

Two Views on Motive Appeals:
Which should be **unconventional**?
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This paper was originally presented at the National Communication Association's Annual Meeting in San Diego, 2008. Criticisms of the position that Toulmin's *warrant* is always more abstract than both *data* and *claim* prompted Adams to construct his BRIDGES MODELS OF REASONING, first presented at the International Listening Association's annual meeting in Minneapolis, 2009.

This paper reflects thinking contained in *Public Speaking: An Idea Focus*, a manuscript in process by Adams and in a paper presented Adams and Cox at the Language, Communication & Cognition Conference, Brighton, UK (Aug., 2008). The presenters express their appreciation to the NCA reviews. Their suggestions were most helpful in improving the sources consulted in preparing this version.

Abstract

This paper analyzes the present conventional wisdom concerning motivational warrants. In comparison with the characteristics of modern syllogisms, the analysis concludes that the present wisdom is **unconventional**. Based on the nature of reasoning and of human motivation, the paper offers a new convention. The paper suggests that this new convention more accurately reflects what we know about both rhetorical and communication theory.

The paper links key areas of rhetorical and communication theory, but does not pretend to review fully the literature in these areas.

Key Words: Appeals, Toulmin, Warrants, Behavioral Intention

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Which should be **unconventional**?

“The interesting writer, the informative speaker, the accurate thinker, and well-adjusted individual, operate on all levels of the abstraction ladder, moving quickly and gracefully and in orderly fashion from higher to lower, from lower to higher....”

S. I. Hayakawa (1949, p180)

S. I. Hayakawa (1949) developed the concept of *abstraction* in linking language to action. In his explication, people symbolize reality in an ascending order from more specific to more general. Cognitive theorists, most notably Milton Rokeach (1960, 1973 & 1986) arranged beliefs in an ascending order from more general values to more specific attitudes. This theme of broad to particular was reflected within reasoning theory by illustrating deduction as moving from general to specific (see Baker, 1905; Foster, 1917; Crocker, 1944; McBurney, 1964; Angell, 1963; Eemeren, Grootendorst and Henkemans, 1996).

This recognition of movement between more general and more specific elements within language, cognition and reasoning seemed consistent with Brockreide and Ehninger's (1960) use of Toulmin (1958) to construct arguments reflecting "rhetorical proofs." In their article, they applied Toulmin's model of arguments (1958) to "rhetoric proofs" mirroring Aristotle's (Cooper, 1960) logos, pathos and ethos (see Table 1).

Figure 1**Conventional Linkage of Modern Terms to Aristotle's Proofs**

Substantive Treatment -----	Logos
Credible Presentation -----	Ethos
Motive Appeals -----	Pathos

This paper expands on Brockreide and Ehninger (1960) particularly in terms of *pathos* making a link to the work of Fishbein and Ajzen (Fishbein, 1967; Fishbein and Ajzen, 1975; and Ajzen and Fishbein 1980). To make this expansion clearly consistent with Hayakawa and Rokeach (1960, 1973; 1986), we recast Toulmin's terms to ensure their meanings are consistent with modern reasoning theory and, then, define emotional appeals within that context. Next, we posit an association of *logos* and *ethos* with modern dimensions of meaning, *reality* (or content) and *relationship* (see for example Bateson, 1972, Adams, 1973; Ekman & Friesen, 1975, Mehrabian, 1981, Devito, 1988) and suggest a third dimension, *goal*, similar to Cronkhrite's motivational concept (1969), for the expansion of *pathos*. In that expansion we seek to align ourselves with such authors as Allport (1961) and Minnick (1968) who identify the breath of emotions impacts beyond emotional appeals (see also Bettinghaus & Cody 1987; Cooper, 1992).

Recasting Toulmin's Model as Reasoning

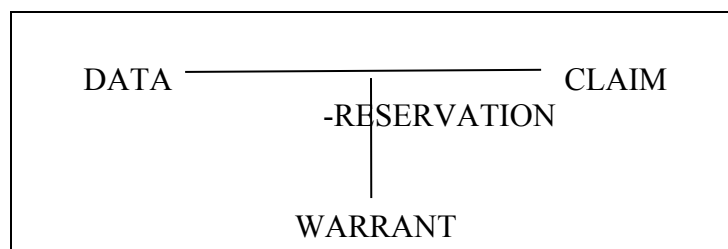
In the deductive syllogism, reasoning starts with a general principle, the *major premise*, that provides a link or a bridge between two more specific parts, the *minor premise* and the *conclusion*. The acceptance of the *major premise*

and the *minor premise* provide justification for reaching the *conclusion*. From the classic view, the syllogism is deductive because it is absolute; inductive arguments, in contrast, are probabilistic (see, Eemeren, Grootendorst and Henkemans, 1996 or Bennett, 2002). An alternative view is that syllogisms are deductive only because they start with a general principle and move to a more specific conclusion. Induction, from the latter view, starts with observations of similar specifics and generalizes from them to a general principle. (See: Kruger, 1960, Ziegelmüller, 1978, Cattell, 1988; or Jaffe, 2001). In this view, all arguments are probabilistic

In providing a place for exceptions in *reservations*, Toulmin's model (1958 & 1972) avoided this controversy (see Figure 2). Additionally, Toulmin (1968, 1972; and Toulmin, Reike & Janik, 1979) provided a model of arguments as opposed to reasoning. In this model, an argument starts when a statement is challenged. The unaccepted statement, then, becomes a *claim* that must be justified. The justification comes in the form of *data* and *warrant*. *Reservations* if needed provide conditions wherein the reasoning would not apply.

Figure 2

Basic Toulmin Model of an Argument



Brockreide and Ehninger (1960) seemed to equate *data* with *minor premise*. They said, “without data clearly present or strongly implied, an argument has no informative or substantive component, no factual point of departure” (p. 44). However, their definition of *warrant*, “Warrant (W) is the operational name Toulmin (1958, 1972) gives to the part of the argument which authorizes the mental ‘leap’ involved in advancing from data to claim” (p. 51), may have differentiated it from a *major premise*. They clearly used *claim* synonymously with *conclusion*: “We normally speak of ‘claim’ as a ‘conclusion’” (p. 45). They saw seven strengths of Toulmin diagram (1958, 1972) over the traditional syllogism, based primarily on its layout and extension to *reservation, qualifier and backing*.

In their text, Ehninger and Brockreide (1978) provided more of their modifications of Toulmin’s (1958, 1972) approach. While their treatment, like Toulmin, Reike and Janik (1979), focused on argumentation, the two systems different in some key ways. Toulmin (1958, 1972) saw arguments as beginning with a *claim*; Ehninger and Brockreide (1978) saw *data* as the starting point (p. 42). To Toulmin (1958, 1972), the *warrant* was, by necessity, stated; to Ehninger and Brockreide (1978), the *warrant* could be implied (p. 41). Overall, while expanding on the syllogism, the Ehninger and Brockreide (1978) system seemed the more consistent with a *model of reasoning*.

For the purposes of this paper, argumentation differs from reasoning in their loci. Argumentation is located within discourse. Reasoning is located within cognitions. As Eemeren (2008) said, “I do indeed distinguish between

argumentation and the (mental) reasoning process underlying argumentation (presented in a speech context). In my view, in argumentation the process starts with having an opinion (standpoint) and, if the person who has this opinion thinks this is necessary in the situation he/she is in, this opinion will be defended by means of argumentation.“ Our contention is that reasoning undergirds argument and argumentation’s intent is to affect reasoning in others. Reasoning is the more basic term, stemming from cognitions. Consistent with Rokeach (1960, 1973 & 1986), Hayakawa (1949) and probably Ehninger and Brockreide (1978), we propose adapting Toulmin’s model to reflect the modern view of deduction.

In deduction, reasoning starts with one of many general principles, a *major premise*, that one accepts as being, at least probably, true. This general principles links, in an abstract sense, a more specific belief, the *minor premise*, with an idea about which the person is uncertain, the *conclusion*.

Reasoning starts with principles in the sense that we already have them stored in our minds. Indeed, as discussed by Brown (1970), Clark & Clark (1977), and Pinker (2002 and 2007) the acquisition of language begins with a pre-existing mental frame work. From there, we build our cognitive system outward from abstract values (Rokeach 1960, 1973, & 1986). A rule, then, or a relatively abstract principle, that we have accepted as probably true, is the starting point of reasoning.

Although, it may often seem that reasoning starts with an observation, the principle must already exist for us to make sense of the observation. We observe sunshine through a window and conclude it may be warm outside.

However, for the observation to become part of a reasoning process, we must already have a principle. In this case, the principle is that sunshine produces warmth. Although the observation keys the reasoning, it isn't the first part of the process. Thus, reasoning is said to be deductive: it moves from more abstract to more specific. (See Cattell, 1988; and Jaffe, 2001)

Warrant

The abstract principle in Toulmin's terms (1958 & 1972) operates as a warrant. A warrant is relatively general and, at least for the sake of analysis, is known, i.e.: accepted as true. The warrant must be abstract, or general, because it must contain and relate the other two parts to each other. A simple warrant might be "Sunshine produces warmth." Most of us would accept this principle as relatively true. It is general: it includes all particular locations and times. It also links two specific things, sunshine and warmth. See Figure 3.

Data or Datum

The *data* is more specific than the *warrant*. The *data* is also accepted, at least tentatively, as being true. *Data* may come from an observation: for example, we see the sunshine coming in our window. This observation may prompt analysis, but the reasoning starts when the *warrant* supplies a bridge. The *warrant* was already accepted when we saw the sunshine; so, in that sense, the reasoning had already started when we saw the sunshine.

Figure 3

**Differentiation of 3 Major Parts of Argument
Major Parts in Relationship to Abstraction and Acceptance**

a: Characteristics Reading Across

Warrant	General and accepted
Data	Specific and accepted
Claim	Specific and not accepted

b: Parts in a 2x2 Table of Characteristics

	Abstract	Specific
Accepted	Warrant	Data
Unaccepted		Claim

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Claim

In the example of the sunshine above, we may well conclude that it is warm outside. As with Ehninger and Brockreide (1978), we see *conclusion* as synonymous with Toulmin's *claim* (1958 & 1972). This *claim*, like the *data*, is more specific (here, the sunshine exists in one moment in time and one location) than the *warrant*. Indeed, the *claim*, in large part, is contained in the warrant which covers similar situations. Our *claim* is that it is warm outside; we don't know it's true, but we have a reason to believe it is.

In our adaptation, as with the conventional syllogism, the parts are clearly distinguished within the context of the reasoning. As with Toulmin's (1958 & 1972) layout, the classification of the part depends on the function it serves in the

reasoning. A *claim*, once established, may then be used as either *data* or *warrant* in the extension of the reasoning. However, by the requirement that a *warrant* encompass both *data* and *claim* in order to fulfill its function, the *warrant* must be more abstract than the other two parts.

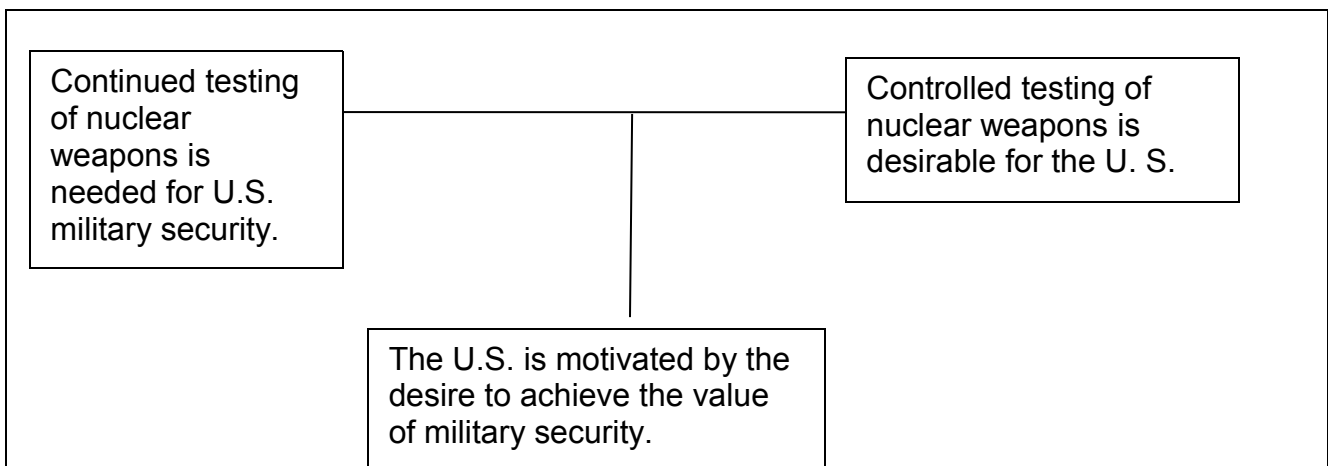
In clearly differentiating *warrant* from *data* within a particular context, we believe the application of Toulmin's (1958 & 1972) model to reasoning is consistent with both his treatment and that of Ehninger and Brockreide (1978). However, we can not be certain. Eemeren, Grootendorst and Henkeman's (1996) conclusion was that in the Toulmin system, *warrants* and *claims* can only be distinguished based on how they function in discourse at any particular time (primarily the order in which they are presented) not based on their level of abstraction. Hitchcock (2003) disagreed with their assessment, stating that *warrants* are always general. However, in 2008, he clarified his position, "The condition that one statement is more general than another is the condition that the first statement logically implies the second one." His definition of "general," then, is more restrictive than ours. So, to him, *warrants* need not be more general (using his definition) than *data*. By definition, our *warrants* are more general than both the relevant *data* and *claim*. To the extent that our shift to reasoning changes Toulmin's definitions, it is justified in the perspective's ability to integrate considerations of language (ala Hayakawa, 1949) and cognitions (ala Rokeach 1960, 1973 & 1986).

Brockreide and Ehninger's (1960) application of *warrants* to "proofs" was consistent with our view of deduction for both *substantive* and *authoritative* definitions and examples. However, translating motivational *warrants* to the process of reasoning is more problematic. (See also Cronkhite, 1969.) They stated of motivation, "The warrant provides a motive for accepting the claim by associating it with some inner drive, value, desire, emotion or aspiration or a combination of such factors" (p. 51). By including "value" in their definition, they made it impossible to distinguish it from the other two types in terms of reasoning. Both other types may be found in values. Additionally, the lack of specification in the word "associating" made possible examples that fit the other two classifications.

In their 1960 journal article, they provided an example of a *proof* using a *motivational warrant* as shown in Figure 4. Their warrant, "The U.S. is motivated

Figure 4

Brockreide and Ehninger (1960) Example of Motivation Proof

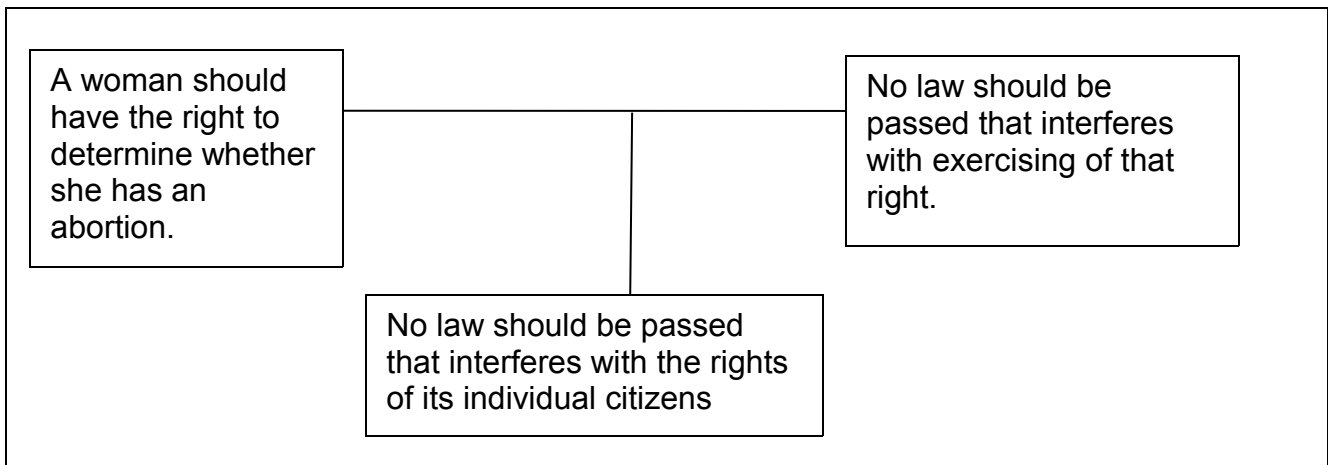


by the desire of military security,” could be a value, making the example clearly fit their definition. However, made by a dispassionate observer, the statement would better be coded as substantive, of the subtype “generalization.”

In their text, they said of motive proofs, “the very rationale for making an inferential leap from evidence to claim lies embedded in the values and motives of arguers and respondents” (p. 87). From a reasoning perspective all warrants lie embedded in belief systems that include both motives and values. Here also, from a reasoning perspective, their example could equally be coded substantive. (See Figure 5)

Figure 5

Ehninger and Brockreide (1978) Example of Motivation Proof



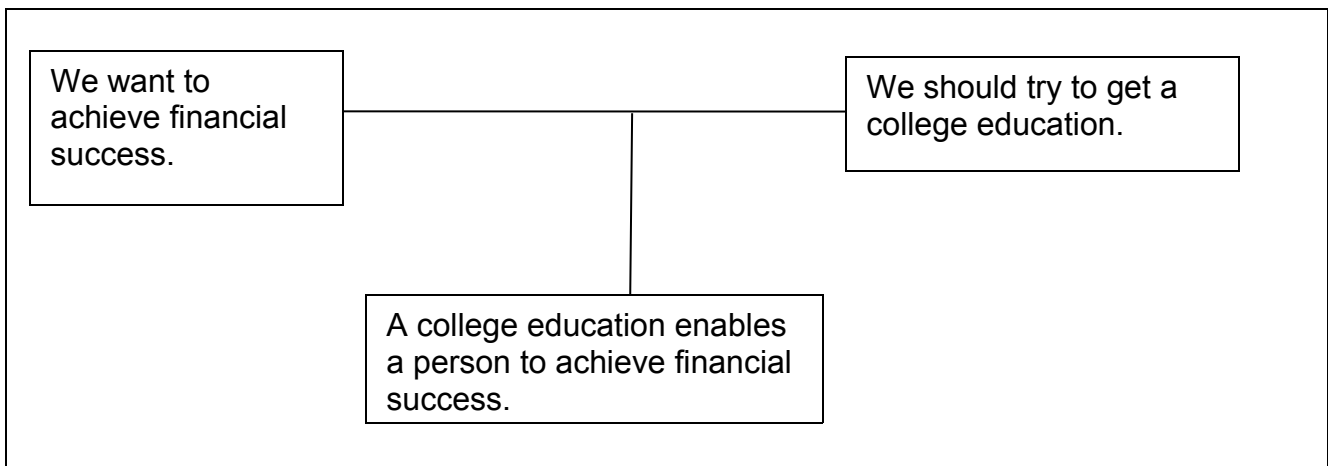
Using Ehninger and Brockreide’s (1978) definitional view, McCroskey (1968), (later reprinted in McCroskey, Larson and Knapp (1971)) provided an example of a motivational warrant that more clearly involved a motive. He

illustrated a motivation warrant in the context of a simple argument. In the example, the claim was “We should try to get a college education.” His *data* was “A College education enables a person to achieve financial success.” His *warrant* was presented as “We want to achieve financial success.”

From a reasoning perspective McCroskey’s *warrant* (1978) did not bridge his *data* and *claim*. His *data* more clearly served that function, with his *warrant* providing the more specific element. The statement, “If we want financial success, we should try to get a college education.” is sufficiently abstract as to include, and thus link, the motivation (data) to the needed act (claim). (See Figure 6).

Figure 6

Reconstruction of McCroskey’s Example



In applying reasoning to human motivation, the reconstruction of McCroskey’s example (1978) can be generalized. The motivational element is always ultimately reflected in the *data*. The motive is within an individual (or

audience) and as such is specific to that individual (or collective). It reflects something that a person wants (See for example Phillips, 1908 and Maslow, 1970). Even when the desire is vague and undefined it is still relatively specific. When an individual reasons so as to achieve the satisfaction of that desire, a more general *warrant* is needed to supply a link between a course of action and the satisfaction of that need. In Cronkhite's system (1969) he similarly linked *motivational concept* to *object concept*, which linked to reality.

From a reasoning perspective, the warrant must be sufficiently broad as to link the motive with some course of action. Thus, a motivational *warrant* is defined as a principle, either stated or suggested, that links a goal with some course of action. The link can be either positive or negative, as in fear appeals.

The process is the same whether the person is reasoning within his or her self or someone else is appealing to the person to take some course of action. Relative to the appeal that taps it, the motive is specific. In common usage, a person's "button" is her/his desire (data) and the means of "pushing it" is the appeal (warrant).

For an appeal to be effective, it must enable the listener to "see" (this includes at the subliminal level) a means of obtaining the desired goal. In its clearest form, the appeal (stated or implied) is a combination of a substantive component (e.g., some act) and motivational component (e.g. a desire).

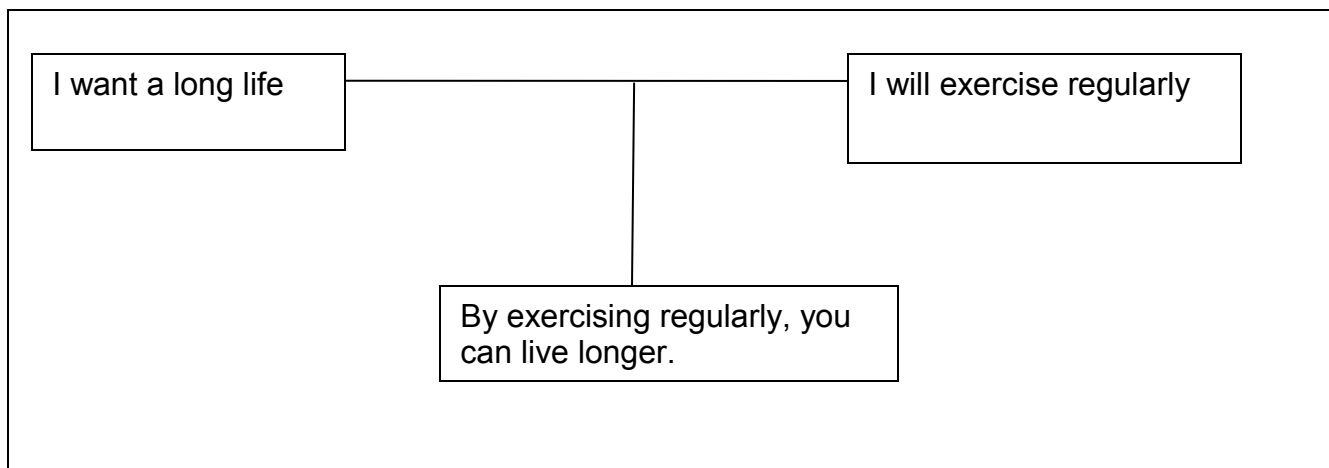
Obviously, speakers often disguise their appeals so that they are not simple.

An example from the area of exercise: "If you exercise regularly, you'll live longer." (See Figure 7) The statement is presented as a "fact," with the hope, if

not the expectation, that it will be accepted by the listener as true. The link in this example is one of *cause*. It is functionally equivalent to statements like “Regular exercise causes you to live longer.” However, the link could take a variety of forms (see Ehninger, 1974). A speaker might say, “People who exercise live longer.” In this form, the appeal is more indirect than one stated as a cause. For it to be effective, the listener must extend the argument by supplying, “I’m a person,” to conclude, “Exercise will extend my life,” the warrant of the argument above.

Figure 7

Toulmin Diagram Showing the Acceptance of a Simple Appeal



Obviously, appeals can be even more indirect. They may encourage the listeners to make the association within themselves by simply suggesting the link with stories, images or the like. A topology of appeals can be found in Adams and Cox (2009).

Proofs Translated to Dimensions of Meaning

Our argument above was that motive appeals include an element of substance. This is part of a main thesis that *pathos* is different than *motive appeals*. Indeed, as Allport (1961) in particular has demonstrated, emotion permeates human interaction, necessitating *pathos* as a broader concept than *emotional appeals*. This thesis is advanced by considering three (primary) dimensions of the symbolic process that operate both within speech acts and cognitions. These three areas correspond closely to the “modern proofs” shown in Figure 1. These three dimensions are highly interactive.

The **Reality** dimension: The denotative meanings in this area reference objects and events in the world that exists independent of the individual giving meaning to the symbols. This dimension includes all the broad areas of science, art, history, geography, religion, etc. Although we think of these referents as being objective, they and the symbols that represent them do evoke attitudes within individuals, attitudes that contain all three components: cognitive, affective and behavioral (Fishbein, 1967). Thus, the symbols evoking the reality dimension do have connotations and do evoke varying degrees of emotions. Our reality dimension includes all those areas previously discussed within “substantive treatment,” “content dimension,” and “object concept.” However, the term *reality* may avoid the suggestion that the other dimensions don’t have substance or content.

The **Social** dimension: The denotative meanings within this dimension reference the relationships of other people to the person assigning meaning to

these symbols. This dimension includes associations connected with business, family, fellowship, romance and the like. Stress in this dimension has typically been on its connotative aspects. As such, variables such as power, trust, and attractiveness have been studied. In symbolic form, its meaning is predominately found in the “act” of “speech act” (see for example Adams, 1973; Ekman & Friesen, 1975; Mehrabian, 1981; Devito, 1988; Bateson, 1973) This dimension includes all those areas previously covered by “credibility,” as expanded by Trenholm (1989).

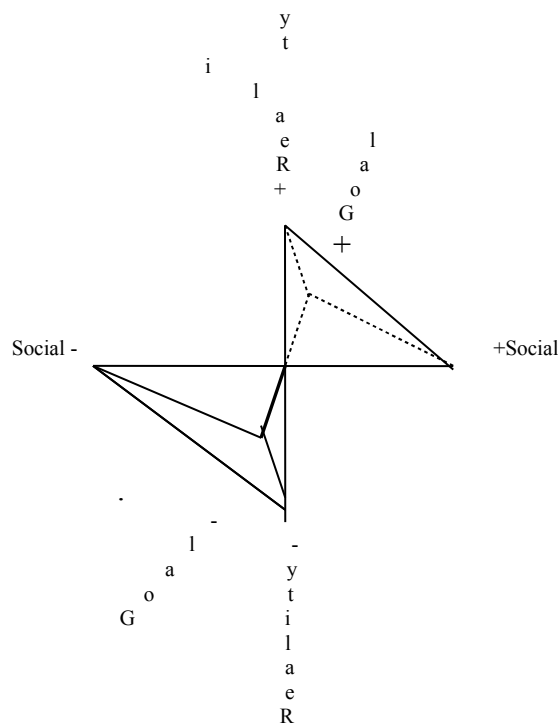
The **Goal** dimension: The meanings within this dimension are all internal. They relate to all aspects of our lives. The denotative meanings are in our hopes, aspirations and dreams. As discussed above, this dimension relates to motives that provide the drives and the emotional empowerment that supply the energy for the potential obtainment of our goals. This dimension is most associated with that previously covered by “motive appeal,” but focuses on meanings within cognitions and symbols as opposed to appeals that cross dimensions. Cronkhite’s (1969) *motivational concepts* clearly spoke to this dimension.

These three dimensions are interactive. A major proportion of empirical research into the nature of attitudes has investigated these interrelationships. Typically, measures within the *reality dimension* served as the dependent variable to gauge the impact of either credibility or motivation. McGuire (1960), with his “wishful thinking” illustrated the impact of motivation on logic. Cronkhite (1969) simply overlaid *motivational concept* on Toulmin’s system. Most relevant,

perhaps, are the studies establishing the *congruity principle* (Osgood, Suci, & Tannenbaum, 1957). The essence of this formula probably accounts for the resolution of messages containing perceived inconsistencies between and among these three dimensions. Our cognitive world could then be represented as a *pyramid of predominant meaning*, as shown in Figure 8, defined by these three dimensions with any imbalance being resolved by shifts in meaning within the pyramid (Adams and Cox, 2008).

Figure 8

Pyramids of Predominant Meaning



While individuals process messages by using all three dimensions in an interactive way, Toulmin's system can be helpful in understanding this process.

Such, certainly, was suggested by Ajzen and Fishbein (1980) naming their analysis, “a theory of reasoned action” (p.1).

Link to Fishbein and Ajzen

Given our recasting of motive appeals, Toulmin’s model (1958, 1972) can be more clearly applied to current cognitive theory. Fundamental to this application is the recognition that the symbolic process is similar both in thought and in the speech act. This correspondence was identified by Aristotle in his Rhetoric even as it relates to our focus of *pathos*. For example, Leighton (1996), Cooper (1996), Frede (1996), Striker (1996), and Nussbaum (1996) all confirm the cognitive dimensions of pathos. It is also reflected in Rokeach’s (1960, 1973, 1986) extensive empirical analysis. In his system, cognitions are built from most abstract values to specific attitudes, resembling the nature of Hayakawa’s (1949) abstraction ladder. Given the general to specific structure, it seems likely that the formation of belief systems do reflect characteristics of deductive reasoning from values to attitudes.

Certainly within the attitude area, a preponderance of empirical support from cognitive-balance theories illustrated the human need for consistency (see for example Heider, 1959; Osgood, Suci and Tanenbaum, 1957; and Festinger, 1957). While the means of maintaining consistency may contain distortions, people believe themselves to be reasonable. The individual’s reasoning process, even with the distortions, should be amenable to analysis using Toulmin’s model (1958, 1972).

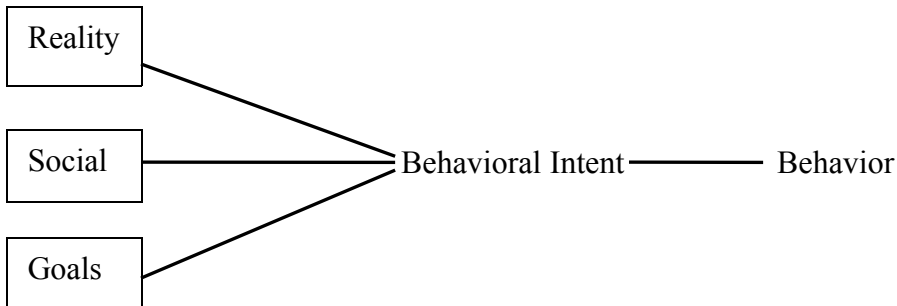
Within the attitude, Fishbein and Ajzen's (Fishbein, 1967; Fishbein and Ajzen, 1975; and Ajzen and Fishbein 1980) added the variable of *behavioral intentions*. *Behavioral intentions* are triggers to behavior, given the correct stimuli. Fishbein and Ajzen (1975) did include a consideration of *norms* within their calculations (pp. 301-307). This inclusion of a *social* dimension brings us back to the modern correspondence of Aristotle's proofs.

Attitudes, containing an affect component, then, are the basis for *behavioral intention*, a predictor of behavior. The affect component in Fishbein and Ajzen's (1975) model recognizes an element of emotion within cognitions. However, the model needs to be expanded in two ways to more clearly reflect the impact of emotions within the cognitive domain.

The first addition would reflect three dimensions of meaning (see Figure 9). The three dimensions, then, contribute to intention. The *affect* component would be the strongest component in both *social* and *goal* dimensions. Plus, the *goal* component would contain the motives that justify the *behavioral intentions*. Thus, this area releases the emotional energy needed both to make the resolution to act and to act at the appropriate time. So, this addition adds considerably to the emotional source from which the proof of *pathos* receives its power.

Figure 9
Additions to Fishbein and Ajzen

Cognitive Dimensions



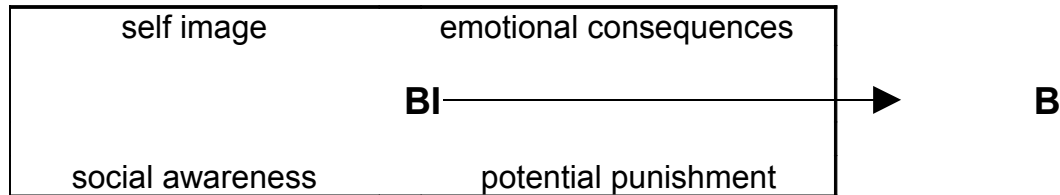
The second addition would expand on Fishbein and Ajzen's (1975) recognition of the role of norms in affecting behavior. Action, particularly that involving change, requires energy to overcome resistance to act and to change (Allport, 1961). The resistance does come from norms within our social attitudes. In addition, the resistance comes from other factors often associated with persuasibility (see Janis & Hovland, 1959 and Trenholm, 1989). With normative constraints, these factors encapsulate our intentions to act; thus, we call them *encapsulators* (see Figure 10). These *encapsulators* sometimes facilitate action, but more often they inhibit it.

Application of Toulmin

In Toulmin's terms *behavioral intentions* are best seen as warrants. From our perspective they embed appeals that have been accepted. The person has accepted a means of satisfying a particular desire and is simply waiting for the appropriate opportunity to act. Within the context of a network of attitudes that are built from general to specific, *the behavioral intentions* are the most specific within any series of *warrants/beliefs*. The surrounding *encapsulators* then serve

Figure 10

Encapsulators of Behavioral Intent



as *reservations* (see Figure 11). The application of the proof of *pathos*, thus, involves both the appropriate use of appeals to heighten listeners desire to act under the correct circumstances and well tailored communication that will enable the person to act regardless of norms and personal inhibitions to the contrary.

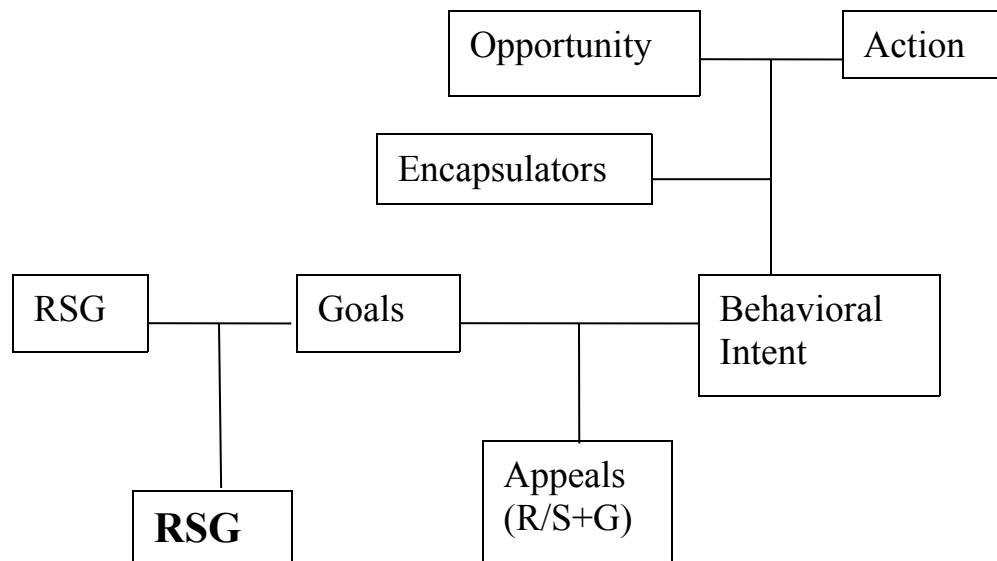
Summary

In this paper we have built a link between Aristotle's proofs, with emphasis on *pathos*, to Fishbein and Ajzen, using Toulmin's model. In so doing we:

- discussed the established view that links substantial treatment to *logos*, credible presentations to *ethos* and motive appeals to *pathos*; explicated reasoning to establish that *warrants* are abstract or general statements or thoughts. Their abstract nature permits them to bridge both *data* and *claim*;
- applied Toulmin to motivation to show that motivational appeals bridge the *substantive* domain with a desired behavior;
- linked the Toulmin model to Fishbein and Ajzen's model of cognitions;

- added three dimensions of cognitive space to Fishbein and Ajzen's model. These three dimensions were *Reality, Social* and *Goal*;
- proposed an addition of *encapsulators* to Fishbein and Ajzen's *behavioral intentions*. These *encapsulators* bracket *behavioral intentions* primarily so as to inhibit actions stemming from Behavioral Intentions; and finally,
- cast *Encapsulators* within the paradigm of Toulmin's model.

Figure 11
Encapsulators within the Toulmin System



(RSG = weighted attitudes within the Reality, Social and Goal dimensions of cognitions. BI = Behavioral Intention. Similar to Cronkhite (1969), this network would extent outward to the left and downward as arguments are chained in *backing*. The bottom RSG is larger to indicate a higher level of abstraction.)

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