

Argument Basics

Argument Basics

While people have a general idea of what “argument” means, the term does have a technical meaning in the context of philosophy that is well worth considering.

“Argument” Defined

While people generally think of an argument as a fight, perhaps involving the hurling of small appliances, this is not the case—at least as the term is used in philosophy. In philosophy, an argument is a set of claims, one of which is supposed to be supported by the others. There are two types of claims in an argument. The first type of claim is the conclusion. This is the claim that is supposed to be supported by the premises. A single argument has one and only one conclusion, although the conclusion of one argument can be used as a premise in another argument (thus forming an extended argument). To find a conclusion, ask “what is the point?” If there is no point being made, then there is no argument. If a point is being made, then there can be an argument.

The second type of claim is the premise. A premise is a claim given as evidence or a reason for accepting the conclusion. Aside from practical concerns, there is no limit to the number of premises in a single argument. To find a premise, ask, “what evidence or reasons are given for the point being made?” If there is no evidence or reason being offered, then there is no argument.

As such, to make an argument requires making a point (conclusion) and backing it up with evidence or reasons (premises).

Varieties

There are two main categories of arguments (three if bad arguments are considered a category). The first type is the inductive argument. An inductive argument is an argument in which the premises are intended to provide some degree of support but less than complete support for the conclusion.

The second type is the deductive argument. A deductive argument is an argument in which the

premises are intended to provide complete support for the conclusion.

A third “type” of argument is a fallacy. A fallacy is an argument in which the premises fail to provide adequate support for the conclusion. There are inductive fallacies and deductive fallacies.

Examples of Arguments

An Inductive Argument

Premise 1: Most Siberian huskies enjoy running.

Premise 2: Isis is a Siberian husky.

Conclusion: Isis enjoys running.

A Deductive Argument

Premise 1: If pornography has a detrimental effect on one’s character, it would be best to avoid it.

Premise 2: Pornography has a detrimental effect on one’s character.

Conclusion: It would be best to avoid pornography.

An Extended Deductive Argument

Argument 1, Premise 1: If pornography has a detrimental effect on one’s character, it would be best to regard it as harmful.

Argument 1, Premise 2: Pornography has a detrimental effect on one’s character.

Argument 1, Conclusion: It would be best to regard pornography as harmful.

Argument 2, Premise 1: If it is best to regard something as harmful, then the government should protect people from it.

Argument 2, Premise 2: It would be best to regard pornography as harmful.

Argument 2, Conclusion: The government should protect people from pornography.

A Fallacy (Circumstantial ad hominem)

Premise 1: Dave supports the tax reduction for businesses and says it will be good for everyone, but he owns a business.

Conclusion: Dave must be wrong about the tax reduction.

General Assessment

Just like almost everything else, arguments are subject to assessment. When creating an argument, the usual goal is to make a good one. When assessing an argument, the goal is to determine whether it is good or not.

When assessing any argument there are two main factors to consider: the quality of the premises and the quality of the reasoning.

While people often blend the two together, the quality of the reasoning is quite distinct from the quality of the premises. Just as it is possible to build poorly using excellent materials, it is possible to reason badly using good premises. Also, just as it is possible for a skilled builder to assemble crappy material with great skill, it is possible to reason well using poor premises. As another analogy, consider a check book. Doing the math is the same thing as reasoning. The math can be done correctly (good reasoning) but the information entered for the checks (the premises) can be mistaken (for example, entering \$5.00 instead of \$50). It is also possible to enter all the checks correctly, but for there to be errors in the mathematics.

Reasoning

When assessing the quality of reasoning, the question to ask is: Do the premises logically support the conclusion? If the premises do not logically support the conclusion, then the argument is flawed, and the conclusion should not be accepted based on the premises provided. The conclusion may, in fact, be true, but a flawed argument gives you no logical reason to believe the conclusion because of the argument in question. Hence, it would be a mistake to accept it for those reasons. If the premises do logically support the conclusion, then you would have a good reason to accept the conclusion, on the assumption that the premises are true or at least plausible.

The way the reasoning is assessed depends on whether the argument is deductive or inductive. If the argument is deductive, it is assessed in terms of being valid or invalid. A valid argument is such that if the premises were true

then the conclusion must be true. An invalid argument is such that all the premises could be true and the conclusion false at the same time. Validity is tested by formal means, such as truth tables, Venn diagrams and proofs. If an argument is valid and has all true premises, then it is sound. Naturally, a sound deductive argument also has a true conclusion. If a deductive argument is invalid, has one or more false premises (or both) it is unsound.

While deductive arguments are assessed in strict “black and white” terms (valid or invalid, sound or unsound), inductive arguments are assessed in terms of varying degrees of strength.

A strong inductive argument is an argument such that if the premises are true, then the conclusion is likely to be true. A weak inductive argument is an argument such that even if the premises are true, the conclusion is not likely to be true. There are various degrees of strength and weakness which express a somewhat subjective opinion of how well the argument’s premises logically support the conclusion. Such assessments are based on the standards for assessing the specific type of argument and the better the argument succeeds at meeting the standards, the stronger the argument. The worse it fails, the weaker the argument. A strong inductive argument with true premises is often called cogent.

Premises

When assessing the quality of the premises, the question to ask is: are the premises true (or at least plausible)? While the testing of premises can be a rather extensive matter, it is reasonable to accept a premise as plausible if it meets three conditions. First, the premise is consistent with your own observations. Second, the premise is consistent with your background beliefs and experience. Third, the premise is consistent with credible sources, such as experts, standard references and textbooks. It should be noted that thoroughly and rigorously examining premises generally involves going far beyond the three basic standards presented here.

Good and Bad Faith Arguing

Philosophical argumentation aims at establishing the truth of a claim. The goal of persuasion is to get the audience to believe a claim whether it is true or false. Philosophical argumentation requires that one argues in good faith; persuasion does not. This is not to say that persuasive techniques are forbidden when arguing philosophically. You can and should use persuasive techniques to make your arguments more interesting, but you should not use them as substitutes for arguments.

Arguing in good faith is not the same thing as making a good argument: a person could make a terrible argument or use false premises in good faith. This is because arguing in good or bad faith is primarily a matter of intention. That said, arguments made in bad faith will tend to be bad arguments. To use an analogy, a person can prepare a turkey in good faith with the intention of making it safe and delicious. But the turkey could turn out badly or could even give the guests food poisoning. Preparing food in bad faith, to continue the analogy, would aim at deceiving guests about what they are really eating or even aim at intentionally poisoning them. As the analogy suggests, just as you would want to avoid bad faith cooks you would want to avoid those who argue in bad faith. They will not be serving up anything you should consume.

When a person argues in good faith, they intend to argue that a claim is true by using good logic and true (or at least plausible) evidence and reasons. Arguing in good faith does not require that a person believes the claim they are arguing for, but they do need to be honest about this. A person can advance an argument they disagree with as part of a good faith discussion. For example, philosophical argumentation often includes considering objections against one's position and these objections can (and should) be made in good faith. As another example, when a philosophy presents the views of a philosopher they disagree with, they should present the arguments in good faith.

When considering arguments against your view (be they objections you raise yourself or not), arguing in good faith means using the

principle of charity. Following this principle requires interpreting claims in the best possible light and reconstructing (or constructing) arguments to make them as strong as possible. There are three reasons to follow the principle. The first is that the use of this principle is the right thing to do. The second is that doing so helps avoid committing the straw person fallacy. In this context, this is a fallacy in which one presents a distorted or exaggerated version of an argument and then takes criticism of that version to refute the real argument. The third is practical: criticism of the best and strongest version of an argument also addresses the lesser versions.

The principle of charity should be tempered by the principle of plausibility. If you are considering another person's argument, then the claims must be interpreted, and the argument reconstructed in a way that matches what is known about the source and the context. For example, reconstructing an argument by Descartes and including premises from quantum physics would violate the principle of plausibility. Now, on to arguing in bad faith.

Arguing in bad faith is not the same thing as arguing badly, but it usually involves making bad arguments with dubious premises. As with good faith, bad faith is a matter of intention. When a person argues in bad faith, they intend to deceive and mislead when engaged in argument. A person can engage in bad faith arguing in many ways.

One way to argue in bad faith is to knowingly use fallacies (errors in logic) to try to get the audience to accept a claim as true (or reject one as false). To illustrate, a person arguing in bad faith might make a straw person (a distorted version) out of their opponent's view or launch an ad Hominem attack against them to "refute" them.

Another way to argue in bad faith is to knowingly use persuasive devices (rhetoric) in place of evidence and reasons to get the audience to believe a claim. As noted above, you can use persuasive devices in good faith when making an argument. For example, a person skilled at both argumentation and comedy might make a hilarious but good argument.

A third way to argue in bad faith is to use lies as premises or the conclusion of an argument. This is different from *unintentionally* using claims that are not true—a person can make a false claim and not be lying, since lying is a matter not just of truth but also intention. A person can also make a true claim and still be lying; this could occur because the person incorrectly believes the claim is false and is trying to deceive the audience into accepting the claim as true.

Like sorting out when someone is lying, determining when someone is arguing in bad faith can be challenging. A person who is arguing in good faith might seem to be arguing in bad faith if they unintentionally use bad logic or make false claims. Someone who is skilled at arguing in bad faith might be utterly convincing and seem to be advancing incredible arguments. Fortunately, when assessing arguments and claims you can cut through bad faith by focusing on using the methods of logic and critical thinking to sort things out.

Some Common Valid Deductive Arguments

Modus Ponens (Affirming the Antecedent)

Form

Premise 1: If P, then Q

Premise 2: P

Conclusion: Q

Example

If killing in war is like murder, it is immoral.

Killing in war is like murder.

Killing in war is immoral.

Modus Tollens (Denying the Consequent)

Form

Premise 1: If P, then Q.

Premise 2: Not Q.

Conclusion: Not P.

Example

If reality is just a dream, it should seem incoherent.

Reality does not seem incoherent.

Reality is not just a dream.

Hypothetical Syllogism

Form

Premise 1: If P, then Q.

Premise 2: If Q, then R.

Conclusion: If P, then R.

Example

If cheating is wrong, then cheating in a class is wrong.

If cheating in a class is wrong, cheating on this test is wrong.

If cheating is wrong, then cheating on this test is wrong.

Disjunctive Syllogism

Form

Premise 1: P V Q

Premise 2: Not P

Conclusion: Q

Example

Bill can lose weight through surgery or diet and exercise.

Bill decided not to diet or exercise.

Bill has decided to lose weight through surgery.

Dilemma

Form 1

Premise 1: If P, then Q

Premise 2: If R, then S

Premise 3: P or R

Conclusion: Q or S

Form 2

Premise 1: If P, then Q

Premise 2: If R, then S

Premise 3: Not Q or not S

Conclusion: Not P or not R

Form 3

Premise 1: If P, then Q.

Premise 2: If not P, then not Q.

Premise 3: P or not P.
Conclusion: Q or not Q.

Example

If lying is wrong, then people should not lie.
If lying is not wrong, then it is okay for people to lie.
Lying is either wrong or it is not.
So people should not lie or it is acceptable.

Reductio Ad Absurdum (Reducing to Absurdity)

Form #1

Premise 1: Assume that a claim, P, is true.
Premise 2: Prove that this assumption leads to something false, absurd, or contradictory.
Premise 3: Conclude that the claim that P is true is itself false.
Conclusion: Conclude that P is false.

Form #2

Assume that a claim, P, is false.
Prove that this assumption leads to something false, absurd, or contradictory.
Conclude that the claim that P is false is itself false.
Conclude that P is true.

Example

1. Oppression is best defined as the mistreatment of a minority by a majority.
2. In the case of sexism, a majority (women) is mistreated by a minority (men).
3. Therefore, sexism is not oppression.
4. This is absurd, so the definition is flawed.

Inductive Arguments

Analogical Argument

An analogy is a comparison between two (or more things). For example, if a person says “congress is like an really old car: it costs a lot of money to keep going and it makes a lot of noise, but really doesn’t get you anywhere fast”, then she is making an analogy. Of course, merely

presenting a comparison is not the same thing as making an argument.

An analogical argument is an argument in which one concludes that two things are alike in a certain respect because they are alike in other respects.

As might be imagined, analogies are often used in ways other than in arguments. One common non-argument use of analogies is to explain something. These sorts of analogies are often called explanatory comparisons or explanatory analogies. For example, a person might attempt to explain the working of the heart in terms of a pump. Non-argumentative analogies are often also used for humorous purposes or in other artistic contexts.

Analogical arguments are extremely common. In addition to being used in everyday life, they are commonly used in law and medicine. For example, when a lawyer argues from precedent, they are most likely using an analogical argument. Doctors also make extensive use of analogical arguments. For example, they draw analogies between what they observed in medical school and what they are observing in a specific patient. For example, a doctor might reason that because this patient’s condition closely resembles the case of poison ivy they saw in medical school, the patient has been exposed to poison ivy.

Form

An analogy will typically have three premises and a conclusion. The first premise two premises establish the analogy by showing that the things (X and Y) in question are similar in certain respects (properties P, Q, R, etc.). The third premise establishes that X has an additional quality, Z. The conclusion asserts that Y has property or feature Z as well. Although people generally present analogical arguments in an informal manner, they have the following logical form:

Premise 1: X has properties P,Q, and R.

Premise 2: Y has properties P,Q, and R.

Premise 3: X has property Z.

Conclusion: Y has property Z.

A more concise two premise version is also common:

Premise 1: X and Y have properties P,Q,R.

Premise 2: X has property Z.

Conclusion: Y has property Z.

X and Y are variables that stand for whatever is being compared, such as chimpanzees and humans or apples and oranges. P, Q, R, and are also variables, but they stand for properties or features that X and Y are known to possess, such as having a heart. Z is also a variable and it stands for the property or feature that X is known to possess. The use of P, Q, and R is just for the sake of the illustration-the things being compared might have many more properties in common.

An example of an analogy presented in strict form is as follows:

Premise 1: Rats are mammals and possess a nervous system that includes a developed brain.

Premise 2: Humans are mammals possess a nervous system that includes a developed brain.

Premise 3: When exposed to the neurotoxin being tested, 90% of the rats died.

Conclusion: If exposed to the neurotoxin, 90% of all humans will die.

Moral Argument from Analogy

It is very easy to make a moral argument using an argument from analogy. To argue that Y is morally wrong, find an X that is already accepted as being wrong and show how Y is like X. To argue that Y is morally good (or at least morally acceptable), find an X that is already accepted as morally good (or at least morally acceptable) and show how Y is like X. To be a bit more formal, here is how the argument would look:

Premise 1: X has properties P,Q, and R.

Premise 2: Y has properties P,Q, and R.

Premise 3: X is morally good (or morally wrong).

Conclusion: Y is morally good (or morally wrong).

A more concise two premise version is also common:

Premise 1: X and Y have properties P,Q,R.

Premise 2: X is morally good (or morally wrong).

Conclusion: Y is morally good (or morally wrong).

Examples of Analogical Arguments

Example #1

Premise 1: Attacking your next-door neighbors, killing them, and taking their property is morally wrong.

Premise 2: War involves going into a neighboring country, killing people and taking their property.

Conclusion: So, war is morally wrong.

Example #2

Premise 1: Animals and humans are both capable of suffering and experiencing pain.

Premise 2: Killing humans is morally wrong.

Conclusion: So, killing animals is morally wrong.

Standards of Assessment

The strength of an analogical argument depends on three factors. To the degree that an analogical argument meets these standards it is a strong argument.

First, the more properties X and Y have in common, the better the argument. For example, in the example given above rats and humans have many properties in common. This standard is based on the commonsense notion that the more two things are alike in other ways, the more likely it is that they will be alike in some other way. It should be noted that even if the two things are very much alike in many respects, there is still the possibility that they are not alike regarding Z. This is why analogical arguments are inductive.

Second, the more relevant the shared properties are to property Z, the stronger the argument. A specific property, for example P, is relevant to property Z if the presence or absence of P affects the likelihood that Z will be present. Using the example, above, the shared properties are relevant. After all, since neurotoxins work on the nervous system, the presence of a nervous system makes it more likely that something will be killed by such agents. It should be kept in mind that it is possible for X and Y to share relevant properties while Y does not actually have property Z. Again, this is part of the reason why analogical arguments are inductive.

Third, it must be determined whether X and Y have relevant dissimilarities as well as similarities. The more dissimilarities and the more relevant they are, the weaker the argument. In the example above, humans and rats do have dissimilarities, but most of them are probably not particularly relevant to the effects of neurotoxins. However, it would be worth considering that the size difference might be relevant and thus a difference worth considering.

Responding to an Argument from Analogy

When arguing against an argument by analogy, the overall goal is to show that the two things being compared are not enough alike to justify the conclusion. To be more specific, this is done by showing that the argument in question fails to adequately meet the standards for assessing an argument from analogy. Naturally, an argument from analogy can also be criticized by calling the premises into question.

For example, consider the second example given above. In this argument it is claimed that humans and animals are both capable of suffering and experiencing pain. Given that killing humans is morally wrong, it would seem to follow that killing animals is also morally wrong.

One way to respond to this argument is to try to show that humans and animals are not similar enough in relevant ways for the conclusion to follow. Another way to approach

this is to argue that there is a relevant difference (or differences) between humans and animals that weakens the analogy enough to make the argument fail. As a specific example, the French philosopher Descartes argued that humans have minds and animals do not, thus (as he saw it) killing a human is rather different from killing an animal.

The premises can, of course, also be questioned. In this example, it could be argued that killing humans is not morally wrong and this would undercut the support for the conclusion.

Such responses can be responded to in turn, so that a dispute over an argument from analogy might go through many rounds of response and counter response. For example, if someone presents an argument supporting the claim that killing humans is not wrong, the defender of the analogy could counter with an argument aimed at showing that killing humans is morally wrong.

Argument from/by Example

Introduction

Not surprisingly, an argument by example is an argument in which a claim is supported by providing examples.

While they are used in academic contexts quite often, arguments by example are also commonly used in “real life.” For example, suppose someone wants to show that another person always mooches pizza without offering to help pay for it. The case could be made by listing examples in which the “pizza mooch” ate pizza but did not contribute any money.

Strict Form

Strictly presented, an analogy will have at least one premise and a conclusion. Each premise is used to support the conclusion by providing an example. The general idea is that the weight of the examples establishes the claim in question.

Although people generally present arguments by example in a fairly informal manner, they have the following logical form:

Premise 1: Example 1 is an example that supports claim P.

Premise n: Example n is an example that supports claim P.

Conclusion: Claim P is true.

In this case n is a variable standing for the number of the premise in question and P is a variable standing for the claim under consideration.

An example of an argument by example presented in strict form is as follows:

Premise 1: Lena ate pizza two months ago and did not contribute any money.

Premise 2: Lena ate pizza a month ago and did not contribute any money.

Premise 3: Lena ate pizza two weeks ago and did not contribute any money.

Premise 4: Lena ate pizza a week ago and did not contribute any money.

Conclusion: Lena is a pizza mooch who eats but does not contribute.

Moral Argument by/from Example

Arguments by/from example are generally not used to directly argue that something is right or wrong. They are most used to argue for a claim that will itself be used in an explicitly moral argument. That is, they are generally used to settle a factual issue.

For example, suppose that someone is arguing about stem cell research. A person in favor of the research might want to argue that it is morally acceptable because of all the benefits. In order to do this, she would most likely want to argue that it has numerous significant benefits by giving examples of these benefits in an argument by/from example. A person who is opposed to stem cell research might, in contrast, want to argue that it is immoral because of the harms it would generate. As such, he might present various examples of significant harms

that would support the claim that stem cell research would be harmful.

Because of its usefulness in arguing that something is beneficial or harmful, arguments by/from example are often used in conjunction with the appeal to consequence (see below).

Example

Premise 1: Stem cell research could allow doctors to regrow replacement limbs and organs, which would be beneficial.

Premise 2: Stem cell research could allow the development of new treatments for disease ranging from diabetes to Parkinson's disease, which would be beneficial.

Premise 3: Stem cell research could allow more effective testing of drugs without using animal or human subjects, which would be beneficial.

Conclusion: Stem cell research could have significant benefits.

Standards of Assessment

The strength of an analogical argument depends on four factors. First, the more examples, the stronger the argument. For example, if Lena only failed to pay for the pizza she ate once, then the claim that she is a mooch who does not contribute would not be well supported-the argument would be very weak.

Second, the more relevant the examples, the stronger the argument. For example, if it were concluded that Lena was a pizza mooch because she regularly failed to pay for her share of gas money, then the argument would be weak. After all, her failure to pay gas money does not strongly support the claim that she will not help pay for pizza (although it would provide grounds for suspecting she might not pay).

Third, the examples must be specific and clearly identified. Vague and unidentified examples do not provide much in the way of support. For example, if someone claimed that Lena was a pizza mooch because "you know, she didn't pay and stuff on some days...like some time a month or maybe a couple months

ago”, then the argument would be extremely weak.

Fourth, counterexamples must be considered. A counterexample is an example that counts against the claim. One way to look at a counter example is that it is an example that supports the denial of the conclusion being argued for. The more counterexamples and the more relevant they are, the weaker the argument. For example, if someone accuses Lena of being a pizza mooch, but other people have examples of times which she did contribute, then these examples would serve as counterexamples against the claim that she is a pizza mooch. As such, counterexamples can be used to build an argument by example that has as its conclusion the claim that the conclusion it counters is false.

Responding to an Argument by/from Example

Responding to an argument by/from example in a critical manner involves assessing it based on the standards presented above and showing how it fails to meet one or more of them (in the case of counter examples, this involves presenting counter examples). The overall goal is to show that the examples do not adequately support the conclusion. Naturally, an argument by/from example can also be criticized by questioning the truth of the premises.

In the example given above, the gist is that stem cell research could have significant benefits because of the numerous examples of potential benefits. The benefits do seem to be relevant and adequately numerous, so the most likely avenues of criticism would involve the other two standards. First, it might be argued that the examples need to provide more details (such as the likelihood of the positive results) before the conclusion can be considered adequately supported. Second, perhaps the best way to counter this argument is by presenting counter examples to show that such research would be harmful rather than beneficial (one common argument is that such research would devalue human life).

As with any argument, the premises can be challenged. In this example it would involve

presenting reasons or evidence showing that the research is not likely to have the alleged benefits.

Such responses can be responded to in turn and these can also be countered. For example, if it were argued that stem cell research most likely will not lead to the ability to grow limbs and organs, another argument could be given to try to show that it is likely that it will have the alleged benefits. This process can go on for quite some time, especially in very controversial matters-such as stem cell research.

Examples

Example #1

Premise 1: The painting Oath of the Horatii shows three brothers ready to take action, while the women are painted as passive observers.

Premise 2: In action films, such as typical Westerns, women are cast as victims that must be protected and saved by men.

Conclusion: Art reinforces gender stereotypes.

Assessment of Example #1

While art is full of stereotypes, more examples should be used. The examples are relevant, but specific Westerns should be named and described. Finally, there are counterexamples, especially in modern films and TV, that need to be considered.

Example #2

Premise 1: The Egyptians believed in an afterlife as shown by their funeral preparations.

Premise 2: Plato’s writings indicate that the ancient Greeks believed in an afterlife.

Premise 3: The Chinese practice of ancestor worship indicates they believed in an afterlife.

Conclusion: People of ancient cultures believed in an afterlife.

Assessment of Example #2

More examples should be used, but the mix of diverse cultures strengthens the argument. The examples are relevant. They could be more detailed but are reasonably specific. There are

some limited counterexamples, such as periods of doubt about the afterlife in ancient Egypt.

Argument from Authority

Introduction

This is an argument in which the conclusion is supported by citing an authority. Since the argument is based on an appeal to the authority, the strength of the support depends on the quality of the authority in question. Given that no one can be an expert on everything and the fact that people regularly need reliable information, these arguments are very common. In fact, they are used so often that people generally do not even realize they are being used. For example, when a politician cites an economist to justify her policies, she is making an argument from authority. As another example, when a student cites a source stating that a historic event took place, he is using an argument from authority. As a final example, when people trust a news source (such as CNN, The Daily Show, or Fox News) they are probably relying on an argument from authority—they assume the news source should be trusted because the people involved are supposed to be experts.

Not surprisingly, this argument is used when a person lacks the required knowledge and expertise and therefore needs to rely on another source of information. For example, most lawyers are not experts on DNA testing or ballistics, so they hire experts to testify in court. In effect they are saying that what the expert says about the DNA or gun is true because the expert is an expert. This sort of argument is also used when a person wants to add extra weight to his/her position. For example, an author of a book on dieting might cite other doctors and nutritional experts that agree with her views on dieting.

Like other arguments, an argument from authority can be used to establish its conclusion for use as a premise in another argument. For example, a person who is arguing for the

censorship of violence might cite an authority who claims that watching violent television makes children violent.

It should be noted that an argument from authority is not an exceptionally strong argument. After all, in such cases a claim is being accepted as true simply because a person is asserting that it is true. The person may be an expert, but her expertise does not really bear on the actual truth (or falsity) of the claim. This is because the expertise of a person does not actually determine whether the claim is true or false. Hence, arguments that deal directly with evidence relating to the claim itself will tend to be stronger.

Despite the inherent weakness in this argument, a person who is a legitimate expert is more likely to be right than wrong when making considered claims within her area of expertise. In a sense, the claim is being accepted because it is reasonable to believe that the expert has tested the claim and found it to be reliable. So, if the expert has found it to be reliable, then it is reasonable to accept it as being true. Thus, the listener is accepting a claim based on the testimony of the expert. Naturally, the main challenge is determining whether the person in question is a legitimate expert or not.

Strict Form

Strictly presented, an argument from authority will have two premises and a conclusion. The first premise claims the person is an authority on a particular subject. The second presents the claim made by the authority in the subject in question and the conclusion asserts that because an authority made the claim in her area of expertise, it is true.

Although people generally present arguments from authority in an informal manner, they have the following logical form:

Premise 1: Person A is (claimed to be) an authority on subject S.

Premise 2: Person A makes claim C about subject S.

Premise 3: Therefore, C is true.

A is a variable that is replaced with the authority's name, S is a variable that is replaced with the subject and C is a variable that is replaced with the actual claim. For example:

Premise 1: Dr. Michael LaBossiere is an authority on arguments.

Premise 2: Dr. Michael LaBossiere claims in the subject area of arguments, that an argument by example has two premises.

Conclusion: Therefore, it is true that an argument by example has two premises.

Standards of Assessment

An argument from authority is assessed in terms of six standards. If an argument meets these standards, then it is an acceptable argument from authority and it is reasonable to accept the conclusion based on the premises. If the argument fails to meet the standards, then it would not be reasonable to accept the conclusion based on the premises. Bad arguments from authority are relatively common and are known as fallacious appeals to authority.

1. The person has sufficient expertise in the subject matter in question.

Claims made by a person who lacks the needed degree of expertise to make a reliable claim will, obviously, not be well supported. In contrast, claims made by a person with the needed degree of expertise will be supported by the person's reliability in the area.

Determining whether or not a person has the needed degree of expertise can often be very difficult. In academic fields (such as philosophy, engineering, history, etc.), the person's formal education, academic performance, publications, membership in professional societies, papers presented, awards won and so forth can all be reliable indicators of expertise. Outside of academic fields, other standards will apply. For example, having sufficient expertise to make a reliable claim about how to tie a shoelace only requires the ability to tie the shoe lace and impart that information to others. It should be noted that being an expert does not always

require having a university degree. Many people have high degrees of expertise in sophisticated subjects without having ever attended a university. Further, it should not be simply assumed that a person with a degree is an expert.

Of course, what is required to be an expert is often a matter of great debate. For example, some people have (and do) claim expertise in certain (even all) areas because of a divine inspiration or a special gift. The followers of such people accept such credentials as establishing the person's expertise while others often see these self-proclaimed experts as deluded or even as charlatans. In other situations, people debate over what sort of education and experience is needed to be an expert. Thus, what one person may take to be a fallacious appeal another person might take to be a well-supported line of reasoning. Fortunately, many cases do not involve such debate.

2. The claim being made by the person is within her area(s) of expertise.

If a person makes a claim about some subject outside of his area(s) of expertise, then the person is not an expert in that context. Hence, the claim in question is not backed by the required degree of expertise and is not reliable.

It is very important to remember that because of the vast scope of human knowledge and skill it is simply not possible for one person to be an expert on everything. Hence, experts will only be true experts in respect to certain subject areas. In most other areas they will have little or no expertise. Thus, it is important to determine what subject area a claim falls under.

It is also very important to note that expertise in one area does not automatically confer expertise in another. For example, being an expert physicist does not automatically make a person an expert on morality or politics. Unfortunately, this is often overlooked or intentionally ignored. In fact, a great deal of advertising rests on a violation of this condition. As anyone who watches television knows, it is extremely common to get famous actors and

sports heroes to endorse products that they are not qualified to assess. For example, a person may be a great actor, but that does not automatically make him an expert on cars or shaving or underwear or diets or politics.

3. There is an adequate degree of agreement among the other experts in the subject in question.

If there is a significant amount of legitimate dispute among the experts within a subject, then it will be fallacious to make an Appeal to Authority using the disputing experts. This is because for almost any claim being made and “supported” by one expert there will be a counterclaim that is made and “supported” by another expert. In such cases an Appeal to Authority would tend to be futile. In such cases, the dispute has to be settled by consideration of the actual issues under dispute. Since either side in such a dispute can invoke experts, the dispute cannot be rationally settled by Appeals to Authority.

There are many fields in which there is a significant amount of legitimate dispute. Economics is a good example of such a disputed field. Anyone who is familiar with economics knows that there are many plausible theories that are incompatible with one another. Because of this, one expert economist could sincerely claim that the deficit is the key factor while another equally qualified individual could assert the exact opposite. Another area where dispute is very common (and well known) is in the area of psychology and psychiatry. As has been demonstrated in various trials, it is possible to find one expert that will assert that an individual is insane and not competent to stand trial and to find another equally qualified expert who will testify, under oath, that the same individual is both sane and competent to stand trial. Obviously, one cannot rely on an Appeal to Authority in such a situation without making a fallacious argument. Such an argument would be fallacious since the evidence would not warrant accepting the conclusion.

It is important to keep in mind that no field has complete agreement, so some degree of dispute is acceptable. How much is acceptable is, of course, a matter of serious debate. It is also

important to keep in mind that even a field with a great deal of internal dispute might contain areas of significant agreement. In such cases, an Appeal to Authority could be legitimate.

4. The person in question is not significantly biased.

If an expert is significantly biased, then the claims he makes within his area of bias will be less reliable. Since a biased expert will not be reliable, an Argument from Authority based on a biased expert will be fallacious. This is because the evidence will not justify accepting the claim.

Experts, being people, are vulnerable to biases and prejudices. If there is evidence that a person is biased in some manner that would affect the reliability of her claims, then an Argument from Authority based on that person is likely to be fallacious. Even if the claim is true, the fact that the expert is biased weakens the argument. This is because there would be reason to believe that the expert might not be making the claim because he has carefully considered it using his expertise. Rather, there would be reason to believe that the claim is being made because of the expert’s bias or prejudice.

It is important to remember that no person is completely objective. At the very least, a person will be favorable towards her own views (otherwise she would probably not hold them). Because of this, some degree of bias must be accepted, provided that the bias is not significant. What counts as a significant degree of bias is open to dispute and can vary a great deal from case to case. For example, many people would probably suspect that doctors who were paid by tobacco companies to research the effects of smoking would be biased while other people might believe (or claim) that they would be able to remain objective.

5. The area of expertise is a legitimate area or discipline.

Certain areas in which a person may claim expertise may have no legitimacy or validity as areas of knowledge or study. Obviously, claims made in such areas will not be very reliable.

What counts as a legitimate area of expertise is sometimes difficult to determine. However,

there are cases which are clear cut. For example, if a person claimed to be an expert at something he called "chromabullet therapy" and asserted that firing colorfully painted rifle bullets at a person would cure cancer, it would not be very reasonable to accept his claim based on his "expertise." After all, his expertise is in an area which is devoid of legitimate content. The general idea is that to be a legitimate expert a person must have mastery over a real field or area of knowledge.

As noted above, determining the legitimacy of a field can often be difficult. In European history, various scientists had to struggle with the Church and established traditions to establish the validity of their disciplines. For example, experts on evolution faced an uphill battle in getting the legitimacy of their area accepted.

A modern example involves psychic phenomenon. Some people claim that they are certified "master psychics" and are experts in the field. Other people contend that their claims of being certified "master psychics" are simply absurd since there is no real content to such an area of expertise. If these people are right, then anyone who accepts the claims of these "master psychics" as true are victims of a fallacious appeal to authority.

6. The authority in question must be identified.

A common variation of the typical fallacious appeal to authority fallacy is an appeal to an unnamed authority. This fallacy is also known as an appeal to an unidentified authority.

This fallacy is committed when a person asserts that a claim is true because an expert or authority makes the claim and the person does not actually identify the expert. Since the expert is not named or identified, there is no way to tell if the person is an expert. Unless the person is identified and has his expertise established, there is no reason to accept the claim.

This sort of reasoning is not unusual. Typically, the person making the argument will say things like "I have a book that says..." , or "they say..." , or "the experts say..." , or "scientists believe that..." , or "I read in the paper.." or "I saw on TV..." or some similar statement. In such cases the person is often hoping that the listener(s) will simply accept the unidentified source as a legitimate authority and believe the claim being made. If a person accepts the claim simply because they accept the unidentified source as an expert (without good reason to do so), he has fallen prey to this fallacy.

Examples

Example#1

Premise 1: If violent art has a harmful psychological effect on people, then it should be censored.

Premise 2: However, the study by Loeb and Wombat shows that violent art has little, if any psychological effect on people.

Conclusion: Hence, there is no need to censor violent art to protect people from harm.

Example of Assessment

The source needs to be properly identified. Further, there is a great deal of disagreement among the experts within the field of psychology, especially over the matter of the effects of violent art.

Example # 2

Premise 1: According to medical science, there is no life after death.

Premise 2: Medical science is well established.

Conclusion: It is clear there is no life after death.

Example of Assessment

More information is needed about medical science, such as the exact source of the claim.