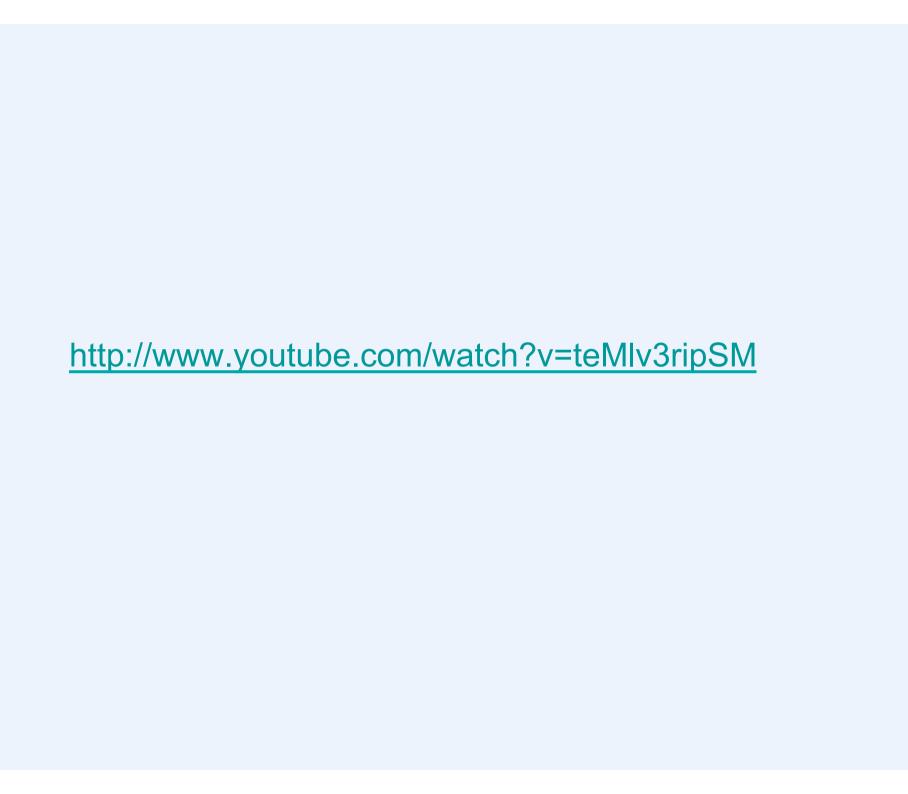
Critical Reasoning for Beginners: week one

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Today we shall be looking at:

(i) the nature of arguments

(ii) how to recognise arguments



Definition: 'Argument'

.... a set of sentences such that...

.... one of them is being said to be true...

.... the other(s) are being offered as reasons for believing the truth of the one.

An argument:

It is Friday, Marianne always wears jeans on Friday so Marianne will be wearing jeans today.

Q1: List the sentences that make up this argument

It is Friday

Marianne always wears jeans on Friday

Marianne will be wearing jeans today

Conclusion: the sentence being said to be true

Premises: the sentence(s) being offered as reason(s) for believing the one

An argument:

It is Friday, Marianne always wears jeans on Friday so Marianne will be wearing jeans today.

Q2: Identify the conclusion of the argument

Q3: Identify the premises of the argument

An argument:

It is Friday, Marianne always wears jeans on Friday so Marianne will be wearing jeans today.

The conclusion is in red
The premises are in green

It is important to distinguish arguments from sets of sentences

Sets of sentences that are *not* arguments might:

a) have no relation at all between them;

b) have between them a relation other than that characterising an argument

A set of sentences that isn't an argument:

The sea is salt

Melbourne is in Australia

But note how easy it is to make it an argument.....

The sea is salt

Therefore Melbourne is in Australia

Arguing is something we do with sentences

Which of these sets of sentences are arguments?

- 1.Towards lunchtime clouds formed and the sky blackened. Then the storm broke.
- 2.Since Manchester is north of Oxford and Edinburgh is north of Manchester, Edinburgh is north of Oxford.
- 3. Witches float because witches are made of wood and wood floats.
- 4. Since Jesse James left town, taking his gang with him, things have been a lot quieter.

There are often words that suggest a set of sentences is an argument:

Since, therefore.....

Can you think of any more?

It is also important to distinguish arguments from assertions

An argument is a set of sentences, *one* of which is being asserted;

An assertion is a single sentence (possibly complex) that is being expressed in assertoric mode.

Which of the following sentences are (or could be) assertions:

1. The room is hot

2. Is the room hot?

3. Turn the heat up!

Beware: some assertions look very like arguments:

If it is snowing the mail will be late

How do we know that this is not an argument?

Assertions are either true or false...

...but arguments are *neither* true *nor* false...

...arguments are either good or bad...

...a good argument is one in which:

(a) the conclusion follows from the premises;

(b) the premises are all true.

Note:

as logicians we are less interested in the truth of the premises of an argument...

...than we are in the relation of 'following from'

One of these is a good argument, one bad, (when we consider the relation of 'following from') which is which?

Argument One:

If it is Monday the lecture will finish at 3.30

It is Monday

Therefore the lecture will finish at 3.30

Argument Two:

If it is Monday the lecture will finish at 3.30

The lecture will finish at 3.30

Therefore it is Monday

Next week we shall be looking at the many different sorts of argument there are, and learning how to distinguish them from each other