

## Review

This page tried to explain, and enable you to understand, the following concepts:

- ambiguity and conceptual distinctions
- equivocation
- an "unpacking definition" or analysis of what we all along understood X to mean, versus a stipulative definition of X, versus a practical test (a proposal for what counts as good evidence) for X
- What is a counter-example? What is a thought-experiment? Why are science fiction thought-experiments relevant to philosophy?
- How do our everyday pre-theoretical intuitions help us support and/or criticize philosophical proposals, if those intuitions can sometimes turn out to be wrong?
- questions about causes/mechanisms, versus questions about evidence or practical tests, versus questions about what defines or constitutes something (what its nature is)

## Review

This page tried to explain, and enable you to understand, the following concepts:

- premises
- conclusion
- deductive arguments
- what is it for an argument to be valid? sound? persuasive?
- implicit/hidden/missing premises
- what is it for an argument to "beg the question"?

## Review

This page tried to explain, and enable you to understand, the following concepts:

- What are the kinds of intellectual tools that philosophers use?
- What does it mean to say that someone has the "burden of proof"?
- What is "attacking a straw man"?
- Why should you be "charitable" to the views of your opponents?

## Review

This page tried to explain, and enable you to understand, the following concepts:

- antecedent and consequent of a conditional
- sufficient condition
- necessary condition
- "if and only if" (iff)
- difference between the converse and contrapositive of a conditional
- *reductio*

### Exercise

For each of the following arguments, determine whether it is valid or invalid. If it's invalid, explain why.

I. "Your high idle is caused either by a problem with the transmission, or by too little oil, or both.

You have too little oil in your car.  
Therefore, your transmission is fine."

II. "If the moon is made of green cheese, then cows jump over it.

The moon is made of green cheese.  
Therefore, cows jump over the moon."

III. "Either Colonel Mustard or Miss Scarlet is the culprit.

Miss Scarlet is not the culprit.  
Hence, Colonel Mustard is the culprit."

IV. "All engineers enjoy ballet.

Therefore, some males enjoy ballet."

### Exercise

Here are some sample arguments. Can you tell which ones are valid and which of the valid arguments are also sound? (There are 5 valid arguments and 2 sound arguments.)

I. "If Socrates is a man, then Socrates is mortal. Socrates is a man. So, Socrates is mortal."

II. "If Socrates is a horse, then Socrates is mortal. Socrates is a horse. So, Socrates is mortal."

III. "If Socrates is a horse, then Socrates has four legs. Socrates is a horse. So, Socrates has four legs."

IV. "If Socrates is a horse, then Socrates has four legs. Socrates doesn't have four legs. So, Socrates is not a horse."

V. "If Socrates is a man, then he's a mammal. Socrates is not a mammal. So Socrates is not a man."

VI. "If Socrates is a horse, then he's warm-blooded. Socrates is warm-blooded. So Socrates is a horse."

VII. "If Socrates was a philosopher then he wasn't a historian. Socrates wasn't a historian. So, Socrates was a philosopher."

### Exercise

Consider the following pairs and say whether one provides sufficient and/or necessary conditions for the other:

1. a valid argument, a sound argument
2. knowing that it will rain, believing that it will rain

## Exercise.

is invalid. But it's clear how to fix it up. We just need to supply *the hidden premise*:

1. All engineers enjoy ballet.
2. *Some engineers are male.*
3. Therefore, some males enjoy ballet.

You should become adept at filling in such missing premises. so that you can see the underlying form of an argument more clearly.

### Exercise

Try to supply the missing premises in the following arguments:

- #1 If you keep driving your car with a faulty carburetor, it will eventually explode.  
Therefore, if you keep driving your car with a faulty carburetor, you will eventually get hurt.
- #2 Abortion is morally wrong.  
Abortion is not a constitutional right.  
Therefore, abortion ought to be against the law.

Here's another passage:

- #3 Allisha went to the bank to get a more recent bank statement of her checking account.  
The teller told her that the balance was \$1725. Allisha was stunned that it was so low.  
She called her brother to see if he had been playing one of his twisted pranks. He hadn't.  
Finally, she concluded that she had been a victim of bank fraud.

Where is the conclusion? Where are the reasons? There are none. This is a little narrative hung on some descriptive claims. But it's not an argument. It could be turned into an argument if, say, some of the claims were restated as reasons for the conclusion that bank fraud had been committed.

Being able to distinguish between passages that do and do not contain arguments is a very basic skill—and an extremely important one. Many people think that if they have clearly stated their beliefs on a subject, they have presented an argument. But a mere declaration of beliefs is not an argument. Often such assertions of opinion are just a jumble of unsupported claims. Search high and low and you will not find an argument anywhere. A writer or speaker of these claims gives the readers or listeners no grounds for believing the claims. In writing courses, the absence of supporting premises is sometimes called “a lack of development.”

Here are three more examples of verbiage sans argument:

- #4 Attributing alcohol abuse by children too young to buy a drink to lack of parental discipline, intense pressure to succeed, and affluence incorrectly draws attention to proximate causes while ignoring the ultimate cause: a culture that tolerates overt and covert marketing of alcohol, tobacco and sex to these easily manipulated, voracious consumers.—Letter to the editor, *New York Times*

- #5 [A recent column in this newspaper] deals with the living quarters of Bishop William Murphy of the Diocese of Rockville Centre. I am so disgusted with the higher-ups in the church that at times I am embarrassed to say I am Catholic. To know that my parents' hard-earned money went to lawyers and payoffs made me sick. Now I see it has also paid for a high-end kitchen. I am enraged. I will never make a donation again.—Letter to the editor, *Newsday*

- #6 I don't understand what is happening to this country. The citizens of this country are trying to destroy the beliefs of our forefathers with their liberal views. This country was founded on Christian beliefs. This has been and I believe still is the greatest country in the world. But the issue that we cannot have prayer in public places and on public property because there has to be separation of church and state is a farce.—Letter to the editor, *Douglas County Sentinel*

The passage on alcohol abuse in children is not an argument but an unsupported assertion about the causes of the problems. The passage from the disappointed Catholic is an expression of outrage (which may or may not be justified), but no conclusion is put forth, and no reasons supporting a conclusion are offered. Note the contentious tone in the third passage. This passage smells like an argument. But, alas, there is no argument. Each sentence is a claim presented without support

from my Technology notes

from my Reading

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