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**1Lectures on the Rhetoric of Argument**

# The logic of an argument

In our work with arguments, we have seen both content and form. By content we mean the actual sentences found in the argument. These are for the most part claims made in a particular context at a particular time. We have talked about these claims in a variety of ways, including whether they are claims about the world, whether they express some value, or whether they are descriptive in nature.

When we talked about structure we generally referred to how these sentences were put together and this usually came down to a reason-thesis relationship. Formal logic calls this a premise-conclusion relationship.

The logic of an argument, what Aristotle means in part by “dialectic” is the study of its structure and form. The study of dialectic in this sense is a theoretical, formal matter. We start with statements:

(Note: the actual filling in of the blank Venn diagrams will be done as a class exercise)

No freshman are sophisticated

Some sophisticated are boors

/Some boors are not freshman

BOORS FRESHMAN

 SOPHISTICATED

This relationship holds for all similar arguments.

No P is M

Some M are S

/ Some S are not P

This particular relationship illustrates a valid form. This means there are not actual arguments in this form with true claims as premises and a false claim as the conclusion. As we can see below, it does not mean that there are not false claims in the premises. This is in contrast with forms in which there are true premises and a false conclusion.

All P is M

All M is S

/All S is P

is such a structure. One can supply content to this form such that the premises are true and the conclusion is false, e.g. All Harley Pan Heads are V Twins, All V Twins are two cylinder machines, so, All two cylinder machines are Harley Pan Heads.

A Venn diagram would also reveal the mistake.



Unlike the previous Venn diagram, a picture of the premises does not automatically give us a picture of the conclusions. So, this argument is invalid

Our first argument had content, meaning it had actual claims which we say are probably true about the world (Enthymeme) Latter enthymeme came to mean arguments with missing premises. Some sophisticated are boor, so some boors are not freshman with the understanding but not stated that it is probably true that no freshman is sophisticated.

The specific argument required understanding the meaning of the key terms. For example:

Freshman= those enrolled with less that 30 credits

Sophisticated=urbane, someone of worldly knowledge, refined taste

Boor=oaf, tedious person

These are meanings of words including evaluative meanings. Arguments with specific words with meaning determined in part by their use in a context is what we might call “the rhetoric of the argument.”

Rhetoric for Aristotle is one of the “productive” sciences. The good that this science aims at is the production of a useful thing. The productive sciences aim at producing either beautiful or useful things; this science includes architecture and medicine. What is produced by Rhetoric is a useful written or oral argument. This was useful in those days of Athenian democracy as a means of producing arguments in the legal setting.

The Venn diagram is a way of treating arguments from a theoretical or structural standpoint. In the diagram we are not concerned with the sentences, the words in the sentences, and the meaning relationships of the actual claims.

 If we look at arguments from the standpoint of a useful activity, we are turning away from the theoretical matter to a practical concern. In Aristotle’s day this was the use of arguments in the public setting of Athens. Frequently it was using argument to persuade or convince citizens to act on or to believe in ways that had outcomes in the political, legal and social aspects of Athens. The ability to influence was more or less open to the male residents of the city-state including those who had the franchise because they were native born in Athens. (Aristotle lacked this avenue being a native of Stagira, (384 BC).

I think this somewhat democratic feature of Athens has relevance to the practical side of arguments. If success is open to a broader group of residents and if this success is related to the ability to influence the direction of one’s government, and if this is accomplished through reasoning, then the practical side of arguments has life. Democracy and practical arguments are intimately connected. In a closed society this feature of arguments is suppressed. (Many repressive countries monitor and censor Internet content).

We could extend the position of the previous paragraph by saying there is even a more intimate connection between a functioning democracy and arguing correctly. The four evaluative criteria we are using for establishing good arguments helps us understand this connection. Violation of any of these tests is part and parcel of the anti democrat. Tyrants, if they study the principles of sound arguments, do so only because they need to know what to suppress.

Aristotle would, I think, say that our four criteria are part of what could be called the logical structure of an argument. He criticizes writers of Rhetoric as frequently ignoring this component by introducing the non-essentials. These non-essentials involve the arousing of prejudices, appeals to pity and encouraging anger in the audience. When these practices take hold a well ordered state is threatened. An appeal to the pity is as bad as warping the carpenter’s rule. We could illustrate this by shifting the case from pity in the audience to distrust in the audience. Consider the following case:

All successful politicians need the support of the people

All who need the support of the people are indebted to the people

So, only successful politicians are indebted to the people.

A clever Rhetor might be able to persuade and audience with this argument. This would include a correct reading of the audience including the assessment of its level of distrust.

But a person who understood the structural point would recognize this as our old; All P is M, All M is S, So All S is P and could go on to give us the counter example; the case where the premises are true and the conclusion false.

I think this is the possibility Aristotle has in mind when he criticizes the writers of Rhetoric who emphasize only the sentiment of the audience and not the proof of the argument.

We can see this same point in our work with the practical arguments and their evaluation. After the horrible events of 9/11 the American audience was rightly concerned about another attack. The level of concern was heightened by the yellow alerts, the failure of our intelligence to locate terrorists, etc. It is not far off to suggest this reached the level of fear in many cases. At the same time there is comfort derived by claims that assert a numerical value; after all numbers don’t lie. These claims, we have classified as descriptive type 1 claims, and there were frequent use of this type in the recent election when the administration advertised that it had captured 100% of the ISIS network. We have developed a proof rule for any such claim, namely there must be a means to verify the numerical value. This is clearly lacking in this case and we note the latest admission of the Administration that armed forces are being deployed in parts of Syria in order to defeat ISIS.

Having introduced these descriptions, Aristotle is ready to define “Rhetoric”.

Rhetoric may be defined as the faculty of observing in any given case the available means of persuasion. (*Rhetorica*, 1139 b 27)

The important part of this description is “any given case”. Other arts can deal with the principles of persuasion in their own area, but Rhetoric deals with persuasion in any area. So the knowledge here is not of a particular subject but of the general principles of reasoning in any subject. This suggests the possibility that the Rhetor may not know some special fact but still is able to construct good argument as well as recognize bad arguments about those facts. Can one have good arguments about bad facts—things that are not true? Logicians have recognized this when they talk about unsound but valid arguments. To change the previous example we can get:

No fish are aquatic

Some aquatic are vertebrates

/Some vertebrates are not fish

This is an argument of the same form with a false first premise as the first instance. This is supposed to show the difference between sound and unsound arguments. In this case both are valid.

Aristotle thought that logic in its formal structure underlies all methods of inquiry. He mistakenly thought that the syllogism was this underlying form. This universality seems to spill over to Rhetoric when he says, Rhetoric deals with persuasion in any area. So when one uses arguments in a specific area of inquiry, in addition to the correct form of argument, one has to know which of the claims are true and which are false. The sound arguments will only use those claims that are true in the premises of the arguments.

Aristotle touches on this concern when he states:

Of the modes of persuasion furnished by the spoken word, there are three kinds. The first kind depends on the personal character of the speaker; the second on putting the audience into a certain frame of mind; the third on the proof or the apparent proof provided by the words of the speech itself. Rhetorica, 1156.

The first mode is summed up in our concept of assurance. In the case of the second mode, Aristotle notes that persuasion may come with the speaker stirs the emotions of the audience. Our judgements are not the same when we are pleased and friendly as when we are hostile and angry. He criticizes writers on Rhetoric who only concern themselves with this second mode. We have summarized this area in our development of the third criterion of relevancies.

In raising the question of irrelevant appeals, we face the problem of the ethical dimension of argumentation. Diligence, steadfastness are positive values, but in the person who uses these attributes to pursue arguments based on irrelevant appeals, the virtues becomes doubly dangerous. It is the danger of a Thrasymachus over a well meaning but inept Cephalus..

Let’s go back to the passage from 1156 and look at each of the modes. This is the passage that writers use to summarize Aristotle’s views on the persuasive power of arguments, or the appeal to Ethos, Pathos, and Logos.

## Ethos

Ethos is appeal based on the character of the speaker. An ethos-driven document relies on the reputation of the author. The persuasiveness of an argument may derive from the perceived strength of character, knowledge, background and training of the author of the argument. I suspect that Aristotle would say this is simply a fact of life. In our discussion of relevance we would ask, “From the standpoint of the correctness of the argument, is the appeal to the character of the author irrelevant?”

The general answer I would propose is, when the character of the author is connected to an element in the argument, especially to a reason in the argument, then the appeal is relevant.

Early in the semester we saw an argument by E.J. Dionne in support of direct elections of the president. Against this was an argument by George Will in support of retaining the Electoral College.

We can speculate about the character of each. In the case of Mr. Dionne, I would suggest we see a character that reflects in everybody having a direct say in the outcome of an election. In short, a character that believes in direct democracy. With Mr. Will, we see a character that wants to keep older establish methods. So, the ethos in these examples have a direct appearance in the element of their arguments and so is relevant and proper.

In the coming weeks we will hear open testimony by witness who had previously been heard in closed session. Their creditability will be tested by judgments of their character.

Those judgments will depend on facts related to their character.

We can now raise a question about what fundamental values this person holds that act as the catalyst or stimulus behind this argument? This is of course, our previous discussion of a warrant.



## Logos

Logos is appeal based on logic or reason. We are now in a position to fine tune this idea and directly define it in terms of our four criteria for a strong argument. In a word, these criteria are the embodiment of logos.



## Pathos

Pathos is appeal based on emotion as found in the audience. It stems from the principle: Know your audience. We will raise the question here that appeared in the topic of ethos: “From the standpoint of the correctness of the argument, is the appeal to the character of the audience irrelevant?” I think there is a similar answer: when the character of the audience is connected to an element in the argument, especially to a reason in the argument, then the appeal is relevant.

It is entirely proper to appeal to the emotions of the audience in an argument that describes the separation of immigrant children from their parents. We learn that there are over 2,000 children the court has ordered to be reunited.

What follows is a table that attempts to connect two of Aristotle’s categories; ethos and pathos to analytical list we have been using in our examination of an argument. The table could be expanded to include logos, with a connection to each of the four criteria.

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| **FEATURES OF THE SPEAKER (Ethos)** | **FEATURES OF THE AUDIENCE (Pathos)** | **CONNECTION FROM THE LIST ON THE RIGHT** | **ANALYTIC LIST** |
| **STRONG COMMITMENT TO THE POSITION** |  | **CLARITY OF THESIS;** | **ISSUE** |
| **RELIABLE SOURCE INFORMATION** | **INFORMATION MINDED** | **ASSURANCE, LEVEL OF LANGUAGE A** | **THESIS** |
| **PERSUSAIVE**  | **OPEN MINDED, WILLINGNESS TO CHANGE BELIEF** | **REASONS, LEVEL OF LANGUAGE B** | **REASON** |
| **OPEN MINDENESS** |  |  | **ASSURANCE** |
| **AWARE OF THE OPPOSING VIEW (CCA)** | **OPEN MINDED, WILLINGNESS TO CHANGE BELIEF** | **CONSIDERATION OF COUNTER ARGUMENT** | **CONSIDERATION OF THE COUNTER ARGUMENT** |
| **SPEAK TO THE LEVEL OF THE AUDIENCE** | **MINIMUM LEVELS OF INTELLIGENCE** | **ASSURANCE, LEVEL OF LANGUAGE** | **WARRANT** |
| **PERCEIVED AS ONE OF HIGH CHARACTER** | **SHARE THE VALUES OF THE SPEAKER** | **LEVEL OF LANGUAGE C, WARRANT** | **LEVEL OF LANGUAGE** |
| **UNBAISED**  |  | **ASSURANCE, CONSIDERATION OF COUNTER ARGUMENT** | **A. DESCRIPTIVE** **B. PRESCRIPTIVE****C. NORMATIVE** |
| **COMPLETENESS OF REASONS** | **COMPLETENESS** | **REASONS** | **CITATIONS** |
| **INTERESTED ENTHUSIASTIC** |  | **ISSUE, LEVEL OF LANGUAGE, WARRANT** | **REBUTTAL OF THE COUNTER ARGUMENT** |
| **CLARITY OF POSITION** |  | **LEVEL OF LANGUAGE** |  |