Fallacies of relevance

FALLACIES OF RELEVANCE 1. Appeal to Force If you suppose that terrorizing your opponent is giving him a reason for believing that you are correct, then you are using a scare tactic and reasoning fallaciously. Example: David: My father owns the department store that gives your newspaper fifteen percent of all its advertising revenue, so I'm sure you won't want to publish any story of my arrest for spray painting the college. Newspaper editor: Yes, David, I see your point. The story really isn't newsworthy. David has given the editor a financial reason not to publish, but he has not given a relevant reason why the story is not newsworthy. David's tactics are scaring the editor, but it's the editor who commits the scare tactic fallacy, not David. David has merely used a scare tactic. This fallacy's name emphasizes the cause of the fallacy rather than the error itself. 2. Appeal to Pity You commit the fallacy of appeal to emotions when someone's appeal to you to accept their claim is accepted merely because the appeal arouses your feelings of anger, fear, grief, love, outrage, pity, pride, sexuality, sympathy, relief, and so forth. Example of appeal to relief from grief: [The speaker knows he is talking to an aggrieved person whose house is worth much more than $100, 000.] You had a great job and didn't deserve to lose it. I wish I could help somehow. I do have one idea. Now your family needs financial security even more. You need cash. I can help you. Here is a check for $100, 000. Just sign this standard sales agreement, and we can skip the realtors and all the headaches they would create at this critical time in your life. There is nothing wrong with using emotions when you argue, but it's a mistake to use emotions as the key premises or as tools to downplay relevant information. Regarding the fallacy of appeal to pity, it is proper to pity people who have had misfortunes, but if as the person's history instructor you accept Max's claim that he earned an A

on the history quiz because he broke his wrist while playing in your college’s last basketball game, then you’ve committed the fallacy of appeal to pity. *Appeal to Snobbery 3. Ad Hominem You commit this fallacy if you make an irrelevant attack on the arguer and suggest that this attack undermines the argument itself. It is a form of the Genetic Fallacy. Example: What she says about Johannes Kepler’s astronomy of the 1600â€²s must be just so much garbage. Do you realize she’s only fourteen years old? This attack may undermine the arguer’s credibility as a scientific authority, but it does not undermine her reasoning. That reasoning should stand or fall on the scientific evidence, not on the arguer’s age or anything else about her personally. If the fallacious reasoner points out irrelevant circumstances that the reasoner is in, the fallacy is a circumstantial ad hominem. Tu Quoque and Two Wrongs Make a Right are other types of the ad hominem fallacy. The major difficulty with labeling a piece of reasoning as an ad hominem fallacy is deciding whether the personal attack is relevant. For example, attacks on a person for their actually immoral sexual conduct are irrelevant to the quality of their mathematical reasoning, but they are relevant to arguments promoting the person for a leadership position in the church. Unfortunately, many attacks are not so easy to classify, such as an attack pointing out that the candidate for church leadership, while in the tenth grade, intentionally tripped a fellow student and broke his collar bone. *Ad Hominem Circumstantial Guilt by association is a version of the ad hominem fallacy in which a person is said to be guilty of error because of the group he or she associates with. The fallacy occurs when we unfairly try to change the issue to be about the speaker’s circumstances rather than about the speaker’s actual argument. Also called “ Ad Hominem, Circumstantial. "

Example: Secretary of State Dean Acheson is too soft on communism, as you can see by his inviting so many fuzzy-headed liberals to his White House cocktail parties. Has any evidence been presented here that Acheson’s actions are inappropriate in regards to communism? This sort of reasoning is an example of McCarthyism, the technique of smearing liberal Democrats that was so effectively used by the late Senator Joe McCarthy in the early 1950s. In fact, Acheson was strongly anti-communist and the architect of President Truman’s firm policy of containing Soviet power. 4. Appeal to the People If you suggest too strongly that someone’s claim or argument is correct simply because it’s what most everyone believes, then you’ve committed the fallacy of appeal to the people. Similarly, if you suggest too strongly that someone’s claim or argument is mistaken simply because it’s not what most everyone believes, then you’ve also committed the fallacy. Agreement with popular opinion is not necessarily a reliable sign of truth, and deviation from popular opinion is not necessarily a reliable sign of error, but if you assume it is and do so with enthusiasm, then you’re guilty of committing this fallacy. It is essentially the same as the fallacies of ad numerum, appeal to the gallery, appeal to the masses, argument from popularity, argumentum ad populum, common practice, mob appeal, past practice, peer pressure, traditional wisdom. The “ too strongly" mentioned above is important in the description of the fallacy because what most everyone believes is, for that reason, somewhat likely to be true, all things considered. However, the fallacy occurs when this degree of support is overestimated. Example: You should turn to channel 6. It’s the most watched channel this year. This is fallacious because of its implicitly accepting the questionable premise that the most watched channel this year is, for that

reason alone, the best channel for you. If you stress the idea of appealing to a new idea of the gallery, masses, mob, peers, people, and so forth, then it is a bandwagon fallacy. *Bandwagon If you suggest that someone’s claim is correct simply because it’s what most everyone is coming to believe, then you’re committing the bandwagon fallacy. Get up here with us on the wagon where the band is playing, and go where we go, and don’t think too much about the reasons. The Latin term for this fallacy of appeal to novelty is Argumentum ad Novitatem. Example: [Advertisement] More and more people are buying sports utility vehicles. Isn’t it time you bought one, too? [You commit the fallacy if you buy the vehicle solely because of this advertisement.] Like its close cousin, the fallacy of appeal to the people, the bandwagon fallacy needs to be carefully distinguished from properly defending a claim by pointing out that many people have studied the claim and have come to a reasoned conclusion that it is correct. What most everyone believes is likely to be true, all things considered, and if one defends a claim on those grounds, this is not a fallacious inference. What is fallacious is to be swept up by the excitement of a new idea or new fad and to unquestionably give it too high a degree of your belief solely on the grounds of its new popularity, perhaps thinking simply that ‘ new is better.’ The key ingredient that is missing from a bandwagon fallacy is knowledge that an item is popular because of its high quality. *Appeal to Past People (“ You too") 5. Accident We often arrive at a generalization but don’t or can’t list all the exceptions. When we reason with the generalization as if it has no exceptions, we commit the fallacy of accident. This fallacy is sometimes called the “ fallacy of sweeping generalization. " Example: People should keep their promises, right? I loaned Dwayne my knife, and he said he’d

return it. Now he is refusing to give it back, but I need it right now to slash up my neighbors who disrespected me. People should keep their promises, but there are exceptions to this generaliztion as in this case of the psychopath who wants Dwayne to keep his promise to return the knife. 6. Straw Man You commit the straw man fallacy whenever you attribute an easily refuted position to your opponent, one that the opponent wouldn't endorse, and then proceed to attack the easily refuted position (the straw man) believing you have undermined the opponent's actual position. If the misrepresentation is on purpose, then the straw man fallacy is caused by lying. Example (a debate before the city council): Opponent: Because of the killing and suffering of Indians that followed Columbus's discovery of America, the City of Berkeley should declare that Columbus Day will no longer be observed in our city. Speaker: This is ridiculous, fellow members of the city council. It's not true that everybody who ever came to America from another country somehow oppressed the Indians. I say we should continue to observe Columbus Day, and vote down this resolution that will make the City of Berkeley the laughing stock of the nation. The speaker has twisted what his opponent said; the opponent never said, nor even indirectly suggested, that everybody who ever came to America from another country somehow oppressed the Indians. The critical thinker will respond to the fallacy by saying, " Let's get back to the original issue of whether we have a good reason to discontinue observing Columbus Day. " 7. Missing the Point The conclusion that is drawn is irrelevant to the premises; it misses the point. Example: In court, Thompson testifies that the defendant is a honorable person, who wouldn't harm a flea. The defense attorney commits the fallacy by rising to say that Thompson's testimony shows once again that his client

was not near the murder scene. The testimony of Thompson may be relevant to a request for leniency, but it is irrelevant to any claim about the defendant not being near the murder scene. 8. Red Herring A red herring is a smelly fish that would distract even a bloodhound. It is also a digression that leads the reasoner off the track of considering only relevant information. Example: Will the new tax in Senate Bill 47 unfairly hurt business? One of the provisions of the bill is that the tax is higher for large employers (fifty or more employees) as opposed to small employers (six to forty-nine employees). To decide on the fairness of the bill, we must first determine whether employees who work for large employers have better working conditions than employees who work for small employers. Bringing up the issue of working conditions is the red herring. FALLACIES OF PRESUMPTION 9. Begging the Question A form of circular reasoning in which a conclusion is derived from premises that presuppose the conclusion. Normally, the point of good reasoning is to start out at one place and end up somewhere new, namely having reached the goal of increasing the degree of reasonable belief in the conclusion. The point is to make progress, but in cases of begging the question there is no progress. Example: “ Women have rights, " said the Bullfighters Association president. “ But women shouldn’t fight bulls because a bullfighter is and should be a man. " The president is saying basically that women shouldn’t fight bulls because women shouldn’t fight bulls. This reasoning isn’t making any progress. Insofar as the conclusion of a deductively valid argument is “ contained" in the premises from which it is deduced, this containing might seem to be a case of presupposing, and thus any deductively valid argument might seem to be begging the question. It is still an open question among logicians as to why some deductively valid

arguments are considered to be begging the question and others are not. Some logicians suggest that, in informal reasoning with a deductively valid argument, if the conclusion is psychologically new insofar as the premises are concerned, then the argument isn’t an example of the fallacy. Other logicians suggest that we need to look instead to surrounding circumstances, not to the psychology of the reasoner, in order to assess the quality of the argument. For example, we need to look to the reasons that the reasoner used to accept the premises. Was the premise justified on the basis of accepting the conclusion? A third group of logicians say that, in deciding whether the fallacy is committed, we need more. We must determine whether any premise that is key to deducing the conclusion is adopted rather blindly or instead is a reasonable assumption made by someone accepting their burden of proof. The premise would here be termed reasonable if the arguer could defend it independently of accepting the conclusion that is at issue. 10. Complex Question You commit this fallacy when you frame a question so that some controversial presupposition is made by the wording of the question. Example: [Reporter's question] Mr. President: Are you going to continue your policy of wasting taxpayer’s money on missile defense? The question unfairly presumes the controversial claim that the policy really is a waste of money. The fallacy of complex question is a form of begging the question. 11. False Dichotomy A reasoner who unfairly presents too few choices and then implies that a choice must be made among this short menu of choices commits the false dilemma fallacy, as does the person who accepts this faulty reasoning. Example: I want to go to Scotland from London. I overheard McTaggart say there are two roads to Scotland from London: the high road and the low road. I expect the high road

would be too risky because it’s through the hills and that means dangerous curves. But it’s raining now, so both roads are probably slippery. I don’t like either choice, but I guess I should take the low road and be safer. This would be fine reasoning is you were limited to only two roads, but you’ve falsely gotten yourself into a dilemma with such reasoning. There are many other ways to get to Scotland. Don’t limit yourself to these two choices. You can take other roads, or go by boat or train or airplane. The fallacy is called the “ False Dichotomy Fallacy" when the unfair menu contains only two choices. Think of the unpleasant choice between the two as being a charging bull. By demanding other choices beyond those on the unfairly limited menu, you thereby “ go between the horns" of the dilemma, and are not gored. 12. Suppressed Evidence Intentionally failing to use information suspected of being relevant and significant is committing the fallacy of suppressed evidence. This fallacy usually occurs when the information counts against one’s own conclusion. Perhaps the arguer is not mentioning that experts have recently objected to one of his premises. The fallacy is a kind of fallacy of Selective Attention. Example: Buying the Cray Mac 11 computer for our company was the right thing to do. It meets our company’s needs; it runs the programs we want it to run; it will be delivered quickly; and it costs much less than what we had budgeted. This appears to be a good argument, but you’d change your assessment of the argument if you learned the speaker has intentionally suppressed the relevant evidence that the company’s Cray Mac 11 was purchased from his brother-in-law at a 30 percent higher price than it could have been purchased elsewhere, and if you learned that a recent unbiased analysis of ten comparable computers placed the Cray Mac 11 near the bottom of the list. FALLACIES OF WEAK INDUCTION 13. Appeal to

Ignorance The fallacy of appeal to ignorance comes in two forms: (1) Not knowing that a certain statement is true is taken to be a proof that it is false. (2) Not knowing that a statement is false is taken to be a proof that it is true. The fallacy occurs in cases where absence of evidence is not good enough evidence of absence. The fallacy uses an unjustified attempt to shift the burden of proof. The fallacy is also called “ Argument from Ignorance. " Example: Nobody has ever proved to me there’s a God, so I know there is no God. This kind of reasoning is generally fallacious. It would be proper reasoning only if the proof attempts were quite thorough, and it were the case that if God did exist, then there would be a discoverable proof of this. Another common example of the fallacy involves ignorance of a future event: People have been complaining about the danger of Xs ever since they were invented, but there’s never been any big problem with them, so there’s nothing to worry about. 14. Appeal to Unqualified Authority You appeal to authority if you back up your reasoning by saying that it is supported by what some authority says on the subject. Most reasoning of this kind is not fallacious, and much of our knowledge properly comes from listening to authorities. However, appealing to authority as a reason to believe something is fallacious whenever the authority appealed to is not really an authority in this particular subject, when the authority cannot be trusted to tell the truth, when authorities disagree on this subject (except for the occasional lone wolf), when the reasoner misquotes the authority, and so forth. Although spotting a fallacious appeal to authority often requires some background knowledge about the subject or the authority, in brief it can be said that it is fallacious to accept the words of a supposed authority when we should be suspicious of the authority’s words. Example: The moon is covered

with dust because the president of our neighborhood association said so. This is a fallacious appeal to authority because, although the president is an authority on many neighborhood matters, you are given no reason to believe the president is an authority on the composition of the moon. It would be better to appeal to some astronomer or geologist. A TV commercial that gives you a testimonial from a famous film star who wears a Wilson watch and that suggests you, too, should wear that brand of watch is committing a fallacious appeal to authority. The film star is an authority on how to act, not on which watch is best for you. 15. Hasty Generalization A hasty generalization is a fallacy of jumping to conclusions in which the conclusion is a generalization. See also Biased Statistics. Example: I’ve met two people in Nicaragua so far, and they were both nice to me. So, all people I will meet in Nicaragua will be nice to me. In any hasty generalization the key error is to overestimate the strength of an argument that is based on too small a sample for the implied confidence level or error margin. In this argument about Nicaragua, using the word “ all" in the conclusion implies zero error margin. With zero error margin you’d need to sample every single person in Nicaragua, not just two people. 16. False Cause Improperly concluding that one thing is a cause of another. The Fallacy of Non Causa Pro Causa is another name for this fallacy. Its four principal kinds are the Post Hoc Fallacy, the Fallacy of Cum Hoc, Ergo Propter Hoc, the Regression Fallacy, and the Fallacy of Reversing Causation. Example: My psychic adviser says to expect bad things when Mars is aligned with Jupiter. Tomorrow Mars will be aligned with Jupiter. So, if a dog were to bite me tomorrow, it would be because of the alignment of Mars with Jupiter. 17. Slippery Slope Suppose someone claims that a first step (in a chain of causes and effects, or a chain

of reasoning) will probably lead to a second step that in turn will probably lead to another step and so on until a final step ends in trouble. If the likelihood of the trouble occurring is exaggerated, the slippery slope fallacy is committed. Example: Mom: Those look like bags under your eyes. Are you getting enough sleep? Jeff: I had a test and stayed up late studying. Mom: You didn’t take any drugs, did you? Jeff: Just caffeine in my coffee, like I always do. Mom: Jeff! You know what happens when people take drugs! Pretty soon the caffeine won’t be strong enough. Then you will take something stronger, maybe someone’s diet pill. Then, something even stronger. Eventually, you will be doing cocaine. Then you will be a crack addict! So, don’t drink that coffee. The form of a slippery slope fallacy looks like this: A leads to B. B leads to C. C leads to D. … Z leads to HELL. We don’t want to go to HELL. So, don’t take that first step A. 18. Weak Analogy The problem is that the items in the analogy are too dissimilar. When reasoning by analogy, the fallacy occurs when the analogy is irrelevant or very weak or when there is a more relevant disanalogy. See also Faulty Comparison. Example: The book Investing for Dummies really helped me understand my finances better. The bookChess for Dummies was written by the same author, was published by the same press, and costs about the same amount. So, this chess book would probably help me understand my finances, too. FALLACIES OF AMBIGUITY 19. Accent The accent fallacy is a fallacy of ambiguity due to the different ways a word is emphasized or accented. Example: A member of Congress is asked by a reporter if she is in favor of the President’s new missile defense system, and she responds, “ I’m in favor of a missile defense system that effectively defends America. " With an emphasis on the word “ favor, " her response is likely to favor the President’s

missile defense system. With an emphasis, instead, on the words “ effectively defends, " her remark is likely to be againstthe President’s missile defense system. And by using neither emphasis, she can later claim that her response was on either side of the issue. Aristotle’s version of the fallacy of accent allowed only a shift in which syllable is accented within a word. 20. Amphiboly This is an error due to taking a grammatically ambiguous phrase in two different ways during the reasoning. Example: In a cartoon, two elephants are driving their car down the road in India. They say, “ We’d better not get out here, " as they pass a sign saying: ELEPHANTS PLEASE STAY IN YOUR CAR Upon one interpretation of the grammar, the pronoun “ YOUR" refers to the elephants in the car, but on another it refers to those humans who are driving cars in the vicinity. Unlike equivocation, which is due to multiple meanings of a phrase, amphiboly is due to syntactic ambiguity, ambiguity caused by multiple ways of understanding the grammar of the phrase. 21. Equivocation Equivocation is the illegitimate switching of the meaning of a term during the reasoning. Example: Brad is a nobody, but since nobody is perfect, Brad must be perfect, too. The term “ nobody" changes its meaning without warning in the passage. So does the term “ political jokes" in this joke: I don’t approve of political jokes. I’ve seen too many of them get elected. FALLACIES OF GRAMMATICAL ANALOGY 22. Composition The composition fallacy occurs when someone mistakenly assumes that a characteristic of some or all the individuals in a group is also a characteristic of the group itself, the group “ composed" of those members. It is the converse of the division fallacy. Example: Each human cell is very lightweight, so a human being composed of cells is also very lightweight. 23. Division Merely because a group as a whole has a

characteristic, it often doesn’t follow that individuals in the group have that characteristic. If you suppose that it does follow, when it doesn’t, you commit the fallacy of division. It is the converse of the composition fallacy. Example: Joshua’s soccer team is the best in the division because it had an undefeated season and shared the division title, so Joshua, who is their goalie, must be the best goalie in the division. 24. Figure of Speech or Parallel-word Construction A fallacy characterized by ambiguities due to the fact that different words in Greek (and in Latin) may have different cases or genders even though the case endings or gender endings are the same. Since this is not widespread in other languages or since it coincides with other fallacies (e. g. equivocation, see above) writers tend to interpret it very broadly. Examples: " Activists have been labeled as idealists, sadists, anarchists, communists, and just about any name that can come to mind ending in -ist, like samok-ist, saba-ist, bad-ist, and of course, who could forgetdevil-ist?" (The writer has the unsaid argument that any name ending in -ist is viewed as " trouble-makers" by our society.) An introductory book on philosophy has an appendix entitle " List of Isms" the proceeds to list the schools of thought in philosophy. (Not all words that end in -ism is a school of thought: take for example, syllogism.)