

# Argument Diagrams

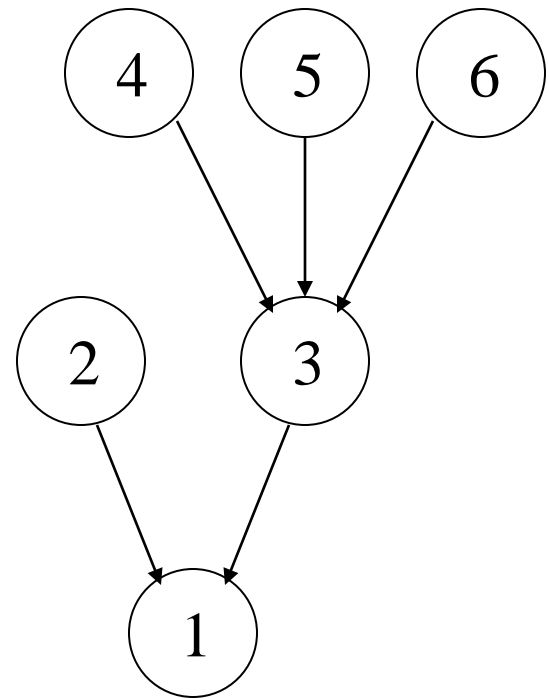
Critical Thinking

# Argument Diagrams for Argument Analysis

- Argument Diagrams are a very useful tool for argument analysis:
  - Diagrams reveal dependence or independence of premises
  - Diagrams reveal the ‘lines’ of reasoning
  - Diagrams reveal where the ‘action’ is
    - What is at the core of the argument
    - What is/are the main line(s) of reasoning
    - What is (considered) less important
- In short, diagrams provide an overall picture of the structure of the argument.
  - As such, potential problems or gaps in the argument quickly reveal themselves as well.

# Argument Diagrams III

I don't (1) hate cheerleading just because (2) it's about as safe as porcupine-juggling. I also hate it because (3) it's dumb. (4) The Velcroed-on smiles. (5) The bizarre arm movements stolen from the Navy signalmen's handbook. (6) The same cheers done by every troupe in every state.



- Letter to the Editor

# Some Basic Principles for Argument Diagrams

- Adding Stuff:
  - Rabbit Rule (RR):
    - Try and make connections between premises and conclusion as clear as possible (e.g. by using the same terms) (don't pull rabbits out of the hat!)
  - Holding Hands (HH):
    - When premises are dependent, make this dependence clear (try and have them 'hold hands')
- Deleting Stuff:
  - Forest Formula (FF):
    - Keep your diagram readable (you should be able to keep seeing the forest through the trees)
  - Simplify the Story (SS) or: Cut the Crap (CC):
    - Simplify where appropriate

# Paraphrase the Prose

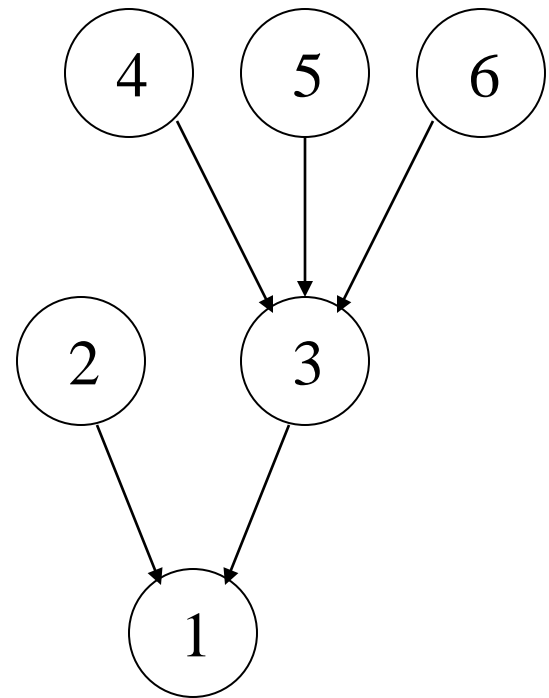
- In sum: Paraphrase the Prose!
  - Remember that there is a difference between arguments and expressions of argument: with your diagram, you are trying to obtain a clear expression of the argument. So, paraphrase, use similar terms and add hidden premises where appropriate, but at the same time feel free to simplify and get rid of some of the details if they are going to be more distracting than illuminating.

# Level the Levels

- Your argument will take the shape of a (upside-down) pyramid, with the conclusion at the bottom, premises on top, and intermediate results in between.
- It helps to try and keep the 'size' and 'type' of the statements at each level the same.

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# Extending Argument Diagrams

- Argument diagrams can be extended in several ways:
  - Objections: indicate objections (and reasons behind them) to premises and to inferences
  - Grounds: indicate the basis/source/ground of ultimate premises (common knowledge, personal observation, authority, etc.)
  - Evaluation: indicate perceived ‘strength’ of premises and inferences



# Applications of Argument Diagramming

- Aside from analyzing arguments, argument diagrams are also good for:
  - Organizing arguments
  - Communicating arguments
- Argument diagrams have been used to organize complicated arguments in:
  - academia (especially philosophy)
  - court rooms
  - industry (think listing ‘pros’ and ‘cons’ in the context of decision making)