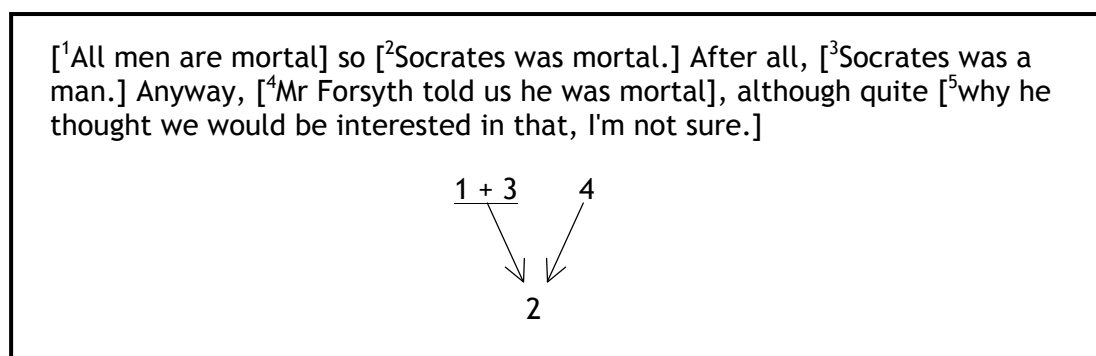


Argument diagrams

Argument diagrams, also known as argument maps, are designed to make clear the structure of an argument. In philosophy and critical thinking an argument is **an attempt to establish a claim as true**. It isn't a disagreement. Those coming from a philosophy background call the claim someone is trying to establish the **conclusion**; the reasons given in its support are called the **premises**. Some people coming from a critical thinking background believe the word 'conclusion' can be misleading. Having evaluated an argument *your* conclusion may be that the claim is false or not yet established. For this reason the claim someone is trying to establish as true might be called '**the contention**'. Also, people often don't start by looking at the evidence and considering it carefully before moving on to draw a conclusion. Instead, they put forward a claim and only then construct arguments to defend it. In critical thinking it is also common to simply refer to the reasons for or against rather than to refer to the premises. Real world arguments don't just have premises leading to a conclusion. They might acknowledge that there are reasons for rejecting the claim but then go on to give more reasons for not finding these persuasive.

Various methods of diagramming arguments have been suggested but you only need to be familiar with two of them. The first numbers each of the statements and then constructs a diagram using those numbers.



Sometimes the individual statements are re-written and listed as a key at the side of the diagram. This can be helpful because the statements may need 'tidying up'. In the example above the fourth statement is ambiguous so in the key it might be written as,

'4. Mr Forsyth told us Socrates was mortal.'

The fifth statement isn't contributing a reason for or against statement two and so isn't included in the diagram. If it had been it would have been re-written as

'5. I'm not sure why Mr Forsyth thought we would be interested in Socrates being mortal.'

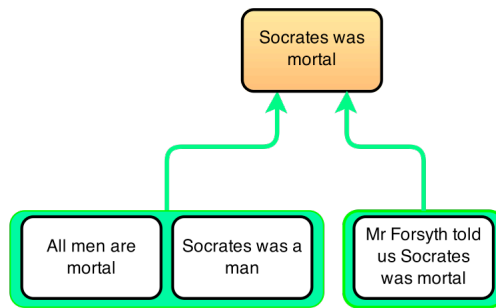


Can you work out why the 1 and 3 have been shown together and the 4 shown separately?

The second method doesn't use a key but puts the statements into boxes and uses them as part of the diagram. The conclusion or contention is usually placed at the top of the diagram and the arrows face upwards. See example below.



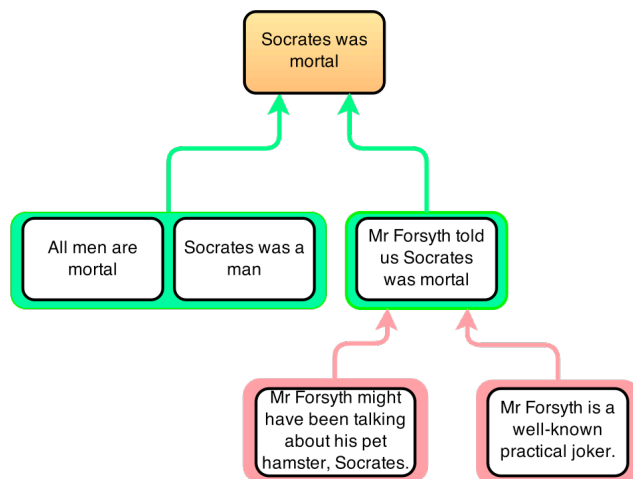
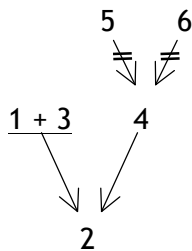
Other than personal preference can you think of any good reason for having the arrows heading either up or down?



There are advantages and disadvantages to each of these methods. The first is convenient if you are given a passage to analyze as part of your classwork. Even if you have to write out each of the individual statements, the process of creating the diagram is broken down into separate steps. The second kind of diagram is easier to read but it is harder to create. It would also have many advantages if, instead of analyzing an argument, you were using a diagram to help construct your own argument, perhaps in preparation for an essay. Not surprisingly the second method has gained in popularity with access to computers.



It is also possible for each of these methods to show more complex arguments containing sub-conclusions and objections. Do the following diagrams show sub-conclusions or objections? How would you show the other one?



Additional resources

It is possible to create argument diagrams using the drawing features in some word processors but it is much quicker to use software designed for the purpose. The main program specifically designed to create argument maps is Rationale. An online trial copy, without the ability to save, is available at <https://www.rationaleonline.com/editor>

The second type of diagram illustrated above was created using the free online tool at <https://www.draw.io/>

Similar tools with limited free options are:

- <https://www.gliffy.com>
- <https://www.lucidchart.com> and
- <http://creately.com/>

There are also various programs that you may already have on your computer, e.g. Visio, Inspiration, or Omnigraffle