

LOGICAL FALLACIES BY TYPE

Unknown Author

Fallacies of Distraction

- [False Dilemma](#): two choices are given when in fact there are three options
- [From Ignorance](#): because something is not known to be true, it is assumed to be false
- [Slippery Slope](#): a series of increasingly unacceptable consequences is drawn
- [Complex Question](#): two unrelated points are conjoined as a single proposition

Appeals to Motives in Place of Support

- [Appeal to Force](#): the reader is persuaded to agree by force
- [Appeal to Pity](#): the reader is persuaded to agree by sympathy
- [Consequences](#): the reader is warned of unacceptable consequences
- [Prejudicial Language](#): value or moral goodness is attached to believing the author
- [Popularity](#): a proposition is argued to be true because it is widely held to be true

Changing the Subject

- [Attacking the Person](#):
 - (1) the person's character is attacked
 - (2) the person's circumstances are noted
 - (3) the person does not practice what is preached
- [Appeal to Authority](#):
 - (1) the authority is not an expert in the field
 - (2) experts in the field disagree
 - (3) the authority was joking, drunk, or in some other way not being serious
- [Anonymous Authority](#): the authority in question is not named
- [Style Over Substance](#): the manner in which an argument (or arguer) is presented is felt to affect the truth of the conclusion

Inductive Fallacies

- [Hasty Generalization](#): the sample is too small to support an inductive generalization about a population
- [Unrepresentative Sample](#): the sample is unrepresentative of the sample as a whole
- [False Analogy](#): the two objects or events being compared are relevantly dissimilar
- [Slothful Induction](#): the conclusion of a strong inductive argument is denied despite the evidence to the contrary
- [Fallacy of Exclusion](#): evidence which would change the outcome of an inductive argument is excluded from consideration

Fallacies Involving Statistical Syllogisms

- [Accident](#): a generalization is applied when circumstances suggest that there should be an exception
- [Converse Accident](#): an exception is applied in circumstances where a generalization should apply

Causal Fallacies

- [Post Hoc](#): because one thing follows another, it is held to cause the other
- [Joint effect](#): one thing is held to cause another when in fact they are both the joint effects of an underlying cause
- [Insignificant](#): one thing is held to cause another, and it does, but it is insignificant compared to other causes of the effect
- [Wrong Direction](#): the direction between cause and effect is reversed
- [Complex Cause](#): the cause identified is only a part of the entire cause of the effect

Missing the Point

- [Begging the Question](#): the truth of the conclusion is assumed by the premises
- [Irrelevant Conclusion](#): an argument in defense of one conclusion instead proves a different conclusion
- [Straw Man](#): the author attacks an argument different from (and weaker than) the opposition's best argument

Fallacies of Ambiguity

- [Equivocation](#): the same term is used with two different meanings
- [Amphiboly](#): the structure of a sentence allows two different interpretations
- [Accent](#): the emphasis on a word or phrase suggests a meaning contrary to what the sentence actually says

Category Errors

- [Composition](#): because the attributes of the parts of a whole have a certain property, it is argued that the whole has that property
- [Division](#): because the whole has a certain property, it is argued that the parts have that property

Non Sequitur

[Affirming the Consequent](#): any argument of the form: If A then B, B, therefore A

[Denying the Antecedent](#): any argument of the form: If A then B, Not A, thus Not B

[Inconsistency](#): asserting that contrary or contradictory statements are both true

Syllogistic Errors

[Fallacy of Four Terms](#): a syllogism has four terms

[Undistributed Middle](#): two separate categories are said to be connected because they share a common property

[Illicit Major](#): the predicate of the conclusion talks about all of something, but the premises only mention some cases of the term in the predicate

[Illicit Minor](#): the subject of the conclusion talks about all of something, but the premises only mention some cases of the term in the subject

[Fallacy of Exclusive Premises](#): a syllogism has two negative premises

[Fallacy of Drawing an Affirmative Conclusion From a Negative Premise](#): as the name implies

[Existential Fallacy](#): a particular conclusion is drawn from universal premises

Fallacies of Explanation

[Subverted Support](#) (The phenomenon being explained doesn't exist)

[Non-support](#) (Evidence for the phenomenon being explained is biased)

[Untestability](#) (The theory which explains cannot be tested)

[Limited Scope](#) (The theory which explains can only explain one thing)

[Limited Depth](#) (The theory which explains does not appeal to underlying causes)

Fallacies of Definition

[Too Broad](#) (The definition includes items which should not be included)

[Too Narrow](#) (The definition does not include all the items which should be included)

[Failure to Elucidate](#) (The definition is more difficult to understand than the word or concept being defined)

[Circular Definition](#) (The definition includes the term being defined as a part of the definition)

[Conflicting Conditions](#) (The definition is self-contradictory)

DESCRIPTION OF FALLACIES <[HTTP://WWW.NIZKOR.ORG/FEATURES/FALLACIES/](http://www.nizkor.org/features/fallacies/)>

In order to understand what a fallacy is, one must understand what an argument is. Very briefly, an argument consists of one or more premises and one conclusion. A premise is a statement (a sentence that is either true or false) that is offered in support of the claim being made, which is the conclusion (which is also a sentence that is either true or false).

There are two main types of arguments: deductive and inductive. A deductive argument is an argument such that the premises provide (or appear to provide) complete support for the conclusion. An inductive argument is an argument such that the premises provide (or appear to provide) some degree of support (but less than complete support) for the conclusion. If the premises actually provide the required degree of support for the conclusion, then the argument is a good one. A good deductive argument is known as a valid argument and is such that if all its premises are true, then its conclusion must be true. If all the argument is valid and actually has all true premises, then it is known as a sound argument. If it is invalid or has one or more false premises, it will be unsound. A good inductive argument is known as a strong (or "cogent") inductive argument. It is such that if the premises are true, the conclusion is likely to be true.

A fallacy is, very generally, an error in reasoning. This differs from a factual error, which is simply being wrong about the facts. To be more specific, a fallacy is an "argument" in which the premises given for the conclusion do not provide the needed degree of support. A deductive fallacy is a deductive argument that is invalid (it is such that it could have all true premises and still have a false conclusion). An inductive fallacy is less formal than a deductive fallacy. They are simply "arguments" which appear to be inductive arguments, but the premises do not provided enough support for the conclusion. In such cases, even if the premises were true, the conclusion would not be more likely to be true.

WEB LINKS:

- Propoganda: <http://carmen.artsci.washington.edu/propaganda/contents.htm>. This site discusses how propoganda differs from logic and some of the common fallacies employed by propogandists.
- Critical thinking: <http://www.accd.edu/pac/philosop/phil1301/c-think.htm>