

Some Useful Things to Know About Arguments

1 What is an Argument?

The goal of an argument is to offer good **reasons** in support of a **conclusion**. If it does so, we can **infer** the conclusion from those reasons.

When making an argument, one takes certain theses for granted (these are the **premises** of one's argument) and then attempts to show that if one accepts those premises, then one ought also to accept the argument's conclusion.

Authors do not always state all the premises of their arguments, but sometimes just take certain premises for granted. These we call **implicit premises**.

2 Evaluating an Argument

Whether an argument convinces us depends wholly on whether we believe its premises, and whether its conclusion seems to us to follow from those premises. So when we're evaluating an argument, there are two questions to ask:

- i. Are its premises true and worthy of our belief?
- ii. Does its conclusion really follow from the premises?

These are completely independent issues. Whether or not an argument's premises are true is one question; and whether or not its conclusion follows from its premises is another, wholly separate question.

If we *don't accept the premises* of an argument, we don't have to accept its conclusion, no matter how clearly the conclusion follows from the premises.

Also, if the argument's conclusion *doesn't follow* from its premises, then we don't have to accept its conclusion in that case, either, even if the premises are obviously true.

So **bad arguments** come in two kinds. Some are bad because their premises are false; others are bad because their conclusions do not follow from their premises. (Some arguments are bad in both ways.)

If we recognize that an argument is bad, then it loses its power to convince us. That doesn't mean that a bad argument gives us reason to **reject** its conclusion. The bad argument's conclusion *might* after all be true; it's just that the bad argument gives us **no reason to believe** that the conclusion is true.

3 Validity & Soundness

An argument is **(deductively) valid** if the conclusion logically follows from the premises.

An argument is **sound** if the conclusion logically follows from the premises, *and* all the premises are true.

Validity. Validity is a formal property. It doesn't matter what the premises and the conclusion actually say. It just matters whether the argument has the right form. So, in particular, a valid argument *need not* have true premises, nor need it have a true conclusion.

Some examples: Are the following arguments valid?

[1] If there is a hedgehog in my gas tank, then my car will not start.
My car will not start.
Hence, there must be a hedgehog in my gas tank.

[2] If I publicly insult my mother-in-law, then my wife will be angry at me.
I will not insult my mother-in-law.
Hence, my wife will never be angry at me.

[3] 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.

[4] All engineers enjoy ballet.
Therefore, some males enjoy ballet.

Soundness. In order to establish that an argument is sound, we have to establish (i) that it is valid, and (ii) that all its premises are true.

Sound arguments always have true conclusions. This means that if you read Philosopher X's argument and you disagree with his conclusion, then you're committed to the claim that his argument is unsound. That is: Either her conclusion does not actually follow from her premises - there is a problem with her reasoning or logic - or at least one of her premises is false.

Consider again argument [3]. Is it sound?

The Bottom Line. When you're doing philosophy, it is never enough simply to say that you disagree with someone's conclusion, or that his conclusion is wrong. If your opponent's conclusion is wrong, then there must be something wrong with his argument, and you need to say what it is.