TYPES OF PROOF

- **logos** – logic proof – appeals to the audience’s reason, understanding, and common sense.
- **ethos** – credibility proof – appeals to the audience’s impressions, opinions, and judgments about the individual stating the argument
- **pathos** – emotional proof – appeals and arouses feelings of the audience

**LOGOS**
- substantive proofs
- facts, reasons, and opinions that are based on reality
- rely on factual information, statistics, and accounts of actual events
- support used is real and drawn from experience
- present common ways of thinking about relationships among the events and data of the real world, and then using those ideas and relationships as support for a line of argument
- mnemonic device: SICDADS

**Argument from Sign**
*Based argument on a specific visible sign.*
- to prove with certainty: chickenpox (person has chicken pox)
- to prove probability of a claim: racial riot (people rioting probably think they are treated unfairly)
- to “prove” a false claim: presents under the tree (existence of Santa Claus)

→ **Test of validity:** is this really a sign of what the author claims it to be? or could something else explain the existence of the sign?

**Argument from Induction**
*Forms conclusions from a number of examples.* (examples → generalization)
- argument from from example
- audience is expected to accept the group of examples as adequate and accurate enough to make the inductive leap to the claim
- (Asian students I know work very hard; all Asian students work hard)

→ **Test of validity:** is the number of examples sufficient? are there exceptions to this group of examples? is there a different generalization for this group of examples?

**Argument from Cause**
*Places the subject in a cause-and-effect relationship*
- clue words: cause, effect, resulted in, as a result, as a consequence, because
- the claim states what you are expected to conclude from the cause-and-effect reasoning (playing video games causes children to become violent)

→ **Test of validity:** Are these causes alone sufficient to create these effects? Could these effects result from other causes? Are there exceptions to the cause-and-effect outcome the author claims?

**Argument from Deduction**
*Forms conclusions from a general principle.* (generalization → example)
- reasoning from general principle to specific examples
- audience is expected to assume that a general principle about a whole category of phenomena is accurate and acceptable
- Syllogism:
  - Major premise: Terrorists are against freedom.
  - Minor premise: America stands for freedom
  - Conclusion: Terrorists are against America (claim based on deduction)

→ **Test of validity:** Is the syllogism logical? Are the premises acceptable and believable? Do the premises apply to the example?

**Argument from Analogy**
*Form arguments based on similarities and differences between examples.* (example → example)
- interpret what we do not know in light of what we do know
- supply the warrant that what happened in one case will happen in other similar cases
The war in Iraq is just like the war in Vietnam; we couldn’t win that one and we can’t win this one. → Test of validity: Are these two items as similar as claimed? Do they have other qualities that are not similar, that would change the claim?

**Argument from Definition**

*Bases argument on audience’s acceptance of a meaning of a key term.*

- Can be seen as a sub-species of an argument of deduction
- Example: we shouldn’t be involved in Iraq now because the conflict there can now be defined as a *civil war*, meaning a conflict between two sides within one country, in which other nations have no interest.

→ Test of validity: Is the definition given accurate? Is it comprehensive? Convincing in this context? Does it captures the key features? Are there exceptions or other definitions for this term that might make the final claim less reliable?

**Argument from Statistics**

*Describes relationships among terms in quantitative terms.*

**ETHOS**

- appeals to audience’s impressions, opinions and judgments about the individual stating the argument (or others whom the arguer cites)
- individuals who project favorable qualities (competence, good character, fair-mindedness, goodwill) have established good ethos and are more convincing

**Argument from Authority**

*Based on increasing arguer’s credibility and case for making the claim*

- we usually accept opinions of people who are authorities or exports
- author can refer to experience and credentials that establish his or her expertise
- author can quote others with credentials/authority

→ Test of validity: Is there enough information to establish the true character and experience of the author? Is the information complete and accurate? Are the credentials good enough to make the author’s contributions reliable? Are they relevant to the issue?

**PATHOS**

- appeals to and arouses feelings/emotions of the audience
- audience’s feelings are aroused primarily through emotional language, examples, personal narratives, descriptions of events that contain emotional elements

**Motivation Proofs**

*Appeal to the needs of the audience*

- appeals to what audiences are supposed to want (food, drink, sex, etc)
- purpose is to urge the audience to take the prescribed steps to meet an identified need.
- (think of beer commercials)

→ Test of validity: Is this really your need? Would doing what the author recommends really satisfy this need?

**Value Proofs**

*Appeal to what audiences are expected to value*

- appeals to virtues (reliability, honesty, loyalty, patriotism, etc) or vices
- *Affirmative action will increase diversity in universities, and diverse campuses create openness and tolerance of differences.* (The notion is that the audience values openness and tolerance.)

→ Test of validity: What are the values expressed or implicit in this argument? Do you share the values with the author? Do you have different values? Would these differences change your final acceptance of the claim?