

Critical thinking I:
More About Argument

Bruce Edmonds

MRes Philosophy of Knowledge

(slides available <http://cfpm.org/mres>)

(Potted) History of the “Western Liberal” Tradition of Thought

- Start usually attributed to culture of Ancient Greeks from around 600 BCE
- Taken up by Romans (some aspects)
- After Roman empire collapsed, was maintained/developed in the Islamic World
- Later re-imported to Western Europe
- At different times nurtured in different European Countries
- Now in many countries across the world

The Original Greek Context

- Small, independent but affluent “city states”
- Where the citizens discussed court cases, and some decisions collectively
- (the “citizens” did not include women, slaves, outsiders or children)
- Thus rhetoric and argument were important
- This was a social process
- The outcomes of these discussions were important – they had real consequences

(formal account of the)
Structure of an argument
(according to these philosophers)

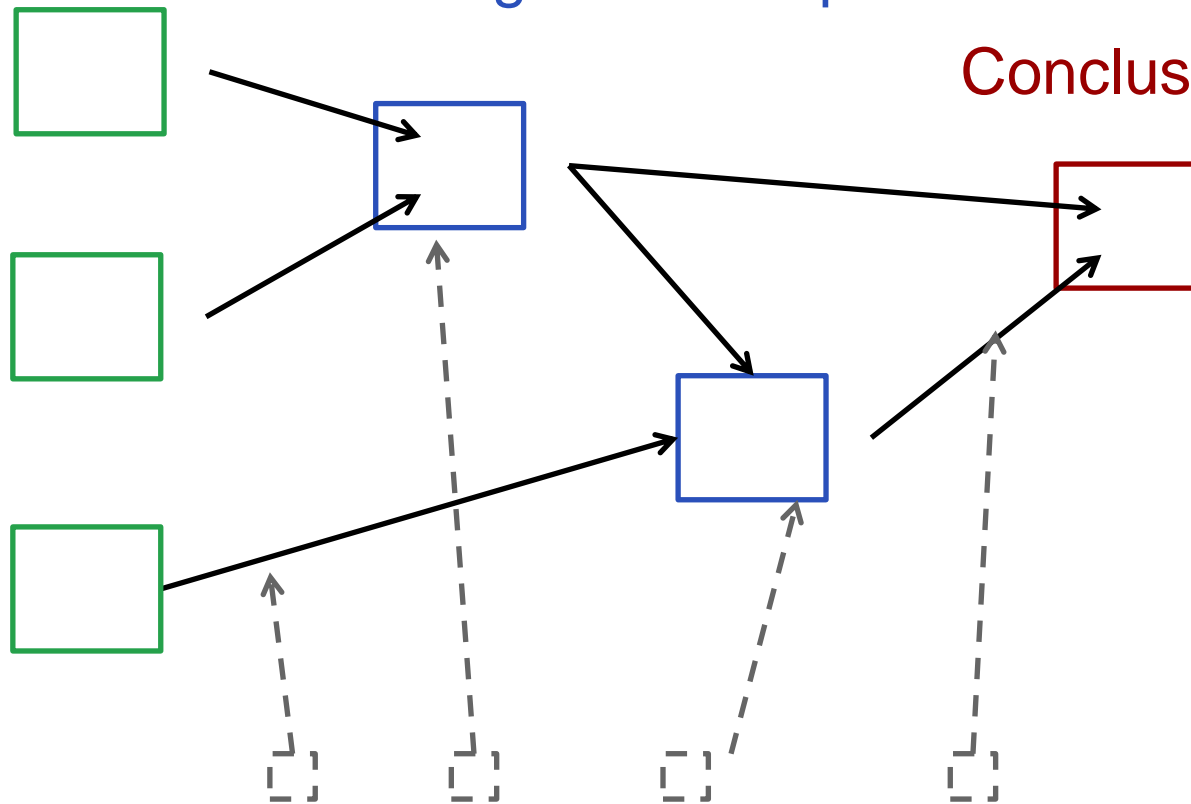
- You start with a number of statements which are agreed with – the *premises*
- Repeatedly you:
 - Make a statement that is a consequence of already established statements (which are the premises *plus* the previously established statements using this step) – the *argument steps*
- Until you get to the statement you wanted – the *conclusion*

the Structure of an Argument

Premises

Argument Steps

Conclusion



Implicit Assumptions

Exercise 1: identifying parts of arguments (again but its hard)

- In groups of two or three...
- Choose some of the example arguments on the sheet, and see if you can identify:
 1. The Conclusion
 2. Any premises (the starting points)
 3. The Intermediate argumentative steps (if any)
 4. Any unmentioned (implicit/hidden) assumptions

Limitations on acceptable argument

- Some philosophers (and others) sought to establish norms as to what kinds of argument were *not* acceptable
- And thus improve the decision making (by avoiding arriving at bad conclusions)
- E.g. *Don't believe Jim – he's a pervert!*
- These kinds of bad argument later came to be called *fallacies*
- They can be seen as the weakest, negative constraint upon discussion

Exercise 2: Judging arguments

- In groups of two or three
- Look at some of the arguments on the sheet, and decide for each :
 1. If you think it has **good** or **bad** argument steps
 2. Whether you agree with its conclusion
 3. Whether you agree with its assumptions

Remember because the assumptions could be wrong it could have:

- **good** argument steps with a **bad** conclusion
- **bad** argument steps with a **good** conclusion

Kinds of Bad Argument?

- starting with bad premises
- sequence meaning cause
- reverse logic
- appeal to authority/experience
- majorities are right
- over generalising
- stereotyping – using people’s biases
- failure to mention the full picture
- arguing from non-existence
- circular arguing
- pure emotion

Making an Argument more Rigorous

- Making your assumptions explicit (bringing as many of the implicit assumptions as explicit premises as possible)
- Making your argument steps clear – why does the step follow from its premises
- Being honest about the strength of your supporting evidence and authorities
- Trying to keep different arguments separate
- (Generally) avoiding circular arguments

The adversarial approach

- The best person to find flaws, limitations etc. in an argument is someone arguing for the opposite point of view (counter-argument)
- Answering criticisms concerning one's argument made may lead one to improve one's argument
- Another approach is to criticise the counter-argument, undercutting the criticism
- You may find eventual agreement is possible (e.g. in a *synthesis*) or not
- The presence of adversarial argument may lead to a better formulation of knowledge

Common attacking criticisms of arguments

- Giving a **counter-example** to the argument (an example where the assumptions are true but the conclusion is false)
- Argue that the assumptions do not apply to the case being argued about (**relevance of assumptions**)
- Argue that the conclusion is not relevant to the case being argued about (**relevance of conclusion**)
- Show that consequences of the conclusion would lead to further consequences that were themselves false (**ridiculo ad absurdum**)

Exercise 3: attacking some arguments

- In groups of two or three
- Look at some of the arguments on the sheet that you **disagree** with the steps of
- Try to formulate some counter-arguments
- Decide whether your counter-arguments fall into the common categories just described, namely:
 - Counter-example
 - Relevance of assumptions
 - Relevance of conclusion
 - Ridiculo ad absurdum

Internalising the adversarial process

- Once you are used to the adversarial approach it can be internalised, that is
- You imagine yourself as your own opponent and so think what counter-arguments could be made against your own arguments
- And thus improve one's original arguments (or even change one's mind about them)
- And hence make them more robust against possible criticism by anticipating criticisms

Exercise 4: attacking arguments you agree with

- In groups of two or three
- Look at some of the arguments on the sheet that you **agree with** (or invent them if necessary) and
- Try to formulate some counter-arguments against it
- Are there any unmentioned but necessary assumptions in it?

Exercise 4: attacking arguments you agree with

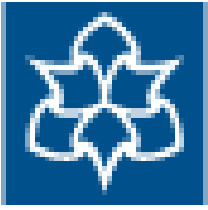
- In groups of two or three
- Look at some of the arguments on the sheet that you **agree with** and
- Try to formulate some counter-arguments

Exercise 5: arguing with someone

- In pairs
- Choose one of the arguments on the sheet
- One person argues for the chosen argument
- The other argues against it
- Take it in turns to argue for your chosen position and against the position of the other person
- Stop if
 - it becomes too heated (are you talking about the arguments or the conclusions?)
 - It does not seem to be getting anywhere
- Then try this with another example

Conclusion

- It is a necessary part of becoming a PhD student that you learn to judge whether arguments are good or bad (even if made by your supervisor)
- The Goodness of an argument is separate from whether one agrees with its conclusion
- If you disagree with a conclusion you have to decide whether it is the argument steps or the premises you disagree with
- Adversarial (but polite!) argument is the cornerstone of the western liberal academic tradition (also its political and legal traditions)
- Getting good at arguing involves internalising the process and doing a lot of self-criticism/argument



Manchester
Metropolitan
University



Bruce Edmonds

bruce.edmonds.name

Centre for Policy Modelling

cfpm.org

Manchester Metropolitan University Business School

www.business.mmu.ac.uk

these slides are linked from

cfpm.org/mres