

IDENTIFYING ARGUMENTS WELL-CRAFTED ARGUMENTS

Def. A **well-crafted** (version of an) argument is an argument that is stated in such a way that its logical features are explicit.

Six principles for producing well-crafted arguments

Principle 1. Identify the premises and the conclusion

Argument 1

The defendant is not guilty of murder since she is insane.

Well-crafted version of Argument 1.

1. The defendant is insane.
2. So, she is not guilty of murder. (1)

Argument 2

Observational data are scientific. On the assumption that observational data are scientific, they can in principle be shown false. Therefore, observational data can in principle be shown to be false.

Well-crafted version of Argument 2.

1. Observational data are scientific.
2. If observational data are scientific, then observational data can in principle be shown false.
3. So, observational data can in principle be shown to be false. (1, 2)

Premise indicators

Because	after all	since
The reason that	for	in light of the fact that
As	based on the fact that	

Conclusion indicators

So	thus	therefore
Accordingly	hence	consequently
Implies that	we may infer that	it follows that
Which proves that		

Note: The premises sometimes come after the conclusion in ordinary English

Note: It's usually best to identify the conclusion first.

Note: Conventions for constructing well-crafted arguments

- Place the conclusion last, using the word 'So' to indicate it.
- Number the premises and the conclusion.
- Conditional statements are put as "if..., then..."
- At the end of the conclusion, place a parenthesis with the number of each premise that is supposed to directly support it.

Principle 2. Eliminate excess verbiage

- **Def. Excess verbiage** is a word or statement that adds nothing to the argument.

There are four prominent kinds of verbiage: discounts, repetition, assurances, and hedges.

1. Discount

An acknowledgement of a fact or possibility that might be thought to render the argument invalid or unsound, or otherwise defective.

Argument 1

Although the defendant plunged the knife into the victim's chest 36 times, she is not guilty of murder since she is insane.

Argument 2

Observational data are scientific. On the assumption that observational data are scientific, they can in principle be shown false. Therefore, even though one or two well-regarded philosophers of science think otherwise, observational data can in principle be shown to be false.

Discount indicators

Although

While it may be true that

Even though

While I admit that

In spite of the fact that

I realize that..., but

Despite the fact that

I know that..., but

2. Repetition

Restating a premise or conclusion, perhaps changing the wording a bit.

Argument 1

The defendant is not guilty of murder since she is insane, simply mentally incapacitated.

Argument 2

Observational data are scientific. On the assumption that observational data are scientific, they can in principle be shown false. In other words, they are falsifiable. Therefore, observational data can in principle be shown to be false.

3. Assurance

A statement, word, or phrase that indicates that the author is confident of a premise or inference.

Argument 1

Without a shadow of reasonable doubt, the defendant is not guilty of murder since she is insane.

Argument 2

As virtually everyone will agree, observational data are scientific. But equally undeniable is the fact that, on the assumption that observational data are scientific, they can in principle be shown false. Therefore, it is plain that observational data can in principle be shown to be false.

Common assurances

Obviously	everyone knows that
No doubt	it is well know that
Certainly	no one will deny that
Plainly	this is undeniable
Clearly	this is a fact

4. Hedge

A statement, word, or phrase that indicates that the arguer is tentative about a premise or inference.

Argument 1

It's not implausible to conclude that the defendant is not guilty of murder since she is insane.

Well-crafted version of Argument 1

1. The defendant is insane.
2. So, she is not guilty of murder. (1)

Argument 2

I believe that observational data are scientific. On the assumption that observational data are scientific, it is reasonable to think that they are falsifiable. Therefore, it seems to me that observational data are falsifiable.

Well-crafted version of Argument 2

1. Observational data are scientific.
2. If observational data are scientific, they are falsifiable.
3. So, observational data are falsifiable. (1,2)

Common hedges

I think that

It seems that

Perhaps

Maybe

In my opinion

I believe that

I guess that

it is reasonable to suppose that

this seems reasonable

this is plausible

Note: sometimes the words and phrases that are frequently used for assurances and hedges do not function in an argument as an assurance or a hedge. For example:

Obviously, you have some limbs. If something is obvious, then it is reasonable to believe it. So, it is reasonable to believe that you have some limbs.

1. You have some limbs.
2. If something is obvious, then you have limbs.
3. So, you have some limbs.

1. Obviously, you have some limbs.
2. If something is obvious, then it is reasonable to believe it.
3. So, it is reasonable to believe that you have some limbs. (1,2)

Principle 3. Employ uniform language

When you construct a well-crafted argument, stick with one term or statement for each concept or thought that is expressed.

Argument 2

Observational data are scientific. On the assumption that empirical facts are central to science, then our judgement about what we can see, touch, hear and the like are falsifiable. Therefore, the sorts of things we have direct access to with our senses in scientific practice can in principle be shown false.

Four ways in which the concept of observational data is expressed:

- Observational data
- Empirical facts
- Our judgment about what we can see, touch, hear and the like
- The sorts of things we have direct access to with our sense in scientific practice

Two ways in which the concept of being scientific is expressed:

- Scientific
- Central to science

Two ways in which the concept of falsifiability is expressed:

- Falsifiable
- Can in principle be shown false

Select one way for each concept, and the logic of the argument becomes much clearer, as follows:

1. Observational data are scientific.
2. If observational data are scientific, then observational are falsifiable.
3. So, observational data are falsifiable. (1, 2)

Principle 4. Be fair and charitable in interpreting an argument

Principle of fairness: Be loyal to the original, not distorting the true meaning.

Argument

Affirmative action is just since it redresses past wrongs done to communities.

Well-crafted???

1. Using strict quotas to restore equality redresses past wrongs done to communities.
2. So, using strict quotas to restore equality is just. (1)

More fairly well-crafted

1. Affirmative action redresses past wrong done to communities.
 2. So, affirmative action is just. (1)
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Argument

Sometimes a patient has no chance of becoming conscious again, in which case it might be morally permissible to kill them.

Well-crafted???

1. Sometimes a patient has no chance of becoming conscious again.
2. So, it might be morally permissible to treat them as though they aren't persons. (2)

More fairly well-crafted

1. Sometimes a patient has no chance of becoming conscious again.
2. So, it might be morally permissible to kill them. (2)

Principle of charity: If the original is ambiguous in some respects, select an interpretation that puts the argument in the best possible light.

Argument

Marijuana should remain illegal. After all, if it became legal, young children would be much more likely to use it and be harmed. How much does it matter whether you are free to do what you want, anyway?

Well-crafted??

1. If marijuana became legal, then young children would be much more likely to use it and be harmed.
2. Freedom to do what you want doesn't matter at all.
3. So, marijuana should remain illegal. (1,2)

More charitably well-crafted

1. If marijuana became legal, then young children would be much more likely to use it and be harmed.
- 2*. Freedom to do what you want with respect to marijuana doesn't matter as much as making it more likely that young children will be harmed.
3. So, marijuana should remain illegal. (1,2*)

Principle 5. Do not confuse subconclusions with (final) conclusions

Argument

If alcoholism is a disease, then it is treated medically. But alcoholism is not treated medically, *for* the primary mode of treatment is the 12-step program of AA. AA's 12-step program is religious in nature. Therefore, alcoholism is not a disease.

Well-crafted version

1. The primary mode of treatment for alcoholism is the 12-step program of AA.
2. The 12-step program of AA is religious in nature.
3. So, alcoholism is not treated medically. (1,2) subconcl
4. If alcoholism is a disease, then it is treated medically.
5. So, alcoholism is not a disease. (3,4)

Argument

Either the universe popped into existence from nothing or it had a beginning or it has always existed. Nothing comes from nothing, so it didn't pop into existence from nothing. So there are really two options: either the universe had a beginning or it has always existed. But it has not always existed; after all, if it has always existed, then it is impossible for the flow of time to have reached now, which it has. Therefore, the universe had a beginning.

Well-crafted version

1. Either the universe popped into existence from nothing or it had a beginning or it has always existed.
2. Nothing comes from nothing.
3. So, the universe didn't pop into existence from nothing. (2)
4. So, either the universe had a beginning or it has always existed. (1,3)
5. If the universe has always existed, then it is impossible for the flow of time to have reached now.

6. The flow of time has reached now.
7. So, the universe has not always existed. (5,6)
8. So, the universe had a beginning. (4,7)

Note: A subconclusion within an argument functions as both a conclusion and a premise.

Principle 6. Make explicit obviously implicit premises in a charitable way

An *enthymeme* is an argument that has one or more premises or its conclusion left implicit.

When you encounter an enthymeme, supply the missing premises or conclusion in your well-crafted version of it.

Argument. Of course there's no God. After all, there's so much horrific evil and suffering in the world.

Well-crafted???

1. There's a lot of horrific evil and suffering in the world.
2. So, there's no God. (1)

No. It's an enthymeme. More well-crafted version:

1. There's a lot of horrific evil and suffering in the world.
2. If there's a lot of horrific evil and suffering in the world, then there's no God.
3. So, there's no God. (1,2)