1.3: The Structure of Arguments

“Anyone who conducts an argument by appealing to authority is not using his intelligence; he is just using his memory.” — Leonardo da Vinci

Improves likelihood that beliefs are correct by **effective argument**

Argument = Reasons + Conclusions (claim)

- Reasons = inputs to arguments (facts, general principles, etc.)
  - connect inputs (data) to conclusion via **logical principles**
  - forms a **network of beliefs**
  - any conclusion should be consistent with the set of inputs
  - if not, a contradiction exists in the set of inputs

**Assumptions**: Reasons needed for an argument, but that are **unsupported** (taken for granted)
(e.g. gun control: one side assumes that a law will help reduce the problem)
- no connection with correctness – could be either right or wrong. But important to find, and to examine.
- usually tend to be unstated as well (these are particularly dangerous)

**Presuppositions**: Reasons necessary for an argument to work, but that are **common to both sides**
(e.g. gun control: both sides want to reduce harm to people)
- in investigation: beliefs/values assumed in all possibilities being considered
- in science: beliefs/values assumed in all hypotheses (kind of the same thing?)

**Descriptive argument** – what **is** the case

Reasons = presuppositions + logic + **evidence**

**Prescriptive argument** – what **should be** done
- e.g., people *should* give money to charity [rather than spending it on themselves]

Reasons = presuppositions + logic + evidence + **prescriptive beliefs**
(prescriptive belief = belief about priority of actions)

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**Real-World Segment: Debating II – Details**

See “COGS303-debates.pdf” on the website
Also see [http://www.sfu.ca/cmns/130d1/HOWTODEBATE.htm](http://www.sfu.ca/cmns/130d1/HOWTODEBATE.htm)