GASCAP Argument Schemes

The acronym "GASCAP"—combined with an understanding of how assumptions (and/or inferences), evidence, and claims interact—can help you remember six fundamental argument schemes (structures). GASCAP strategies are related to Aristotelian *topoi* ("places," "topics"), which can be understood as methods of investigating an issue to find the means or methods to develop that issue.

G: argument by **G**eneralization from examples or from a sample to a larger population
A: argument by **A**nalogy from parallel cases, including precedent(s)
S: argument by **S**igns (indirect evidence or clues)
C: argument for or from **C**ause and effect
A: argument from **A**uthority
P: argument from a generally accepted **P**rinciple

GENERALIZATIONS

Assumption: Whatever is true for a representative sample will most likely be true for the population.

Evidence: The sample has trait X, and the sample is representative.

Claim: Therefore, other members of the population most likely have trait X.

Examples: television Nielsen ratings; generalizations about a college based on a few visits; ideas about people formed immediately after meeting them

Evaluation: Is the sample sufficient in size? Is it sufficient in type (is it typical of the larger whole)? Is the assessment of the sample and/or are Evidence accurate/true? Is the claim relevant to the Evidence? [STAR]

ANALOGIES

Assumption: Two things that are alike in some ways are (probably) alike in other ways, too.

Evidence: observed similarities between the two things

Claim: Therefore, they are (probably) also alike in some further way(s).

Example: The citizens of one state, a state with increasing financial problems, argue that their state should adopt a lottery, since neighboring states that have adopted lotteries have gotten out of debt.

Evaluation: How similar are the two things being compared? Do they differ in too many ways to make the comparison useless? Are there too many dissimilarities?

SIGNS

Assumption: X can be taken as a sign that Y, which is not directly observable, is probably true.

Evidence: X is true.

Claim: Therefore, Y is probably true.

SIGNS, cont.

Example: Police stop a driver who has been swerving. The driver's speech is slurred and she cannot walk a straight line—signs that the driver is most likely drunk. The police suspect that she is drunk, so they administer a breathalyzer.

Evaluation: How strong is the relationship between X and Y? Could other things be causing Y? For example, could other factors cause slurred speech and/or the failure to walk a straight line?

CAUSES (AND EFFECTS)

Assumption:	If condition X and condition Y appear together, they could be causally related.
Evidence:	In many instances, X and Y have appeared together and X has come first.
Claim:	Therefore, X probably causes Y, unless there is some third common factor.

Example: In the mornings, I read without my glasses. Within an hour or so, I suffer from a headache. After a few days of this, I conclude that reading without my glasses causes the headaches.

Evaluation: Is X *causing* Y, or are they just happening around the same time? Could it be that I did not have coffee in the morning, and that caused my headaches? What other factors could be related?

AUTHORITY

Assumption:	Whatever the expert says about X is probably true.
Evidence:	The expert says that X is true.
Claim:	Therefore, X is probably true.

Example: My doctor says that reading without my glasses is causing my headaches in the morning, not skipping coffee like I thought.

Evaluation: Is the authority an expert on the *specific* issue at hand? Do other authorities disagree? Is the authority biased in any way (e.g., being paid by an interested party)? How often are the authorities right on this or related issues?

PRINCIPLE

Assumption:	Principle X is generally regarded as true or correct.
Evidence:	This is a situation in which Principle X applies.
Claim:	Therefore, X is (probably) the case here.

Example: Since we generally believe in an individual's right to privacy, questions about someone's religious beliefs are inappropriate on a job application form.

Evaluation: Is the principle generally accepted? Does it apply to the situation at hand? Are there exceptions? Does following the principle in all cases cause problems or confusion?