An emerging consensus is that investigations of media effects should focus on the most basic political function of the media. Attempting to move out of the usual modes of conceptualization and analysis, this paper concentrates on three major points: the reconceptualization of political knowledge to encompass the respondent's subjective interpretation of certain essential elements of any political problem—actors, proposals, and actor-proposal linkages; the reconceptualization of media use to take into account the messages discriminated by a respondent about a particular content area as opposed to the sheer exposure to media whether content laden or not; and the development of a methodology that allows the respondent to define problems which are within his or her realm of personal experience rather than that set a priori by the investigator. An important feature of this methodology, employed in the Toledo Political Affairs Study, is its applicability across a wide variety of topic areas. This study, which is described in detail, points up the need for content analysis of the mass media agenda in studies employing measures of message discrimination. (HOD)
MESSAGE DISCRIMINATION AND
INFORMATION HOLDING ABOUT POLITICAL AFFAIRS:
A COMPARISON OF LOCAL AND NATIONAL ISSUES

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Viewpoints on the role played by the mass media in the political life of this country are curiously schizophrenic. On the one hand, the media are prescriptively accorded a major impact upon political affairs by many historians, journalists, politicians, and laymen. For example, a basic tenet of traditional libertarian theory is that the media have the constitutionally assigned duty to act as reporter and critic of government activities. This "watchdog" role is seen as essential to the maintenance of our civil liberties. As watchdog the media are assigned the tasks of exposing the machinations of self-serving politicians to the glare of publicity, criticizing governmental policies, reporting on routine government activities, and in general guarding against the encroachment of the public domain on the private sphere. Such normative prescriptions of the "power of the press" have gained renewed credence in these days of Watergate.

Such traditional prescriptive views of the press as guardian of liberty, educator of the citizenry, and nemesis of political wrongdoing stand in rather stark contrast to the empirical role assigned to it by modern political scientists and media scholars. In particular, scholars concerned with the sources and determinants of political knowledge, attitudes, and behavior tend to minimize the impact of the media. Those concerned with political socialization argue for the primacy of such sources as peers, the family, and educational institutions in shaping the initial political orientations of the child. The presence of these relatively stable predispositions is
in turn pointed to as the primary theoretical rationale for according the mass media a chiefly reinforcing function among adults. Overall, the available empirical evidence would seem to be supportive of this position.

A number of researchers, however, have recently questioned the applicability of these findings, and have challenged the traditional research focus upon political attitudes and voting behavior. Chaffee, et al. (1970), for example, argue that the chief political function of the media is not to persuade, but to stimulate interest in political affairs and provide information concerning them. This informational function of the media is at the core of the agenda-setting function of the mass media as conceptualized by McCombs and Shaw (1972), McCombs and Weaver (1973), Funkhouser (1973), and others. Clarke and Kline (1974) have also suggested that "what people learn from communicative activity is a more rewarding topic for media effects research than attitude formation or change".

The consensus which seems to be emerging is that investigations of media effects should focus upon the most basic political function of the media, that is, to communicate information on a mass scale concerning a great variety of political topics, issues, problems, and personalities. Although investigations of this informational function may concentrate upon many aspects, certainly a question of central significance is the nature and extent of learning about various aspects of the political sphere that result from exposure to mass mediated information. To be sure, evidence from a number of voting and opinion studies indicate that mass media exposure is positively associated with political knowledge. (e.g., Berelson, et al., 1954; Campbell, et al., 1954; Nafziger, et al., 1951;
Trenaman and McQuail, 1961; Blumler and McQuail, 1969; Chaffee, et al., 1970). However, such evidence also shows that correlations between mass media exposure and political knowledge generally pale by comparison to those between knowledge and such "background" variables as education (Clarke and Jackson, 1968; Wade and Schramm, 1969; Tichenor, et al., 1970). The media are thus relegated once again to a secondary role.

We would argue here, however, that the use of conventional variables and sterile research designs in previous investigations have effectively masked the true magnitude of media related learning. We can identify at least three major theoretical and methodological problem areas. The first has to do with the way in which political knowledge has been conceptualized and measured in the past. The second is concerned with similar problems in the conceptualization and operationalization of mass media use. The third stems from the lack of comparative research which might result in the discovery of situational differences in the nature and extent of media related learning. The need for such research is particularly crucial if we are to have any faith in the generalizability of our findings, no matter how sophisticated our methodology may otherwise be.

**Conceptualizing Political Knowledge**

Clarke and Kline (1974) point out that most research on knowledge about public affairs has adopted a strictly normative definition of "knowing." The identities of candidates, dates of political events, and awareness of certain prescribed issues are typically used to test the respondent's knowledge of political affairs. Unfortunately, such "civics" conceptualizations are ordinarily biased in favor of more highly educated individuals.
The kinds of cognitions measured usually concern public issues and events which have been defined by the investigator as things important to know. Not surprisingly, the investigator's perceptions in these matters are more likely to be in accord with those of the more highly educated segments of society than with those held by less educated individuals.

Secondly, conceptualizations of political knowledge often have failed to reflect the essential nature of the political process. Politics, in its broadest sense, may be said to involve the authoritative allocation of socially value goods, commodities, and resources. Whenever there is a conflict concerning the proper allocation of these values, the political process is involved in its resolution. Concepts of political knowledge which deal only with awareness of candidates and campaign issues tend to oversimplify this process. Measures of political knowledge generated by such concepts do not indicate the individual's understanding of the dynamics of political conflict, particularly those on-going conflicts which the individual perceives to be directly relevant to his own interests or life situation.

Such considerations suggest reconceptualizing what we mean by political knowledge to more adequately reflect an individual's store of information concerning political conflicts and problems of personal importance. Although such conflicts involve many facets, certainly the essential elements of any political "problem": must include:

1) the contesting individuals or groups (political "actors") and;

2) those solutions to the problem (or desired political "outputs") proposed by the various factions. Knowledge of these elements is essential to:

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1. defined as the subject matter of any controversy concerning the authoritative allocation of values.
1) the formation of informed judgments concerning which solution to the problem to favor, and;

2) the translation of such preferences into any effective form of political action.

There are at least two major avenues which one might take in designing tests that probe a respondent's knowledge of these basic political elements. One is to follow the lead of past research and select a particular problem(s), which, for "objective" reasons, seems to be a problem which people ought to know something about. This approach has obvious utilities, particularly where policy related questions are tied to a specific problem area (e.g., air pollution). Also, since all respondents are required to focus upon the same problem, the researcher need not be concerned about cross-problem differences in mass media coverage. This approach, however, is prone to most of the pitfalls previously described in connection with "civics" conceptualizations of political knowledge. The respondent is denied a chance to choose a problem of personal importance. Since the personal salience of different problems is known to vary with social locator variables such as education, age, sex, etc., the correlations between such relatively static variables and "political knowledge" will, of course, be maximized.

The second approach, then, involves allowing each respondent to nominate a personally "important" political problem which is then made the focus of the interview. Here we are departing from the traditional "objective" measures of knowledge used in much of past research where external observers (the social scientist with a priori notions of what should be known about such things as the number of Supreme Court justices,
names of Governors, or frequency of presidential elections) can obtain validation in a relatively clear cut manner. We think that people operate from more subjective perspectives in that what they think they know about political problems is more likely to generate political action on their part. This "subjective" measure of knowledge we refer to as information holding. Of course we cannot validate such information holding as neatly as traditional political knowledge measures, but we feel that people operate from what they think is important rather than from what we assume is important from a civics perspective. We therefore chose to follow the information holding approach in the study reported here. We shall postpone, for the moment, discussion of the precise methodology employed.

Salience Information. There is another type of knowledge which a person might have about a political problem which differs considerably from a conceptual standpoint from actor information or information about proposed solutions (proposal information), but which nonetheless would seem to be an important indicator of a person's total orientation toward a problem. Such knowledge consists of awareness on the part of an individual of ways in which a particular problem affects his own life or the lives of members of his family. For example, a person may perceive that the "energy crisis" affects his ability to commute to work, or affects his pocketbook through higher fuel prices. "Salience information," therefore, is the perception of a causal linkage between certain aspects of a problem and an individual's own life space. As an indicator of the "salience," or importance, of a problem to an individual, salience information should be associated with other types of knowledge about the problem. It should also serve as an

2. In these formal terms, salience information can be seen to have conceptual roots in the causal "unit relations" of Heider's balance theory, and in attribution theory (Kelley, 1967, 1973).
index of the need for, and utility of, information concerning the problem.

**Conceptualizing Mass Media Use**

In the past, indices of mass media use have usually consisted of respondents' estimates of time spent with various media, frequency of viewing, reading, or listening, or sheer number of media attended to. Although the theoretical meaning of such operationalization is not often addressed, the basic conceptual interpretation common to all of these indices (except in studies of media time budgeting) is "potential for exposure" to some specific kind of media-transmitted information. For example, investigators interested in any link between "mass media exposure" and political information holding would prefer to have reliable measures of respondent exposure to mass-mediated political content only. Since such measures are difficult to obtain, many investigators are content to settle for some "potential for exposure to political information" variable such as "number of hours per week spent watching television." Since we know that audience members exercise considerable selectivity in their information choices, the weakness of such "potential for exposure" variables is apparent, and the low correlations usually obtained between exposure and knowledge are not surprising. The conceptual problem is illustrated by the following diagram:

**Figure I**

\[ X_1 \rightarrow X_2 \rightarrow X_3 \]

Information holding

"potential for exposure to" the topic.

"exposure" variable information on

(e.g., # of TV specific topic hrs./wk.)

We have, therefore, a 3-variable chain with the researcher desiring information on \( X_2 \). He often settles, however, for information on \( X_1 \), which is probably only weakly correlated with \( X_2 \) (because of high audience selectivity in information choice). Since \( r_{13} = r_{12} \cdot r_{23} \), \( X_1 \) will be even

more weakly correlated with \( X_3 \). On the other hand, if it were somehow possible to obtain reliable information on the level of exposure to political information (\( X_2 \)), we might expect a rather strong correlation between \( X_2 \) and \( X_3 \).

We have mentioned the difficulty involved in obtaining direct measures of \( X_2 \). However, an indirect measure can be obtained by asking a respondent if he can recall having recently seen, read, or heard anything in any mass medium concerning the topic or object in question. The number of specific messages or content units which the respondent can recall having perceived within a specified time period (e.g., "in the last two weeks" in the study to be reported here) furnishes us with a measure of message discrimination regarding the topic in question. That is, to discriminate a message is to select some unit of content for attention out of a universe of competing messages or informational stimuli (i.e., make a discriminable response).

In operational terms, it is useful to make a further "discrimination." We shall define a mass mediated content unit as a unit of information or content recalled from any mass medium, regardless of the number of media sources from which the respondent can recall having discriminated that unit. A discriminated message, on the other hand, is defined as a unit of information recalled from a single, specific mass medium.

For example, a person asked to recall anything read, seen, or heard in the media "in the past two weeks" about Watergate might discriminate the following content units:

1) "one of the break-in people was involved in a stolen car ring";
2) "comments from congressmen indicate Nixon will eventually be impeached."
The first content unit was attributed to a newspaper source, while the second was attributed to both a newspaper and a television source. Thus this respondent would be credited with a total of two content units but with a total of three discriminated messages (2 newspaper, 1 television). Treating the second content unit in this fashion as two messages is important conceptually in that discrimination of the unit from two sources indicates a higher overall level of exposure to Watergate-related content than would discrimination of the same content unit from a single source. We might expect, therefore, that the total number of discriminated messages would correlate more strongly with information holding than would the total number of content units.

It is not necessary, of course, to deal exclusively with total message discrimination across all media. One of the more interesting uses of message discrimination is to compare the predictive powers of message discrimination in each of the various media. Such comparisons of relations can reveal inter-media differences in coverage and treatment of the topic in question, or differences in the way each medium is utilized as a source of information. In addition, the relative percentages of respondents in a sample who discriminate one or more newspaper messages, television, or other channel messages, provide a useful set of aggregate statistics for assessing inter-media differences, or for describing total media systems.

Comparing the Local and National Political Spheres

One rather obvious and important situational "dimension" on which we might carry out comparative studies of media use and political information holding is the local vs. national dimension. There are numerous
differences between the local and national political spheres (e.g., with regard to type and scope of problems, type and form of media systems, level of media coverage, or level of political interest), which might lead us to expect similar differences in the ways in which individuals learn about various aspects of these spheres.

Unfortunately, the vast majority of political communication studies have focused on the national political scene. We are aware of only two studies (Brinton and McKown, 1961; Tichenor and Wackman, 1973) which have directly inquired into the effects of mass media use on knowledge of local political affairs. We know of no studies which have attempted a direct comparison of such effects with analogous processes at the national level. Part of the problem, of course, has been the difficulty of developing a research methodology applicable to both the local and national levels which could yield meaningful comparisons. By following our own recommendations for reconceptualizing political knowledge and media use, we feel we have been successful in constructing such a methodology. We would like to show how this methodology was employed in a comparative study of mass media use and political learning in Toledo, Ohio.

The Toledo Political Affairs Study

The findings to be presented here are preliminary in nature, consisting as they do of simple descriptive statistics and bivariate correlations. Less tentative conclusions must await the results of a planned multivariate analysis. More adequate interpretations will also depend, as we shall see, upon the completion of a content analysis of Toledo newspaper and television coverage of local and national political affairs.
Even so, the preliminary findings are highly intriguing.

Interviews were obtained from a random sample of 400 Toledo heads-of-household (18 yrs. and over, with sex and age quotas applied) in December, 1973. In an attempt to insure at least a minimal level of interest and knowledge of local Toledo affairs, respondents were required to have been residents of Toledo for at least one year. Within randomly selected block clusters, respondents in every 4th household were alternately assigned either the local or national version of the questionnaire. This resulted in local and national samples (n=200 each) which were effectively matched on a range of demographic and communication variables. 4

The focus of the national political questionnaire was "the government in Washington, and what it does," while the local version was concerned with "the Toledo city government, and what it does." The questionnaires were identical except for the insertion of either local Toledo or national references at appropriate junctures. Respondents were first asked to name "any problems facing people in this country (or Toledo) which you think the government in Washington (Toledo city government) should work to help solve." R was then asked to choose that problem which "is the most important." The interview proceeded to focus upon this problem. 5 The "energy crisis" and "Watergate" were the two most frequently nominated national problems. Typical local problems included "crime in the streets" and "urban renewal."

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4. The data reveal that the samples match very closely on such variables as education, age, sex, race, voter registration, newspaper and television use, length of residence, etc.

5. If R could not choose one problem as "most important," the interviewer selected the first problem mentioned by the respondent and proceeded to focus upon it.
Message discrimination regarding the "most important problem" (MI) by was elicited/asking R to describe "each thing you read, seen, or heard in the past two weeks" concerning (MI). Each content unit recalled in this fashion was recorded. R was also asked to specify the source (newspaper, magazine, radio, or television—information on interpersonal discussion was gathered later in the interview) of each discriminated unit. Multiple source mentions were encouraged. Variables derived include separate message discrimination measures for each medium (measured by the number of messages attributed to each medium), all-media discrimination (the total number of messages discriminated across all media—see pg. 8 for an example of this measurement procedure), and content unit discrimination (the total number of separate content units discriminated—again, see pg. 8).

Salience information was gathered via a series of open-ended questions which asked R to name any ways that (MI) affected his or his family's personal health, or well being, property, finances, spare time, or "any other ways that you or your family are affected by (MI)." The measure of salience information used here is the total number of such ways mentioned.

Actor information was retrieved via the question "Are there any groups, persons, or organizations that are trying to influence or affect what the government in Washington (or Toledo city government) does about (MI)?" Respondents were encouraged to name actors both inside and outside of government. The measure of actor information used here is the total number of actors mentioned.
Proposal information was elicited by asking "Are there any proposals you think are good (also "not good," and haven’t made up mind about") ideas for how the government in Washington (Toledo city government) should deal with (MI)?" It was emphasized that these proposals could come from either insider or outside of government. Proposal information is indexed by the total number of such proposals mentioned.

Those respondents who were able to name at least one actor and at least one proposal were asked "do any of the groups or persons you mentioned support any of the proposals you just told me about?" This ability to link actors with proposed solutions we consider our most stringent test of political information holding. It is measured here by the total number of actor-proposal linkages \( R \) was able to make.

Standard media use or "potential for exposure" measures were gathered for newspapers (\# of daily newspapers read on an average weekday), television (total \# of television news programs watched in an average week\(^6\)), radio (\# of times radio news listened to on an average weekday), and news-magazines (\# of newsmagazines read regularly).

Also gathered were measures of interpersonal discussion, coorientation, citizen-government influence attempts, alienation, interest in politics, political participation, and various demographic variables, most of which we shall not consider here.

Some Preliminary Findings

In this initial stage of our analysis, we are seeking tentative answers to a number of rather basic questions. First, at the purely

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6. This variable was constructed from a series of questions.
descriptive level:

1). How much do people know about political problems of self-acknowledged importance to them, in terms of actor, proposal, and salience information?

2). Are there any local-national differences in this respect?

3). Do certain media seem to be more fertile sources of information about such problems than others?

4). Are there any local-national differences in the cross-media distributions of discriminated messages?

From the standpoint of theoretical relationships:

1). Does message discrimination uniformly predict different kinds of information holding, or are certain information types predicted more successfully than others?

2). Are there any cross-media differences in this respect?

3). Are message discrimination variables more powerful than conventional media "exposure" variables as predictors of information holding?

4). How does the predictive power of message discrimination compare with that of more stable, transituational variables such as education and interest in politics?

5). Are there local vs. national differences in the answers to any of these questions?

Levels of Information Holding.

Somewhat surprisingly, a greater percentage (39.5%) of respondents at the local level than at the national (32.5%) were able to name at
least one group, person, or organization involved with their self-nominated political problems. The story is reversed, however, with respect to the ability to recall proposed solutions to these problems. Here 66.0% at the national level could name one or more proposals, while only 52.3% of local respondents could do so. Considering the two types of information together, 72.4% of national respondents could name at least one actor or one proposal, compared to 64.8% of local respondents. With regard to the more stringent criterion of actor-proposal linkages, 21.0% of local and 17.7% of national respondents were able to make such linkages.

On the whole, then, the picture presented by these figures is similar to the one generally derived from the more conventional "civics" tests of political information holding. Many persons seem to know little about essential political aspects, even when these aspects are associated with problems of personal importance to them.

That these problems were, in fact, of importance to the majority of respondents is indicated by the figures on salience information. Approximately 76% of the respondents in both samples mentioned at least one way in which their own or members of their family's lives were directly affected by MI. This would seem to indicate, however, that the "important" political problems named by the remaining 24% were only important in relation to other political problems they may have named, and were not important relative to these persons' non-political interests.

Message Discrimination.

As one might expect, many more persons perceived problem-relevant information at the national level (69.5% discriminated at least one message) than at the local (47.0%). In addition, there were interesting cross-level differences in the distribution of messages discriminated

7. The correlation (Pearson r) between actor information and proposal information is .28 at the national level, .45 at the local.
across media, as shown in Table I.

**TABLE I**

<table>
<thead>
<tr>
<th></th>
<th>Newspaper</th>
<th>Television</th>
<th>Radio</th>
<th>Magazine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local</strong></td>
<td>32.5%</td>
<td>24.0%</td>
<td>5.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>National</strong></td>
<td>42.1%</td>
<td>50.3%</td>
<td>12.2%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>

*Percentages may add to more than 100% since respondents could specify more than one source for each content unit discriminated.

Television emerges as a clear leader at the national level as a carrier of information about political problems, although newspapers are not too far behind. At the local level, however, this pattern is reversed, with newspapers emerging as the most important source. This latter finding is corroborated by Farace (1968) in his review of the relatively sparse literature on sources of local political news. According to Farace, typically 40-50% of respondents nominate newspapers as their major source of local news. However, an average of one-third cite radio, and one-sixth mention television. Our data diverges significantly from these latter findings. Either the different methodologies employed are the responsible for disagreement, or television has made significant gains in recent years at the expense of radio as a local news source, or Toledo is not representative of national trends. The latter contingency would seem unable to account for such a large discrepancy. Moreover, data which we gathered via a method similar to that employed in the studies reviewed by Farace support our message discrimination findings rather strongly. Respondents were asked to name those news media which "carry
useful information" about each respondent's nominated problem. The results are displayed in Table II.

TABLE II

<table>
<thead>
<tr>
<th>% Naming One or More Media of Each Type as a Source of Useful Information about the Nominated Problem*</th>
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<tbody>
<tr>
<td>Newspapers</td>
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<tr>
<td>Local</td>
</tr>
<tr>
<td>National</td>
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</tbody>
</table>

*Percentages add to more than 100% since respondents could name more than one medium as a source of information.

Although there are some discrepancies as to the relative importance of sources implied by our two sets of data, both support the superiority of newspapers and television at each level of government.

Predictors of Information Holding

Aggregate percentages of persons utilizing or favoring different media for information about political problems do not necessarily indicate the relative effectiveness of each medium in transmitting information about proposed solutions or actors associated with such problems. Nor do they indicate the relative predictive powers of different types of media variables as compared to such "standard" predictors as education and interest in politics. Correlational analysis can provide us with at least some tentative answers to these questions. In Table III, different types of information holding are arrayed against a number of potential predictors. 8

8. Radio and magazine message discrimination will not be treated separately here because of the small number of respondents in each sample who reported discriminating information from these sources.
TABLE III
CORRELATIONS (PEARSON) BETWEEN INFORMATION HOLDING VARIABLES AND VARIOUS PREDICTORS

<table>
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<tbody>
<tr>
<td><strong>National Level (n=198)</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACTOR INFORMATION</td>
<td>.25***</td>
<td>.05</td>
<td>.20**</td>
<td>.17**</td>
<td>.03</td>
<td>.31***</td>
<td>.01</td>
<td>.30***</td>
<td>.11</td>
</tr>
<tr>
<td>PROPOSAL INFORMATION</td>
<td>.41***</td>
<td>.35***</td>
<td>.43***</td>
<td>.47***</td>
<td>.31***</td>
<td>.15*</td>
<td>.05</td>
<td>.34***</td>
<td>.11</td>
</tr>
<tr>
<td>ACTOR-PROPOSAL LINKAGES</td>
<td>.24***</td>
<td>.15*</td>
<td>.23***</td>
<td>.18**</td>
<td>.10</td>
<td>.25***</td>
<td>.08</td>
<td>.26***</td>
<td>.08</td>
</tr>
<tr>
<td><strong>Local Level (n=200)</strong></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACTOR INFORMATION</td>
<td>.21***</td>
<td>.03</td>
<td>.14*</td>
<td>.25***</td>
<td>.22***</td>
<td>-.01</td>
<td>-.03</td>
<td>.17**</td>
<td>.14*</td>
</tr>
<tr>
<td>PROPOSAL INFORMATION</td>
<td>.03</td>
<td>.04</td>
<td>.01</td>
<td>.11</td>
<td>.21***</td>
<td>.01</td>
<td>.04</td>
<td>.18**</td>
<td>-.04</td>
</tr>
<tr>
<td>ACTOR-PROPOSAL LINKAGES</td>
<td>.14*</td>
<td>.03</td>
<td>.05</td>
<td>.14*</td>
<td>.22***</td>
<td>.03</td>
<td>.01</td>
<td>.18**</td>
<td>.12*</td>
</tr>
</tbody>
</table>

* p < .05  
** p < .01  
*** p < .001

a. Although the measurement of certain variables in this table may not meet the rigorous requirements of an interval scale, Pearson r's were calculated in order to utilize as much of the information in the data as possible. In any case, some 14 of the bivariate relationships presented above were tested via Kendall's Tau B and Tau C. The average difference between these nonparametric coefficients and Pearson's R was only .04.

b. Indexed by number of years of schooling.

c. Interest in national politics at national level, interest in local politics at local level. Measured via a 7pt. Likert-type scale.
National Findings.

At the national level all message discrimination variables (except for TV message discrimination as a predictor of actor information) show moderate and highly significant correlations with the various types of information holding. Education is also a moderate and reliable predictor of all information types. Education is not, however, significantly associated with message discrimination at either the national or local levels, and thus the relation between message discrimination and information holding cannot be a spurious effect of education. Our other "static" transitiutinal variable, interest in politics, is only weakly associated with information holding.

As expected, television news exposure is only very weakly associated with information holding at the national level. Newspaper exposure, on the other hand, emerges as a surprisingly strong predictor. With respect to actor information and actor-proposal linkages it is a better predictor than newspaper message discrimination - an unexpected finding. However, the latter is much more strongly correlated with proposal information.

Although television appeared earlier as the leading source of information about national political problems (in terms of the percentage of respondents discriminating messages from each source), both "exposure" and message discrimination measures indicate that TV is not as effective as newspapers in "educating" respondents about actors and proposed solutions. This is not surprising with regard to proposed solutions, where newspapers have a clearly superior capability to treat complex issues in considerable detail. Newspapers also afford the reader the opportunity to reread and reprocess information which he finds difficult to assimilate.
An often voiced criticism of television news, however, is that it places too much emphasis on "personalities." From this one might expect that viewers would learn about political actors, as we have defined them. Perhaps, though, network news generally fails to "connect" actors with their issue positions. The presentation of such actor-issue "connections" (to use the terminology of McClure and Patterson, 1974), would not only be essential to the perception of specific actor-proposal linkages (as we term "connections" here), but would also be important in creating the impression that certain actors are associated with a problem at all (even though viewers may not learn the precise issue positions of the various actors). Apparently, television does a poor job of providing such linkages, even in the supposedly issue oriented atmosphere of a presidential campaign. McClure and Patterson's (1974) data indicate that television news during the 1972 campaign "did a poor job of informing American voters where the candidates stood on the issues. With few exceptions, the Nixon and McGovern issue positions were neither clearly nor extentensive reported," (p.7). Moreover, changes in voters' perceived candidate-issue connections ("beliefs") during the campaign did not appear to be related to TV news exposure. Our data indicate that a similar situation exists in a non-campaign context. The failure of television news to provide sufficient information regarding candidate-issue connections would seem to extend the more general case of actor-proposal linkages. Of course content analysis of TV coverage would be necessary to strengthen such an interpretation. In light of present evidence, however, the interpretation seems viable enough.9

9. See McClure and Patterson (1974) for an extensive and insightful discussion of characteristics of television news which contribute to its ineffectiveness as a source of political affairs information.
We have no really convincing explanation for the apparent anomaly that salience information is related to proposal but not to actor information, particularly since no such discrepancy is found at the local level. It is possible that the discrepancy is at least partially issue specific. For example, a large percentage of respondents (about 30%) in the national sample nominated the "energy crisis" as their problem of interest. It was noted during coding that such respondents generally had high levels of salience and proposal information, but ordinarily could name few actors. Just why this occurred might be determined via a content analysis of media coverage for the period preceding the survey. In any event, it would have the effect of depressing the correlation between salience and actor information holding.

Local Level Findings. At the local level, salience information is the strongest and most consistent predictor of information holding, followed closely by education. Once again, interest in politics (local) is only a weak predictor. Unlike at the national level, where newspaper exposure exhibited significant correlations with information holding, "potential for exposure" variables uniformly exhibit near zero correlations with all information types.

On the whole, message discrimination does not display the predictive power it showed at the national level. This discrepancy would seem to be based on the convergence of two factors. First, respondents in the national sample tended to focus principally upon two major problems which were of immediate interest at the time of the survey: "Watergate" and the "energy crisis." Secondly, both of these problems had been heavily

10. This would seem to be an illustration of the agenda-setting function of the mass media (McCombs and Shaw, 1972; McCombs and Weaver, 1973; Funkhouser, 1973).
covered by the Toledo media in the weeks immediately prior to the survey. At the local level, on the other hand, respondents nominated a wide range of problems, from "crime in the streets" to a "city garbage truck ran through my fence." It is probable that a number of these problems received little, if any, media coverage in the two weeks immediately prior to the fielding of the study. As a result, many individuals at the local level could display considerable knowledge (as we have defined it) of their nominated problem as a result of past learning, yet be able to recall few if any media messages discriminated "in the past two weeks", simply because the content was not on the media agenda. This would, of course, have the effect of depressing any correlation between media message discrimination and political information holding.

If level of mass media coverage were controlled, therefore, it is likely that message discrimination variables would display generally equivalent predictive powers at the local and national levels across problems which received equivalent levels of coverage. We plan to test this hypothesis as soon as we are able to complete a content analysis of the Toledo media's coverage of nominated problems.

Although its effects may be weakened by the low media coverage factor, newspaper message discrimination still correlates significantly with actor information, and, consequently, with the actor-related measure of actor-proposal linkages. Its failure to correlate at all with proposal information is surprising, especially in view of the relatively strong relationship between these two variables at the national level. This may be indicative of an emphasis on actors in the local coverage of the Toledo papers, at the expense of detailed content concerning proposed solutions to problems. We have, though, no content analytic evidence analogous to the McClure and Patterson data on national television news to support this inference.
In contrast to messages discriminated from newspaper sources, television message discrimination at the local level displays particularly low associations with information holding, even with allowance for suspected low television coverage of many problems. This, when viewed in conjunction with the fact that only 24% of the local sample discriminated television messages, suggests that local television news is not a very effective vehicle for transmitting actor-proposal information. Perhaps the 53% of our local respondents who cited TV (see Table II) as a source of "useful" information about their nominated problem had things other than political actors and proposed solutions in mind. This suggests the need for research into just what kinds of information about a problem persons consider "useful."

**Message Discrimination vs. Information Holding**

It should be pointed out that we are aware of criticism that can be leveled at the potential tautological nature of message discrimination and information holding. We would argue that the former is a first level cognitive processing, while the latter is a second level processing. A person exposed to media content makes a series of discriminations among all possible units of content. These discriminations are then processed in the context of a political or problem oriented gestalt which allows integration of the discriminated content units into a larger cognitive framework.

From an empirical perspective we found that there was a low set of correlations between education and message discrimination, though both correlate highly with information holding. Table IV indicates the magnitude of these relationships. When we consider the fairly large correlations between education and the different types of information in Table III, the obvious inference is that message discrimination and information holding are not the same thing.
### TABLE IV

EDUCATION AND MESSAGE DISCRIMINATION CORRELATIONS

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<td>NATIONAL</td>
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<td>LOCAL</td>
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* p < .05

**Message vs. Content Unit Discrimination.**

Somewhat contrary to our earlier theoretical reasoning, content unit discrimination correlates more strongly with information holding than does all-media message discrimination at the local level, while displaying at least predictive equivalence at the national level. One particular explanation suggests itself. It will be remembered that a respondent might discriminate only a single content unit, but could be given credit for one or more messages discriminated, depending on the number of media in which the content unit was encountered. All-media message discrimination would seem to be a better measure of cross-media exposure, while content unit discrimination would appear to be the more effective index of cross-topic exposure within media. This is because each content unit relates, at least in the mind of the respondent, to a different aspect of the nominated problem. This is not necessarily true of a discriminated message (two or more of which may relate to the same content unit). At the same time, content unit discrimination is also an index of cross-media exposure, though not to the same extent as message discrimination.

Based on this reasoning we would recommend the practice of always examining both message and content unit discrimination in future investi-
gations. Under conditions where within-media variation in content is greater than between-media variance, we might expect content unit measures to be more strongly associated with information holding. Under the opposite conditions, message discrimination should prove the more powerful predictor. Again, content analytic studies which attempt to relate within and between media content variation to variance in the relative efficacy of content unit and message measures are needed to support such a hypothesis.

Summary

This paper has attempted to move out of the usual modes of conceptualization and analysis by concentrating on three major points:

1) the reconceptualization of political knowledge to encompass the respondent's subjective interpretation of certain essential elements of any political problem--actors, proposals, and actor-proposal linkages.

2) the reconceptualization of media use to take into account the messages discriminated by a respondent about a particular content area as opposed to the sheer exposure to media whether content laden or not.

3) the development of a methodology that allows the respondent to define problems which are within his or her realm of personal experience rather than that set a priori by the investigator.

A particularly important feature of this methodology is its applicability across a wide variety of topic areas, thus facilitating the execution of much needed comparative studies. We have employed this feature here in a comparative investigation of mass mediated political learning at the local and national levels. This study, however, has pointed up the need for content analysis of the mass media agenda in studies employing measures
of message discrimination. This need is particularly salient in multi-
topic studies where media coverage may be expected to vary across topics
and across media. Here, the interface between the actual and discriminated
content agendas may significantly affect the magnitude of observed correla-
tions between message discrimination and other variables.
REFERENCES


REFERENCES (Continued)


