Fallacies are deceptive errors of thinking.

A *good argument* should:

- 1. be deductively valid (or inductively strong) and have all true premises;
- 2. have its validity and truth-of-premises be as evident as possible to the parties involved;
- 3. be clearly stated (using understandable language and making clear what the premises and conclusion are);
- 4. avoid circularity, ambiguity, and emotional language; and
- 5. be relevant to the issue at hand.

List of fallacies

Circular (question begging): Assuming the truth of what has to be proved – or using A to prove B and then B to prove A.

Ambiguous: Changing the meaning of a term or phrase within the argument.

Appeal to emotion: Stirring up emotions instead of arguing in a logical manner.

Beside the point: Arguing for a conclusion irrelevant to the issue at hand.

Straw man: Misrepresenting an opponent's views.

- Appeal to the crowd: Arguing that a view must be true because most people believe it.
- Opposition: Arguing that a view must be false because our opponents believe it.
- Genetic fallacy: Arguing that your view must be false because we can explain why you hold it.
- Appeal to ignorance: Arguing that a view must be false because no one has proved it.
- Post hoc ergo propter hoc: Arguing that, since A happened after B, thus A was caused by B.
- Part-whole: Arguing that what applies to the parts must apply to the whole or vice versa.

Appeal to authority: Appealing in an improper way to expert opinion.

Ad hominem (personal attack): Improperly attacking the person instead of the view.

Pro-con: A one-sided appeal to advantages and disadvantages.

- Black and white thinking: Oversimplifying by assuming that one of two extremes must be true.
- False stereotype: Assuming that members of a certain group are more alike than they are.
- Appeal to force: Using threats or intimidation to get a conclusion accepted.
- Complex question: Asking a question that assumes the truth of something false or doubtful.

18 fallacies

AA = appeal to authority

AC = appeal to the crowd

AE = appeal to emotion

AF = appeal to force

AH = ad hominem

AI = appeal to ignorance

AM = ambiguous

BP = beside the point

BW = black and white

CI = circular

CQ = complex question

FS = false stereotype

GE = genetic

OP = opposition

PC = pro-con

PH = post hoc

PW = part-whole

SM = straw man

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