

Remind yourself about
philosophical
argumentation

Review

1. When is the difference between an argument and an assertion?
2. What is the difference between an argument and rhetoric?
3. What is an argument?
4. How many premises does an argument have?
5. And how many conclusions?
6. What is the standard form of an argument?
7. Why do we reconstruct arguments and put them into standard form?

What is the difference
between deduction and
induction.

Deductive or inductive?

- Most Beatles songs are slow
- Let It Be is a Beatles song
- **Let It Be is slow**
- Premier League footballers are well paid
- Ronaldo is a Premier League footballer
- **Ronaldo is well paid**

Inductive or deductive?

- Hitler had a dog
- Therefore, you ought not to have a dog

1. What are the two ways in which inductive arguments can go wrong?

If you go to London,
then you'll see Big
Ben. You went to
London last week, so
you saw Big Ben.

Review

1. What is a deductive argument?
2. And what is an inductive argument?
3. What makes a deductive argument valid?
4. And what makes one sound?
5. What are the two ways in which inductive arguments can go wrong?



If the dog hears an intruder, the dog will bark

The dog heard an intruder

Therefore, the dog barked

Modus ponens

If p , then q

p

Therefore q



If the dog hears an intruder, the dog will bark.

The dog did not bark.

Therefore, the dog did not hear an intruder





Modus tollens

If p , then q

not q

Therefore not p

If the dog hears an intruder, the dog will bark.

The dog barked

Therefore, the dog heard an intruder





Affirming the
consequent

If p , then q

q

Therefore p



If the dog hears an intruder, the dog will bark.

The dog did not hear an intruder

Therefore, the dog did not bark

Denying the the
antecedent

If p , then q

not p

Therefore not q



**What is a
(philosophical)
fallacy?**

Fallacies

- Wishful thinking
- Intensional fallacy
- Tu quoque
- Ad hominem
- Hypostatization
- Etymological
- False dilemma
- Straw man
- Far-fetched
- Gambler's fallacy
- Style over substance
- Converse accident

- Sharp shooter's fallacy
- Naturalistic fallacy
- False equivalence
- Cum Hoc, Ergo Propter Hoc
- tokenism
- Amphiboly
- Disregarding science
- Complex questions
- Availability heuristic
- anthropomorphism

- Proof surrogate
- Traditional wisdom
- Prophetic fallacy
- Stereotyping
- Misplaced burden of proof
- Invalid reasoning
- Amphiboly
- Disregarding science
- Complex question
- Availability heuristic
- anthropomorphism



Fallacy of equivocation

- (P1) A feather is light
- (P2) What is light is not dark
-
- (C) Therefore, a feather is not dark



Fallacy of equivocation

- (P1) Jane is a cool dudette
- (P2) If you are cool, you can't be warm

- (C) So Jane is cold



Fallacy of composition

- (P1) The great wall of China is made up of small bricks

- (C) Therefore, the great wall of China is a small brick wall



Fallacy of composition

- (P1) Oxygen burns
- (P1) Hydrogen burns
-
- (C) Therefore, H₂O burns



Jumping to conclusions

- (P1) This is the most expensive car in the shop

- (C) Therefore, it's the best and therefore I am going to buy it.



Naturalistic fallacy

- (P1) Women are naturally capable of bearing and nursing children
- (C) Women ought to be the primary care givers of children



Naturalistic fallacy

- (P1) Men tend to be aggressive
- (C) Men ought to join the army

University of Bath

LGBT+

Diversity & Support

Naturalistic fallacy

- (P1) Homosexuality is unnatural
- (C) Homosexuality is wrong

Naturalistic fallacy

- Conflating what is the case (the natural) with what **ought** to be the case (the moral)

Challenge:

Pick three fallacies. Explain it in your words. Then explain it to the rest of the class.

THE UPTURNED MICROSCOPE PRESENTS

Logical Fallacies in the Lab

TODAY: **THE STRAWMAN**

MISREPRESENTING SOMEONE'S ARGUMENT
TO MAKE IT EASIER TO REFUTE

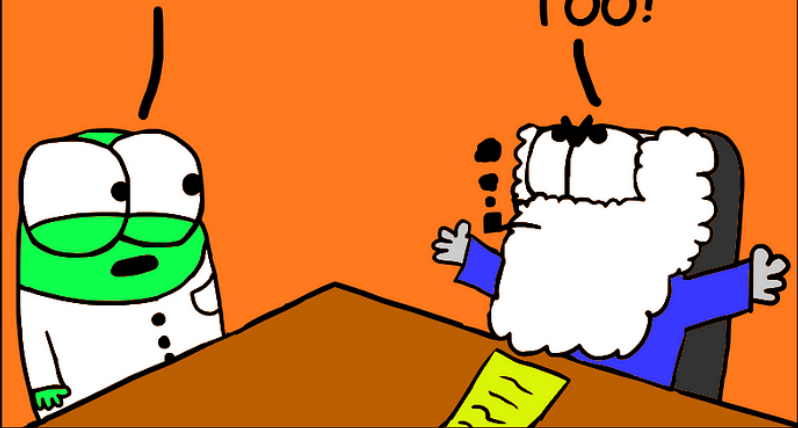
...AND GIVEN MY
CONTRIBUTIONS
TO THIS PAPER,
I THINK THAT I
DESERVE TO
SHARE CREDIT
WITH THE FIRST
AUTHOR.

SO FAME IS
MORE
IMPORTANT
TO YOU THAN
SCIENCE, HUH?
THAT'S SAD.



WHAT?
I DIDN'T
SAY THAT.

OH, SO
NOW I'M
SENILE
TOO!



Fallacies

names

description

examples

14 October 2024

What is a cognitive bias?

For each bias:

Name of bias

Description of bias

Example(s)

https://www.youtube.com/watch?v=wEwGBIr_RIw&safe=true



THINKING,
FAST AND SLOW



DANIEL
KAHNEMAN

<https://www.youtube.com/watch?v=DQX8I6pNCKA&safe=true>

<https://www.dailymotion.com/video/x3q4alx>