse the opposition or to obfuscate their position than to lend clarity. What we might call the faulty definition fallacy occurs whenever the advocate employs terms that are equivocal or ambiguous in a manner that achieves strategic advantage in an argument.

The definitional fallacy of equivocation occurs when an advocate shifts the meaning of a term in the course of an argument so that it has two different and often competing or incompatible definitions. Consider this argument: “The President of the United States cannot declare war without the approval of Congress. President Ford declared a war on inflation without seeking congressional approval. He should therefore have been impeached.” Notice that the term “war” means two rather different things here. In the first case it refers to a literal conflict with another nation, where congressional approval is mandated by the Constitution; in the second case it is employed as a metaphor for suggesting how the nation should mobilize its resources to solve an economic problem, where congressional approval might be useful but is not legally mandated. By equivocating on the meaning of “war” the advocate obfuscates the argument so as to encourage the audience to draw a conclusion that is otherwise not warranted.

The definitional fallacy of ambiguity occurs when it becomes difficult to tell which of two or more different meanings of a term is being used in an argument. When President Clinton announced, “I did not have sexual relations with that woman [Monica Lewinsky]” he was relying upon the ambiguity of the term “sexual relations” to confuse his opponents and the American people. The ambiguity here rests in the multiple meanings of “sexual relations” as referring, on the one hand, to sexual intercourse, and on the other hand, to any sexual association or relationship between two people. In retrospect we know that only the first meaning lends truth value to the claim, but at the time there was no way of knowing which meaning he was invoking and thus the claim was ambiguous.
28. **RED HERRING**

Named after the dubious behavior of participants in the British Fox Hunt, by which one would drag a dead red herring across the path of an opponent’s dog so as to distract it from the scent of the fox, this fallacy entices an opponent to divert his or her attention to an irrelevant or purposefully contentious point or issue. Oftentimes, a red herring is phrased in provocative language meant to evoke an emotional response and lead one to lose his or her cool.

“What people have likened our need to fix public education to the 1960s space race against the former USSR. Why do people want to move backward? Why would we, as a nation, want to regress, especially for a moon-shot? The last thing we need to do is devote federal funds to a system that fuels ideals, not results. There is no such thing as the modern day space race. Instead of taking steps toward an achievable education system, with higher high school graduation rates and improved inner city schools, we are taking giant leaps backward.”

29. **ARGUMENTUM AD IGNORANTUM**

An *argumentum ad ignorantum* is literally an “appeal to ignorance,” which attempts to establish that a proposition is true insofar as it has not been proven false. As such, this argument fallaciously mistakes a lack of evidence for evidence of the contrary. An advocate who advances such an argument essentially argues that if he or she cannot be proven wrong, he or she must be right.

“Who said any [of my attacks] were unwarranted or not true? Chris has never come out and denied anything. There is a reason why he isn’t giving interviews and that’s because he can’t defend [himself against] what’s on the blog.”

This is an actual quote by Andrew Shirvell, Assistant Attorney General for the state of Michigan, who was catching fire for creating a blog with bigoted attacks on Chris Armstrong, student council president at the University of Michigan and an open homosexual.

30. **STRAW PERSON**

A straw person is an opponent that does not exist. An advocate who advances a straw person argument purposefully misrepresents the position of his or her opponent (or creates one *ex nihilo*), argues against that position, and then claims his or her disproof of that position as an argumentative triumph. This is a fairly popular tactic in contemporary politics. For example, as many commentators have noted, George W. Bush used to begin arguments with “Some say,” or “Some of my opponents say,” or “Some in Washington,” or “Some people believe,” or.... It is a subtle move, but this “Some” is actually a straw person (or a collection of straw persons). The reason is that Bush would follow these phrases with a fictitious position that was easily rebuffed, thus making his own position look stronger by contrast. Wayne Fields, a scholar of presidential rhetoric, calls this an increasingly prevalent phenomenon in contemporary politics whereby one “can have arguments with nonexistent people.” It goes without saying that neither one party nor another is the sole practitioner. Consider another, more recent example:
“There is a Conservative faction in this country that cares about nothing but privatization. Many of them argue to privatize social security. Many of them also argue to privatize the whole of the education system. I don’t know what their motives are, but their end goals are obvious.”

31. **GALILEO GAMBIT**

In his time, Galileo Galilei was widely held to be a heretic and a heterodox. He was frequently profaned. Much of the controversy that emerged about Galileo and his work had to do with his agreement with Copernicus that the sun—not the earth—is the center of the universe, not to mention his conflict with the Holy Catholic Church over the nature of truth. Many times he was called before the Holy Office and, at one point, he was even brought before the Inquisition. Yet many of his views, including his unified theory of matter, his proofs of gravity and motion, his discovery of the law of free fall, and the like, turned out to be correct.

The Galileo gambit, or the Galileo fallacy, begins with the premise: “They laughed at Galileo, and he was right.” An advocate who commits the fallacy follows this logic to assert: “They laugh at me, so I must be right.” In other words, an advocate will argue that, because his or her ideas are widely criticized, the ideas must be right. It should be obvious that controversy doesn’t guarantee correctness. As such, a Galileo gambit is an argumentative ploy that attempts to entice people into being persuaded by virtue of the fact that an argument is the object of serious contention. It is in some ways, then, an excuse to be polemical.

“Of course, I am something of a political provocateur. Long ago, I resolved that I was going to draw on my experience in the left and fight fire with fire. I was determined to speak to and about the left in its own morally uncompromising voice. [...] I will continue to speak (as the left likes to say) ‘truth to power.’ I will do it, even though it means being tagged as a provocateur.”

This is a quotation from David Horowitz, defending his controversial anti-reparations ad campaign and his more broadly polemical attack on higher education.