Results of a study which measured two complementary forms of political thinking, conceptual differentiation and conceptual integration, are reported. Conceptual differentiation is a person's ability to identify individual political issues, acts, and events which compete for attention in the news media. Conceptual integration is a person's ability to synthesize individual issues and ideas into abstract terms. The study involved 137 hour-long depth interviews concerning national politics which were tape recorded and transcribed. Conclusions are that depth interview data strongly contribute to the interpretation of more routinely gathered poll data; that two-thirds of the mass electorate make only marginal use of political abstractions in their evaluation of the political system; and that there is no indication that those with lower scores on conceptual differentiation and integration are more easily manipulated by political symbols or arguments. Separate sections of the technically written paper describe ways in which people relate the conditions of their own lives to those of their fellow citizens and political authorities and discuss the measurement of conceptual differentiation and integration as related to political issues, units of government, organized political groups, general constituencies, and political figures. Later sections describe the levels of differentiation and integration to variables such as educational level. (NC)
DIFFERENTIATION AND INTEGRATION:
TWO DIMENSIONS OF POLITICAL THINKING

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Abstract

Differentiation and Integration: Two Dimensions of Political Thinking

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Conceptual differentiation is defined as the number of discrete, concrete elements of political information an individual possesses and utilizes in his or her evaluation of political issues. Rather than the more commonly used textbookish political knowledge indices, this measure corresponds more closely to knowledge-in-use. Conceptual integration is defined as the explicit and spontaneous organization of ideas and information in terms of abstract or ideological constructs, and represents an expansion of Philip Converse's research on levels of ideological thinking in mass publics. These two related dimensions of the processing of political ideas and information emerged from a content analysis of verbatim transcripts of 137 hour-long depth interviews with a representative urban mass sample concerning national politics and social trends.

The first sections of the paper describe the language and constructs American citizens use to relate the condition of their own lives to those of their fellow citizens and to the political authorities. Even in this smallish sample, spectacular variation in the cognition and evaluation of political life is revealed. Later sections of the paper relate variation in levels of the differentiation and integration of political information to antecedent variables such as level of education and resultant variables of political behavior. As expected, education plays a very central role, but there are some surprising interactive linkages with patterns of political thought. One especially intriguing finding is that conservatives have significantly lower scores than liberals on indices of differentiation and integration. The ramifications of these findings for survey research methodology and dominant theories of mass political behavior are discussed.
It has been noted that belief systems have never surrendered easily to empirical study and quantification (Converse, 1964). In fact, empirical work in this field may have passed a unique benchmark when two sets of researchers working independently had derived rather similar measures of political sophistication -- the special irony being that the two measures were scored in opposite directions.

Given that one researcher's sophistication is another's simplistic thinking, we may benefit from an attempt to rethink the dominant approach to measurement which relies so heavily on inferences from correlation matrices of political opinion items. The present study puts forward an alternative approach to the measurement of patterns of political thinking which is based on a rigorous content analysis of the natural language of political discourse. The study involves 137 hour-long, loosely structured depth interviews concerning national politics. Each interview was tape-recorded and transcribed. Trained coders combed through the transcripts recording each spontaneous reference to a political object or issue and the linkages the respondent made between them. There was striking variation in both the number of political references made and patterns of linkage. Many interviewees repeatedly responded to political questions in strictly personal terms. A primary finding of the study was the identification of two complementary dimensions of political thinking: Conceptual Differentiation -- the ability to identify and discriminate among various political issues, actors and events which jostle each other for attention in the news media, and Conceptual Integration -- the explicit organization of political ideas and issues in terms of abstract or ideological constructs.
Before turning to a more detailed description of the research design and findings, however, it may be helpful to briefly review the correlational research tradition in the study of political opinion structure which predetermines this research. 2

MEASURES OF POLITICAL ATTITUDE STRUCTURE

The seminal article in this field is clearly Converse's "The Nature of Belief Systems in Mass Publics" (1964). Expanding on central findings of The American Voter (1960) and Herbert McClosky's work (1960) on different styles of political thinking in political elites and masses, Converse contrasted the level of organization of political opinions in a sample of Congressional candidates and a cross-sectional sample. The research is organized around the concept of constraint defined as, "the success we would have in predicting, given initial knowledge that an individual holds a specific attitude, that he holds certain further ideas and attitudes." Converse went on to explain, "if a person is opposed to the expansion of Social Security he is probably a conservative and is probably opposed as well to any nationalization of private industries, federal aid to education, sharply progressive income taxation and so forth." (1964, 207). Converse's measure of constraint was the average inter-item correlation coefficient for a set of survey items concerning prominent political issues. The constraint in belief systems so measured for the elite group was found to be twice that of the mass sample (Goodman and Kruskal tau coefficients of .53 and .23 respectively). Converse was cautious not to interpret the data as evidence that his elite respondents were more "logical" in their thinking.
But clearly the higher level of constraint was seen as an indication of cognitive sophistication.

In our estimation, the use of such basic dimensions of judgment as the liberal-conservative continuum betokens a contextual grasp of politics that permits a wide range of more specific idea-elements to be organized into more tightly constrained wholes. We feel, furthermore, that there are many crucial consequences of such organization: With it, for example, new political events have more meaning, retention of political information from the past is far more adequate, and political behavior increasingly approximates that of our sophisticated "rational" models, which assume relatively full information. (1964, 227).

Converse went on to discuss a broad array of related issues and alternative approaches to measurement but the correlational measures of constraint have attracted the most attention and recently have become the basis for an intense but polite debate in the journals over two issues: (1) are the beliefs of the mass public really significantly less constrained than the elite? (Luttbeg, 1968; Brown, 1970; Bennett, 1975; Farah and Miller, 1974) and, (2) has the pattern of low constraint and sophistication among mass publics changed since the quiescent Eisenhower era? (Pomper, 1972; Nie and Andersen, 1974; Bennett, 1973; Nie, Verba and Petrocik, 1976; Miller et al., 1976; Popkin et al., 1976; and RePass, 1976).

The use of inter-item correlations as an indicator of sophisticated cognitive structure did not pass without serious and sustained criticism. More recently, Popkin et al. (1976), Bishop et al. (1978), Sullivan et al. (1978), and Petrocik (1978), among others, have noted that the correlation used in this literature are extremely sensitive to changes in question format. Since item formats have changed dramatically from survey to survey
and even within the ICPSR national election series, comparison across studies and over time is extremely problematic. Additionally, Repass has made the point that surveys in which more of the items have common referents exhibit higher inter-item correlations. He notes, for example, that one of the more recent of the ICPSR election studies had three items referring to Vietnam which may artifactually increase the apparent constraint in the foreign policy area (1976, 829).

These are important technical problems for which, hopefully, technical solutions will be found. But there exists a much more difficult and fundamental issue: Is opinion constraint really a valid indicator of ideology or cognitive sophistication? If efforts to reduce and control for measurement error in constraint indices are successful, will we be in possession of a theoretically meaningful instrument or simply a highly refined measure of some other phenomenon?

Our discussion thus far has touched on two distinct constructs for which constraint has been used as an indicator and both carry considerable intellectual baggage. The constructs are ideology and cognitive sophistication. Ideology is one of a number of frequently used concepts with frustratingly diverse and multiple meanings. Minar (1961), Putnam (1973), Mullins (1972), Bergmann (1974), Johnson (1968) among others, have put together definitional lists. Drawing on their detailed compilations and discussion it is possible to identify four primary elements of the construct: ideological thinking is, 1) politically oriented, most public events and issues are perceived and interpreted in political terms; 2) structured around abstract concepts, cognitive links are made between specific issues.
and abstract theoretical principles; 3) closed, opinions are rigid and resistant to new (especially contrary) information; and 4) emotionally charged.

Political sophistication has also been defined and operationalized in diverse ways by different scholars. Our attention here will focus on the overlap between the sophistication and ideology constructs. Definitions of both, often include the first two components identified above, a political orientation, and the structuring of political thought through the use of abstract concepts. The intriguing question of whether politicized and abstract thinking leads in some natural way to closed-mindedness, or especially emotionally charged political beliefs will be set aside for later analysis.

Constraint measures make rather awkward indicators of ideology and sophistication. They require the assumption that increased correlational constraint between a number of specific issue items indicates that the opinions have been deduced from more abstract principles. The difficulty stems from the fact that there are numerous potential sources of constraint other than abstract thinking. Converse, for example, in his original article elaborates the distinction between logical, psychological and social sources of constraint. He notes that while Americans might have absorbed the notion that "communists are atheists, very few may understand the historical and philosophical roots of such an observation and may well be repeating an often-heard phrase or simply associating 'communists' with everything wicked and evil" (1964, 212).

It would seem to make strategic sense at the current stage of inquiry to maintain a clear distinction between the definitional components of
ideology and sophistication and to pursue unique measures of each. One individual might study history and politics and after a thoughtful review of issues and events come to an ideological position. In contrast, another might simply be repeating slogans and abstractions absorbed uncritically from friends and associates. The componential approach allows us to explore empirically why an ideologue may be more or less sophisticated and why a sophisticated observer of politics may be more or less ideological.

TWO DIMENSIONS OF POLITICAL THINKING

If the correlation-constraint approach to measuring political attitude structure dominates the literature, it is less a result of the method's proven validity than its methodological convenience — every opinion poll and survey of more than one item offers another opportunity for analysis. A fruitful inquiry into the nature of belief systems, however, requires a more sensitive approach to measurement, one which allows the respondent the opportunity to structure his or her own beliefs rather than simply respond to a sampling of prescaled, fixed alternatives. Robert Lane's depth interview approach in his study of mass political ideology (1962) offers particular promise for the study of everyday political discourse.

This work draws on the tradition of the clinical interview and an earlier study by Smith, Bruner, and White (1956). Lane's research was based on very loosely structured interviews with 15 middle and lower class men from New Haven. There was an amazing breadth of topics discussed ranging from childhood perceptions of politics, fears, hopes, and life plans to a detailed evaluation of current political issues. Basically Lane's approach was to continue the interview until the respondent was "talked out" and was
merely repeating points already made. The interviews involved from 10 to 20 hours of contact and collectively resulted in 3,750 pages of typed transcripts, which in turn became the basis of his book. The detailed transcripts allowed Lane to study both the language his respondents used and the flow of their logic as they introduced issues, explored alternatives and explained their thinking or, as was often the case, their lack of interest in a particular matter.

A more systematic approach amenable to larger scale survey applications is Converse's Levels of Conceptualization measure. It is based on a content analysis of transcribed open-ended answers of respondents to eight questions: what they liked and disliked about the Democratic and Republican parties and what would make them vote for or vote against each of the major presidential candidates. The interviewing was conducted during the presidential campaign of 1956 so most citizens had been confronted with information about the candidates and parties and given the matter some thought. Converse was interested in what organizational framework or yardstick individuals used to locate the candidates and parties and make sense of the electoral hubbub. His finding that a mere two and a half percent of the electorate in 1956 provided clear evidence of ideological structuring of beliefs and opinions has been frequently cited. (1964)

Lane's approach has the special strength of allowing less articulate respondents the time to develop and express their thoughts and there is greater sensitivity to the character and organization of language than in Converse's measure. But the clinical interview approach lacks the focus, rigor and comparability which is necessary if the data are to be used ultimately in multivariate causal analyses, and the data collection costs
for 20-hour interviews are prohibitively high. Converse's approach has
the advantage of viable large scale application but the focus on parties
and candidates at election time could distort the assessment of the day-
to-day processing of political information by mass publics. Also the fact
that in his measures interviewers transcribed respondents' remarks in long-
hand on the questionnaires may have further restricted the data's accuracy.

We sought a middle ground, a viable, general-use, and theoretically
grounded measure of cognitive structure in mass publics which drew on the
strengths of the work of both Converse and Lane, and maintained the dis-
tinctions between the various components of the ideology and sophistication
constructs. As noted above, two dimensions of analysis emerged from a
careful reading of their parallel inquiries and the related literature
concerning the structure of mass political cognitions -- conceptual dif-
ferentiation and integration.

For our purposes conceptual differentiation is operationally defined
as the number of discrete, concrete elements of political information the
individual utilizes in the course of his or her hour-long depth interview.
It is akin to political knowledge. But veridical knowledge would be better
measured by a focused exam. Conceptual differentiation might better be
described as knowledge in use. We focus on patterns of cognitive discrimi-
nation, the ability and inclination of the individual to identify and
separate the various issues, political figures, units of government, interest
groups, events and social trends. Only spontaneous, volunteered references
to a specific issue or political entity are coded in this measure.

Intuitively, one would expect that an undifferentiated view of politics
would be self-perpetuating because without a certain minimum awareness of
basic political processes and institutions, political news from television and newspapers would be a meaningless and confusing jumble of strange words, unfamiliar faces and vaguely familiar reporters standing in front of buildings in Washington.

The second dimension of analysis, conceptual integration, is complementary to the first and reflects the other common component of sophistication and ideology — the use of abstract concepts in the structuring of belief elements. It is complementary in the sense that an individual must differentiate elements of the political domain to some minimum degree in order to have elements to integrate. Conceptual integration is operationally defined as the spontaneous and persistent use of abstract concepts to structure beliefs and opinions in the course of the depth interviews on American politics.

The complementarity of the concepts of differentiation and integration may be useful in coming to understand the process by which some citizens come to have a full and sophisticated understanding of the political process and others not. Growth in political sophistication would seem to involve a spiraling, back and forth between an increasingly differentiated understanding of the political process which in turn requires the individual to use a higher level of abstraction or some anchoring concept to put the discrete pieces of information in some kind of manageable and accessible order. This new structuring of the political domain in turn allows the individual to assimilate, retain and interpret further political information. As an analogy, it might be helpful to imagine what a game of chess looks like to the uninitiated — the chess board a confusing array of strangely shaped pieces which jump and zig-zag around until someone miraculously wins.
Gradually, however, through observation and the asking of occasional question, the observer becomes able to differentiate the pieces and their characteristic movements and if he is persistent, ultimately to understand how the individual movements fit together into a unified strategies and styles of play. The notion of a spiraling process between differentiation and integration in an individual’s acquisition of knowledge in a particular field has numerous antecedents in the fields of education, psychology and political sociology. (Piaget, 1952; Bruner, et al., 1956; Zajonc, 1968; Schroder et al., 1967; Berelson et al., 1954; Gardner, Schoen, 1962; Whitehead, 1929) Alfred North Whitehead in his writings on education and science for example, laid particular emphasis on the rhythm of learning, a patterned movement back and forth between facts and theories, between the excitement of a new insight into how the parts fit together and the hard work of studying each of the individual elements which must predicate that insight. In some ways this process reflects the collective growth of knowledge in science as characterized by Kuhn (1962), the continuing accumulation of facts until a new integrative paradigm emerges to order the data in a more sophisticated and parsimonious way.

Although most versions of this process identify it as a chicken-and-egg causal loop, differentiation is often defined in one sense as prior to integration suggesting that it would be possible to have a highly differentiated but unintegrated conception of politics but not the reverse. Perhaps a strong interest in politics but lack of formal schooling might lead to such a configuration. The following analysis will attempt to explore that pattern and the extent to which those with less education might use more concretely focused anchoring concepts to structure their political universe.
It is also possible, of course, that some individuals simply have a high tolerance for the inherent ambiguities of a highly differentiated but unintegrated conception of the political world. A related phenomenon is the possibility of "ideology by proxy," whereby the less sophisticated rely on more sophisticated acquaintances for cues in understanding what goes with what. (Katz and Lazarsfeld, 1955, Converse, 1964).

There are some strong suggestions that the variables of conceptual differentiation and integration in the political sphere may have some natural discontinuities, some cutting points of special significance for political behavior. One possibility with roots in Marx's conception of the lumpenproletariat (1852) and survey research's version of know-nothingism (Hyman and Sheatsley, 1947) is the idea of a self-perpetuating and unmoved bottom strata of individuals who successfully defend themselves from any increasing interest in or information about politics. Another cutting point at the higher end of the integration dimension which suggests itself is a working understanding of the liberal-conservative continuum. It would seem to be a requirement for the successful processing of the daily outpouring political information for the news media. We turn, then, to an analysis of the depth interviews to address these issues.

THE BAY AREA SURVEY DEPTH INTERVIEWS

A series of transcribed hour-long depth interviews on attitudes toward the political system conducted by the Berkeley Survey Research Center in 1972 offer a special opportunity to refine a new measure of political conceptualization. The original purpose of these interviews was to validate several new
scales of political alienation-allegiance and possible dissatisfaction with the quality of life. Data on a battery of over 500 closed-ended items had been collected in a previous interview and a self-administered questionnaire. The depth-interview technique of measurement validation was explained to respondents and then the interviewers proceeded to review a number of broad questions of politics, allowing the respondent to set the pace and tone of the interview.

A number of the characteristics in the BAS depth interview make it an especially attractive medium for exploring political conceptualization. Initial questions are diffuse and general, allowing the respondent to define the salient issues. But there were also extensive follow-up probes to clarify, for example, whether individuals dissatisfied with their economic situation blamed themselves, their boss, or blamed the political or economic system in some way for their fate.

After respondents were given ample opportunity to mention issues and events, a number of the more prominent issues of the day were raised by interviewers including economics, crime, race relations, the environment and the quality of education. An especially interesting section of the interview probes the respondent's thoughts on some rather abstract principles of politics including political freedom, equality, democracy and the legitimacy of political institutions in America. Interviewers were instructed to probe and challenge each comment in an attempt to bring out whatever reasoning lay behind these various opinions, thus presenting an ideal opportunity to explore patterns of logic and the individual's ability to organize facts and ideas.
The interviews averaged about an hour in length and were typed in full from tape recordings, resulting in single-spaced transcriptions which averaged about 20 pages in length. Four advanced graduate students in the fields of political science, sociology and law were recruited to code these transcripts for patterns of political conceptualization.

The first task was to count and code each spontaneous reference to a political object or issue. The unit of analysis was a passage, that is, the original question and response, and the one or two follow-up probes which concern the same topic. Some were brief and involved yes, no, or I-don't-know responses. Other passages dealing with high salience issues might run several pages in length.

The coders were looking for references to common identifiable political issues such as unemployment or high taxes, the mention of political figures, groups, general constituencies, events and, of course, units of government. The first coding decision when such references were made concerned whether the statement was, in fact, volunteered or whether the respondent was simply repeating a term or issue raised by the interviewer.

Once a volunteered reference was located, the second step in the coding process was to establish that the reference was made in a political context. This was often the most difficult part of the process. Take, for example, a respondent raising the issue of crime. If the reference was to "...increasing crime in the streets, the government ought to do something about it," or if it concerned lenient judges or an unworkable penal system, the reference is obviously political in nature. If instead the comment involved an incidence
of crime in which the respondent or a relative was personally involved, it is not clear whether the individual actually sees the issues as a social or political problem requiring the coordinated response of the community. The key analytic concept here is "supra-individuality." Thus if an event or object is seen by the respondent as being caused by or requiring the response of more than one individual, it was judged to be a political reference. This was not a hard and fast coding rule. The coder had to make each decision in the context of the particular interview. References to clearly political entities such as Congress, or the Constitution, or the use of such terms as "socialism" or "free speech" are coded as political references automatically.

The final step in the coding process was to insure that references to specific objects and issues were counted only once. Our interest is in the number of distinct political objects and issues mentioned by the respondent rather than the frequency with which various issues were raised. Coders transcribed the issues and terms on special coding sheets to insure that each was counted only once even though it might be referred to at several points in the interview.

CONCEPTUAL DIFFERENTIATION

The key notion underlying measurement of conceptual differentiation is specificity. How many specific political issues, actors and events will a respondent bring up in the course of an hour-long interview? Among the 137 respondents there was an impressive range of from 1 to 94 political references made in the course of the interview. The average was 26.7, the standard deviation, 16.5.
One might justifiably ask how an hour-long interview on politics can be conducted without a respondent mentioning more than one political object. The answer is straightforward enough. The respondents talk about themselves. Their mode of thinking, it turns out, is overwhelmingly self-centered, and concrete. Are they satisfied about the way things have been going in this country? Their response concerns their job, family, friends and neighbors. Each politically-oriented probe elicits a response which reflects only the individual's own life-space. An economic-situation probe elicits comments on the price of bread at the market last week or a decision to put off buying a new TV. Questions concerning racial problems may elicit a detailed description of the "black lady who was elected head of our PTA." There is no reference to social or political causes or consequences.

Such patterns of thought which translate all political and social questions into personal ones, however, are not the modal response. The political discourse of most people reflects some mixture of social and personal concerns. The analysis proceeds, then, to explore this mix. What kinds of political objects are most salient to the mass citizenry? Are there some distinctive clusters and patterns of political discourse?

Political Issues. The coin of the realm in the political speech of the mass citizenry is clearly the "political issue" — a topical policy question or cluster of policy questions usually identified in the media and interpersonal discussion by a key term or phrase such as "busing," "taxes," "civil liberties," "crime in the streets," or "the energy crisis." It was not necessary that respondents actually take a position on each issue or that they mention a particular key term. A respondent need only raise the issue in some way. Typically the flow of the interview would go as follows:
Q: Could you tell me some of the things about America you're well satisfied with?

A: Well, I'm glad to see we're out of Vietnam, and it looks like latest announcements are that we might try to solve our trade deficit problems, I think also racial relations problems, I think maybe we're making progress there...

In this case the original question is very broad, basically asking the respondent to list issues which are salient to him.

Another pattern involves a question which raises a general issue area such as the environment and the respondent translates that key term into more specific issues which are meaningful to him.

Q: How about the environment? Are you satisfied with the quality of the environment around here?

A: I think we're moving in the right direction toward the environment to try to restrict automobile traffic into San Francisco, for example. It's interesting that many of the new office buildings are being built without any new parking facilities whatsoever. It's a step to encourage people to take mass transit and BART [Bay Area Rapid Transit]...

If this respondent had answered simply that he thought the environment was getting better or worse, he would not have been credited with raising an issue because in such a case he would only be responding directly to the question. The essence here is not opinionation, but awareness of currently discussed policy questions. In one case an elderly gentleman mentioned prohibition which is not in most circles at the moment a hotly debated topic. This case, accordingly, was coded instead as a reference to an historical event. On the average, respondents volunteered references to about ten issues in the course of the depth interview.
A distinction was made between specific and general issues. In order to qualify as a "specific issues" the reference had to concern a particular bill or proposal recently considered by the voters or a legislative body. Examples of specific issues would include a school bond referendum, a proposed new freeway, a bill in Congress, an international incident. As one might expect, most references were to more general issues, at the rate of about four to one.

In the course of discussing issues and events, various political actors might be mentioned. The reference might be to the President or Congress, an organized interest group, an issue or a private citizen. One fairly straightforward way of organizing such references is as follows.

Units of Government. We are concerned here with distinctions between the judicial, legislative and executive branches of government, between the two houses of Congress, between federal, state and local authorities, or any of the various federal agencies and bureaus. For some individuals, the term government may refer to an undifferentiated bureaucratic monolith. There may exist no notion of differentiated responsibility or checks and balances. The bulk of the citizenry, however, does differentiate units and levels of government. Accordingly, the number of references to the state department, the IRS, FBI, the Supreme Court, the mayor, the local zoning commission, and the like, was used as an index of the extent of such differentiation. On the average, about four such references or distinctions were made.

Organized Political Groups. The modal reference here would be to a political party or an interest group of some sort such as the AMA, the Home Owners Association, the John Birch Society, or the NAACP. Almost all interviews
involved some volunteered reference which compared the Democratic and Republican parties. Since such references to the major parties were so often linked together, they were counted as one reference (that is, one distinction). References to all other parties and interest groups were each counted as an additional reference. At times, individuals might forget the proper name of a group, get it confused with other groups or ask the interviewer if she could recall the name. Thus, the American Independent Party might be referred to as "that other party...you know, Wallace and those people." As long as the referent was clear, it was included in the differentiation index.

General Constituencies. One of the favorite topics of political pundits and students of public opinion is the notion of issue publics or potential issue publics, a group of citizens who by reason of their racial, geographic, ideological, religious or social characteristics are likely to be affected by and concerned about a particular issue or piece of legislation. When our respondents singled out some collectivity as actually or potentially having been influenced by or influencing a political decision, it was coded under this category. The reference may be very broad such as to poor or rich people, or to more specific groups -- people on fixed incomes, blacks, Mexican-Americans. There were in this mass sample about twice as many references to these broad constituencies as to actual organized nongovernmental groups.

Political Figures. Is Archie Bunker a political figure? His name was mentioned several times as typifying an approach to politics. Despite the fact that he is a fictional character, it was decided to include such references here because of their prominence in popular culture -- in some
weeks Archie Bunker may be responsible for getting more individuals to think about political questions than the president and leaders of Congress combined. Most references to prominent political figures, however, are much more straightforward and easily recognized. Most references were to the president or former presidents. With the exception of the governor of California, all individual political figures who were mentioned by more than 10% of the sample had occupied the presidency. A little more than four references to various political figures were made in the average interview.

A final and somewhat smaller category was devoted to Political Events such as the U-2 incident or a recent presidential trip and ongoing governmental programs such as Medicare or the Work Incentive Program for welfare recipients. Also included were references to broader historical trends such as increasing bureaucratization or a weakening of the role of religion in American life. There were about five such references in the average interview.

Figure 1 about here

Figure 1 summarizes these patterns of political discourse. A series of factors and canonical correlation analyses were conducted on the indices of these different elements of political discourse and the results provided strong evidence of unidimensionality and communality. No significant sub-patterns such as a prominent covariance between, for example, interest groups and specific issues were in evidence. For the remainder of this discussion conceptual differentiation will refer to a simple additive index of the total number of respondent references to all categories.
The intercoder reliability of the index is not easily assessed because of the complexity of the coding task. We computed a rough index by assigning pairs of coders to single interviews with a resultant intercoder correlation for the index of $r = .84$.

CONCEPTUAL INTEGRATION

The measurement of conceptual integration included a rather different type of content analysis of the interview transcripts. In addition to scrutinizing passages and enumerating each reference to an abstract concept, coders rated the interview as a whole, functioning in this case as an expert judge. Coders were asked to characterize the predominant pattern by which respondents organized, linked, contrasted, or put in context the various political issues, actors and events, which were mentioned in the course of the depth interview. The typology used closely parallels Converse's five Levels of Conceptualization (Campbell et al., 1960:216-265; Converse, 1964:214-219). Given the prominence of Converse's distinctions, we sought to test their generalizability beyond the election context to a broader evaluation of styles of political thought. His typology proved to be a remarkably valid, robust and viable approach to the measurement of conceptual integration. Only two percent of the interviews were judged unclassifiable and an additional eight percent were noted to involve ambiguities, but were judged codable. Because the classification of an hour-long interview entailed the evaluation of a much more complex stimulus, the intercoder reliability fell somewhat below the figures reported by Converse for his initial study. Coders assigned respondents to identical or adjacent categories 82 percent of the time, while in the earlier case they were classified in identical categories 82 percent of the time. Converse's
definitions of each of the five levels were revised slightly as indicated in Figure 2 to make them somewhat more general and appropriate to the evaluation of a full length and broad-ranging depth interview. The liberal-conservative continuum was frequently and characteristically used as a conceptual yardstick by respondents in the highest category but its use was not a prerequisite for inclusion in that level (as in Converse's original system). The following examples illustrate the spontaneous and unambiguous use of political abstractions in the day-to-day political discourse of citizens whose active political participation for the most part was limited to voting and an occasional campaign contribution. These remarks, of course, were typically neither particularly profound nor original but they do reflect the ability of the individual to put issues in a more abstract context.

Q. If you were trying to imagine an ideal system of government, how close do you think our present system of government comes to that ideal?

A. Well, I don't know of anything that is more satisfactory. I have some pretty reactionary ideas. I would go back to the idea that if anyone's going to vote on taxing property owners they should be property owners who would be paying the taxes. That idea went out a couple of hundred years ago, but it's still a pretty good idea...

Q. Are there any other areas of life that we haven't talked about that you think are very important?

A. Yes. The medical. I think there should be more research done on it....Finding the why-nots of the human body, is important to the future.
Q. Do you think that is the responsibility of government?

A. Yes, I think the government should have that responsibility—that is a big responsibility of the government. They should apportion more money into it.

Q. If they had to raise taxes to do these things—would you want it done?

A. Yeah. I would be in favor of it. That sounds like socialism, but that is the way it has to be. The type of socialism that is bad that I am talking about is the complete authoritative power of the president of the United States...not programs that have to be implemented for the welfare of the people.

In both of these examples the respondents' vocabulary is tied to the liberal-conservative continuum. In other characteristic examples of conceptual integration the emphasis was more historical as in one case when the respondent contrasted America's role in Vietnam to that of England during the American revolution. In another case the respondent anchored many of her remarks with references to abstract principles of freedom of speech and freedom of the press including an extended scenario explaining how a reporter's right to protect his sources is essential to a healthy democracy.

The second level is interstitial, reflecting peripheral, vague, occasional or especially restricted use of abstract concepts. This second category appears to be populated by two types of individuals -- those who have a sophisticated grasp of most political abstractions and concepts but are not inclined to use them often and those whose use of abstract concepts reflects limited understanding or some level of confusion. Several respondents, for example, restricted their use of the liberal-conservative dimension to spend-save issues, another equated those terms exclusively to the politics of the young versus the old. Political thought characteristic of level II is not necessarily unsophisticated, just contracted and less explicit than...
level I. For example, individuals might refer to democracy or the principle of freedom of speech in passing without making it clear whether they had a very full understanding of the historical and philosophical roots of those concepts, or use the terms simply as representative symbolic phrases signifying American ideals of government.

As indicated in Figure 2, the hour-long interviews generated substantially higher estimates of the use of abstract concepts and conceptual integration in the mass population than Converse found. Our estimate for level I is about five times the size of Converse’s original parameter, levels I and II combined about two and a half times the size. Part of this may be due to the more active political climate of the 1970s and the more extensive opportunity in the depth interviews for individuals to demonstrate their approach to political issues and current events. Nonetheless, those making significant use of abstract political concepts represent less than a third of the citizenry. It is likely that the length and breadth of the interview exceed to the point of diminishing returns and that interviews two or three times this length would be unlikely to generate percentages for levels I and II combined, which would exceed a third of the sample.

If a substantial number of citizens do not make consistent use of such constructs as the left-right continuum or similar abstractions to organize their assessment of American politics, what do they use? There are, apparently, two answers — two more concretely focused anchoring points for the organizational political discourse. In one case, corresponding to level III, citizens organize their response to politics on the basis of affiliation with a prominent social grouping. Passages within the depth interviews
characteristic of this level include a pattern of defining liberalism and conservatism in group interest terms:

Q: In politics we often hear the terms "liberal" and "conservative." What do those terms mean to you?

A: Well, it means that the Democrats are liberal and the Republicans are conservative. That's the way I look at it, and I find that it's just true.

Q: And what is there that makes the Democrats liberal and the Republicans conservative? What are their characteristics?

A: Well, the Democrats are for the people and the conservatives are for big business and the big financial interests in the country. And, they are governed by those big financial interests. And you see, they believe that they should control the finances and the big business in the country. And then they should hand out the jobs to the people. That's been always the way. But the Democrats don't feel that way about it. That's why we have unions.

Equally often group interests are more precisely focused in narrower and straightforward self-interest terms. A retired army sergeant, for example, answered the questions on his satisfaction with American government, the quality of life in America, race relations, the need for political leadership and patriotism, with specific references to the interests of retired military personnel—a total of 18 references within the hour-long interview. This group-interest mode of cognitive organization characterized roughly a third of the sample.

Another alternative to a reliance on abstract concepts to organize political discourse is characteristic of level IV. Citizens organize their response to government on a seemingly straightforward mechanism of electoral reward and punishment based on the incumbent's ability to generate peace, prosperity, and a sense of administrative competence. Among these respondents, references to issues are seldom linked to abstract concepts, or to each other.
They are occasionally linked to social groups but most often exist as free-floating political observations. To the extent that issues are structured, they are seen as being either successfully or unsuccessfullly resolved by recent government action. Skeptical of abstract arguments of political philosophy on how the problems should be approached and who might differentially benefit, these respondents reflect the stereotype of "the man from Missouri," demanding to be shown the concrete result. One respondent, for example, came right to the point:

Q: Do you think there is anything you can do about the things you are dissatisfied with?

A: No, I don't. Just keep voting and trying to find the right candidates and just trying to do what I should do...live a decent moral life and do what I can in the community.

Q: In some way, can you have an effect?

A: A slight effect, yes. But it takes a while. If you vote somebody in, you are not sure what he can do. No man can promise anything, but I can certainly work to defeat him if I find somebody who promises something I prefer more. Or if he disappoints me, I can work very hard to defeat him next time. I always help in politics.

This group, according to estimates generated from our depth interviews, represents a little less than a third of the adult population.

The fifth and final level identifies those consistently apolitical respondents who may make an occasional reference to a political issue or two but show little evidence of any of the patterns of cognitive organization identified above.

Figure 2 illustrates another aspect of our approach to the study of conceptual integration. The "levels" of conceptualization can be seen as
independent dimensions rather than mutually exclusive, hierarchical categories. Much of the attractiveness of Converse's original discussion of this typology is its parsimony and clearly ordered organization of "types" of belief systems in mass publics. Indeed, in its more generalized form, it has proven to be a remarkably robust analytic tool. But because references to political abstractions, groups and issues were measured independently, we are in a position to test the unidimensionality and cumulative nature of these phenomena and explore the possibility of natural discontinuities or cutting points in the distributions. The rightmost four columns of Figure 2 list the numbered central and peripheral references to abstract concepts, references to group interest, and free-floating issue references, for those in each of the five "levels" of conceptualization.

A visual inspection seems to indicate two rather distinct cutting points which set off levels I and V at both ends of the continuum from the middle mass. The small group classified in level I appears to rely heavily on abstract concepts to structure their comments (abstractions appear at a frequency three to four times that of the rest of the sample. Yet they make on the average 3.7 more references to group interest than those in the group interest category and twice the number of issue references than the rest of the sample. The small apolitical counterpart at the other end of the continuum reflects an equally unique behavioral pattern, in this case a strong disinterest in matters political or abstract.

A visual inspection also reveals the categories are cumulative but as it turns out not enough so that it qualify as a Guttman scale. Generally the prevalence of passing references to abstract concepts (a more difficult criterion in the Guttman sense) among the lower scale types generates too many scaling errors to satisfy the traditional Guttman criteria.
Because of the prominence of abstract references at all but the lowest level of conceptual integration we took a closer look at the use of abstractions and their occasional linkage to the overarching liberal-conservative continuum. The first step was an attempt to identify clusters of abstract concepts by enumerating natural terms and phrases respondents use to denote them — a complete lexicon for the 137 depth interviews. The task turned out to be not unmanageable, in fact we turned up only 287 distinct political terms, phrases or cliches. All of these references were spontaneous, volunteered by respondents rather than interviewers, so they should reflect the salience of these organizing concepts to the public rather than the inquiring scientists. Drawing in part on Herbert McClosky's typology of political orientations (1975) we identified six prominent concept groupings as summarized in Figure 3.

Figure 3 about here

The most intriguing finding was the dominance of the status quo-change dimension. Since this part of the analysis is especially sensitive to the substantive focus of the depth interview and the groupings themselves are ad hoc, these results are suggestive, rather than definitive. But they do harken back to de Tocqueville's characterization of the American perspective as practical, centrist, and suspicious of utopian ideologies of radical reform. (1840:1-3)

Figure 3 illustrates that although the American public does not routinely use the left-right spectrum to identify a richly articulated and overarching philosophy of governance, they do find occasional use for related
terms to identify (and most often to condemn) non-centrist political perspectives. Americans, despite a mode of language which reflects a cynicism about the motives and abilities of politicians, bureaucrats and government in general are rather pleased with the functioning of their political system as a whole. Even critical events such as Watergate seem not to have shaken this faith. (Sniderman, et al., 1975) For many respondents, especially in the middle mass (levels II, III and IV) a collapsed form of the liberal-conservative continuum proves useful. Ignoring left versus right, they simply identify political actors and issues as more or less distant from the status quo. A more philosophical conception of modern liberalism which emphasizes government intervention, redistributive strategies and abstract conceptions of equality is notably less prominent.

THE COVARIATION OF DIFFERENTIATION AND INTEGRATION

Differentiation and integration, as we have noted, are complementary processes. It is hard to imagine an attentive, politically oriented individual who in following the political news of the day has not developed some appreciation of the various abstract structuring concepts which are the stock in trade of journalists, columnists and editorial writers. We expect that an increasingly differentiated view of the political arena will generate an increasing need for some means of conceptual organization, perhaps some variant of the liberal-conservative continuum. In turn, the image of a citizen with a fully articulated and sophisticated understanding of political abstractions who is unable to differentiate the executive from the judiciary,
for example, is rather implausible. It is an issue, of course, easily tested with the data at hand.

We contrasted the Index of Differentiation with both the five-level typology of integration and the continuous Index of Integration — the actual number of references to abstract concepts. The former analysis is easily summarized in tabular form and is presented as Figure 4.

The strong pattern of covariance has a law-like quality to it which reinforces our hypothesis of complementarity. Only a scattered few respondents follow an extreme deviant pattern of either very high integration and low differentiation or the reverse. 39% of the sample falls directly on the center diagonal. The correlation coefficient for this grouped data calculates out to .60. The scatter plot for the full continuous distribution of the two indices resembles a textbook example of bivariate homoscedasticity, in this case $r = .67$. In regression terminology, our respondents on the average would make about two additional references to the issues, actors or events, for every abstraction mentioned.

The issue of heteroscedasticity and non-linearity, incidentally, is of special theoretical relevance in this case. As we had noted earlier, there is a certain intuitive appeal to the idea of a critical mass in both the differentiation and integration variables, some kind of threshold or take-off point of differentiating the most basic elements of the political system which must be reached before the natural spiraling process of increasing differentiation and integration comes into play. Such threshold effects suggested themselves in the continuous distributions for the five
levels of integration in Figure 2, for example. Similarly, if another critical threshold existed in the middle or higher levels of conceptual integration we might expect that increasing differentiation would not be associated necessarily with additional integration. Thus a basic repertoire of abstract concepts, so to speak, would suffice, and the covariation between differentiation and integration would be less distinct in upper levels, i.e., heteroscedasticity. But, visual inspection and a series of statistical tests revealed no evidence of either non-linearity or heteroscedasticity. If a critical threshold exists, it is not evident in the interplay of differentiation and integration, or takes a form more subtle than these measures can discern.

Although they covary and could be conveniently combined in an additive index of sophistication, differentiation and integration are statistically and analytically separable. The correlation of .67 corresponds to 45% shared variance, a moderate enough level to allow us to explore the structuring of political thought in mass publics further through an analysis of deviant cases, those respondents lagging significantly behind in their use of abstract concepts and those whose use of abstract concepts far exceed what one would expect from the Index of Conceptual Differentiation. Most of the sample, of course, falls on the non-deviant diagonal as illustrated in Figure 5.

Figure 5 illustrates our model for deviant case analysis derived from Figure 4. Those with consistently low or high levels of differentiation and
integration are in the lower left and upper right cells of the diagram. Our primary interest, however, focuses on the discrepant cases, those with particularly diffuse or prematurely structured belief systems, with index scores one standard error above or below, respectively, the bivariate regression line for the indices of differentiation and integration. For the sake of clarity, those with intermediate scores on differentiation and integration are eliminated from this stage of the analysis. We will return to this figure shortly in an attempt to establish whether such deviant patterns are in fact related to unique clusters of opinion and behavior.

DEMographic patterns.

As students of public opinion, the impulse is deeply ingrained in most of us to seek out the demographic basis of opinion distributions and trends. Most political poll data, for example, routinely break down opinions by race, sex, educational level, income and region of the country. Unique chapters on the role of each of these variables have become de rigueur in empirical studies of public opinion and voting. Given all that attention, our collective intuitive estimates ought to be pretty accurate. Extrapolating from the numerous studies which identify those demographic groups which are most likely to be interested in politics, to vote, to follow political news in the media, to discuss politics with friends and colleagues, and to be best informed (Campbell et al., 1960; Key, 1963; Milbraith, 1965; Flanagan, 1972; Verba and Nie, 1972; Pomper, 1973; Asher, 1976) we would expect lower levels of differentiation and integration among blacks, women, poor people, both young adults and senior citizens, those with lower class origins and those in blue collar occupational settings, who presumably spend much of their time...
manipulating objects rather than ideas. In matters political, especially as they concern the use of political abstractions, one would expect the individual's level of education to be of special importance. Because the manipulation of abstract concepts is central to the educational process at all levels, we might expect that education would be especially highly correlated with conceptual integration.

Figure 6 reports the results of the series of multiple regressions which attempt to unravel the causal origins of differentiation and integration in mass political thought. The bottom line (both literally and figuratively in this case) reports the multiple $r^2$ or percent of variance explained by all demographic variables combined, revealing, as regressions of this sort go, rather low coefficients. These cognitive phenomena, it appears, are not easily predicted from a battery of demographic variables. The primary factors appear to be education, income, and race. In order to explore the possibility of a unique linkage between several demographic variables and one of these two indices, we followed a procedure of extracting the unique variance of each index by running an integration-differentiation regression, taking residuals and rerunning the demographic regressions on residualized dependent variables. The results are included in Figure 6. As expected, education is most strongly linked with conceptual integration. In fact, it may not be related at all to the unique variation in the differentiation index.

Overall, we conclude from these analyses that the patterns of political thought under scrutiny here are relatively weakly linked to the usual
demographic variables but that among these variables, level of education seems to be most significant. As we shall see shortly, however, the influence of education on styles of political thought is more complex than we had first anticipated.

EVIDENCE OF A SPIRAL PROCESS --

PATTERNS OF POLITICAL THINKING IN THE LIFE CYCLE

An interactive spiraling process of the type we have described is a very difficult causal pattern to untangle by means of a single survey study. We would benefit, of course, from repeated over-time measurements. But even then, because we have no theoretical basis on which to estimate lagged effects, we might move only a small distance toward a clarification of the causal process involved. The best available alternative strategy would seem to be an analysis of growth in differentiation and integration in the various age cohorts. We expect, given the spiral hypothesis, a steady increase in both indices with age. But the initial analysis of zero-order correlations between age and the indices of differentiation and integration indicated no significant relationship. Because of the possibility of a suppressor effect resulting from the usual negative correlation between age and education and because of the possibility of retrogression associated with senility and the status of senior citizens we pursued nonlinear and interactive effects through a series of analyses of covariance. Still, the results were non-significant and unpromising. At this point we returned to the spiral theory which had stimulated the analysis in the first place for a further clue on how the mechanism might work. Was it possible that education served as a catalyst and that the effects of age would be different for the lesser and more educated strata of our sample? Figure 7 illustrates
the rather striking results of the ensuing analysis.

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**Figure 7** about here

The upper portion of Figure 7 graphs the relationship of age with conceptual differentiation for three groups, corresponding to those whose highest level of education is grade school, high school, and college or above. The solid line designating the pattern for grade school respondents actually declines with age, starting a little above the overall sample mean for the differentiation index and dropping well below it. This seems to suggest that the spiraling pattern can actually work in two directions. Those who enter the work world early but with little formal education seem as capable as any to be attentive to and differentiate the various objects of political life. But without the help of integrative abstract concepts the realm of politics becomes threatening and confusing to some individuals. As a result they retreat into a less differentiated and more simplistic conception of politics. In contrast, just the reverse spiraling process is evident for the college-educated with the high school-educated falling in between with no linear trend. A similar pattern is evident in the bottom half of Figure 7. In this case conceptual integration doesn't actually decrease over time for the grade school subsample but we see a dramatic and fairly steady growth among the college educated. Also, we can see from the fact that these trend lines do not intersect that the relationship between education and integration is a much stronger one.

We cannot be sure that the interaction effects dramatically illustrated here are actually the result of accumulated exposure to political life through
increasing age because given the nature of this data we are unable to separate out age and historical cohort effects. It is often suggested, of course, that young men and women coming to political consciousness during the depression, the Second World War, or the Vietnam era, would be likely to have fundamentally unique perceptions of the political process. Of course, long-term panel data on these variables would be necessary to resolve this issue with any finality.

**ALTERNATIVE CAUSAL PATHS**

Clearly, education is an especially critical variable in the growth of sophisticated political thought. But it is not a prerequisite. We sought to determine what configuration of variables might explain how some individuals with less formal education exhibit high levels of both differentiation and integration. After all, 22% of those classified in the highest level of conceptual integration and 30% of those in the second highest level have a high school education or less. We analyzed the effects of early socialization, and later socialization in the occupational setting and social life on the differentiation and integration indices. The regressions indicated independent but small effects for level of income and a high status upbringing. Surprisingly, current levels of organizational participation and occupational status did not have a significant independent effect.

We then turned to the notion of a spiraling phenomenon of a different sort. It was hypothesized that the more concrete and immediate issues of local politics might stimulate interest and in turn increasing awareness and political involvement. Local political involvement is a likely candidate as an alternative path to political sophistication because it is traditionally
not strongly associated with education. Generally those most interested in international and national politics come from the highest educational strata while those with a particular interest in local politics can be found throughout the educational spectrum.

Figure 8 illustrates the correlation of local political involvement with differentiation and integration controlling for level of education. The Index of Local Political Involvement is based on the frequency of participation in six activities: attending meetings of the town council or local agencies, such as a school board, writing a letter to an editor, working with a local group to solve a community problem, signing a petition, or visiting an official's office as a result of a concern with community problems. The zero order correlation of the Index of Local Political Involvement with differentiation and integration is .25 and .31, respectively, controlling for education the figures drop to .18 and .24, indicating in both cases a strong independent effect.

COGNITIVE STRUCTURE AND POLITICAL BEHAVIOR

The discussion thus far has not emphasized a necessary link between styles of political thinking and political behavior. There are several reasons for this assumption. First of all, despite the vigor of ongoing policy debates, on a day to day basis, there are not many opportunities for political behavior per se among the mass citizenry. Of course, newspapers and television each day offer up political news which many of us absorb more
or less passively. But except for the political campaign season every several years, an occasional brouhaha at the local school board or a political petition, not much opportunity for the average individual to act on the basis of his or her political perceptions presents itself. During campaigning, political activities are highly routinized and usually professionally organized. There are ample opportunities for symbolic activities such as the wearing of buttons and displaying of bumper stickers. But the bulk of the public play roles of observers rather than participants. Second, as we have noted, the different styles of structuring political thought identified by Converse's terms "group interest" and "nature of the times" serve as functional alternatives to abstract thinking. Less politically sophisticated individuals whose party identification and political preferences are organized on a proxy mechanism, following the lead of unions or other organizations or trusted and more politically active friends and colleagues may have a functionally consistent set of opinions and may vote, as often in their own best interest as more sophisticated citizens who laboriously study the issues and candidates in making up their minds. We will return to this difficult issue of the ramifications of cognitive styles in public opinion for the functioning of the political in a concluding section. But first, in an attempt to probe a little deeper into the character of the causal status of the differentiation and integration variables, we have taken a further brief look at the depth interview data.

A caveat is in order here. The issue of causal direction in the linking of political belief patterns and behavior is complex. Again, we cannot assume that, for example, an increasingly differentiated conception of the political realm causes strong party identification. Perhaps there is an interactive or
increasing differentiation reflecting a movement from an apolitical to a political orientation) will be tied most closely to political participation, while increasing conceptual integration will be more closely tied to patterns of ideology and opinionation.

We turn first to issues of political ideology and party identification. We had available two indices of ideological orientation. One was a simple question which asked respondents to identify themselves on a five point scale from very liberal to very conservative. The other was a 35 item scale of attitudes towards specific issues in the liberal-conservative domain. (McClosky, 1975) We expected, of course, a non-linear pattern to be in evidence with the most liberal and most conservative exhibiting the highest levels of both differentiation and integration. We would expect a more distinct pattern for integration because of the salience of abstract principles to ideological thinking. Nothing in the research literature on mass ideology with which we were familiar would lead one to expect more differentiated thinking among individuals on the left rather than the right, or any greater dependence on abstractions per se. Thus we anticipated a symmetric U-shaped curve in both cases.
But as Figure 9 illustrates, there are some distinct differences we had not anticipated. It seems that, as defined by our measures of differentiation and integration, liberals are distinctly more sophisticated than conservatives in mass publics. The ideological self-identification measure is not particularly helpful because so few people identify themselves as very liberal or very conservative. In this graph we see evidence of non-linearity for the ideological elite who identify themselves as leaning far to the left or right on the political spectrum. But among the middle mass, the great majority of respondents who simply identify themselves as liberal, moderate, or conservative, there is a distinct linear trend of decreasing differentiation and integration moving from liberal to conservative. The ideology attitude index based on an actual compilation of opinions and beliefs, (and a better balanced distribution of respondents) demonstrates the linear trend more dramatically.

What would explain such a pattern? Liberals mention on the average seven more political objects than conservatives and are about one and a half times as likely to make reference to a political abstraction. Is it a spurious artifact of some sort? Probably not. Analysis of the distribution of education across these ideological categories indicates no significant confounding effects. We would not extrapolate from these findings to argue that the political leaders, scholars, and columnists of the right are any less sophisticated or disinclined to use abstract concepts. But it seems that in the way ideological packages filter down to the mass publics, the anchoring concepts of conservatism are perhaps fewer in number, less abstract, and less conducive to a differentiated perception of governmental process. This makes sense on an intuitive level. One thinks of the rugged individualist
of modern conservative thought who exhibits little sympathy for government intervention in our day-to-day lives, the growing federal bureaucracy, and the proliferation of abstract catch phrases based on "wars on poverty," "affirmative action," and the subtleties of detente. We might think again of the stereotypical man from Missouri who demands to be shown the concrete results and has little taste for the abstractions of modern politics. His is a conservative posture, perhaps populist in flavor, which reflects a cynicism toward the undifferentiated symbol of Washington/federal bureaucracy/high taxes/etc. Perhaps such reflections overinterpret the data. There may well be a simpler explanation. But at the very least, these striking differences between liberals and conservatives in the mass population deserve further scrutiny.

Given the more highly differentiated conception of politics among liberals, we might expect Democrats to exhibit higher scores than Republicans on differentiation, but that turns out not to be the case. The pattern in the final graph in Figure 9 is less distinct but indicates that Democrats have no higher level of differentiation and perhaps a lower level of integration than Republicans. So it seems that whatever mechanism which differentiates the cognitive styles of liberals and conservatives does not translate into an equivalent pattern for party identification.

We turn next to patterns of electoral participation. The hypothesis here is fairly straightforward. One would expect, naturally enough, that increased skills in differentiation and integration are directly associated with political participation. The dependent measure is the Index of Electoral Participation based on the frequency of involvement in campaign activities, including displaying buttons or bumper stickers, attendance at political rallies, volunteer work, political contributions and persuading
friends or neighbors to vote for a particular candidate, in addition to voting. The average for the overall sample was about three such activities over the past several years and as Figure 10 illustrates, there is a dramatic linear correlation between both cognitive indices and electoral participation.

Figure 10. about here

Earlier work on sophistication and participation had indicated a threshold effect. (Neuman, 1977) In that study, higher levels of sophistication, above the 6th or 7th decile, were no longer associated with distinctly higher levels of participation. But the evidence here indicates a direct and linear effect.

Finally, we return to the model of deviant case analysis described earlier to search further for potentially unique effects of differentiation or integration. The strategy here, it will be recalled, was simply to eliminate the middle mass, those with average scores on both indices, and identify the unique characteristics of those particularly apolitical or political, and those with an imbalanced pattern of differentiation and integration. Given the spiral theory of cognitive growth, we would expect individuals in either the diffuse or premature structuring cells to be in a state of imbalance and under pressure to develop a more balanced conception of politics. Thus we would expect for these transitional states intermediate values on the political involvement and opinionation indices roughly halfway between the apolitical and political cells. Deviations from that pattern
would indicate unique effects of the differentiation or integration variables and identify the special character of the diffuse as opposed to premature structuring.

Indeed, there were some rather intriguing patterns. With regard to opinionation, measured here as an index of the percent of 35 items in the liberal-conservative domain on which the respondent expressed an opinion, one would expect a rather dramatic difference in level of opinionation with the politically oriented respondents the most likely to express their views. The differences are not strong but the diffuse category with a high level of differentiation and a low level of abstract structuring are most opinionated. These results suggest there are two reasons respondents select the "don't know" category in a survey. In the first and most straightforward case they simply are unfamiliar with the issues and have no opinion. In the second case, which may serve to lower the opinionation levels for those in the political orientation and premature structuring categories, there may be a conflict or cross-pressuring of relevant political principles which would move the individual after due consideration and thought to decline to express an opinion on a particular issue.

A second variable of interest here was the pattern of opinion leadership. Katz and Lazarsfeld early in the 1950s demonstrated the importance of a more informed and attentive strata of individuals sharing information and influencing the opinions of the less attentive. The question at hand was simply whether opinion leadership, measured here by an item indicating frequency of recommending
political preferences to friends and colleagues, is tied to unique patterns of cognitive structure. Again the evidence is that differentiation rather than integration is the most essential variable. The diffuse and political cells in this case reflect the highest levels.

Finally, in an attempt to further clarify the origins of styles of political thought, we compared attentiveness to political news in newspapers and television, measured here is the number of days per week exposed to the media, in the deviant case typology. The results might be cause for some concern, since the American public is becoming increasingly dependent on television for its news. (Roper, 1978) The results in Figure 11 suggest that television viewing is weakly related to an increase in differentiation but is apparently inversely related to the use of abstractions to structure political thought. In contrast, newspaper reading leads to both increased differentiation and integration. Given the time constraints on television news and the often-cited fact that an entire evening network newscast in transcript would not fill even the front page of a newspaper, these results seem plausible. But given the structure of the data analysis, it would be unfair to assume a causal direction which implies that heavy television viewing in some sense causes a simplistic view of politics when the opposite causal direction represents an equally reasonable hypothesis.

CONCLUSION

In these few final paragraphs we will attempt not to summarize the analysis but rather to draw three conclusions. The results cited above indicate that variation in conceptual differentiation and integration is measurable (albeit by a somewhat laborious content analytic procedure) and
that these two dimensions of cognitive organization have unique origins and effects on political opinions and behavior. At this point, however, it would seem appropriate to move beyond the statistics to put the results in a broader context. Our first point concerns the nature of survey research data. The second and third points concern more general questions about the role of public opinion in the democratic process.

First, one important conclusion which is likely to be drawn from such labors with transcribed depth interviews is an overwhelming sense of the procrustian nature of survey research. It is a point, perhaps not easily conveyed by the few brief quotations and the summary statistics cited above. It is an impression, no doubt, which has struck other analysts who have the opportunity to work with the remarks of their respondents in unedited natural language. By following the natural dynamics of the interview process in transcript one sees repeatedly how the initial response of the interviewee to a particular question such as attitudes towards racial inequality and the energy crisis might easily be misinterpreted. The responses to follow-up probes and the way in which the respondents organize their answers reveal much more than any simple agree-disagree continuum.

Depth interview work of this sort is expensive and time-consuming, but one of its strongest contributions might be to clarify the interpretation of more routinely gathered poll data. One of the most surprising findings of this study was the correlation between liberal political attitudes and high levels of conceptual differentiation and integration. Further work is now underway to try to determine if liberals and conservatives use abstract concepts in distinctly different ways and whether such a distinction, if it exists, might help to explain patterns of political behavior.
A second conclusion concerns the relationship of the individual to his or her political environment. Recent books by Bennett (1975) and Page (1978) have emphasized this point. If after a careful examination of hour-long interviews we still find two-thirds of the mass electorate making only marginal use of political abstractions to structure their evaluations of the political system. It is not necessarily the result of their own cognitive shortcomings. If issues are vaguely defined and the linkage between candidates and issues is unclear, it may well be a result of a pattern of candidate behavior and media coverage, which itself is vague and shallow. The columnist has so many column inches, the television reporter so many seconds to capsule the major issues of the day. Given the current structure of the news media, one could hardly expect them to get much beyond the main points of the issue. Correspondingly, few candidates have found success by handing out long manuscripts spelling out their policy positions on each issue of the day. Further research on cognitive patterns will benefit from parallel analyses of mass political thought and trends in media coverage.

Clinical psychologists working in the area of cognitive structure have argued that a sudden increase in the perceived complexity of a problem can lead to a pattern of withdrawal. (Schroeder et al., 1967) So a potentially sudden shift in media coverage or candidate behavior could have a disruptive effect on the democratic process, especially if the citizenry as a whole came to the sudden recognition of how little any of the politicians or experts understood about our collective problems. There are some signs that we may be approaching a crisis of this sort now. But a gradual expansion of coverage of political events, perhaps a spiraling increase between differentiation and integration, would seem to be a step in the right direction. The
results reported above contrasting heavy television and newspaper use suggests that our nation's increasing reliance on electronic journalism should be cause for concern.

Third and finally, there is an issue which underlies all of this analysis. To what extent are the less sophisticated and attentive citizens in the electorate more easily propagandized and manipulated? This concern has arisen repeatedly in social science research, including the propaganda research of the 1940s, the concern with mass society in the 1950s, as well as more recent research on media and politics. The results reported above, however, give no indication that those with lower scores on conceptual differentiation or integration are any more easily manipulated by political symbols or arguments. The intermediate levels of cognitive organization reflecting an orientation toward group interest or a straightforward mechanism of electoral reward and punishment represent, after all, rather reasonable political postures. In fact, the man-from-Missouri stereotype noted above reflects a cognitive state more likely to be influenced by concrete results than rhetoric. This suggests some intriguing possibilities. It may be that the more sophisticated and abstractly-oriented citizens may actually be more rather than less susceptible to the manipulative strategies of political elites. It is an issue worthy of further attention.
### Figure 1

<p>| Units of Political Discourse — Mean Frequency of Occurrence in the Depth Interviews |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent of Questions:           | 0% | 4% | 8% | 12% | 16% | 20% | 24% | 28% | 32% | 36% | 40% | 44% | 48% | 52% |
| Number of References:           | 0   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  |
| Political Issues                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Specific                        |     |     |     |     |     |     |     |     |     |     |     |     |     | 9.6 |
| General                         |     |     |     |     |     |     |     |     |     |     |     |     |     | 7.6 |
| Political Actors                |     |     |     |     |     |     |     |     |     |     |     |     |     | 12.5|
| Units of Government             |     |     |     |     |     |     |     |     |     |     |     |     |     | 4.1 |
| Organized Groups                |     |     |     |     |     |     |     |     |     |     |     |     |     | 1.4 |
| General Constituencies         |     |     |     |     |     |     |     |     |     |     |     |     |     | 2.8 |
| Individual                      |     |     |     |     |     |     |     |     |     |     |     |     |     | 4.2 |
| Political Events                |     |     |     |     |     |     |     |     |     |     |     |     | 4.6 |
| Specific Events                 |     |     |     |     |     |     |     |     |     |     |     |     |     | 2.2 |
| Social/Historical Trends        |     |     |     |     |     |     |     |     |     |     |     |     |     | 2.4 |</p>
<table>
<thead>
<tr>
<th>Level</th>
<th>Converse Terminology and Percent. (1956)</th>
<th>Revised Definition</th>
<th>Of Total Sample</th>
<th>Within Level: Mean Number of References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent Making at Least One Such Reference</td>
<td>Average Number of References</td>
<td>Percent of Total Sample Classified in Level</td>
<td>Percent Peripheral Reference to Abstract Concept References</td>
</tr>
<tr>
<td>I</td>
<td>Ideologue 2 1/2%</td>
<td>Unambiguous use of abstract concepts to structure and link political actors, issues, and events</td>
<td>61% 1.5</td>
<td>13% 3.9</td>
</tr>
<tr>
<td>II</td>
<td>Near Ideologue 9%</td>
<td>Peripheral or unclear use of abstract concepts</td>
<td>89% 5.6</td>
<td>15% 1.6</td>
</tr>
<tr>
<td>III</td>
<td>Group Interest 42%</td>
<td>Structuring of political issues and objects based on group interest</td>
<td>98% 5.5</td>
<td>34% 1.1</td>
</tr>
<tr>
<td>IV</td>
<td>Nature of Times 24%</td>
<td>Primarily free-floating reference to political issues, occasionally structured with reference to incumbent's political performance</td>
<td>99% 12.2</td>
<td>30% 0.9</td>
</tr>
<tr>
<td>V</td>
<td>No Issue Content 22 1/2%</td>
<td>Residual category</td>
<td>8% 0.7</td>
<td>1.0</td>
</tr>
</tbody>
</table>
### Table: \hspace{1em} The Spontaneous Use of Abstract Concepts in Mass Publics: Some Prominent Concept Groups

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Average Number Reference Per Interview</th>
<th>Concept Group</th>
<th>Definition</th>
<th>Typical Terms and Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.2</td>
<td>Status Quo vs. Change</td>
<td>A basic dimension of the liberal-conservative continuum focusing on patterns of political change</td>
<td>&quot;revolution&quot; &quot;militancy&quot; &quot;reactionary&quot; &quot;extremism&quot;</td>
</tr>
<tr>
<td>2</td>
<td>.6</td>
<td>Political Structure and Process</td>
<td>Abstractions focusing on due process, issues of the balance of power and governmental organization</td>
<td>&quot;two-party system&quot; &quot;pressure group&quot; &quot;pork barrel politics&quot; &quot;power structure&quot;</td>
</tr>
<tr>
<td>3</td>
<td>.5</td>
<td>Governmental Responsiveness to Public Opinion</td>
<td>Abstractions focusing on democracy or its absence</td>
<td>&quot;majority rule&quot; &quot;dictatorship&quot; &quot;town meeting&quot; &quot;one man one vote&quot;</td>
</tr>
<tr>
<td>4</td>
<td>.4</td>
<td>Law and Order versus Individual Rights</td>
<td>Also prominently associated with liberalism-conservatism, these constructs deal with the tension between authority and individual freedom</td>
<td>&quot;freedom of speech&quot; &quot;inalienable rights&quot; &quot;law and order&quot; &quot;subversive activities&quot;</td>
</tr>
<tr>
<td>5</td>
<td>.2</td>
<td>Government Intervention versus Economic Individualism</td>
<td>These concepts deal with general principles of government involvement in economic life.</td>
<td>&quot;free enterprise&quot; &quot;laissez-faire&quot; &quot;socialist economics&quot; &quot;capitalism&quot;</td>
</tr>
<tr>
<td>6</td>
<td>.2</td>
<td>Equality/Inequality</td>
<td>These concepts deal with patterns of economic, political, and social inequality and ameliorative strategies</td>
<td>&quot;social darwinism&quot; &quot;affirmative action&quot; &quot;quota system&quot; &quot;civil rights&quot;</td>
</tr>
<tr>
<td>7</td>
<td>4.0</td>
<td>Miscellaneous Other</td>
<td>Concepts, terms and phrases which either span dimensions above or denote other concepts</td>
<td>&quot;justice&quot; &quot;isolationism&quot; &quot;pacifist&quot; &quot;propaganda&quot;</td>
</tr>
</tbody>
</table>
### Figure 4

**Covariance of Differentiation and Integration**

<table>
<thead>
<tr>
<th>Index of Conceptual Differentiation</th>
<th>0%</th>
<th>6%</th>
<th>13%</th>
<th>20%</th>
<th>66%</th>
<th>18%</th>
</tr>
</thead>
<tbody>
<tr>
<td>40+</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>12</td>
<td>18%</td>
</tr>
<tr>
<td>30-39</td>
<td>0</td>
<td>10%</td>
<td>24%</td>
<td>35%</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>20-29</td>
<td>27%</td>
<td>38%</td>
<td>20%</td>
<td>35%</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>10-19</td>
<td>9%</td>
<td>45%</td>
<td>39%</td>
<td>5%</td>
<td>0%</td>
<td>28%</td>
</tr>
<tr>
<td>0-9</td>
<td>64%</td>
<td>10%</td>
<td>4%</td>
<td>5%</td>
<td>0%</td>
<td>10%</td>
</tr>
</tbody>
</table>

No Issue | Nature of Content | Group | Near | Ideologue
---|-------------------|-------|------|-------
8% | 30% | 34% | 15% | 13% | 100%

**Conceptual Integration Typology**

\[ \chi^2 = 100, \quad 20 \text{ df}, \quad .001 \]

\[ r = .60 \]

Table percentaged down.
Figure 5

A Model for Deviant Case Analysis

<table>
<thead>
<tr>
<th>Conceptual Differentiation</th>
<th>Conceptual Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Highly Political Orientation</td>
<td>15%</td>
</tr>
<tr>
<td>Premature Structuring of Political Thought</td>
<td>13%</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Diffuse Structuring of Political Thought</td>
<td>15%</td>
</tr>
<tr>
<td>Highly Political Orientation</td>
<td>22%</td>
</tr>
</tbody>
</table>
### Figure 6

**Demographic Patterns of Differentiation and Integration**

**Unique Variance**

<table>
<thead>
<tr>
<th>Social Status</th>
<th>Differentiation</th>
<th>Integration</th>
<th>Conjoint Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zero-Order R</td>
<td>Regression Beta</td>
<td>Residual Regression Beta</td>
</tr>
<tr>
<td>Education</td>
<td>.26</td>
<td>.24</td>
<td>.05</td>
</tr>
<tr>
<td>Occupation Status</td>
<td>.10*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>.19</td>
<td>.10</td>
<td>-.03</td>
</tr>
<tr>
<td>Ascribed Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race (black)</td>
<td>-.23</td>
<td>-.22</td>
<td>-.13</td>
</tr>
<tr>
<td>Sex (female)</td>
<td>.00*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (young adult)</td>
<td>-.03*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(senior citizen)</td>
<td>-.07*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fathers' SES</td>
<td>.18</td>
<td>.06</td>
<td>.03</td>
</tr>
<tr>
<td>Multiple R</td>
<td>.34</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Multiple R^2</td>
<td>.11</td>
<td>.03</td>
<td></td>
</tr>
</tbody>
</table>

* non-significant
Figure 7

Interaction Effects: Education and Age on Differentiation and Integration

INDEX OF CONCEPTUAL DIFFERENTIATION

35
31
27
23
19

INDEX OF CONCEPTUAL INTEGRATION

12
10
8
6
4
2
0

20's 30's 40's 50's 60's 70's +

AGE

College

H.S.

grade school

College

H.S.

grade school
Local Political Involvement As Alternative to Formal Education

**Figure 8**

Index of Local Political Involvement

- **Zero-order**
  - Differentiation Index: $r = 0.25$
  - Integration Index: $r = 0.31$

- **Partial**
  - Differentiation Index: $r = 0.18$
  - Integration Index: $r = 0.24$

Partials reflect control for educational level.
Figure 9

Ideology and Party Identification

I Ideological Identification

Integration

Differentiation

20 23 26 29 32 35 37
Very Liberal Leaning Liberal Moderate Leaning Conservative Very Conservative

32 29 26 23 20
Ideology Attitude Index

Integration

Differentiation

20 23 26 29 32 35 37
Very Liberal Leaning Liberal Moderate Leaning Conservative Very Conservative

32 29 26 23 20
Party Identification

Integration

Differentiation

20 23 26 29 32 35 37
Strong Democrat Leaning Democrat Independent Republican Leaning Republican Strong Republican
Figure 10

Electoral Participation Curves

Differentiation Index (deciles)

Integration Index (deciles)
Figure 11
Deviant Case Analysis: Diffuse and Premature Structuring

<table>
<thead>
<tr>
<th></th>
<th>Diffuse Structuring</th>
<th>Political Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinionation</td>
<td>87%</td>
<td>81%</td>
</tr>
<tr>
<td>Opinion Leadership</td>
<td>40%</td>
<td>42%</td>
</tr>
<tr>
<td>Newspaper Reading</td>
<td>4.6</td>
<td>6.0</td>
</tr>
<tr>
<td>TV News Viewing</td>
<td>5.3</td>
<td>3.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Apolitical Orientation</th>
<th>Premature Structuring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinionation</td>
<td>75%</td>
<td>82%</td>
</tr>
<tr>
<td>Opinion Leadership</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>Newspaper Reading</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>TV News Viewing</td>
<td>4.9</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Increasing differentiation → Increasing integration
GLOBAL EVALUATION OF AMERICAN SOCIETY

1. Let's start out with you telling me the things about America these days that you are well satisfied with.

2. Now how about the things in America these days that you are most dissatisfied with?

3. Well, like most people, you've mentioned some good things and some things that you don't like. On balance, though, how would you describe your feelings about the country these days?

4. How does this make you feel? I mean would you say that you feel proud, happy, angry, worried, indifferent, disappointed, confident, resigned, or what?

5. Thinking about the things you are satisfied with, who or what do you think is responsible for them? How about the government -- the way it operates and the way our political leaders think and act -- have anything to do with it?

6. How about with respect to the things you are dissatisfied with? Who or what is to blame for them?

QUALITY OF LIFE

7. Thinking about your own life now -- I mean, living conditions, work, family life, the problems of everyday life in this community generally -- how do you feel about the quality of life you yourself are experiencing? I mean, would you say that you are very pleased, satisfied, dissatisfied, really unhappy, or what?

8. When you say that you are ________, what particular things are most important in making this judgment?

9. You've told me your feelings about your own situation. Could you tell me how you think for you, life in this community generally compares to that of most other people?
10. What about the economic situation with respect to yourself? How satisfied are you with your standard of living, job, the taxes you have to pay? Well, how about with respect to the country as a whole, how well is it doing in these areas?

11. Is crime a problem for you around here? How about where you work, visit, and so on? Is this something you worry about a lot with respect to the country as a whole?

12. How about race relations in the country? How do you feel the country is doing in this regard? Specifically? Is this a problem for you yourself? What about this neighborhood?

13. Are you satisfied with the quality of the environment around here? You know, smog, green space, enough parks, and so forth. Is this a problem, do you think, for the country as a whole?

14. Let's talk about something a little different for a minute. You may have heard about how some people are sort of giving up on society, dropping out, going off to live in the country, for example. They complain that things have gotten too big, life is too complicated, that we can't control our own lives enough. How do you feel about this? Have you ever felt this way?

15. All in all, do you sometimes feel like an outsider in this country, that you don't really belong here?

POLITICAL VALUES AND PERCEPTIONS OF GOVERNMENT

16. Now let's talk a little more about one aspect of our country -- the system of government. Overall, how close does the way our government work come to the way you think it should? What specifically do you feel you like about the way our government operates? What are the things you dislike?

17. Some people have told us that they worry there is too much freedom in America, especially political freedom -- others have told us they worry there is too little. What do you think?

18. What about the level of equality in this country -- do you think our government treats most people equally and fairly? How about with respect to equality of opportunity? Do you think most people have a fairly equal opportunity to get ahead?

19. All in all, does this country give most people or groups a fair amount of influence over policies?
20. There's been a lot of talk about how government, regardless of who is in power, can't be believed, that public officials can't really be trusted. How do you feel about this?

21. Do you feel that the people in government really care about your needs and interests? Do you feel that they are concerned with what you want and are doing their best to solve the country's problems? How about people other than yourself? Are there some who our government (regardless of which party is in power) ignores?

22. How about your own relationship to the government? If there was something you wanted to see done or changed, or if you had some particular problem, do you think you yourself (or perhaps you and some other people) could influence the government? Are you yourself active politically? Do you vote regularly, take part in campaigns, belong to political organizations, go to political rallies, demonstrations?

23. Have you ever felt that the way the government operates is immoral—that is, that government sometimes breaks the rules?

24. Well, we've talked about quite a few things. Could I close by asking you one last general question: Do you feel you are really committed to this country—or, are there so many things about America that you can't accept, that you don't really feel a part of it?

25. One last question: In politics we often hear the terms "liberal" and "conservative" being applied to politics, candidates, or policies. What do these terms mean to you—liberal and conservative?
FOOTNOTES

1 The comparison is between the INDSCAL measure of Marcus et al. (1974) which attributes higher sophistication to those who use a greater number of dimensions of judgment and the numerous other constraint measures based on Converse's work which associate sophistication with the use of a single abstract liberalism-conservatism dimension for conceptualizing political issues.

2 Readers familiar with flurry of attention in the scholarly literature recently to the methodology of measuring attitude structure and the possibility of a shift over the last decade in the level of attitude constraint in the mass public may wish to move ahead to the next section.

3 Characteristic of this critique are Brody and Page (1972), Kessel (1972), Popkin et al. (1976) and Repass (1976).

4 The breadth of definitions and measures of political sophistication is rather striking. (Cf. political involvement, Berelson et al., 1954; political information, Lane and Sears, 1964; political cognition, Himmelstrand, 1960; political competence, Almond and Verba, 1963; political rationality, Shapiro, 1969.)

5 A more complete description of the interview schedule can be found in an appendix.

6 More detailed information about the coding process and scoring of the indices of conceptual differentiation and integration are available from the author.
Because of the difficult nature of coding ambiguous references to semipolitical issues and events, there was concern about intercoder reliability and the validity of the coding process itself. The usual indices of intercoder reliability are not useful under these circumstances because they are, for the most part, based on the proportion of intercoder agreements to the total number of coding decisions. There is a difficulty, in this case, of determining both the numerator and denominator. The average interview may include reference to 500 or more objects, individuals, and events, most of them non-political in nature—Uncle Herman, the leaking faucet in the bathroom, the new Pontiac, getting a promotion at work, and so on. Basing one's calculations on the fact that coders correctly identified and accordingly did not code these nonpolitical utterances would lead to artificially high indices of agreement. On the other hand, requiring that each political utterance be given precisely the same code may lead to an underestimate of true reliability because, for the most part, the subcategory distinctions were not used in the analysis. For example, a respondent may mention a problem concerning property taxes. One coder may designate it as a specific local issue. Another may code it as one of the frequent references to high taxes, a general issue. What is important for the great bulk of the analysis is only that the total number of coded political utterances (the conceptual differentiation score) be accurate.

Accordingly, the most reasonable estimate of coder agreement was taken to be the average pairwise difference in standard deviation units or,

\[ \frac{\sum (X_1 - X_2)}{N} \]

\[ \sigma_x \]

where \( X_1 \) and \( X_2 \) represent the Conceptual Differentiation scores for each
pair of coders, \( N \) represents the total number of pairwise coder comparisons and \( \sigma_x \) is the standard deviation in \( x \) for the full sample. Using this formula for the fifteen intercoder comparisons, it was found that,

\[
\frac{123}{15} \div 22.7 = 0.361
\]

indicating that coding discrepancies accounted for only about 13% of the variance which, in considering the complexity of the process, would seem to be a reasonable figure.

8 Guttman scale statistics were computed using unity as the cutting point and again using the sample mean for each variable as the cutting point. In the former case, \( CR = 0.95 \), minimum marginal reproducibility = 0.86, coefficient of scalability = 0.56, and the average interitem correlation coefficient = 0.37. In the latter case, \( CR = 0.79 \), minimum marginal reproducibility = 0.54, coefficient of scalability = 0.53 and the average interitem correlation coefficient = 0.60.

9 Index of Differentiation = 13.8 + 1.9x Index of Integration, standard error of estimate = 12.3.

10 In order to minimize sampling fluctuations inherent in this small sample, the data in this figure and figures 8 and 10 have been smoothed by the traditional moving average technique, which averages the means in each reported point with the adjacent means.
BIBLIOGRAPHY

Almond, Gabriel and Sidney Verba  

Asher, Herbert  

Bennett, Stephen Earl  

Bennett, W. Lance  

Berelson, Bernard R., Paul Lazarsfeld, and William N. McPhee  

Bergmann, Gustav  

Bishop, George, et al.  

Brody, Richard A. and Benjamin I. Page  

Brown, Steven R.  

Bruner, Jerome S., Jacqueline J. Goodnow and George A. Austin  

Campbell, Angus, Philip E. Converse, Warren E. Miller and Donald E. Stokes  

Converse, Philip E.  

Farah, Barbara and Warren Miller  
Flanigan, William H.  
1972  Political Behavior of the American Electorate, 2nd Ed.  
Boston: Allyn and Bacon.

Gardner, Riley and Robert Schoen  
1962  "Differentiation and Abstraction in Concept Formation."  

Himmelstrand, Ulf  
1960  "Verbal Attitudes and Behavior: A Paradigm for the Study of  
Message Transmission and Transformation."  

Hyman, Herbert H. and Paul B. Sheatsley  
1947  "Some Reasons Why Information Campaigns Fail."  
Public Opinion Quarterly (Fall): 412-423.

Johnson, Harry  
1968  "Ideology and the social system."  

Katz, Elihu and Paul F. Lazarsfeld  

Kessel, John H.  

Key, V. O.  

Kuhn, Thomas S.  
[1962]  The Structure of Scientific Revolutions. Second edition,  

Lane, Robert E.  

Lane, Robert E. and David O. Sears  

Luttbeg, Norman R.  
1968  "The Structure of Beliefs among Leaders and the Public."  
Public Opinion Quarterly (Fall): 398-409.

Marcus, George E., et al.  
1974  "The application of individual differences scaling to the  
measurement of political ideology."  
American Journal of Political Science, 405-420.

Marx, Karl  
[1963]