

Module 5: Stretching Limits in the Age of Reason

Topic 3 Content: Logical Fallacies

Introduction

Logical Fallacies

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Click on the circles in the categories or the **NEXT** button to view descriptions and examples of each logical fallacy in greater detail.



Pathos Ethos Logos

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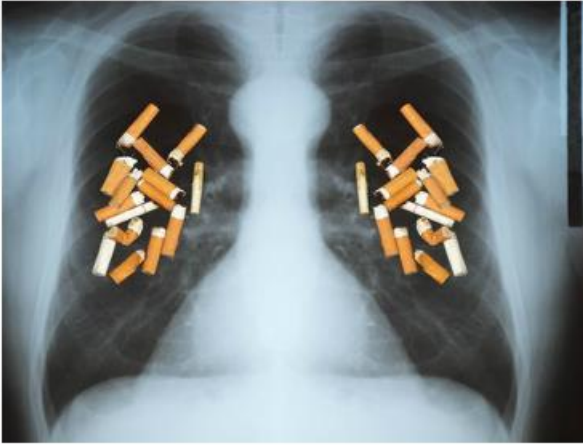
Scare Tactic

Logical Fallacies

Scare Tactic

Description: scaring an audience into believing something

Example: A smokeless-tobacco company shows what a person's lungs look like after a period of tobacco use. Though the images may be true, fear is used to sway opinion, whether it is for the good of people or not.



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Pathos Ethos Logos

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Slippery Slope

Logical Fallacies


Slippery Slope

Description: presenting the idea that a small first step leads to a chain of related events that result in a significant and dire effect

Example: Not choosing to buy a diamond from a certain jeweler will cause your partner to become angry and leave you, and you will grow old alone.



Slippery Slope



Pathos Ethos Logos

Description: presenting the idea that a small first step leads to a chain of related events that result in a significant and dire effect

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Topic 3 Content: Logical Fallacies

Either/Or Choice

Logical Fallacies

Either/Or Choice

Description: presenting a limited range of choices

Example: A car company shows only two choices for a heavy-duty truck that will "do the job" and does not present another truck that is adequate yet more affordable as an option.



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Sentimental Appeals

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Description: directly appealing to the audience's emotions

Example: A TV ad shows wildlife covered in oil from an oil spill to sway public opinion against drilling.



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Appeals to False Authority

Logical Fallacies

Appeals to False Authority

Description: using a biased, suspicious, or incredible source to defend a conclusion

Example: A commercial uses a famous athlete to sell a brand of jeans even though the athlete may not be an authority in fashion.



Appeals to False Authority

Pathos Ethos Logos

The diagram shows a horizontal bar divided into three sections: Pathos (green), Ethos (red), and Logos (blue). The 'Appeals to False Authority' label is positioned above the Ethos section, which is highlighted with a red box. The bar is composed of several small circles and arrows pointing to the right.

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Dogmatism

Logical Fallacies

Dogmatism

Description: asserting that a statement of a point of view is established fact and there is no other logical perspective

Example: A food company advertises that gluten is the cause of all digestive issues. Thus, everyone should go gluten-free, and the company's brand can help.



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Moral Equivalence

Logical Fallacies

Moral Equivalence

Description: comparing the behavior of two or more people or entities; if one is bad, the other must be; or if one is good, the other must be.

Example: A political action committee states that if the government is going to impose restrictions on smoking for health reasons, then it must impose the same restrictions on drinking and eating of fatty foods.



The diagram consists of three horizontal arrows pointing to the right. The first arrow is green and labeled 'Pathos'. The second arrow is red and labeled 'Ethos'. The third arrow is blue and labeled 'Logos'. A white callout box with a pointer is positioned above the red arrow, containing the text 'Moral Equivalence'.

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Ad Hominem

Logical Fallacies

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Description: attacking an opponent's character or traits rather than his or her argument

Example: A politician says, "Only an idiot would argue for pursuing a peaceful solution to this conflict."



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Generalization

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Generalization

Description: making a broad generalization based on a specific instance or insufficient evidence

Example: A politician states that since one person who identifies himself with a political group has extremist ideas, the entire group is extremist and must be monitored.



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Faulty Causality

Logical Fallacies

Faulty Causality

Description: assuming that since one event follows another, the first must cause the second

Example: A commercial says that if people have the flu, they cough. If you are coughing, you have the flu and need a particular medicine to treat the flu.



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Begging the Question

Logical Fallacies

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Description: basing a conclusion on an assumption; the statement could be possible, but sufficient proof is not given.

Example: An ibuprofen company advertises that aspirin users are at risk of becoming dependent on the drug because aspirin is an addictive substance.



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Equivocation

Logical Fallacies

Equivocation

Description: using a word or idea with multiple meanings incorrectly in order to deceive

Example: A political ad may show a video clip of a politician saying, "I don't have multiple homes. I have properties with residences next to the ocean, in the mountains, and in Hawaii."



Pathos Ethos Logos

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Non Sequitur

Logical Fallacies

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Description: assuming one thing is the cause of another; *non sequitur* is Latin for "It does not follow."

Example: A windshield-wiper company shows a person with inferior windshield wipers broken down on the side of the road in the rain. It rained just before the car broke down, so not having their superior windshield wipers caused the car to break down.



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Straw Man

Logical Fallacies

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Description: misrepresenting an opponent's position so as to more easily refute it, or often, to not refute the original position at all

Example: A politician asserts that since his opponent supports limiting access to guns for convicted felons, his opponent must also support removing access to all guns from the general public.



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Faulty Analogy

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Faulty Analogy

Description: basing an argument on misleading, superficial, or implausible comparisons

Example: A group claims that it is illegal for a stranger to enter someone's home uninvited. Firefighters enter people's homes uninvited; therefore, firefighters are breaking the law.



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Red Herring

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Red Herring

Description: using information that is meant to mislead an audience by diverting its attention from the real issue

Example: In a political debate, the moderator asks a candidate, "Did you not vote to raise taxes while you were in the Senate?" The candidate responds, "But do we not want our children to have the best food available?"



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