

Arguments and Validity



Not *that* kind of argument ...

Standard Form

The 'standard form' of an argument is as follows:

Premise 1

Premise 2

... (etc.)

Conclusion

How to spot the conclusion

- The speaker's whole purpose in making the argument is to persuade us to believe the conclusion.
- So ask yourself, "What does the speaker ultimately want us to believe?"
- Also, the conclusion will often (not always) come after a word or phrase like "therefore", "hence", "it follows that", "so we can be sure that", etc.

E.g.

“The continental plates are not fixed in place, but drift around very slowly. This is clear from the close geological similarity of coastlines that are now separated by wide oceans. We can see, for example, that the rocks of eastern South America exactly match those of west Africa, which makes sense only if these continents were once joined.”

Conclusion

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E.g.

“The global financial crash of 2008 showed us who’s really in charge of the world economy. The crash was partly caused by corporate fraud, but mostly by excessive risk-taking, in pursuit of obscene profits. Well, what happened then? Of course the financial titans who lost their foolish bets were bailed out by you and me. And the crooks got off scot free. These well-known facts clearly show that the global financial system is no longer under control of governments, and has in fact become the government.”

Conclusion:

“The global financial crash of 2008 showed us who’s really in charge of the world economy. The crash was partly caused by corporate fraud, but mostly by excessive risk-taking, in pursuit of obscene profits. Well, what happened then? Of course the financial titans who lost their foolish bets were bailed out by you and me. And the crooks got off scot free. These well-known facts clearly show that **the global financial system is no longer under control of governments, and has in fact become the government.**”

How to spot premises

- Premises are statements that the speaker does *not* attempt to support, in the argument, by other statements. They are ‘information inputs’, not outputs. E.g. they might be:
 - Assumed, for the sake of argument
 - Taken as common knowledge
 - Directly observed
 - Accepted on the authority of an expert
 - Demonstrated previously, etc.

How to spot premises

- Premises *won't* be preceded by phrases like 'it follows that', 'therefore', etc.
- Instead, they'll have phrases like, "And", "But", "Given that", "Everyone knows that", "According to Stats Canada", etc.

E.g.

“The continental plates are not fixed in place, but drift around very slowly. This is clear from the close geological similarity of coastlines that are now separated by wide oceans. We can see, for example, that the rocks of eastern South America exactly match those of west Africa, which makes sense only if these continents were once joined.”

E.g.

“The continental plates are not fixed in place, but drift around very slowly. This is clear from [the close geological similarity of coastlines that are now separated by wide oceans](#). We can see, for example, that the rocks of eastern South America exactly match those of west Africa, which makes sense only if these continents were once joined.”

Premises:

“The continental plates are not fixed in place, but drift around very slowly. This is clear from the close geological similarity of coastlines that are now separated by wide oceans. We can see, for example, that the rocks of eastern South America exactly match those of west Africa, which makes sense only if these continents were once joined.”

Standard form

1. There is close geological similarity between coastlines that are now separated by wide oceans.
2. The rocks of eastern South America exactly match those of west Africa

∴ The continental plates are not fixed in place, but drift around very slowly

E.g.

“The global financial crash of 2008 showed us who’s really in charge of the world economy. The crash was partly caused by corporate fraud, but mostly by excessive risk-taking, in pursuit of obscene profits. Well, what happened then? Of course the financial titans who lost their foolish bets were bailed out by you and me. And the crooks got off scot free. These well-known facts clearly show that the global financial system is no longer under control of governments, and has in fact become the government.”

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Standard form

1. The crash was partly caused by corporate fraud, and excessive risk-taking, in pursuit of obscene profits.
2. The financial titans who lost their foolish bets were bailed out by you and me.
3. The crooks got off scot free.

∴ the global financial system has become the government

E.g.

“Theories that the Apollo moon landings were faked can be rejected conclusively. For example, if you look at the footage of astronauts walking on the moon, you’ll see the way that the fine dust they kick up falls straight down again, without drifting or floating. This is only possible in a vacuum, not in a movie set down on earth.”

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“Actually you did go to school with George Orwell. You remember that kid Eric Blair who sat next to you in math class? Well, Eric Blair is George Orwell – I read it in the paper.”

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Argument

- Arguments may also be good or bad, strong or weak, but in *two* ways.
- A good argument has:
 1. *Plausible* premises
 2. *Strong support* of the conclusion by the premises
- In Phil 1102 we're only concerned with #2, the support issue. And we're interested only in *deductive* support, i.e. *validity*.

Valid Argument?

Chris is an avid fly-fisher

Chris enjoys hunting black bears and caribou

Chris drives a large, rugged pickup truck

Chris is not a vegetarian

- No. The premises strongly *support* the conclusion, but it isn't deductive.
- It's not deductive, because it's *possible* for the premises to be true, and the conclusion false.

Valid Argument?

All fish have gills

Tadpoles have gills

∴ Tadpoles are fish

- Here, the premises are *actually* true, and the conclusion is *actually* false, so not valid.

Valid Argument?

All mammals are warm blooded

Dogs are warm blooded

∴ Dogs are mammals

- Here, the premises are *actually* true, and the conclusion is *actually* true as well. So is it valid?
- No.

Valid Argument?

No mammal lays eggs

Platypuses lay eggs

Platypuses are not mammals

Valid, but not sound (as premise 1 is false)

Platypus

From Wikipedia, the free encyclopedia

The **platypus** (*Ornithorhynchus anatinus*) is a [semi-aquatic mammal endemic to eastern Australia](#), including [Tasmania](#). Together with the four species of [echidna](#), it is one of the five extant species of [monotremes](#), the only mammals that lay [eggs](#) instead of giving birth to live young. It is the sole living representative of its [family \(Ornithorhynchidae\)](#) and [genus](#)