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ABSTRACT

A total of 224 college students participated in a study of the relationships between dogmatism and authoritarianism and the characteristics of written discourse. Early in the semester each class completed a public opinion poll which included a combination of the Rokeach Dogmatism Scale and the California F Scale. In a seemingly unrelated task assigned later in the semester, students were asked to write a two-page message to a hostile audience on a topic about which they felt strongly. Three thematic, two logical, and three stylistic content analyses were carried out on the compositions. Analyses of results for the 148 students for whom complete data were available indicated that dogmatism and authoritarianism were related but discriminable entities. Authoritarianism was not reflected in the various measures of aspects of written discourse, while dogmatism, although highly correlated with authoritarianism, was related to communicative behavior. When persuading others, the low scorers sought more factual judgments, made more assertions, and asked more questions than did the high scorers. In addition, high and low scorers tended to use more qualifiers than did moderate scorers. (AA)

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COMMUNICATIVE CHARACTERISTICS
OF
DOGMATISM AND AUTHORITARIANISM
IN WRITTEN MESSAGES

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COMMUNICATIVE CHARACTERISTICS
OF
DOGMATISM AND AUTHORITARIANISM
IN WRITTEN MESSAGES

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Since World War II many psychologists have sought explanations for the phenomenon of "authoritarianism," -- a personality type dominated by leader-follower images. In the three decades since Erich Fromm first wrote about authoritarianism there has been a plethora of research. Psychological Abstracts lists not less than 174 published works employing authoritarianism or its offspring, dogmatism, in the last ten years alone. No less than 28 of these studies have investigated the roles played by these constructs in human communication. But to date no one has detailed what, if any, rhetorical - communicative behaviors characterize high, medium and low Authoritarian and/or Dogmatic persuaders. That is the goal of this paper.

Dogmatism and Authoritarianism

The terms "dogmatism" and "authoritarianism" are often used interchangeably. This is an unfortunate, but understandable, state of affairs. The concept of authoritarianism was initially developed by Erich Fromm in his Escape From Freedom (1941), Abraham Maslow in "The Authoritarian Character Structure," (1943), and Eric Hoffer in The True Believer (1951),² all of which were non-quantitative.

In 1950 T. W. Adorno and his colleagues at the University of California (Berkeley) published their now classic volume The Authoritarian Personality in which they presented the California F Scale. The F Scale has generally been regarded as the quantitative measure of authoritarianism. But in reality, the Adorno study bore no relation to the previous work on authoritarianism. The Berkeley group was studying anti-Semitism and a predisposition to accept anti-democratic or Fascist propaganda, hence the F (for Fascism) Scale.³ Had they titled their book The Fascist Personality, the confusion could have been avoided.

The most notable response received by the Adorno study was Christie and Jahoda's edited volume of Studies in the Scope and Method of "The Authoritarian Personality," (1954), which presented four general criticisms.⁴ First, Edward Shils argued that the F Scale was curvilinear -- that low F scorers were as authoritarian (in the original sense) as high scorers. This has now been generally accepted by psychologists. Second, it was charged that the F Scale was biased toward conservative authoritarianism (but remember that this is precisely what Adorno, et al, wanted to measure). Third, Richard Christie suggested that the Scale lacked construct validity, since they defined "Authoritarianism" as a high score on the F Scale. Finally, Hyman and Sheatsley argued that the blend of psychoanalytic and social psychological techniques combine to render the study methodologically weak. While accepting the theory, they find it inadequately supported.

In an attempt to correct for the F Scale's weaknesses,

Milton Rokeach developed the Dogmatism Scale to measure "topic-free authoritarianism."⁵ Thus, Dogmatism is in the tradition of classical authoritarianism, while Authoritarianism is a measure of conservative or fascist authoritarianism. Studies have usually found high correlations between the F and D Scales (in the order of .70).⁶ This should not be surprising, since they are designed to measure similar concepts.

Differences between the F and D Scales have emerged in subsequent studies. It has been generally concluded that the D Scale measures general authoritarianism,⁷ and that the two scales are factorially discriminable.⁸ Despite other scales suggested by Halman⁹ and Ray,¹⁰ the Dogmatism Scale is considered the best measure of general authoritarianism.¹¹

The Dogmatism Scale has led to many profitable lines of research. As psychologists Vacchiano, Strauss, and Hochman appraised it in their 1968 review of Dogmatism literature:

All in all, if one can evaluate concepts by the amount and nature of research they stimulate, dogmatism, in a short period of time, has proven a potent formulation. It has provided a common denominator for such diverse areas as classroom teaching and personality development, interpersonal behavior and the employment of defense mechanisms.¹²

But what do we know about the relationship between authoritarianism and human communication?

Dogmatism and Authoritarianism
in Communication

Since 1961 there have been 28 quantitative studies of communication employing either Dogmatism or Authoritarianism as variables.¹³ Only four have explored their influence on message formulation, while 24 have examined the effects of D and F on message reception. Understandably, the D Scale has received more widespread usage than the F Scale.)

Unlikely as it may seem, the California F Scale has been used in only one study of message formulation. In his analysis of the effect of editor Authoritarianism upon news display, Madden encountered several methodological difficulties (among them the curvilinearity of the F Scale, the partition of the editors into high and low halves, and subject awareness of the study) which appear to have distorted his results.¹⁴ Thus, our knowledge in this area is less than extensive.

In a study closely related to this one, Franklyn S. Haiman and Donald F. Duns discovered that Dogmatism noticeably affected communicative behavior.¹⁵ In four separate experiments they found that:

1. speech instructors could predict relative D scores on the basis of a 3-minute speech;
2. judges familiar with the concept of Dogmatism could predict relative Dogmatism from written messages more reliably than the untrained speech instructors;
3. two studies revealed that students were considerably better able to predict Haiman D scores based on verbal interaction in class than were instructors.

The Haiman and Duns results are significant to the extent that they suggest that some quantifiable difference exists between the communicative behavior of high and low D scorers. But they offer neither a systematic identification of those differences, nor any basis upon which to predict Dogmatism scores. Essentially, they tell us that a statistically significant number of subjects guessed correctly.

Only one study provides systematic characteristics for differentiating high and low D scorers. In his study of evidence selection, John Kline discovered that high and low scorers both use more "undocumented" than "documented" evidence, but that high scorers used significantly more documented evidence than did low scorers; and low scorers used significantly more undocumented evidence than did high scorers.¹⁶ In other words, if we were to hear two speeches, the speaker using the most documented evidence would be presumed more Dogmatic than his counterpart. Although interesting, this hardly seems sufficient basis for predicting D scores.

In short, Haiman and Duns have suggested that authoritarianism affects communicative behavior. If they are correct in their analysis, we should be able to get some clue to an individual's degree of open- or closed-mindedness through his rhetorical-communicative behavior. This should prove worthwhile for those psychologists, political scientists, historians and rhetorical critics who are interested in prominent individuals unwilling (or unable) to complete the F, D, or any other paper and pencil test. I suggest that there are many people who would be at least mildly interested in knowing the rela-

tive F and D scores of people like Richard Nixon, Harry Truman, Adolf Hitler, George Wallace, George McGovern, Paul Harvey, Howard Cosell and Jesus. But we have no way of determining such scores at the present time.

Method

A total of 224 students in the introductory communication course at Purdue University were asked to perform two tasks. During the first month of the Fall, 1975 semester, each class was visited by an "outsider" who asked them to complete a public opinion poll. The "poll" was in reality a combination of the Rokeach Dogmatism Scale and the California F Scale. The questionnaires were scored and recorded for future use.¹⁷

Later in the semester each instructor assigned a persuasive composition. Each student was to write a two-page message to the most hostile audience imaginable, about the topic which he felt more strongly than any other. The students were given no indication that the compositions and poll were related in any way. The compositions were collected by the instructors in the usual manner, and were submitted to a number of content analytic procedures to determine the extent to which Dogmatism and Authoritarianism were reflected in discourse.

Three thematic, two logical and three stylistic content analyses were conducted to answer the following questions:

1. What rhetorical behaviors, if any, characterize high, medium and low scorers on the Dogmatic/Authoritarian Scales?

2. Are any such differences sufficient to predict the writer's score as high, medium or low Dogmatic/Authoritarian?
3. Are any such differences sufficient to predict the writer's actual score on the Dogmatism/Authoritarianism Scale?

Thematic Analysis

Each composition was classified according to the variables of "topic" and "stance" (position on the topic). The topic was classified as one of eight categories.¹⁸

1. Personal - matters pertaining to an individual which need not involve society.
2. Social - matters pertaining to the good of society at large, or personal issues approached from the perspective of norms.
3. Political - matters pertaining to the governing of society, or the pursuit of power.
4. Economic - matters pertaining to the distribution of resources within a society.
5. Recreational - matters pertaining to the use of leisure time.
6. Religious - matters pertaining to spiritual affairs or one's faith in a supreme being.
7. Educational - matters pertaining to the institutionalized learning process.
8. Scientific - matters pertaining to research and technology.

Second, each essay was classified according to the stance taken by the author. The four categories were:

1. Defend - defend or protect the status quo.
2. Modify - accept the status quo generally, but seek a specific change within it.

3. Destroy - indict the status quo as cause of significant problems, and argue for its repeal or revocation.
4. Propose - advocate a new course of action not embodied in the status quo. This may, in some cases, include destruction of the status quo.

Logical Analysis

Neither of the two logical analyses was originally intended as a method for the analysis of rhetorical logic. But Stephen Toulmin's system for describing logical patterns in terms of sufficiency rather than form has been frequently adapted by rhetorical critics,¹⁹ and Carroll Arnold's judgmental categories take on different characteristics in this design. Let us examine each of them in turn.

The Toulminian approaches suggested by Hart and Arnold proved too restrictive for this study. When Hart suggests, for example, that:

...when a critic looks for a major claim in a speaking situation, he must search for the dominant impression residing in the majority of the listeners -- the impression that is the product of the verbal statements made by the speaker.²⁰

he is clearly referring to an oral situation, wherein the auditors are unable to backtrack through the speaker's logical processes. But the present study analyzed written messages which not only allowed, but actually invited re-reading and double checking. Thus, we must look beyond the general residual impression left by the speech.

Of primary importance, then, is the manner in which phrases or statements function rhetorically within the discourse. Does

the phrase or statement function as:

1. Claim - "the conclusion whose merits we are seeking to establish,"
2. Data - "the facts we appeal to as a foundation for the claim,"
3. Warrant - "rules, principles, inferences...which can act as bridges, and authorize the sort of step to which our particular argument commits us."
4. Qualifier - "indicating the strength conferred by the warrant on this step..."
5. Rebuttal - "indicating circumstances in which the general authority of the warrant would have to be set aside," or
6. Backing - "standing behind our warrants... will normally be other assurances, without which the warrants themselves would possess neither authority nor currency."²¹

Since we are interested only in the writer's thought processes, we must analyze the message as though he were writing to himself. If we can assume that few people will intentionally present an illogical argument, we should also be able to assume that each writer finds his message logically consistent.

The Toulminian description of the discourse enables us to quantify each writer's logical patterns. Specifically, it permits direct statistical comparison of the writers' number of data per claim, warrants per claim, qualifiers per claim, rebuttals per qualifier, and backing per warrant.

The second logical analysis was Arnold's "Classes of Judgments." Although Arnold intended them to describe a speaker's response to a rhetorical situation, they have a

much broader use in this situation. Since all writers are in the same rhetorical situation, we can compare the types and frequencies of judgments which each type of rhetor deems appropriate for that situation.

Each statement was classified according to Arnold's four categories of judgments:

1. Factual - "judgments accepting or rejecting the alleged existence form, capacities, etc. of something;"
2. Optative - "evaluative judgments endorsing or rejecting something on the basis of general personal or social preferences;"
3. Adjudicative - "judgments on the conformity that exists or is lacking between things or events and formally agreed upon codes or standards;"
4. Predictive of Desirability - "evaluative judgments endorsing things on the basis of their desirability, feasibility, potency, and so forth for the future."²²
(hereafter referred to as, "predictive")

Stylistic Analyses

The three stylistic analyses involved each subject's average sentence length, his proportion of "monolithic terms," and his manner of expression reflecting his evidentiary choices.

One of the more recurrent themes throughout the literature on authoritarianism is the high scorers' need to simplify incoming stimuli.²³ If such individuals do, indeed, prefer simple stimuli, it seems likely that they will also tend to express themselves in relatively simple sentences.

"Monolithic terms" are words or phrases which convey an

image of individuals thinking or behaving in a concerted manner. Since high scorers (on either scale) are characterized by a sharply defined belief-disbelief system, we may expect them to view ego-involving problems as struggles between "us" and "them." The number of monolithic terms was divided by the number of words to determine the frequency with which each subject employed them.

Finally, each statement was categorized according to the writer's source of implied credibility. Every time a communicator makes a statement, his audience is entitled to ask for verification. In an earlier paper I suggested a typology of statements based upon possible answers to that question:²⁴

1. Non-attributed Assertion - credibility is inherent (A is an A).
2. Speaker Verified - the speaker invests his credibility in the proposition (I believe that A is an A).
3. General Others - credibility is derived from perceived group pressures (Everyone/all intelligent people know that A is an A).
4. Specific Others - credibility is derived from a credible other. (The Constitution/Billy Graham says that A is an A).
5. Documented Others - credibility is derived from the interaction of a credible other and the audience's perceived ability to verify the reference. (The Constitution says that A is an A^x, where x = footnote).

To which we may add a sixth type of statement:

6. Question - credibility is derived from a shift in the burden of proof (or disproof) from the source to the audience. (If A is not an A, then what is it?)

The high scorer's feeling for and about authority should

be reflected in his indirect invocation of authority.²⁵

Procedure

The analyses yielded 148 usable sets of data,²⁶ each of which was recorded on computer cards. The computer ordered the subjects into high, medium and low thirds according to each scale, and conducted five statistical analyses.

A Pearson correlation was conducted to determine the extent to which F and D were related in this sample. Second, χ^2 's were used to analyze differences in topic and stance selection by high, medium and low groups. Third, a series of one-way analyses of variance were computed to ascertain the significance of differences for the logical and stylistic variables. Discriminant analyses were conducted to determine the extent to which the communicative variables could predict the subject's group score. Finally, a series of step-wise regressions were employed to determine the extent to which a subject's precise D or F score can be predicted from his written discourse. In all cases significance was set at the .05 level.

Results

Previous research suggests that the California F Scale (and hence the Authoritarian Personality) tends to exhibit a curvilinear relationship to a variety of behavior patterns. Since the D Scale was designed to correct for the socio-political bias of the F Scale (i.e., to measure "topic-free" authoritarianism) we may expect to find a more consistently li-

near relationship between the Dogmatic Personality and a comparable variety of behavior patterns. With some previously cited exceptions the literature fulfills this expectation. But what of communicative behavior?

The customarily significant correlation between D and F scores suggest that we should find some similarities in communicative behavior related to the personality type of the source. Conversely, because even a highly significant correlation leaves much unexplained, and because two studies have found F and D to be factorially discriminable, we may also expect to observe a number of differences among the distribution of communicative traits according to D and F scores. In light of the previous research we may expect some traits to be curvilinearly related to Authoritarianism and we may expect to find some traits linearly related to Dogmatism.²⁷

I. Dogmatism and Authoritarianism

For this particular group, the correlation between D and F was .7122, which is significant at the .001 level.²⁸ Nevertheless, we must realize that .4928 of the relationship remains unexplained. Our concern is primarily with this elusive second half of the relationship -- that which Kerlinger and Rokeach and Warr, Lee and Joreskog found to be factorially discriminable.

II. Characteristics of Dogmatism

The data suggest four significant differences between the three levels of Dogmatism. Contrary to the earlier study by Haiman and Duns, there was no significant relationship between Dogmatism score and topic ($x^2 = 17.31$ with 14 df, signi-

ificance = .24) or between Dogmatism and stance ($x^2 = 4.063$ with 6df, significance = .67).

Seventy-two percent of the subjects wrote about either "personal" (44%), or "social" (28.4%) topics. Within these two groups the distribution according to D scores was almost random (personal = 35.5%, 30.6% and 33.9%; social = 35%, 30%, and 35%).

But when the two most popular categories are deleted the results become more interesting. Of those eight people who were concerned about politics, 75% were high Dogmatic, while none were low scorers. Although only nine people were involved, it is nevertheless interesting that no high scorers wrote about "religious," "educational," or "scientific" topics. Perhaps most surprising is the fact that religious topics were the exclusive property of medium and low scorers. But we must again note that these differences are apparent in less than 10% of the total sample. On the whole, D scores were not related to the subjects' choice of topic (Table #1).

The stances adopted by the three groups of subjects were, if anything, less interesting than their choice of topics. As shown in Table #2, almost half the subjects (47.5%) advocated new proposals, and there was virtually no difference between groups (31.2%, 32.8%, 35.8%). Among those who defended the status quo the largest groups were medium (40.9%) and high Dogmatic (36.4%). Not only were the medium Dogmatics most likely to defend the status quo, they were also the least likely to destroy it (28.6%) compared to the high (38.1%) and low (33.3%) groups. When it came to modification of the status

quo the low Dogmatics accounted for 45.2% of the suggestions compared to the moderate (32.3%) and high (22.6%) groups. (See Table #2).

In short, the data for stance suggest that:

1. People will most often present some kind of proposal, regardless of their D score.
2. In other cases, it is likely that:
 - a. Medium D will defend,
 - b. Low D will modify what they have, and
 - c. High D will criticize or destroy.

The latter suggestions are consistent both with the criticisms of the California F Scale and with our high correlation between D and F scores. It suggests that Dogmatism may be as curvilinear as Authoritarianism. But, of course, this is based on the behavior of only one part of the sample, and may be offered only as conjecture.

While the thematic analyses offer some interesting data, they do not approach statistical significance. However, four significant differences did emerge from the series on one-way analyses of variance conducted for the logical and stylistic variables (Table #3).

Two logical variables - the number of qualifiers per claim (QC), and the frequency of factual judgments - varied with respect to Dogmatism. Intuitively, one might expect an inverse relationship between Dogmatism scores and the number of qualifiers per claim. Although the low Dogmatic subjects did have the highest QC ratio (.5265), they were followed by the high D group (.4152) and then the medium scorers (.3169).

The difference was significant beyond the .05 level ($F = 3.771$ with 150 df, F probability = .025). A Student-Newman-Keuls test confirmed the fact that both the high and low subjects used significantly more qualifiers per claim than did moderate Dogmatics.

Although this is compatible with the suggestion that the Dogmatism Scale is a curvilinear instrument of some behavior patterns, it is difficult to explain with respect to Rokeach's description of the Closed Mind. The most reasonable interpretation seems to be that low scorers use a large ratio of qualifiers to claims because they perceive fine shades of differences, while high scorers use qualifiers to defend against potential disagreement. Medium scorers, however, are neither as open nor as defensive as the extreme groups.

The second logical difference was that low D subjects sought significantly more factual judgments (18.55) than did either the medium (13.31) scorers or high (14.91) scorers ($F = 5.40$ with 140 df, F probability = .006). The simplest explanation for this occurrence would be that low Dogmatics offer the most facts to support their arguments. If this were the case, then low D would also have a significantly higher ratio of data per claim. Although low Dogmatics did indeed use more data per claim than their colleagues, it does not approach statistical significance (probability = .438). This suggests that low D's seek factual judgments as both Claims and Data (resulting in a great number of factual judgments, while reducing the DC ratio), whereas high D's group their factual judgments in DC configuration.

Two stylistic variables - assertions and questions - varied with respect to Dogmatism. In both cases the low scorers employed the variables with significantly greater frequency than did the high scorers.

The typology of statements was the only single analytical tool to elicit two sets of significant differences among the high, medium and low groups. Although there was a linear relationship between D scores and both assertions ($F = 3.634$ with 140 df, F probability = .028) and questions ($F = 3.211$ with 140 df, F probability = .042), none of the other categories approached significance (see Table #4).

Taken collectively, these data suggest an interesting interpretation. The low Dogmatic subjects' use of assertions suggests a reliance upon the inherent truth of their statements. As the scores increase the subjects apparently feel a stronger need to answer the question, "according to whom?" High and low Dogmatics employed substantially more speaker verifications (4.68 and 4.53 respectively) than did medium scorers (3.36). All three groups were close to the mean of one reference to general others per message. The reduction in the frequency of questions from the low (2.53) to medium (1.53) and high (1.48) groups seems to suggest that higher scorers did not feel that they could rely on their audience for proper responses as often as could the low scorers.

Interestingly, no group averaged more than .19 documented references per composition. Put differently, there was at most one documented reference in every five essays. Considering the fact that these essays were assigned over a

period of time to permit research, it is safe to conclude that this group of students did not feel a strong need to document their arguments.

Since Hart discovered that "doctrine seems to affect oral rhetoric in a generic way,"³⁰ we may be surprised that all subjects appear reluctant to invoke specific others (either creeds or credible others). This suggests either that doctrine and Dogmatism are unrelated, that doctrinaire-Dogmatic persuaders adopt different styles for oral and written messages, or both.

In summary, we find that low Dogmatic subjects asked for a large proportion of factual judgments, assertions, questions and qualifiers per claim. There may also be non-significant tendencies for them to seek modification of the status quo and to provide no documentation whatsoever.

Moderate Dogmatics employed significantly fewer qualifiers than their counterparts, and may have a non-significant tendency to defend the status quo. In most other cases they seem to resemble the high scorers more than the low scorers.

High Dogmatic subjects are, perhaps surprisingly, characterized by significantly fewer factual judgments, assertions, and questions, and more qualifiers per claim than the other groups. They document and invoke credible others more often than the other groups, but still very rarely. In other words, the high Dogmatic seems to be characterized less by what he says than by what he does not say. The average length of the high D message is five sentences shorter than the low group. Although there was no significant difference in sentence length among the groups, there may be a spill-over to message length.

The high D person can make his point and satisfactorily support it (for his standards) with less effort than his counterparts, perhaps in part because his Truth is very simple. As a Baptist acquaintance of mine is fond of saying, "God said it, I believe it, and that settles it."

III. Predictors of Dogmatism

Although significant differences appeared between the three groups, it is not possible to predict D scores with any degree of reliability. As Table #5 indicates, even the results of all 28 regressions collectively achieve only 23% accuracy. This is certainly not worth the effort. (See Table #5).

However, one can improve his accuracy if he is only interested in predicting whether an individual is high, medium or low Dogmatic. Although the results are modest at best, we can improve on the 33.3% we could get by chance. When all the discriminant analyses are taken collectively the correct prediction is made in 57.43% of the cases. Although this is only significant at the .21 level, it is an increase of 24% over chance.

It is intriguing to compare these results with those of Haiman and Duns. Although their unsystematic prediction of high and low Dogmatism were significant at the .025 level (a tremendous improvement over our .21) 83% of their "predicted low" D subjects were actually high Dogmatic. In this study, however, only 24.1% of the "predicted low" were high scorers. In fact, if we delete the "medium Dogmatic" group (both predicted and actual) the 28 variables predict the correct category in 69.8% of the cases. In other words, it seems that

the level of accuracy and significance is greatly inflated when the medium D category is omitted. This suggests that it is possible to discriminate between high and low Dogmatism, but that medium Dogmatism may be a separate consideration. If this is the case, we must re-examine all previous Dogmatism studies, most of which studied only extremes while ignoring mid-range scores.

Two of the analyses proved more economical, although less helpful, than the whole range of variables. Using Arnold's four judgmental categories we can predict the correct group in 44.59% of the cases (55.3% when "medium" is deleted). But when a prediction is wrong, it is very wrong. Note in Table #6 that this approach is virtually unable to distinguish between high and low groups. Thus, the significance is a poor .63. (See Table #6).

The logical ratios predict the correct category in only 41.89% of the cases (58.7% with medium omitted), but with somewhat greater consistency (probability = .33). Unfortunately, except for the "predicted high" category, this improvement seems to be a result of chance. Whereas the judgmental approach appears to gamble and miss, the logical ratios are most cautious. Neither analytical tool can predict low Dogmatic scores accurately, but neither misses by anything close to Haiman and Dun's 83%. This tendency for predicted lows to be high scorers is consistent with Haiman and Dun's initial study,³¹ and again suggests that the Rokeach Dogmatism Scale may be a curvilinear measure of rhetorical communicative behaviors.

IV. Characteristics of Authoritarianism

Since there is a significant correlation between the D Scale and the California F Scale, and since we have discovered four significant communicative differences related to Dogmatism, we might expect to obtain similar results for the F Scale. Somewhat surprisingly, this was not the case.

The four significant differences in Dogmatic rhetoric - qualifiers per claim, factual judgment, assertions, and questions - all disappeared when the subjects (N = 139) were divided according to Authoritarianism. The probability for qualifiers soared from .025 to .530, factual judgments from .006 to .186, assertions from .028 to .435, and questions from .042 to .145. In none of these instances do the differences approach statistical significance.

Furthermore, predictive judgments emerged as barely significant ($F = 3.060$ with 138 df, F probability = .049) - a drastic improvement from the .688 level it attained for Dogmatism. Although it appears that low scorers sought more predictive judgments than either high or medium scorers (5.59 as compared to 4.27 and 4.02), the Student-Newman-Keuls test was unable to distinguish significantly different subsets within the predictive category. (See Table #7)

In short, it appears that in this particular study, Authoritarianism was unrelated to rhetorical-communicative behaviors. Thus, with respect to written communicative behavior, the area of correlation between F and D is less important than their area of divergence.

V. Predictors of Authoritarianism

The regressions and discriminant analyses support the apparent lack of distinguishable rhetorical differences attributable to Authoritarianism. The ability to accurately predict an F Scale score from the subject's rhetoric using all 28 variables is only 18% - even worse than the 23% obtained for D scores.

Furthermore, no discriminant analyses (except for all variables) could predict noticeably better than chance. The typology of statements was the most accurate (38.51%), followed by the judgments (37.84%), and the logical ratios (34.46%). Collectively, all variables could correctly predict the group only 50.86% of the time (probability = .95).

In short, the data suggest that it is not possible to predict whether an individual is high, medium or low Authoritarian on the basis of his written discourse. However, when the middle groups (both actual and predicted) are deleted from the analyses the predictive accuracy increases. The typology of statements alone successfully differentiates between high and low F in 60.0% of the cases, and all 28 variables collectively predict 74.3% of the cases. But since we already know that Authoritarianism generally has influence on behavior, we have little need to distinguish between high and low scorers' behavior.

Although analyses such as these could enable us to distinguish between conservative-authoritarian (high F) from liberal Authoritarian (low F), the important differences are between the middle group and the extremes. Since our analyses

point out differences between high and low, and none between the middle and the extremes, it is likely that the differences are due to something other than Authoritarianism. Thus it appears from these analyses that Authoritarianism does not affect written communicative behavior.

VI. Summary of Results

Let us summarize by answering the three research questions posed earlier in this study, then proceed to explore the implications of this study for research in Communication and Psychology. (See Table #8).

As indicated in Table #8, the results of this study suggest that Dogmatism is reflected in an individual's use of factual judgments, his assertions, questions and qualifiers per claim. Authoritarianism, on the other hand, is reflected only slightly in the use of predictive judgments. Thus, despite their high correlation (.72 significance = .001), Dogmatism and Authoritarianism seem to differentially affect the formulation of written messages.

Although it is not possible to reliably predict either scores or groups of scores on either scale from the subjects' written discourse using these particular analyses, Dogmatism can be predicted somewhat more accurately than Authoritarianism.

But predictive accuracy for both D and F increases noticeably when the "medium" categories are omitted from the discriminant analyses. This suggests that both scales share the curvilinear tendency previously found in the F Scale, since the ends are different from the middle. It further suggests

that, although we may be able to distinguish between high and low Dogmatism and Authoritarianism, we may have little desire to do so. The meaningful differences in both cases seem to be between those whose scores fall in the mid-range (unexplainedly) and those who fall in the extremes.

Finally, it appears from the analyses conducted that D and F, while related, are different constructs. This supports the conclusions of both the Kerlinger-Rokeach and Warr-Lee-Joreskog factor analyses. In this case, Dogmatism is reflected in communicative behavior while Authoritarianism is not.

Conclusions and Implications

When we combine the results of this study with those of previous research, we are led to the conclusion that Dogmatism and Authoritarianism are related, but discriminable entities. They repeatedly attain significant correlations, but at least three studies have discriminated between them - two by means of factor analysis, and one rhetorically. Furthermore, we are inclined to believe that the differences are communicatively significant.

The results indicate that Authoritarianism is not reflected in written discourse. Considered in light of the previously cited work by Madden (as reinterpreted), this conclusion becomes quite compelling. The only differences between the three groups (their use of predictive judgments) was not upheld by the Newman-Keuls test.

Furthermore, the research on Authoritarianism as a receiver variable is inconclusive. One study found high scorers

susceptible to authority influence, while the other found low scorers susceptible to authority influence. But the high scorers in the second study were not differentially susceptible to high or low status scores.³²

In short, Authoritarianism does not appear to affect communicative behavior in any consistent fashion. If the F Scale measures anything at all (as most will concede) the variable it measures seems to be independent of written communicative behavior.

Although highly correlated with Authoritarianism, Dogmatism does seem to be related to communicative behavior. When persuading others the low scorer will seek more factual judgments, make more assertions, and ask more questions than the high scorer. In addition, the high and low scorers both tend to use more qualifiers per claim than do the moderate scorers.

Furthermore, previously cited studies present a profile of various communicative competencies which appear related to Dogmatism. Low scorers can better differentiate between source and message than can high D scorers. The high D individual is more likely to be influenced by an authoritative source and to devalue the speaker in a dissonant situation. He will be slower to recognize visual humor, slower to recognize or retain belief discrepant information and susceptible to opinionated language.

In short, Dogmatism appears to affect communication in a number of rather significant ways. The results of this study are consistent with much previous research, leading to the general conclusion that Dogmatism is a communicative vari-

able while Authoritarianism is not.

If D and F are distinct, but related concepts, we must re-evaluate previous research and explore some new areas.

I. Implications for Psychological Research

Psychologists must begin to study all levels of Dogmatism - not just the extremes. Whether they divide the sample into thirds or quartiles, it is imperative that they include all scores. Similarly, dividing a sample into halves can only obscure some of the potential differences between subjects. The data from the Dogmatic analyses suggest that authoritarian behavior may be inconsistent -- involving relationships linear for some variables and curvilinear relationships for others.

A second, related concern is that psychologists should attempt to discover whether the curvilinearity suggested by this investigation (as well as the earlier study by Becker) is typical or atypical of behaviors affected by Dogmatism and Authoritarianism.

Finally, psychologists must acknowledge the possibility of Dogmatic curvilinearity when interpreting previously reported research. Since most studies have ignored the moderate scores on both scales, they have avoided the issue. Statistically significant "differences" may represent similarities in a sea of empirical chaos.

II. Implications for Communication Research

This study was undertaken in an attempt to find a method for determining the D and F level of historically prominent individuals. Although we have not yet discovered such a tool,

we have made some progress.

Research to date suggests that we can, and should, discard Authoritarianism as a rhetorical construct in favor of Dogmatism. If we are satisfied with a 40-50% prediction accuracy then we can proceed to analyze written messages. But most of us would prefer greater accuracy. Certainly the results obtained thus far suggest that we can improve our accuracy through further research.

Three lines of endeavor seem most worth pursuing. First, we need to explore the theoretical underpinnings of Dogmatism as they relate to communicative behavior. Dale Leathers' work concerning the rhetoric of the American radical right is most helpful in this regard. His "Belief-Disbelief Systems: The Communicative Vacuum of the Radical Right" is particularly useful.³³ More work of this nature should provide us with a more detailed understanding of the relationship between Dogmatism and communication.

Along similar lines, Hert et al's development of "rhetorical sensitivity" may prove useful in understanding the communicative variables associated with authoritarianism.³⁴

A second avenue of approach would be to experimentally manipulate messages to determine which thematic, logical and stylistic variables are preferred by high, medium and low Dogmatic individuals. Specifically, Q-sort technique could be used to determine which types of statements, or types of judgments or logical ratios are preferred by each group. This would help us to understand which things such people would say, given a finite range of choice.

Finally, we can immodestly recommend more studies like this one. This was an attempt to isolate a fairly specific rhetorical situation - a written message in an introductory communication course - and to attack it with an arsenal of analytical weapons. We can now proceed to refine the sample, the situation, the procedures, the message conditions and the results. The body of literature implied by all these improvements would probably be voluminous, but should enable us to predict an individual's level of authoritarianism with some accuracy, given his attempts at persuasion.

We have raised a number of questions about the relationship between authoritarianism and communication. Hopefully, we have added to the stockpile of available answers. But in the process we seem to have stumbled upon a number of complicating factors which need further research - is Dogmatism different from Authoritarianism? Is either related to communicative behavior?

These questions are worth pursuing. When we fail to learn more of the relationship between authoritarianism and communication, we at least learn something about one or the other of them. This particular study suggests that we can intuitively brand a person as high or low authoritarian from his discourse (as Haiman and Duns observed), but that we have little systematic foundation for making such predictions. If this study is regarded as a beginning rather than a culmination of research efforts, we may be able to progress toward the prediction of authoritarianism from rhetorical discourse.

TABLE 1: DOGMATISM SCORE AND CHOICE OF TOPIC

Count Column per cent Row per cent Total per cent	Low Dogmatism	Medium Dogmatism	High Dogmatism	Row Total
SOCIAL	14 29.8 35.0 9.9	12 25.5 30.0 8.5	14 29.8 35.0 9.9	40 28.4
PERSONAL	22 46.8 35.5 15.6	19 40.4 30.6 13.5	21 44.7 33.9 14.9	62 44.0
RECREATIONAL	5 10.6 33.3 3.5	7 14.9 46.7 5.0	3 6.4 20.0 2.1	5 10.6
POLITICAL	0 0 0 0	2 4.3 25.0 1.4	6 12.8 75.0 4.3	8 5.7
ECONOMIC	2 4.3 28.6 1.4	2 4.3 28.6 1.4	3 6.4 42.9 2.1	7 5.0
RELIGIOUS	2 4.3 50.0 1.4	2 4.3 50.0 1.4	0 0 0 0	4 2.8
EDUCATION	2 4.3 66.7 1.4	1 2.1 33.3 .7	0 0 0 0	3 2.1
SCIENTIFIC	0 0 0 0	2 4.3 100.0 1.4	0 0 0 0	2 1.4

TOTAL COUNT: 47 47 47 141
 TOTAL PER CENT: 33.3 33.3 33.3 100%

TABLE 2: DOGMATISM SCORE AND STANCE

Count Column per cent Row per cent Total per cent	Low Dogmatism	Medium Dogmatism	High Dogmatism	Row Total
DEFEND	5 10.6 22.7 3.5	9 19.1 40.9 6.4	8 17.0 36.4 5.7	22 15.6
DESTROY	7 14.9 33.3 5.0	6 12.8 28.6 4.3	8 17.0 38.1 5.7	21 14.9
MODIFY	14 29.8 45.2 9.9	10 21.3 32.3 7.1	7 14.9 22.6 5.0	31 22.0
PROPOSE	21 44.7 31.3 14.9	22 46.8 32.8 15.6	24 51.1 35.8 17.0	67 47.5

TOTAL COUNT	47	47	47	141
TOTAL PER CENT	33.3	33.3	33.3	100%

TABLE 3: DOGMATISM AND THE LOGICAL AND STYLISTIC VARIABLES

Logical Variables	F Ratio	df	F Probability
DATA/CLAIM	0.837	140	0.438
WARRANT/CLAIM	2.381	140	.094
QUALIFIER/CLAIM	3.777	140	.025 **
BACKING/WARRANT	1.363	140	.258
REBUTTAL/QUALIFIER	1.816	140	.165
FACTUAL	5.400	140	.006 **
OPTATIVE	.408	140	.651
ADJUDICATIVE	.537	140	.587
PREDICTIVE	.282	140	.688
Stylistic Variables			
SENTENCE LENGTH	0.447	140	.633
MONOLITHIC TERMS	.767	140	.470
ASSERTIONS	3.634	140	.028 **
SPEAKER VERIFIED	.872	140	.423
GENERAL OTHERS	.122	140	.576
SPECIFIC OTHERS	.779	140	.465
DOCUMENTED OTHERS	.477	140	.618
QUESTIONS	3.211	140	.042 **

**Statistically significant results

TABLE 4: DOGMATISM AND STATEMENT TYPES

Statement Types	Low Dogmatic Mean	Medium Dogmatic Mean	High Dogmatic Mean	Total
ASSERTIONS	21.46	17.72	16.78	18.66
SPEAKER VERIFIED	4.53	33.36	4.68	4.19
GENERAL OTHERS	.91	1.06	1.02	1.00
SPECIFIC OTHERS	.78	.89	1.25	.97
DOCUMENTED OTHERS	.04	.19	.19	.14
QUESTIONS	2.53	1.59	1.48	1.87

TOTAL: 30.25 24.81 25.40 26.83

TABLE 5: SUMMARY OF DOGMATISM REGRESSIONS

Variable	Multiple R	R ²	Change in R ²	Simple R
FACTUAL/QUESTION	0.160	0.026	0.026	-0.160
ADJUDICATIVE/GENERAL	.210	.044	.019	.135
PREDICTIVE/ASSERTION	.247	.061	.017	-.137
MONOLITHIC TERMS	.271	.073	.012	.114
OPTATIVE/ASSERTIONS	.298	.089	.015	-.104
OPTATIVE/GENERAL	.325	.105	.017	.104
PREDICTIVE/QUESTIONS	.349	.122	.016	-.112
WARRANTS	.373	.139	.017	.001
WORDS	.390	.152	.013	-.153
FACTUAL/SPECIFIC	.412	.169	.017	.078
PREDICTIVE/SPECIFIC	.421	.178	.008	-.077
FACTUAL/DOCUMENTED	.431	.186	.008	.084
FACTUAL/GENERAL	.435	.189	.003	.079
PREDICTIVE/GENERAL	.442	.196	.006	.031
ADJUDICATIVE/QUESTIONS	.446	.199	.004	-.027
SENTENCES	.450	.203	.004	-.102
FACTUAL/SPEAKER VERIFIED	.455	.207	.004	-.044
FACTUAL ASSERTION	.461	.213	.006	-.147
DATA	.466	.217	.003	-.115
REBUTTAL	.470	.221	.004	.014
QUALIFIERS	.475	.225	.005	-.095
CLAIMS	.479	.230	.004	-.028
OPTATIVE/SPEAKER VERIFIED	.481	.231	.002	-.033
OPTATIVE/SPECIFIC	.483	.233	.002	.066
PREDICTIVE/SPEAKER VERIFIED	.484	.234	.000	.016
ADJUDICATIVE/SPEAKER VERIFIED	.484	.234	.000	.095
OPTATIVE/QUESTION	.485	.235	.000	-.018
ADJUDICATIVE/ASSERTION	.485	.235	.000	-.008

TABLE 6: DOGMATISM PREDICTED BY JUDGMENTS

Actual Group	Predicted Low Dogmatic	Predicted Medium Dogmatic	Predicted High Dogmatic
LOW DOGMATIC	19 40.4%	7 14.9%	21 44.7%
MEDIUM DOGMATIC	13 27.7%	19 40.4%	15 31.9%
HIGH DOGMATIC	17 31.5%	9 16.7%	28 51.9%

Per Cent of Cases Grouped Correctly: 44.59%

TABLE 7: AUTHORITARIANISM AND THE LOGICAL AND STYLISTIC VARIABLES

Logical Variables	F Ratio	df	F Probability
DATA/CLAIM	0.411	138	0.650
WARRANT/CLAIM	.092	138	.506
QUALIFIER/CLAIM	.101	138	.530
BACKING/WARRANT	.505	138	.604
REBUTTAL/QUALIFIER	1.022	138	.364
FACTUAL	1.691	138	.186
OPTATIVE	.241	138	.686
ADJUDICATIVE	.165	138	.641
PREDICTIVE	3.060	138	.049 **
Stylistic Variables			
SENTENCE LENGTH	0.284	138	0.688
MONOLITHIC TERMS	.863	138	.427
ASSERTIONS	.846	138	.435
SPEAKER VERIFIED	.857	138	.430
GENERAL OTHERS	.010	138	.132
SPECIFIC OTHERS	1.182	138	.310
DOCUMENTED OTHERS	.522	138	.595
QUESTIONS	1.941	138	.145

**Statistically significant results

TABLE 8: SUMMARY OF RESULTS

QUESTION	AUTHORITARIANISM	DOGMATISM
<p>1. What rhetorical behaviors, if any, characterize high, medium and low scorers on the F and D Scales?</p>	<p>1. Statistically significant but unclear relationship between F and "predictive" judgments.</p>	<p>1. Inverse relationship between D and "factual".</p> <p>2. Inverse relationship between D and "assertions".</p> <p>3. Inverse relationship between D and "questions".</p> <p>4. Curvilinear relationship between D and qualifiers per claim.</p>
<p>2. Are any such differences sufficient to predict the writer's score as high, medium or low F or D?</p>	<p>1. All variables = 50.86% (p = .95).</p> <p>2. Statements = 38.51% (p = .93).</p> <p>3. Judgments = 37.84% (p = .83).</p>	<p>1. All variables = 57.43% (p = .21).</p> <p>2. Judgments = 44.59% (p = .63).</p> <p>3. Logical ratios = 41.89% (p = .33).</p>
<p>3. Are any such differences sufficient to predict the writer's actual score on the F and D Scale?</p>	<p>No -- 18% accurate using all variables.</p>	<p>No -- 23% accurate using all variables.</p>

Notes

1. Throughout this paper "Authoritarianism" and "Dogmatism" will be used to refer specifically to scores on the California F Scale and Rokeach' Dogmatism Scale respectively. The lower case (authoritarianism and dogmatism) will be used in all other cases.
2. Erich Fromm, Escape from Freedom (New York: Avon Books, 1965), Abraham H. Maslow, "The Authoritarian Character Structure," Journal of Social Psychology, 18 (November, 1943), 401-411, and Eric Hoffer, The True Believer (New York: Harper and Row, 1951).
3. T. W. Adorno, Else Frenkel-Brunswick, Daniel J. Levinson, and R. Nevitt Sanford, The Authoritarian Personality (New York: W. W. Norton, 1969), p. 1.
4. Richard Christie and Marie Jahoda (ed.), Studies in the Scope and Method of "The Authoritarian Personality" (Glencoe, Illinois: Free Press, 1954).
5. Milton Rokeach, "Political and Religious Dogmatism: An Alternative to the Authoritarian Personality," Psychological Monographs, 70 (1956) No. 18 (whole no. 425), and The Open- and Closed-Mind (New York: Basic Books, 1960), chapter 4.
6. David J. Hanson, "Dogmatism and Authoritarianism," Journal of Social Psychology, 76 (1968), 89-5 and "Validity Test of the Dogmatism Scale," Psychological Reports, 26 (1970), 585-586; and James P. Shaver, Helmut P. Hoffman, and Hyrum E. Richards, "The Authoritarianism of American and German Teacher Education Students," Journal of Social Psychology, 84 (1971), 303-304.
7. Hanson (1968) and (1970); and Shaver, Hoffman and Richards (1971).
8. Fred Kerlinger and Milton Rokeach, "The Factorial Nature of the F and D Scales," Journal of Personality and Social Psychology, 4 (1966), 391-399. The authors conclude that F factors include, "authoritarian aggression, submission to ingroup authorities, and impulse control," while D factors were "Belief in one cause, belief in one truth, isolation-alienation, self-proselytization, and an unnamed factor." Peter B. Warr, R.E. Lee and K.G. Joreskog, "A Note on the Factorial Nature of the F and D Scales," British Journal of Psychology, 60 (1969), 119-123, suggest that two factors "dogmatic opinionation" and "pragmatism" are common to both F and D. D factors are "isolation-alienation," "belief in one cause," "belief in one truth," "personal ambition," "virtuous self-denial," and "self-proselytization." F factors are "general authoritarianism," "personal morality," "nationalism," "institutional toughmindedness," and "personal toughmindedness."

9. Franklyn S. Haiman, "A Revised Scale for the Measurement of Open-mindedness," Speech Monographs, 31 (June, 1964), 97-102.

10. John J. Ray, "The Development and Validation of a Balanced Dogmatism Scale," Australian Journal of Psychology, 22 (December, 1970), 253-260.

11. Herbert W. Simons, "Dogmatism Scales and Leftist Bias," Speech Monographs, 35 (June, 1968), 149-153, and Herbert W. Simons and Nancy Neff Berkowitz, "Rokeach' Dogmatism Scale and Leftist-Bias," Speech Monographs, 36 (November, 1969), 459-463.

12. Ralph B. Vacchiano, Paul S. Strauss, and Leonard Hochman, "The Open- and Closed-Mind: A Review of Dogmatism," Psychological Bulletin, 71 (1968), 261-273.

13. This includes neither Roderick P. Hart, "The Rhetoric of the True Believer," Speech Monographs, 38 (November, 1971), 249-261; nor Dale G. Leathers, "Belief-Disbelief Systems: The Communicative Vacuum of the Radical Right," in Explorations in Rhetorical Criticism, ed. by Gerald P. Mohrman, Charles J. Stewart, and Donovan J. Ochs, (University Park: Penn State University Press, 1973) which do not employ the F or D Scales..

14. Thomas James Madden, "Editor Authoritarianism and Its Effect on News Display," Journalism Quarterly, 48 (Winter, 1971), 660-666.

15. Franklyn S. Haiman and Donald F. Duns, "Validators in Communicative Behavior of Attitude-Scale Measures of Dogmatism," Journal of Social Psychology, 64 (1964), 287-297. For further elaboration see Donald F. Duns, "A Study of the Relationship Between Dogmatism and Speech Behavior," (unpublished doctoral dissertation, Northwestern University, 1961).

16. John H. Kline, "Dogmatism of the Speaker and Selection of Evidence," Speech Monographs, 38 (November, 1971), 354-355.

17. No analyses of the test scores were conducted until all data were collected, lest the content analyses be biased by the researcher's expectations.

18. Although some of the essays could have been classified into two or more categories, each was assigned to that category which (in the coder's opinion) best summarized the primary thrust of the composition. Thus, an essay about "abortion" might be classified as "personal" (persuading an individual in a specific case), "social" (whether abortions should be legal or illegal), or "religious" (whether abortions are in keeping with a selected religious belief).

19. Stephen Toulmin, The Uses of Argument (Cambridge: Cambridge University Press, 1958), see especially pp. 94-145. See for example, Wayne Brockriede and Douglas Ehninger, "Toulmin on Argument: An Interpretation and Application," Quarterly Journal of Speech, 46 (February, 1960); 44-53, and Roderick P. Hart, "On Applying Toulmin: The Analysis of Practical Discourse," in Mohrman, Stewart and Ochs, pp. 75-95.
20. Hart, p. 77.
21. Toulmin, pp. 97-98, 101, 103.
22. Carroll C. Arnold, Criticism of Oral Rhetoric, (Columbus, Ohio: Charles E. Merrill, 1974), p. 70.
23. Billy J. Franklin and Richard A. Carr, "Cognitive Differentiation, Cognitive Isolation, and Dogmatism," Sociometry, 34 (June, 1971), 230-237; Harvey J. Brightman and Thomas F. Urban, "The Influence of the Dogmatic Personality upon Information Processing: A Comparison with a Bayesian Information Processor," Organizational Behavior and Human Performance, 11 (April, 1974), 266-276; and Joseph Zacker, "Authoritarian Avoidance of Ambiguity," Psychological Reports, 33 (December, 1973), 901-902.
24. Craig Allen Smith, "The Hoftstadter Hypothesis Revisited: The Nature of Evidence in Politically 'Paranoid' Discourse," Southern Speech Communication Journal 42 (Spring, 1977) 279-280.
25. A pilot study found some slight differences, but the data failed to meet the assumptions necessary for statistical analyses.
26. Since both the F and D scales are additive, failure to answer any one item invalidates that particular scale for one subject. Thus, a subject could have a D score and no F score, or vice versa. Those who had neither were deleted from the study. For added flexibility, the judgment and statement analyses were combined (e.g., factual-assertion, optative-assertion, etc.). "Factual" judgments were combined by adding all factual categories, etc.
27. As one might expect of an exploratory study of this scope, few of the analyses proved statistically significant. But the results do suggest some potentially important relationships (or non-relationships as the case may be) which appear to be related to Dogmatism and Authoritarianism. For this reason, many of the data are reported largely for their heuristic value.
28. The correlation coefficient of .71 in this study is consistent with Shaver, Hoffman, and Richards's, .70 (1971).

29. Rokeach, (1960), pp. 55-56.
30. Hart, (1971), pp. 249-261.
31. Haiman and Duns, pp. 287-297.
32. Richard Centers, Robert W. Shomer, and Aroldo Rodrigues, "A Field Experiment in Interpersonal Persuasion Using Authoritative Influence," Journal of Personality, 38 (September, 1970), 392-403; and James C. Moore and Edward Krupat, "Relationships Between Source Status, Authoritarianism, and Conformity in a Social Influence Setting," Sociometry, 34 (March, 1971) 122-134.
33. Dale G. Leathers, "Belief-Disbelief Systems: The Communicative Vacuum of the Radical Right," in Mohrman, Stewart and Ochs; and "The Protestant Fundamentalism of the Radical Right," Southern Speech Journal, 33 (Summer, 1968), 245-258.
34. Roderick P. Hart and Don M. Burks, "Rhetorical Sensitivity and Social Interaction," Speech Monographs, 39 (June, 1972), 75-91; Roderick P. Hart, William F. Eadie, and Robert E. Carlson, "Rhetorical Sensitivity and Communicative Competence," (paper delivered at SCA convention, Houston, Texas, December, 1975). Also of interest is Hart's, "Rhetorical Certainty and Automated Language Analysis: A Methodological Foray," (unpublished manuscript, Purdue University, 1974), and "Absolutism and Situation: Prolegomena to a Rhetorical Biography of Richard M. Nixon," Communication Monographs 43 (August, 1976) 204-228.