

1.2: 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 to work, but 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** the case

Reasons = presuppositions + logic + evidence + **prescriptive beliefs**

Real-World Segment: Debating I – Basics

See “COGS303-debates.pdf” on the website

Also see <http://www.sfu.ca/cmns/130d1/HOWTODEBATE.htm>