Communication & Science
JOURNAL
Classic Series 2014

Serota, K., Fink, E. L., Noell, J., Woelfel, J. (1975). Communication, ideology and political behavior: A multidimensional analysis.

A RAH Press Publication
http://www.comSciJ.com

COMMUNICATION, IDEOLOGY, AND POLITICAL BEHAVIOR:

A MULTIDIMENSIONAL ANALYSIS

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April 1, 1975

Paper presented to the Political Communication Division of the International Communication Association Convention, April 23-26, 1975, Chicago.

(Working Paper 75-1, Political Ideology Project)

This paper constitutes a preliminary report on an empirical study into the structure of class ideologies and the ways communication processes shape and influence them. Mention of the concept "ideology" today often brings to mind a set of ideas or doctrine that serves to promote class or material interests (cf., Shils, 1968). Thus Marxism is often seen as a doctrine that, in Daniel Bell's (1962) terms, converts "ideas into social levers" that promote actions to realize the interests of the proletariat. It is this conception of ideology that is considered in the "End of Ideology" debate (Bell, 1962; Lipset, 1960, Aron, 1957; Waxman, 1969). Without wishing to comment directly on the merits or demerits of this particular debate, it has served to prompt a widespread re-examination of the concept of ideology--its meaning, types, and structures. This paper continues that re-examination with a preliminary empirical analysis of the structures of the ideologies of "lower" and "upper" social groups.

In doing empirical research on ideology, two basic issues must be confronted. The first is to achieve an adequate conceptualization and definition of ideology. In doing this, we will follow closely the work of Clifford Geertz (1964) and his interpreters. The second issue is to develop measurement procedures commensurate to the complexity of the phenomenon itself. Here there are fewer guides to follow, and we will argue that only a new methodological approach is sufficient to deal with the problem.

Let us turn first to consideration of definitional problems. An examination of the genesis and development of the concept of ideology reveals that it has had a variety of meanings in the works of different analysts. While an extensive review of the literature on this concept is beyond the immediate scope of this paper (see Birnbaum, 1960; Lichtheim, 1967; Geertz, 1964; and Mannheim, 1936), a brief overview of some of the discrepent uses is in order to establish the context for this paper. Historically, perhaps the most influential conception of ideology has been that of Karl Marx. Ideology, according to Marx, consists of "false consciousness" of one's true interests and the real nature of society and history (Lichtheim, 1967:18). In this conception a sharp distinction has to be made between "truth" and "ideology." Only a correct analysis, such as the one Marx presumably provided, can "unmask" the class basis of bourgeois ideology and indicate the way in which distortion serves to support the capitalist status quo.

Building on Marx's analysis, Karl Mannheim in his now classic work, Ideology and Utopia, refined and deepened Marx's conception. Mannheim made a fundamental distinction between a particular and a total conception of ideology. Under the rubric of the particular, Mannheim included "all those utterances the 'falsity' of which is due to an intentional or unintentional, conscious, semi-conscious, or unconscious, diluting of one's self or of others taking place on a psychological level and structurally resembling lies." The total conception of ideology, in contrast, does not involve a "suspicion of falsification," but rather is concerned with "the whole outlook of a social group" (Mannehim, 1936:59) or the way in which a collectivity's thought is structured as a whole. The total conception of ideology, in other words, is concerned with the Weltanschauung of a social group.

In Mannheim's hands, then, the concept of ideology is reformulated and placed in a larger context; although he does not contrast "truth" and "ideology," Mannheim's total conception of ideology does continue an interest in the distortion an ideology may contain. Thus he explicitly raises the issue of how "social structures come to express themselves in the structure of assertions (or ideologies), and in what sense the former concretely determine the latter" (cited by Lane, 1962:14). But the thrust of his analysis of ideology is to generalize our concern with ideology to that of a social group's "whole outlook." The focal concern of an analysis of ideology is not with particular outlooks or doctrines but with the total "thought-system" or "mode of thought" of a social group.

While Mannheim's analysis of ideology transcends the simplistic distinction between "truth" and "ideology," it raises a fundamental issue itself. If the analysis of ideology is to be concerned with the "whole outlook" or Weltanschauung of a social group--whether a class or a nation--how does one conceive of a culture as a whole? Is culture itself mere ideology, whether we consider philosophy or mathematics, religion or science? While Mannheim himself comes close to this position (1936:77), the issue is obviously more complex. And it is here that Clifford Geertz' work is so clarifying.

Geertz (1965) argues that ideology must be seen as one kind of cultural system. Culture, he argues, consists of:

> . . . extrinsic sources of information [conveyed through symbols or symbol-systems] in terms of which human life can be patterned--extrapersonal mechanisms for the perception, understanding, judgment, and manipulation of the world. Culture patterns--religious, philosophical, esthetic, scientific, ideological--are "programs"; they provide a template or blueprint for the organization of social and psychological processes, much as genetic systems provide such a template for the organization of organic processes (1964:62; emphasis provided).

As a kind of cultural system, ideology thus is a guide in an uncertain world, orienting people to their surroundings, and making comprehensible the situation in which people find themselves. Compared to other cultural systems, ideology is distinct in its focus on man's social situation, his patterns of communication and of relations in society. As Geertz notes:

> Whatever else ideologies may be . . . they are, most distinctively, maps of problematic social reality and matrices for the creation of collective conscience. Whether, in any particular case, the map is accurate or the conscience creditable is a separate question. . . . (1964:64)

Nigel Harris (1968), an interpreter of Geertz, adds to this that:

> Ideologies are differentiated [from other aspects of culture] by the feature that they provide with organi-

> zation for social experience, that is experience only in the context of a society rather than in the context of an isolated individual or the relationship of inanimate things. More specifically, ideologies relate to the arena of social conflict, to the purposes of groups competing for scarce resources.

Or as Geertz himself explains, the ideological cultural system is "the justificatory, the apologetic one" (1964:71) which establishes and defends key social values, among which those concerning "scarce resources" are probably the most important.

The approach to ideology taken in this paper, then, follows Geertz. Ideology is seen as a kind of cultural system that orients people as they communicate and relate to others. While ideology may or may not be accurate, it does define and structure communications through its system of symbols concerning scarce resources or the social groups competing for them. An empirical analysis of ideology must thus be explicitly concerned with analyzing the structure of such symbols.[1]

This brings us to the second basic issue that must be faced. Given an acceptable conception of ideology, can we develop adequate measures of it? The problem of developing methodological procedures adequate to measuring ideology has been recognized for some time. In the 1950s, Harold Lasswell was quoted for saying:

> Certainly the methods of quantitative measurement are not altogether valueless in, for instance, the analysis of voting behavior in our mass society. But for the field of ideologies the as yet mysterious condensation of complex thought processes is too subtle to be accessible to even the most refined methods of statistical mechanics (cited in Minar, 1961).

Fortunately, the procedures proposed in this paper promise to outdate such criticism. To appreciate their significance, however, a brief review of earlier approaches to measuring ideology is needed.

In the past, probably the most common approach to measuring ideology was to develop a scale of one or more items in terms of which the respondent would indicate his or her own position on the ideological item in question. Most such "ideology scales" are essentially the same as such standard attitude scales as the Likert or Guttman scales (see for example, Rosenberg, 1956; Campbell, et al., 1960; Arian, 1967; Selznick and Steinberg, 1969; or Schulze, 1969). A more general rationale for the use of such scales can be found in the work of Milton Rokeach (1960; 1968; also see L. B. Brown, 1973). Rokeach distinguishes between general "belief systems" and those more specific and focused "organizations of beliefs and attitudes" that he calls "ideologies." Since in this perspective ideology is considered similar to attitudes, a scale essentially like an attitude scale would seem to be appropriate.

There is, however, a basic problem with measuring ideology on such a scale. The problem is that such scales are inherently reductionistic, or in Mannheim's terms, they are necessarily limited to tapping particular conceptions of ideology. It might be thought that such scales could be used to get at the total conception of ideology, our object of concern, by aggregating the scores of individuals' responses to such scales. However, as Mannheim argues, analyses that focus on:

> the content of individual thought . . . can never achieve (a) basic reconstruction of the whole outlook of a social group. They can at best reveal the collective psychological aspects of ideology, or lead to some development of mass psychology, dealing either with the different behavior of the individual and the crowd, or with the results of the mass integration of the psychic experiences of many individuals. And although the collective-psychological aspect may very often approach the problems of the total ideological analysis, it does not answer its question exactly (1936:59).

An additional problem with these attitude scale techniques is that they require the investigator to specify in advance all relevant dimensions useful in differentiating concepts in the ideological domain. This ideal of usefulness may be theory-centered or respondent-centered, in that the investigator may have theoretically derived relevant dimensions, or may have considered the cognitive or linguistic practice of the respondents to be sampled. In either case, this a priori specification may subject the results to gross incompatibility with the actual processes of ideological evolution within a given social group.

The proper way to analyze ideology, then, is to measure the "whole outlook of a social group" at once. The problem is how can this be done. Up to now, in fact, it has not been done very systematically or precisely. Some investigators (e.g., Lane, 1962; Ladd, 1969) have attempted to delineate the structure of an ideology of a social group as a whole, but they have done this either informally or impressionistically, confirming Lasswell's pessimism concerning the prospects of quantitatively studying ideology. Perhaps the most ambitious and most nearly successful attempt was made by Scott (1959). Conceiving of ideology as an aspect of culture, Scott anticipated Geertz' approach to ideology. Scott tried to empirically delineate ideologies as "clusters" of related cultural themes as revealed in a correlation-like matrix. Since he measured the variables that he used in constructing the correlation-like matrix by doing content analyses of open-ended questions, he could not systematically and quantitatively analyze them. Nevertheless, constructing a correlation-like matrix for each of three groups, he was able to point to different clusters of ideological elements or dimensions of ideology in the different groups. Although Scott collected information from individuals in each group, the way he analyzed the information in terms of a correlation-like matrix for each group clearly attempted to get at the structures of the total conception of ideology of each group.

In this study, using metric multidimensional scaling techniques that have only recently been developed, an approach somewhat similar to Scott's will be taken. Because it is now possible to measure and evaluate culture as symbols and symbol-systems quite precisely, the present analysis will empirically derive the structural patterns of the ideologies of "upper" and "lower" social groups so that they can be compared, and the impact of communication patterns on them evaluated. More precisely, this paper will empirically evaluate, first, the extent to which ideologies of upper and lower social groups differ in structure and focus, and secondly, the ways the media and interpersonal communication are associated with those ideologies.

Methods

Analytical Method

Metric multidimensional scaling provides a particularly appropriate scheme for the assessment of ideological structure because of its holistic approach. As Geertz (1964) asserts, ideology can be treated as a map of "problematic social reality." A multidimensional analysis allows us to array a set of social elements using a spatial analogy or "map" to represent the interrelationships or structure of that set. Further, the multidimensional approach to be described can be argued to satisfy the conditions for quantitative measurement of ideology set forth by Mannheim.

The scaling technique suggested here is a particularly rigorous application of the procedures grouped under the rubric of multidimensional scaling (cf., Nunnally, 1967; Shepard, Romney, and Nerlove, 1972). Multidimensional scaling, like factor analysis, attempts to array a set of variables in a configuration across a number of axes. Unlike factor analysis, the multidimensional techniques rely on measures of distance rather than correlation to derive relationships (Torgerson, 1958); thus, they maintain the data in a form more closely related to the original measurements allowing the researcher to observe the implicit structure of results. As Gulliksen suggests in his seminal treatment of multiple-dimension measurement (1946), the procedure is similar to that of the surveyor who finds the location of a particular point by knowing its distance from all other objects around it.

Two major varieties of multidimensional scaling exist. The most prevalent is the nonmetric approach developed by Shepard (1974) and Kruskal (1964). However, this version suffers severe limitations for comparison because of its reliance on monotonic transformations. The classical variety, developed by Torgerson, is based on ratio level operations and linear transformations. For many years this approach has not been widely used because of the difficulty of achieving the high level of scaling necessary to perform its operations. However, recent adaptations such as three-mode factor analysis (Tucker, 1966) and matrix aggregation (presented here) have shown strong signs of reviving this powerful analytic technique.

Metric multidimensional scaling transforms a set of ratio pair-comparisons of the ideological (or other) concepts under study to a configuration

of points with projections on orthogonal axes. Judgments are made about the dissimilarity or discrepancy of elements in the set and grouped to form a matrix of all judgment pairs. This matrix is aggregated (by simple arithmetic averaging) across the sample to derive a mean distance matrix representing the average dissimilarity for all concepts in the set. The resultant matrix is then transformed to a centroid scalar products matrix which is subsequently factored to provide loadings, or projections, on the orthogonal dimensions spanning the space (see Woelfel, 1972; Serota, 1974; and Barnett, Serota, and Taylor, 1974, for extensive descriptions of the mathematical and theoretical considerations involved in this procedure).

The result of these transformations is a configuration of the stimuli set which represents the ideological structure treated as a complete configuration of elements of social reality in continuous, metric space (for other, similar uses of these techniques, see Gillham, 1972, and Woelfel, 1974).

It should be emphasized that we are dealing with the aggregated set of cultural interrelationships. Unreliability in the individual case is compensated for by selecting an appropriate sample to describe the aggregate configuration. Further, according to Mannheim's definition of total ideology, this method would be unsuitable for ideological measurement were it applied only to the individual. For these reasons, averaging judgments across the sample to achieve an aggregate configuration of discrepancies provides a reliable representation of a social group's ideological structure.

Design

The present research effort, which focuses upon developing a clear strategy for studying communication and ideology, was carried out in two parts. The first step in this effort consisted of generating and selecting concepts for the scaling instrument which reflect salient and integrated aspects of political ideology. The second step was to examine the configuration of these concepts within two social groups in conjunction with measures of structural and information influences on ideological formation, and on consequent social behavior.

Concepts were selected by the careful review of responses to a set of theoretically derived questions on the components of social change and social structure (see Appendix A). A careful procedure for the selection of salient components of current social reality was devised. Initially, a set of questions on the Weberian notions of political, economic, and social power, and on the influences and outcomes of social change were developed. These items were divided and administered to two simple random samples of households in Lansing, Michigan (N = 41) and Oakland County, Michigan (N = 40), by telephone interview. The subjects were encouraged to provide as many responses as they felt necessary for any particular question.

The result of this process was a list of over two hundred concepts pertaining to structure and change in the American social system. From this list, eleven main categories of high frequency responses were derived.

Responses were grouped into these categories on the basis of similarity to the category heading or minor variation in response from the heading (e.g., "rich people" and "the wealthy" were placed into a category for "the rich"). In several cases, the categories could be reduced to a single common response ("media"), while other categories needed further refinement (e.g., politics divided into "government," "Democrats," and "Republicans"). The final outcome of the sorting task was the arrival at a list of thirteen key concepts used by the respondents, which represent those elements most often viewed as relevant to the domain of political ideology. Political ideology is conceived as those aspects of the culture relevant to defining, describing, evaluating, and explaining the socio-political structure, and changes or events within this structure. The derived list of concepts follows:

(1) Big business
(2) Unions
(3) The rich
(4) The middle class
(5) The poor
(6) Republicans
(7) Democrats
(8) The average person
(9) Government
(10) The media
(11) Revolution
(12) Protest
(13) Apathy

In addition, the concepts "socialism" and "me" were added for theoretical reasons. The concept Me allows the respondent to provide a report of dissimilarity between the self-concept (represented by Me) and all other concepts in the set. When Me is aggregated it provides a measure of the social balance point or perspective from which all other concepts can be viewed. Previous research (Taylor, Barnett, and Serota, 1975) has shown this to be an extremely useful concept for understanding attitudinal orientation and making behavioral predictions. "Socialism" was added because it is relatively central in defining kinds of societal change both in theory, in the American context, and cross-nationally.

Following this concept generation procedure, instrumentation for the main thrust of the study was developed. Our questionnaire includes pair-comparisons for all possible combinations of concepts. Respondents were asked to make judgments of dissimilarity using the form:

> If x and y are u units apart, how far apart are concept a and concept b?

This item wording requests a ratio distance judgment by asking, "how far apart are a and b," as a proportion of the standard distance provided by the researchers ("if x and Y are u units apart . . ."). This format allows the respondent to report any positive value, thus producing an unbounded, continuous scale of differences. In this study, the criterion or standard pair selected was John F. Kennedy and Dwight D. Eisenhower (a pair used

repeatedly in previous studies) and the value of the dissimilarity given this pair was 100 units.

In addition to the pair-comparisons, the instrument includes measures of the three Weberian power dimensions for some of the concepts. Further, measures of frequency of exposure to interpersonal and media messages, and of similarity of interpersonal and media information to one's own view were incorporated. Finally, demographic data, frequencies of various behaviors, and perceptions of personal social position were included. With the exception of some demographic items, all questions were presented as ratio judgment scales. In this present paper, only a limited subset of that data will be reported.

Sample

The sample for this preliminary examination was drawn from students in communication at Michigan State University and in sociology at Lansing Community College. A total sample of 55 cases was used with these divided into two groups; the first group represents a lower social stratum (N = 16), and the second group represents an upper social stratum (N = 39). The sample excludes respondents who provided grossly incomplete responses. Respondents were asked to indicate whether they considered themselves "upper class," "middle class," "working class," or "lower class." Those falling into the first two groups comprised the upper stratum sample while those in the second group formed the lower stratum sample. A final sort was made to check the consistency of perceptions with SES indicators; those subjects with gross inconsistencies were deleted from the study. In this trial, consistency between status as perceived and from objective indicators was sought so that a clear evaluation of the ideological assessment technique could be made.

With the exception of the common experience of some college education, the two strata represent disparate populations, and this allows us to assess ideological differences if they are indeed present. Consistency within the samples was high and the results to be presented represent a good test of the theoretical and methodological issues raised above.[2]

Results

Ideological Configurations

While the reader may appreciate that only fragments of the massive data generated by these procedures can be presented here, several striking findings are immediately apparent. First of all, for both upper stratum and lower stratum samples, the complexity of the ideological structures is far greater than has heretofore been suspected. In each of the samples, fourteen orthogonal dimensions are required to array the fifteen ideological concepts without distortion (see Tables 1 and 2). Clearly, one dimension,

as suggested by Marx, two dimensions, as suggested by Ladd (1969), and Eysenck (1947), or three dimensions, as suggested by Weber (1958), cannot alone or together account for a significant proportion of the total variance exhibited in the configurations of either social group. Moreover,

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Tables 1 and 2 about here
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since only fifteen of the most important ideological concepts are included in this analysis, these configurations may underestimate the actual complexity of the ideological structures of each social group.

A second finding of significance is the non-Euclidean character of the ideological structure of both samples. For both groups, six of the 14 characteristic roots (eigenvalues) are negative and large, indicating substantial departures from a linear Euclidean structure. A plausible interpretation for this finding may well be the effects of context on the perceptions of concepts. Thus, for example, combining both samples, individuals report the following dissimilarities among the concepts The Rich, Big Business, and Me:

	Me	The Rich	Big Business
Me	0	313	237
The Rich		0	19
Big Business			0

No Euclidean triangle can be generated from these figures. Apparently, respondents attend to different aspects of Big Business and The Rich when comparing either to themselves. While this outcome is anticipated by most socio-psychological theory, the perhaps overly-rationalistic views of ideology by major ideological theorists generally fail to consider such discrepancies.

A third finding of interest is that the upper stratum group see their aggregate self ("Me") as 41 percent further from the remaining concept set as compared to the lower stratum group. The average dissimilarity of Me from all other concepts was 159 units for the upper stratum group and 113 for the lower stratum group. Of the 14 concepts paired with Me, only The Rich and Government are closer to the upper stratum Me than the lower stratum Me.

The upper stratum group views the ideological domain as more distant from their aggregate me. In addition, members of the upper strata generally view the concepts as more dissimilar from each other than members of the lower stratum. This may reflect either differential cognitive abilities associated with social position, actual differences in ideological configuration, or both. This is important theoretically as well as for evaluating the findings by multidimensional methods.

Finally, initial analyses of these data show a considerable but not complete similarity across strata in the ideological configurations. After rotation to least squares best fit on each other, the data show a mean difference in the locations of the concepts across the two samples of only 87.19 units, less than the perceived separation between Kennedy and Eisenhower (see table 3). The correlations of the first two dimensions of the

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Table 3 about here
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spaces across samples are .84 and .73 (see Appendix B). These differences are exaggerated by a substantial disagreement about the locations of Big Business (123.89 units), The Rich (169.78 units) and Socialism (124.31 units).[3] Both samples see The Poor as quite close to Revolution. The lower stratum sample reports The Poor-Revolution separation as 123 units (i.e., 1.23 times the separation between Kennedy and Eisenhower), while the upper stratum sample sees the same separation as only 59, or half the separation between Kennedy and Eisenhower. This may be a finding of real substantive import, and close scrutiny of this perceived separation as economic conditions change seems appropriate. The two strata appear in substantial ideological agreement, with the discrepancy of thirteen of the fifteen concepts being less than 100 units. The two concepts with large discrepancies are Big Business (124 units discrepant), and The Rich (170 units discrepant).

Effects of Communication on Ideology

It is difficult to make clear inferences about the effects of communication on ideology using only the first wave of what is intended as a longitudinal analysis. However, certain findings are suggestive even at this early stage. The correlation between the frequency with which concepts are discussed by the lower stratum sample and the disagreement across strata about the position of those concepts is -.65; the equivalent correlation of the upper stratum frequencies and the discrepencies is -.40.[4] These figures indicate that the least disagreement exists for those concepts most frequently discussed. This seems to suggest a substantial homogenizing effect of interpersonal communication, although it may, as well, indicate a preference to discuss those concepts about which people find agreement. The equivalent correlations for frequency of media coverage of the concepts are only .07 for the lower stratum sample, and .08 for the upper stratum, which seem to indicate that gross media effects are negligible.

Table 4 contains the frequency of contacts with interpersonal and media sources concerning eleven of the fifteen concepts. The upper stratum report

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Table 4 about here
- - - - - - - - - - -

many more interpersonal contacts concerning big business and the rich than the lower stratum sample; the lower stratum sample reports many more interpersonal contacts concerning self, unions, the middle class, the average person, government, and the media than the upper strata. The pattern of results concerning media contact is quite different from interpersonal contact results for the two groups. The upper stratum sample reports, overall, many more contacts with the media concerning the ideological concepts. The discrepancies between these two strata concerning media contacts are large across more than half of the concepts. In addition, one finds that the upper stratum is much more dependent (or much more reliant) upon the media to provide information concerning unions and big business than it is upon interpersonal sources. The lower stratum utilizes the media more than interpersonal contacts for information concerning big business but it largely utilizes interpersonal contacts for information concerning unions. In general, both strata are involved in more interpersonal (as opposed to media) contacts for these two important ideological concepts. In summary, while the lower stratum seems to receive ideological information from interpersonal contacts, the upper stratum is more closely tied into media contact for ideological information.

Table 5 casts some additional light on this issue, showing that both upper and lower stratum samples are able to selectively agree or disagree with the position of both interpersonal contacts and media on specific ideological concepts. In general, the upper stratum sample feels roughly equal agreement about expressed positions of both media and interpersonal sources on ideological ideas, while the lower stratum sample finds itself

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Table 5 about here
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somewhat more similar to the views of interpersonal sources than media sources. In most cases, however, the extent of disagreement seems to be moderate, averaging only about 60% of the dissimilarity specified for Kennedy and Eisenhower, a separation we believe most sample members see as moderate.[5]

Discussion

Once again, the preliminary nature of this study and the particular character of the sample caution against overinterpreting these data. However, noting some of the findings, several important results seem secure.

In the multidimensional configuration, the lower stratum sample sees its aggregate "me" as only 78 units from the position of the media (.78 times the Kennedy-Eisenhower separation) while the upper stratum sample places its aggregate "me" 85 units (or .85 times the Kennedy-Eisenhower separation) from the media. The relative similarity of media and government to the aggregate "me" of each stratum illustrated by the fact that

the lower stratum and upper stratum see their aggregate selves as, respectively, 183 units and 167 units from the government's position. This suggests that the media, as an institution, is ideologically more closely allied with the public (and is perhaps more credible as an information source). Of additional interest, both groups see their aggregate selves as closer to socialism (lower, 107; upper, 172) than to unions (lower, 120; upper 264) or to big business (lower, 147; upper, 272). Even the Democratic party is further from the aggregate "me" of the lower group (127) than is socialism. Should these findings, and other consistent relationships in the data matrix, be replicated in larger, more general samples, they would serve to indicate that the American people are alienated from the ideological conception of society generally considered to be the American concensus.

Several significant results can be drawn from this report of findings and are summarized here. First, the ideological structure is considerably more complex than has been heretofore suspected. These data show the configuration to be both multidimensional and non-Euclidean. Secondly, the media are associated with the position of the population more closely than many other establishment concepts in the ideological structure. Third, upper stratum-lower stratum agreement about ideology is substantial but not perfect. Fourth, the upper stratum appears to get more information about ideology from the media while the lower stratum receives more ideological information from interpersonal sources. Notably, the upper stratum gets more information about big business and the rich from interpersonal sources than does the lower stratum. And finally, the metric procedures illustrated here seem quite adequate to the task of mapping even so complex an information pattern as the general ideological beliefs of a culture.

As a preliminary effort in the application of multidimensional analysis to ideology and communication, the implications of these results appear insightful. Even with the small samples employed, the aggregated metric technique yields configurations with good face validity and intuitive consistency. The concurrent measures of information and source-receiver similarity have provided some interesting and potentially important results. However, analysis has lead us to the development of stronger and conceptually clearer scaling techniques which will be employed in the next phase of our research.

What is clearly needed now is a longitudinal analysis utilizing these techniques (and subsequent improvements) on larger samples which are representative of the U.S. population as a whole. The value of such data may well be worth some considerable effort and expense. Certainly, as results here suggest, such study should provide a strong case for the importance of the role of communication in the formation of ideology, and the policies and behaviors which stem from it. In conclusion, this study demonstrates both the theoretical and methodological utility of characterizing political ideology as a spatial configuration. It appears that the seminal ideas of Mannheim, Geertz, and others relating communication to ideology, can be fruitfully investigated in this way.

FOOTNOTES

1. This focus for empirical analysis does not follow only from Geertz' conception of ideology. Mannheim himself came to very similar conclusions; see Ideology and Utopia, 1936:83.

2. In the actual analysis, dissimilarity scores greater than 4,000 were eliminated. This amounts to eliminating extreme views of discrepancy, and therefore the similarity of ideological configurations across the two social strata may be overstated. Hence, this may be a conservative test of stratum differences.

3. These differences are also substantially exaggerated by technical limitations in our least squares rotation program which rotates only the first six real dimensions; most likely these discrepancies should be smaller than they appear.

4. Note that these correlations are based on the concepts as the unit of analysis. For example, the correlation of -.65 is between column 3 in Table 5 and the corresponding discrepancy's in Table 3. Hence, our generalizations are to other concepts in the population of ideological concepts, and not to other persons in the sample. Of course, these results are germaine to this sample. Further investigation will reveal the generality of these results across samples of respondents and concepts.

5. Judgments of source-receiver similarity were made as ratios of the perceived similarity of Kennedy's and Eisenhower's ideas. This criterion had a prescribed value of 100 and respondents were told that zero represented no dissimilarity. With this information, they were requested to make judgments of the similarity of their own conceptions and those provided by media (interpersonal) contacts.

	1	2	3	4	5	6	7
1 Me	.00						
2 Big business	146.93	.00					
3 Unions	120.00	128.66	.00				
4 The rich	379.26	13.64	70.42	.00			
5 The middle class	30.93	55.31	67.85	166.33	.00		
6 The poor	61.25	159.73	46.92	172.50	112.25	.00	
7 Republicans	101.00	35.43	124.68	92.75	70.25	86.25	.00
8 Democrats	127.18	49.68	42.93	70.81	46.93	51.12	87.86
9 Socialism	106.87	69.50	48.31	123.43	117.62	50.37	290.31
10 The average person	24.37	131.00	95.81	138.66	26.87	53.62	71.00
11 Government	183.12	29.42	65.93	28.56	140.00	107.14	38.12
12 The media	77.81	31.14	77.81	45.93	168.12	230.00	55.93
13 Revolution	100.56	223.21	58.00	132.60	80.31	123.06	105.25
14 Protest	65.00	102.50	32.13	132.13	57.60	118.13	97.66
15 Apathy	54.26	58.75	119.26	75.69	45.33	96.13	119.33

	8	9	10	11	12	13	14	15
1								
2								
3								
4								
5								
6								
7								
8	.00							
9	73.12	.00						
10	45.81	168.68	.00					
11	40.75	113.06	170.35	.00				
12	51.56	134.75	149.33	46.68	.00			
13	111.56	95.13	122.00	219.37	85.80	.00		
14	94.06	54.73	98.80	171.14	123.86	26.21	.00	
15	70.86	95.60	36.85	54.80	104.40	101.14	78.46	.00

Table 1a. Aggregate Concept Dissimilarity Matrix for Lower Stratum Group ($12 \leq N \leq 16$; reported dissimilarities > 4000 were excluded from means computation).

		1	2	3	4	5	6	7
1	Me	-180.70	-23.31	-45.06	23.41	-9.88	2.78	-.95
2	Big business	47.45	-22.87	-80.60	-1.28	48.91	-20.85	2.56
3	Unions	7.28	32.74	20.46	3.33	-44.35	-27.99	11.57
4	The rich	184.43	17.79	45.21	-5.93	11.07	4.35	-1.36
5	The middle class	-38.31	-9.45	13.09	-22.70	48.72	-20.83	5.90
6	The poor	-42.81	24.71	18.23	-98.46	-39.03	-1.20	-9.25
7	Republicans	12.31	-137.21	30.16	-8.70	-14.25	-14.14	-9.55
8	Democrats	17.14	3.76	-10.21	-13.12	-11.15	9.03	32.08
9	Socialism	-8.05	142.88	-41.31	7.88	3.49	.83	.36
10	The average person	-34.97	-30.14	37.03	-37.95	29.60	30.97	27.42
11	Government	66.26	-22.02	-77.10	-25.77	-47.85	2.86	-12.84
12	The media	34.16	-31.93	-32.17	107.49	-21.19	12.99	8.32
13	Revolution	-35.84	29.56	102.13	54.86	-16.41	10.69	-8.44
14	Protest	-26.66	23.08	34.21	25.05	31.57	-36.91	-16.78
15	Apathy	-1.69	2.41	-14.09	-8.11	30.76	47.41	-29.05
	Eigenroots	81565.42	46242.22	34368.61	28481.16	14647.24	6825.25	3568.34

	8	9	10	11	12	13	14	15
1	-1.21	-.32	.49	-2.35	-3.01	-6.30	16.70	150.77
2	-4.10	.08	-3.27	-34.01	-32.13	-45.85	-53.17	-16.74
3	1.81	.01	20.24	10.12	-51.32	-11.72	3.56	-16.55
4	-1.23	.33	.61	-6.35	2.73	17.42	18.38	147.72
5	21.47	-.06	2.90	2.05	21.22	45.24	-10.32	-9.14
6	-5.52	-.07	-7.17	-23.89	-7.59	62.00	-48.57	-16.28
7	-.88	.02	-4.80	-9.75	-2.75	-10.07	108.03	-45.84
8	2.16	.03	-19.57	37.91	-24.41	-11.50	.42	-6.13
9	-.72	-.01	-2.46	-16.41	20.21	-6.33	103.39	-44.64
10	-10.11	-.06	12.97	-4.77	34.13	-20.42	-5.41	-28.67
11	5.28	.12	4.11	18.30	52.72	-44.89	-37.69	-5.86
12	-2.49	.06	.85	-10.96	8.92	80.45	-28.20	-44.11
13	6.73	-.06	-7.20	-20.91	4.58	-64.96	-49.89	-17.18
14	-13.88	-.04	-2.37	38.85	21.12	8.92	-23.95	-14.98
15	2.71	-.00	4.68	22.19	-44.43	8.02	6.73	-32.31
	Eigenroots							
	902.86	.26	-1158.64	-6600.52	-11670.60	-22019.64	-33639.11	-53961.00

Table 1b. Coordinate Dimension Values for the Lower Stratum Group.

		1	2	3	4	5	6	7
1	Me	.00						
2	Big business	272.15	.00					
3	Unions	264.18	161.81	.00				
4	The rich	286.52	22.02	152.83	.00			
5	The middle class	33.42	90.87	81.89	118.45	.00		
6	The poor	133.71	268.68	90.44	310.35	85.65	.00	
7	Republicans	240.52	38.68	134.28	33.68	74.15	201.30	.00
8	Democrats	129.43	90.59	63.86	82.44	53.37	78.33	195.94
9	Socialism	172.07	237.45	96.36	293.86	104.25	59.92	217.94
10	The average person	58.05	108.10	87.30	170.28	29.39	85.47	117.48
11	Government	167.15	59.41	122.52	38.55	104.74	213.35	97.64
12	The media	85.31	59.76	93.92	62.66	89.78	149.08	89.28
13	Revolution	164.78	244.15	116.46	289.55	145.07	58.76	244.89
14	Protest	129.02	243.84	79.17	222.82	94.60	43.51	164.89
15	Apathy	93.78	126.86	123.59	119.72	50.35	71.15	99.21

	8	9	10	11	12	13	14	15
1								
2								
3								
4								
5								
6								
7								
8	.00							
9	80.92	.00						
10	60.73	158.83	.00					
11	61.15	219.91	173.56	.00				
12	59.91	151.10	115.15	74.00	.00			
13	126.56	66.23	190.46	315.73	190.66	.00		
14	93.71	73.56	118.10	210.21	153.15	81.10	.00	
15	100.10	200.43	58.92	82.34	115.00	256.77	244.86	.00

Table 2a. Aggregate Concept Dissimilarity Matrix for the Upper Stratum Group ($36 \leq N \leq 39$; reported dissimilarities > 4000 were excluded from means computation).

		1	2	3	4	5	6	7
1	Me	-77.91	140.55	-57.99	9.89	5.75	3.40	2.84
2	Big business	125.90	-41.41	-14.37	11.58	-55.84	26.07	-23.56
3	Unions	-10.54	-88.76	61.45	-25.63	9.74	-15.74	8.63
4	The rich	164.33	-41.24	-39.02	-1.20	2.60	-32.51	17.28
5	The middle class	-.42	17.37	-9.47	24.72	.31	7.71	-14.03
6	The poor	-123.99	27.59	70.39	-.75	5.26	-8.51	12.62
7	Republicans	89.34	-29.83	25.51	73.60	43.60	25.42	3.31
8	Democrats	-5.65	-8.36	-25.75	-66.41	-33.37	-29.84	-5.82
9	Socialism	-115.21	-32.02	13.46	-39.18	2.30	47.21	-22.32
10	The average person	-5.89	32.74	11.83	45.55	-21.47	-36.33	-31.13
11	Government	111.43	43.87	8.47	-63.67	45.47	11.39	-10.22
12	The media	36.41	11.50	-38.34	-11.50	2.24	31.37	35.06
13	Revolution	-148.19	-71.17	-35.59	25.68	-47.21	4.01	19.80
14	Protest	-92.65	-45.46	-40.41	11.24	71.63	-26.49	-9.00
15	Apathy	53.04	84.64	69.84	6.07	-31.03	-7.16	16.54
	Eigenroots	132842.29	51526.43	24869.98	19950.14	17159.78	9097.87	4887.05

	8	9	10	11	12	13	14	15
1	.01	.48	-4.60	8.40	-32.19	1.62	29.03	92.66
2	-6.17	-.14	25.45	11.51	3.33	52.84	-1.86	50.42
3	-5.15	-.30	-20.27	36.38	-24.77	3.13	52.24	51.66
4	9.51	-.14	-19.16	-18.52	7.14	-7.37	-62.97	66.45
5	28.30	.06	-12.18	32.27	49.95	-15.34	17.58	-33.72
6	-2.06	.09	30.23	-1.74	42.55	-14.73	-47.73	64.82
7	1.22	-.10	12.51	-25.79	-16.48	-43.11	50.30	3.55
8	2.55	-.02	16.79	-26.27	13.90	-33.20	77.86	-20.65
9	1.24	-.11	-29.90	-31.53	.75	1.47	-25.09	19.24
10	-22.37	.11	-17.00	2.94	1.29	-33.96	-26.11	-41.31
11	1.47	.15	17.58	19.25	-33.99	-26.57	-49.99	-53.10
12	-22.81	.04	-10.23	9.73	41.50	-.27	11.19	-48.25
13	7.76	-.24	10.93	7.58	-42.89	-20.09	-37.00	-53.39
14	-2.10	-.15	9.66	-6.03	6.60	73.24	4.11	-34.58
15	8.59	.29	-9.87	-18.17	-16.71	62.32	8.43	-63.79
	Eigenroots							
	2131.76	.61	-4855.29	-6163.96	-11527.01	-17785.78	-24117.78	-39336.71

Table 2b. Coordinate Dimension Values for the Upper Stratum Group.

Table 3. Estimate of Concept Discrepancies across Strata, by Least Squares Rotation of First Six Real Dimensions

Concepts	Discrepancies
Me	64.33
Big Business	123.89
Unions	80.09
The Rich	169.78
The Middle Class	68.23
The Poor	79.26
Republicans	76.20
Democrats	92.99
Socialism	124.31
The Average Person	22.10
Government	61.71
The Media	80.24
Revolution	74.87
Protest	94.51
Apathy	95.37
Mean Discrepancy	87.19

Table 4. Frequency of Interpersonal and Media Contacts Concerning Ideological Concepts, for Upper and Lower Strata Groups[a]

Concept	Upper Strata		Lower Strata	
	Interpersonal (1)	Media (2)	Interpersonal (3)	Media (4)
Big Business	40.06	55.69	15.93	42.39
Unions	32.58	73.33	85.71	36.46
The Rich	56.75	39.77	42.14	39.46
The Middle Class	45.19	45.03	66.93	47.77
The Poor	46.16	49.26	42.21	47.62
Republicans	49.06	57.95	46.36	44.77
Democrats	49.81	56.89	42.93	41.69
The Average Person	46.60	32.59	126.71	28.46
Government	95.43	75.29	127.79	77.54
The Media	65.56	61.65	123.43	47.25
Me (Yourself)	78.23	14.85	102.69	5.50

[a] Frequency is reported for "the last month."

Table 5

Reported Similarity of Views of Interpersonal Contacts and Media Contacts to Own View about Selected Ideological Concepts for Upper and Lower Strata

Sample Group	Upper Stratum		Lower Stratum	
Concepts \ Source	Interpersonal	Media	Interpersonal	Media
Big Business	94.05	65.35	70.75	32.00
Unions	60.44	83.41	47.58	35.50
The Rich	61.16	65.08	90.67	25.40
The Middle Class	41.03	44.19	44.75	47.27
The Poor	39.84	52.22	44.00	134.73
Republicans	68.19	71.83	55.50	114.64
Democrats	60.48	66.20	27.50	118.46
The Average Person	53.58	48.37	39.67	124.82
Government	71.97	71.09	67.42	38.00
The Media	56.00	63.47	40.17	20.00
Me (Yourself)	44.76	43.17	47.10	40.00
$\bar{X}$ =	60.15	60.19	54.13	63.78
N =	39	39	16	16

100 units = The disagreement a separation between Kennedy and Eisenhower.

0 units = Complete agreement.

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Appendix A. Open-ended questions used to elicit ideological concepts.

1a. In your opinion, who has great political power in this country?

1b. Who do you feel has very little political power in this country?

2a. In your opinion, who has great economic power in this country?

2b. Who do you feel has very little economic power in this country?

3a. In your opinion, who has great social power in this country?

3b. Who do you feel has very little social power in this country?

4a. How does change take place in the United States?

4b. Through what other activities do you feel change could take place? In other words, what activities would make change occur or make it more likely?

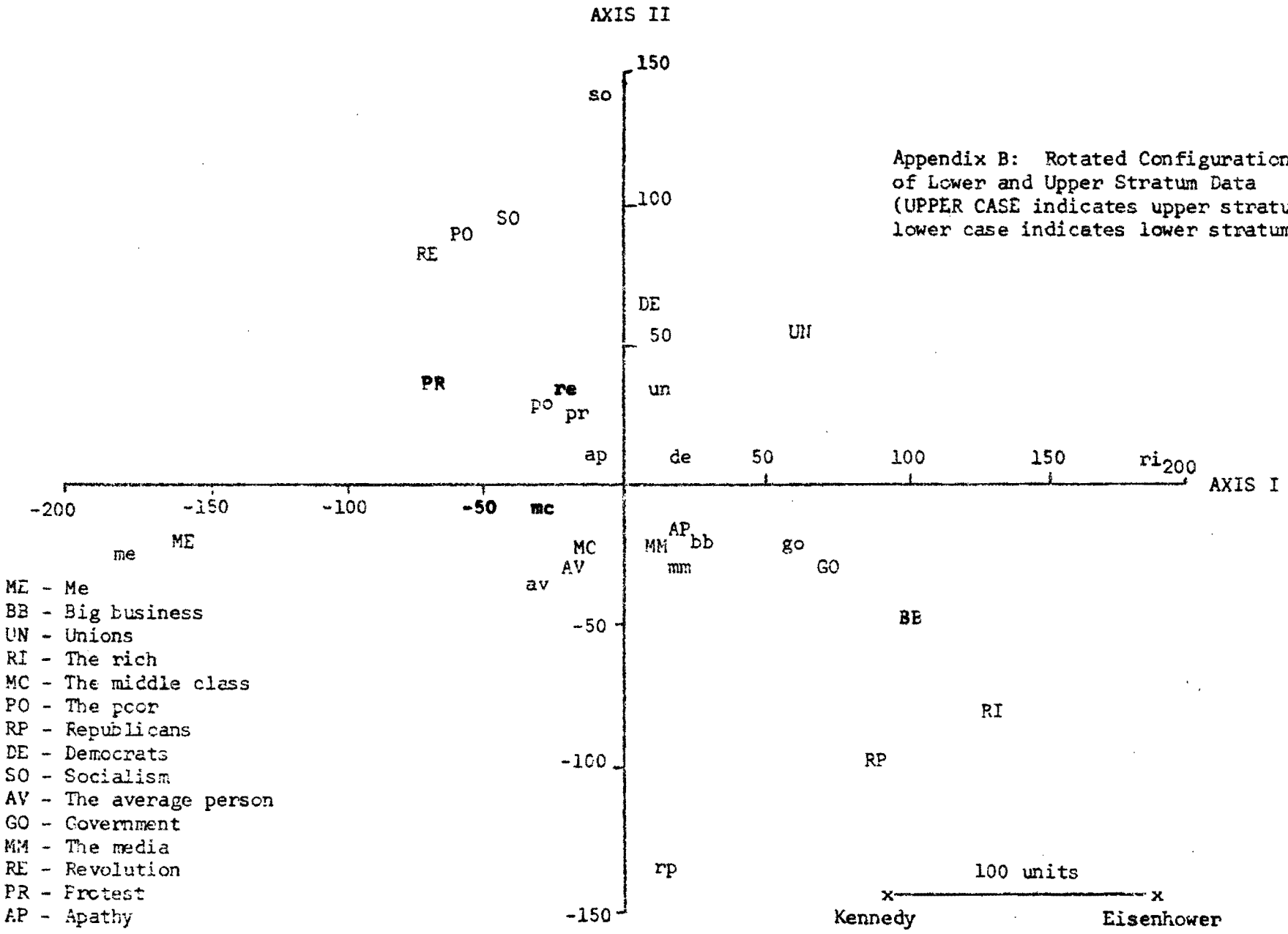
4c. What do you think prevents change from occurring in the United States?

5a. What types of good or desirable outcomes do you think will occur from social change activities in this country?

5b. What types of bad or undesirable outcomes do you think will occur?

6a. What types of good or desirable outcomes do you think will not occur from social change activities in this country?

6b. What types of bad or undesirable outcomes do you think will not occur?



Appendix B: Rotated Configurations of Lower and Upper Stratum Data (UPPER CASE indicates upper stratum, lower case indicates lower stratum)

ME - Me
BB - Big business
UN - Unions
RI - The rich
MC - The middle class
PO - The poor
RP - Republicans
DE - Democrats
SO - Socialism
AV - The average person
GO - Government
MM - The media
RE - Revolution
PR - Protest
AP - Apathy

ERRATA

1. Re-examination of the raw data revealed that certain minor errors occurred in the computation of the mean distance matrices for both groups. While these errors produced insignificant effects on the results, they do yield some minor variation in the actual values reported, both in the text and tables.

   In the upper stratum mean distance matrix, 20 of the 105 cells had minor changes within two units of the original values. Exceptions to this were cell 13-4 with a new value of 294.41, and cell 14-4 with a new value of 229.64. In the lower stratum group six cells had changes. Four of these, cell 3-2 (120.63), cell 14-4 (120.14), cell 15-4 (91.71), and cell 11-10 (163.00) had changes greater than two units.

   Transformation of the mean distance matrices to spatial coordinates with these few changes yielded no differences greater than that occurring from the rounding error inherent in the computer program.

2. The last sentence on page 8, carrying over to page 9, should read:

   > Clearly, one dimension, as suggested by Marx, two dimensions, as suggested by Ladd (1969), and Eysenck (1947), or three dimensions as suggested by Weber (1958), cannot alone or together account for a significant proportion of the total variance exhibited in the configurations of either social group (for any concept or subset of concepts.)

   The clause denoted by brackets was inadvertently deleted from the final draft.