

Introduction to argumentation and critical thinking

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What is an argument?

Premise 1

Premise 2

Premise 3

...

Conclusion

A very simple model of a good argument

A very simple model of a good argument

A

Assertion

Clear, one sentence claim that you want to convince your public of.

A very simple model of a good argument

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R

Reasoning

Logical, step-by-step explanation, that explains the underlying logic of your argument and demonstrates why your assertion is true.

1 > 2 > 3 > 4

A very simple model of a good argument

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Empirical evidence / relevant authority

Referring to relevant empirical evidence (case studies, academic studies) and/or opinion of relevant authority that demonstrates that your assertion and reasoning are true

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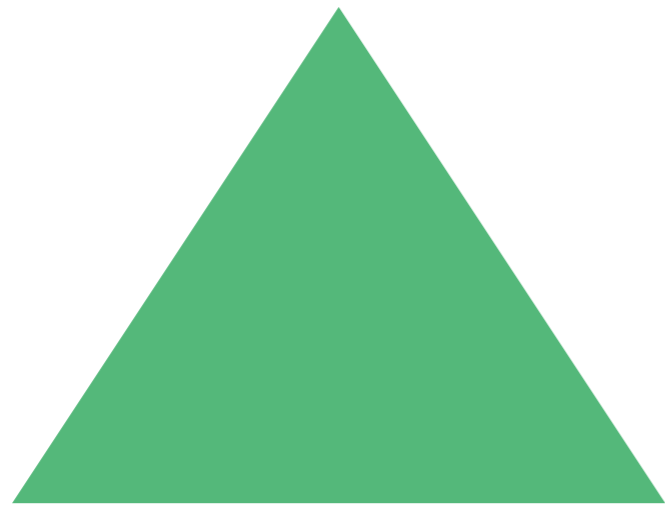
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(I)

Illustration of the idea

Illustrating the main idea of your argument with a clear, visual example



The Pyramid Principle of communication

What do you need for a case?



Main thesis



Strongest
arguments



Responses to
objections



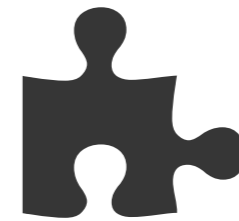
A few important tools and habits.

1. Argumentation
 2. The Scientific Method
 3. Cognitive Biases
 4. Media Literacy
- ...

Two simple ways how arguments can go wrong



Relevance



Sufficiency



Relevance problems.

Even though the presented premises are emotionally persuasive, they are logically irrelevant to the assertion of the argument presented



Personal attack (ad hominem).

Attacking someone's character or personal traits in an attempt to undermine his/her argument

Appeal to tradition.

Assumption that a claim is correct or right just because it is linked with something old or traditional.





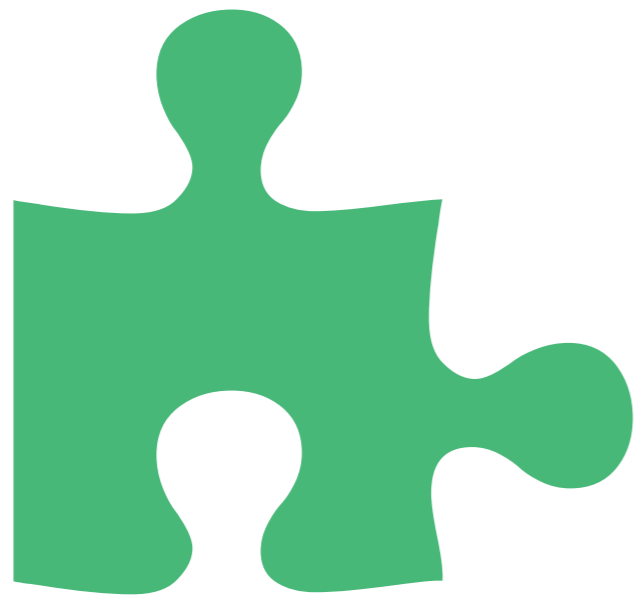
Appeal to irrelevant authority.

Appealing to the opinion of a person even though he/she does not have relevant expertise in the subject matter.



Straw man.

Misrepresenting someone's
argument to make it much easier
to refute.



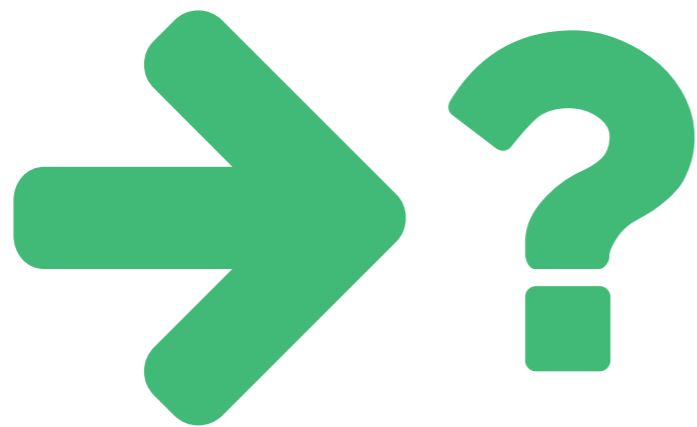
Sufficiency problems.

Even though the presented premises are logically relevant to the assertion of the argument, they are insufficient to establish the assertion.



Anecdotal evidence.

Using personal experience or isolated examples in an argument with the purpose of establishing empirical support.



Non-sequitur (does not follow).

A conclusion or statement that does not logically follow from the previous argument or statement. "Slippery slope" is especially popular.



Begging the question.

Attempting to prove a proposition by repeating this same proposition (maybe with slightly different words).



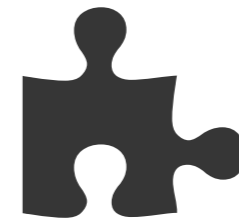
Correlation and causality.

Thinking that, just because B happened after A, B happened only because of A.

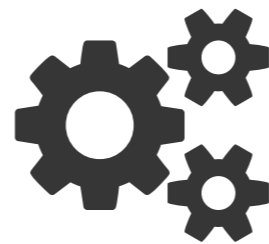
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