

Fallacies of weak induction

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Fallacies of weak induction employ premises which are not irrelevant (as with fallacies of relevance), but which supply only weak inductive support for the conclusion.

Appeal to authority

This fallacy is committed when the arguer cites as evidence the authority or testimony of someone who is not in fact an authority in the relevant subject area.

I need to buy some drinks for the party tonight. I think I'll get Diet Pepsi, because that's what MC Hammer says has the best taste.

Brad Pitt said in a recent interview that nuclear power plants should be shut down because they are unsafe. So I am going to vote to close them down since they are clearly unsafe.

Lester Brown, author of the annual State of the World report, has said that the depletion of the rain forests is one of the ten most serious problems worldwide. Thus, it must be the case that this is in fact a very serious problem.

Appeal to Ignorance

Committed when the arguer claims that a lack of evidence for some claim constitutes evidence for that claim's negation.

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I've looked all over this room, and I can't find my keys, so they must not be here.

Slippery Slope

This fallacy is committed when the arguer claims that his position must be preferred because the only other position will lead to a chain of events leading to undesirable consequences. It is a fallacy if in fact the chain of events is not likely to occur.

We should outlaw pornography. The continued manufacture of this material will lead to an increase in crimes such as rape and incest. This will gradually erode the moral fabric of society, resulting in increased crimes of all sorts. Soon, we will be facing the complete collapse of law and order, and perhaps the end of civilization.

Attempts to outlaw pornography should be abandoned. If pornography is outlawed, then this will open the door to censorship of newspapers and magazines. Then we will see textbooks and university curricula censored as well. Then the government will be in the business of maintaining complete mind control over us all.

We should pay to have the hole in the dam fixed immediately. If we do not, then the water levels will continue to rise, overflowing the banks of the river. Eventually, the entire valley will be flooded, and the town will be under water. Surely we can't allow this to happen.

FDA Still Against Medical Pot

Despite mounting evidence to support it, the FDA has reaffirmed its stance against the use of medical marijuana. What do *you* think?



Brian Kirkpatrick,
Drywall

"Instead of wasting time on political moves like this, the FDA should get back to doing what it does best, approving new boner pills."



Kay Helms,
Quarry Worker

"This is the slippery slope, man! First they outlaw medical marijuana, and the next thing you know, it's only a matter of time before they make ALL pot illegal."



Sam Greenland,
Fruit Vendor

"It's not like the FDA left cancer patients out to dry. They can still smoke cigarettes."

False Dichotomy

The fallacy of false dichotomy is committed when the arguer claims that his conclusion is one of only two options, when in fact there are other possibilities. The arguer then goes on to show that the 'only other option' is clearly outrageous, and so his preferred conclusion must be embraced.

Either you let me go to Lollapalooza, or I'll be miserable for the rest of my life. I know you don't want me to be miserable for the rest of my life, so you should let me go.

Either you use Speed Stick deodorant, or you will stink to high heaven. You don't want to stink, so you better buy Speed Stick.

Either I keep smoking, or I'll get fat. I don't want to get fat, so I better keep smoking.

Either we keep Charles Manson in jail, or we release him, thus risking murder, carnage, and mayhem. We don't want murder, carnage, or mayhem, so we had better keep him in jail.

Comparison between Slippery Slope and False Dichotomy

Both essentially have the form of a disjunctive syllogism. (Which is a valid form of inference!)

Slippery Slope

1. $A \vee B$
2. $\sim B$
3. A

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- ii. $C \supset D$
- iii. $\sim D$
- iv. $\sim B$

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False Cause

This fallacy is committed when one concludes that A causes B, when in fact all that has been shown is a correlation between A and B.

During the past two months, every time the cheerleaders have worn blue ribbons, the basketball team has won. So if we want to keep winning, they had better continue to wear the blue ribbons.

Children become able to solve complex problems, predict the behavior of others, and think of objects objectively at the same time that they learn language. Therefore, learning a language is what causes these abilities.

Every time Jerome Bettis carries more than 30 times, the Steelers win. So all Cowher has to do to keep the Steelers winning is to give the ball to Bettis at least 30 times a game.

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Four possible explanations for a correlation between A and B:

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Four possible explanations for a correlation between A and B:

1. Coincidence
2. A causes B
3. B causes A
4. A and B both caused by C

Does it pay to be a flirt?

Report says women in the workplace who use sexual behavior may not get that next promotion or raise.

August 8, 2005: 2:19 PM EDT

NEW YORK (CNN/Money) - Flirting at the office is not only taboo, but it could even take a toll on your financial future.

Women who cross their legs provocatively, wear short skirts or massage a man's shoulders at work get fewer pay raises and promotions, according to Friday's *USA Today*.

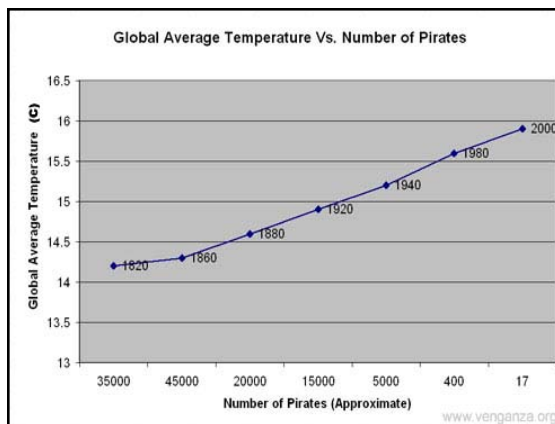
The newspaper, citing a Tulane University study, said 49 percent of female MBA graduates polled admitted that they have tried to advance in their careers by sometimes engaging in certain sexual behaviors, including sending flirty e-mails and wearing revealing clothing.

The respondents who said they never engaged in such activity earned an average of three promotions, versus two for the group that had employed sexuality. Those who said they never used sexuality were, on average, in the \$75,000-\$100,000 income range; the other group fell, on average, into the next range, \$50,000 to \$75,000.

Tulane professor Arthur Brief said the study suggests that women should be careful about letting men open doors or lift boxes that aren't particularly heavy, because chivalry is "benevolent sexism."

"We argue that there are negative consequences for women who use sexuality in the workplace," Brief told the newspaper.

The 164 women in the study ranged in age from their mid-20s to 60.



Hasty Generalization

Is committed when the arguer draws a conclusion about all members of a group from characteristics of a few members. It is a fallacy if there is no reason to think that the example individuals are typical. (Sample might be too small, or the sampling might be systematically biased.)

I think I won't accept the job at Office Depot. My boss would be a woman, and at my last job my boss was a woman, and she was the worst boss I've ever had.

You spend all your time watching football! I've called you over a dozen times in the last few months, and every single time you're watching football! Don't you have a job, or any friends?

Farmer Bob used Stinky Winky fertilizer at three spots in his corn field, and at those three spots the corn plants died. All the other plants in the field lived. Stinky Winky fertilizer is obviously bad for corn plants.

Comparison between false cause and hasty generalization.

All are based on noticing a correlation and then drawing a bad conclusion from that correlation.

False cause requires a causal relationship, can usually tell if some sort of control is implied.

With false cause, there may be no move from some to all (the data may hold for all), and if there is a move from some to all, that isn't the problem. **Problem is the causal relation.**

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Hasty generalization need not involve any causal claim. It's entirely about a move from a premise about some examples, to a conclusion about all examples.

We examined 20 bodies, chosen at random, of the 100 bodies discovered at the ancient burial site. All 20 of them had spear wounds in their heads. Therefore, it is reasonable to conclude that all of the bodies will have spear wounds in their heads.

Practicing with examples

Michael Jordan says Spray-o-Vac batteries help save the environment. So I don't buy any other brand.

If we legalize euthanasia for elderly people who want to die, then what about cases where the person can't speak? Then it will be made a law that if the relatives think that the person would want to be put to death, then they will be euthanized. Then any time an old person becomes a burden, their children will just take them down to the hospital to have them killed.

As the number of laws on the books has increased over the past 50 years, the number of crimes committed has also increased. So if we reduce the number of laws, we will reduce crime.

Beer magnate Bubby Busch has argued that government should get off the back of business. But without government, there would be no legal system, no defense, no Social Security program. None of us wants to lose those benefits. Busch is clearly wrong.

Of course there is a God! Every attempted atheistic argument has failed.

Either you get an Alpine CD changer, or you have a second rate system that won't impress your friends.

Of course abortion is permissible! A woman has a right to do what she wants with her own body!

Of course abortion is wrong! It's always wrong to kill another person!

You can hardly convince me that increases in the military budget are desirable when I happen to know that you work in a munitions factory.

The budget deficit was reduced after only a few years with a Republican Congress. So if we want to keep the budget under control, we need to elect another Republican Congress.

You should not find the defendant guilty of murder, since it would break his poor mother's heart to see him sent to jail.

Ben: How come I didn't get invited to your party?

Sally: Because you're the most boring person I've ever met. And you always smell like crap.

A recent study has shown that among the youth of our city, 80 percent of those who contracted venereal disease last year had taken sex education classes in high school. Obviously if we want to cut down on the incidence of VD we must get rid of those sex education classes.

The only policy that effectively reduces public shootings is right-to-carry laws. Allowing citizens to carry concealed handguns reduces violent crime. In the 31 states that have passed right-to-carry laws since the mid-1980s, the number of multiple-victim public shootings and other violent crimes has dropped dramatically. Murders fell by 7.65%, rapes by 5.2%, aggravated assaults by 7%, and robberies by 3%.

Pete: I'm telling you, magnet therapy works.

Paul: That's ridiculous. There have been no legitimate medical studies that demonstrate the effectiveness of magnet therapy.

Sure, you start by eliminating prayer in public schools. Pretty soon, any mention of god or religion in school is forbidden. And then they'll say you can't mention those things in any public place. Before you know it, they ban religion entirely and tear down the churches. You don't want America to turn into some immoral atheistic country, do you?

A Bentley is a real status symbol. Very few people can afford one.

I think your new theory of gravitation is wrong. I asked my physics professor, and he said it doesn't make any sense.

Everyone is selfish; everyone is doing what he believes will make himself happier. The recognition of that can take most of the sting out of accusations that you're being 'selfish'. Why should you feel guilty for seeking your own happiness when that's what everyone else is doing, too?

Beth: You can't do that. That's an illegal move. A pawn can't move backwards.

Andy: But you did the same thing two moves ago!

Prof. Grimshaw argues that Shakespeare's plays were actually written by the Duchess of York. His evidence for this claim is a letter supposedly written by the Duchess to Ben Jonson. However, recent scholarship suggests that this letter is a forgery, so Grimshaw's bold conjecture must be rejected.

The President must be doing a bad job. His approval ratings are really low.

I don't know how you can take Heidegger seriously. He was a Nazi sympathizer, you know.

I'm sorry I couldn't make it to class yesterday. My grandmother passed away and I had to attend her funeral.

Kekulé says that benzene has a ring-like structure. But he also says that this idea first came to him in a dream. Why should I trust any scientific claim that was inspired by a dream?

Mr Johnson thinks marijuana should be legalized, but does he realize the kind of effects drugs have on kids? Not only are many drugs dangerously addictive, needle use among drug addicts often leads to the propagation of the AIDS virus.

Why don't you support the death penalty? Do you want hardened and dangerous criminals wandering the streets?

Some parents in the district think we should provide bilingual education in Spanish. We cannot do this. If we do, then some will ask for bilingual education in Greek, and then in German and Japanese. Next it will be Hungarian and Polish. These programs would be far too expensive to maintain.

How dare you criticize my logic! You commit fallacies left and right!

You should have your brakes checked. It sounds like they are about ready to go, and if they do, you will likely crash your car and get injured.

Today is Monday, and I crashed my car. Last Monday my boyfriend dumped me for my younger sister. I think I'll kill myself before next Monday so nothing else rotten happens.

Rent with Hertz, or get stuck in the rain and pay too much and lose the big company contract.

Happy Birthday sweetie! I got you a CD by the Oak Ridge Boys. They have long hair and guitars just like those other bands you like -- you know, Metallica and Korn.

Smith, Adams, and Harris all outlived their wives, and their wives were younger than they were. It must be the case that men outlive women these days.

Whenever we drive to Murphy's Bar, we always get into an accident on the way back. It's getting to be too much. Next time we're going to go to some other bar.

Communism is a terrible way to structure a society because a good society must respect individual property rights.

Anne: That's a really cute dog. What breed do you think it is?
Bob: It's a Dalmatian.
Anne: Really? How do you know?
Bob: Well, look at all the spots. All Dalmatians have spots.

I think I'd be the perfect candidate for this job. You've got to give me a break. My girlfriend just dumped me and I don't think I'd be able to stand another rejection.