

AN ANALYSIS OF THE PERCEIVED  
ORGANIZED STRUCTURE AND SOCIOMETRIC  
APPLICATION IN A REGION

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THESIS



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## ABSTRACT

### AN ANALYSIS OF THE PERCEIVED ORGANIZED STRUCTURE AND SOCIOMETRIC APPLICATION IN A REGION

by Jack Eberhardt Damson

This thesis is concerned with the problem of describing, interpreting, and evaluating a procedural framework for the planning of development activity in a specified geographic area. This procedural framework formed the outline of a research study done on the perceived organized structure and sociometric application in Michigan's Upper Peninsula. The framework consists of the following five steps:

1. The location and definition of organized interest sectors.
2. The identification of the influential organizations within the sectors.
3. An indication of the key leadership representing the organized interest.
4. The location and description of interaction patterns among the organizations and interest sectors.
5. The validation of the procedure through the actual assistance in planning development activities.

The first stage of this thesis dealt with the first three steps of the framework, while the second stage was concerned with the fourth. The fifth step was considered beyond the scope of the research project but is addressed in part by this thesis. The two stages were examined with regard to their theoretic rationale, methodology and findings. The methodologies employed

were the reputational and sociometric methods, which were subsequently described in terms of their application in the research project under analysis. Of primary concern in the third stage of this thesis, was an evaluative critique and detailed analysis of the research design as presented in the previous two stages.

The thesis methodology essentially consisted of a comparison of procedures utilized in the project with those outlined and recommended in the social science literature. Based on the literature were suggestions for the strengthening or revision of the research study design.

It was generally concluded that the procedural framework, including the use of the reputational and sociometric methods, can indeed provide a viable and operational means for assisting in development activities and for contribution to organizational knowledge. More specifically, it was demonstrated that (1) a comprehensive inventory of influential organizations can be obtained for a specific region, and (2) a sociometric technique can locate noticeable patterns of interaction among organizations and interest sectors.

Terminating the thesis is an outline of problem areas which require further refinement and investigation: (1) the identification of a manageable region for study, (2) a defined procedure for organizational selection and placement into interest sectors, (3) decisions pertaining to the nature of organizational representation for the purposes of sociometric information, (4) the construction of a precise sociometric design, and (5) the validation of the procedural framework by actual assistance in planning development activities.



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A THESIS

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This thesis  
is dedicated to my mother

HELEN EBERHARDT DAMSON (1909-1964)

who was totally committed to the service of others.  
Her zest for learning and humanitarian concern has  
played no small part in the direction of my life.



## ACKNOWLEDGMENTS

A thesis is seldom the product of one individual but is shaped and guided by the support and efforts of many who may have, unknowingly, influenced the end result. Two people who have been especially prominent through their assistance and cooperation are Dr. Robert C. Anderson and Harry Webb. Dr. Anderson initially provided the opportunity to work on the project which formed the basis of this thesis and has been instrumental throughout with his guidance and supervision. Both men through their enthusiastic dedication to social science and patient indulgence have contributed to the completion of this work.

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## CHAPTER I

### INTRODUCTION

Community, regional and national development programs have been the objects of much concern and discussion in past years. Urban renewal, highway construction and "beautification" projects have been among the recent elements associated with development activities. President Johnson's War on Poverty has focussed interest on regional development, e.g. the Appalachia area. Much has been written pertaining to the development of emerging nations or development on a national scale. Examples here would include any number of newly emergent African nations and developing South American countries.

These growth activities have threads of commonality running through them. All are concerned with organization per se in varying degrees of complexity. All are also concerned with acquiring support and resources. This most necessarily involves obtaining the support of influentials and the organizational units they represent. In order to acquire this support, knowledge of who these leaders are and the nature of the organized structure they represent must be accessible or available. Considerable effort could be saved and expended elsewhere, if such information were existing prior to the initial stages of a development project. If, indeed, pertinent material were at hand regarding the organized interests and their leadership, growth and development at any level would be greatly facilitated. A natural extension of this viewpoint would be the value of locating and defining the nature of relationships between and among the organized interests. If it can be

established what kinds of relationships persist among the interest units, the nature of and extent of the development programs can be more thoroughly planned and thus enhanced. With this information available, planners would know what kinds of programs could achieve what degree of success and which constellations of organized interests could be expected to support or oppose a program. Logically one could assume that such an analysis could contribute to the prediction of outcomes of political issues. Miller and Form<sup>1</sup> have developed a "theory of issue outcome" which, in certain aspects, is similar to the project under consideration. The fundamental differences seem to be in the method of determining relationships between units.

It appears that an outline has formed which contains the basic steps leading to the attainment of the goal implied above. In actuality there are two goals, one of which is ancillary. The major goal is the evolvment of a working procedural framework in order to aid and assist in the planning of development and growth programs. Associated with this is the consequent contribution to the general body of organizational and interorganizational knowledge of such a framework.

The first step would appear to involve the location and definition of interest sectors. Secondly, it is necessary to identify the major or prominent organizations within these sectors. Thirdly, an indication should be made as to the key influentials who represent the interest units. The fourth step would consist of an attempt to locate and describe the interaction patterns among the organizations and interest sectors. A fifth and final step would then include a validation of this procedure through the actual assistance in planning development activities.

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<sup>1</sup>Delbert C. Miller, "The Prediction of Issue Outcome in Community Decision Making," Research Studies of the State College of Washington, 25:137-47, June 1957.

Although these five steps appear to structure the situation quite rigidly, many variables are involved which may influence the methods and techniques used in the fulfillment of these steps. In respect to this, much deviation or diversity can be expected to occur in the accomplishment of the tasks involved. The diversity is often the result of value judgments, time-space limitations, economic pressures or personality idiosyncracies.

Dr. Robert C. Anderson has initiated a project in which he incorporates his ideas and procedures concerning the conduction of such a study. Three of the steps as described above have been carried out, a fourth is partially completed and the final validation phase awaits trial. It will be the problem of this thesis to describe this project and to offer an interpretative critical analysis upon which a decision on the validation phase may rest.

The first stage (steps 1-3) of this thesis will involve a brief description of a research study on the perceived organized structure of Michigan's Upper Peninsula. This description will involve, in essence, a paraphrasing of the primary features as considered by the project experimenters. An attempt will be made to avoid evaluative comment on my part at this time. The primary purpose of this first section will be to simply relate in an objective manner the study as carried out by Dr. Anderson and his co-workers. In this way a basis of familiarity will be established so that the forthcoming analytic discussion can be made meaningful and shared with a common perspective. A problem of major concern in this section will be the consolidation of the project without losing or misrepresenting the author's meaning. In respect to this, much of the description will contain direct quotes where deemed essential, the inclusion of certain forms which were employed in the study, and a sampling of the results in table form for illustrative purposes.

The second stage of the thesis will concentrate on the sociometric

phase (step 4) of the research study. Since this was the most recent part of the research project, a secondary task of this thesis has been to develop a presentation of the sociometric stage along with appropriate discussion of the findings. As with the first stage, this chapter will follow the format of first presenting the theoretic rationale, the methodology and, finally, the results.

The third stage of the thesis will contain a critical analysis of the project. This analysis will be expected to consist of a detailed examination of the project as described. The thesis methodology at this point will basically involve the following: A search of the literature is carried on for material and information which is pertinent to the procedures examined. These procedures are then compared to and discussed in light of their departure from or adherence to precedent found in the social science literature. Advantages and disadvantages, as outlined by social scientists of the basic methods used, are presented and discussed in terms of their applicability to the research study. Finally, in conjunction with this critical analysis, evaluative comment is offered along with some constructive recommendation, where possible, for a strengthening or revision of certain methodological procedures. Pervading the analytic discussion is the concern with how adequately the procedures employed in the research project contribute to the goals as set forth, i.e. a working framework for development activities and contribution to organizational knowledge.

## CHAPTER II

### FIRST STAGE: THE PERCEIVED ORGANIZED STRUCTURE<sup>1</sup>

#### Theoretic Rationale

Michigan's Upper Peninsula today, like all of modern society, is a bureaucratic society; that is, most of its functional requirements are carried out and controlled by complex organizations. Not only does modern society as a whole tend to be bureaucratic, the most powerful social units which make up modern society are bureaucracies.<sup>2</sup> Not all of these social units are big and powerful. In addition to big business, labor and industry, there are political parties, school systems, churches, small retail stores, voluntary associations, etc., which make up a large part of the social web of a geographic region.

It is postulated that organized special-interest groups represent the basic social units responsible for development. These, large or small, public or private, special-interest groups act as development resource (1) holders, (2) allocators, and/or (3) receivers or some combination of the above. Such

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<sup>1</sup>Most of this chapter is composed of direct quotes from and paraphrasing of the works cited, as follows: Robert C. Anderson, Jack E. Damson and Francis X. Mulvihill, "The Perceived Organized Structure of Michigan's Upper Peninsula--A Sociometric Analysis," a paper presented at the 1965 Rural Sociological Society Meeting, Edgewater Beach Hotel, Chicago, Illinois; Robert C. Anderson, "The Perceived Organized Structure of Michigan's Upper Peninsula," an unpublished Michigan State University Research Report, 1963; and Robert C. Anderson and Gerald Connally, "The Perceived Organized Structure of Five Selected Counties in the Grand Traverse Bay Region of Northwest Michigan," an unpublished Michigan State University Research Report, 1965.

<sup>2</sup>Amitai Etzioni, Complex Organizations: A Sociological Reader, p. 257.

organizations are control mechanisms through which power<sup>1</sup> for development is generated and flows. As such, organized special-interest groups of a given geographic area become basic development resources. They are in a position to accumulate and control other types of resources necessary to achieve the development goals of a given region.

Given, then, is the fact that development resources available to an area are allocated to and through the informal and formal organized special interests. But resource allocations or requests can be made only to that which is known to exist or is perceived by those in a position to allocate or request resources. If, in an area such as Michigan's Upper Peninsula, an organized special-interest group is not perceived or recognized by others in the region, the resources of this group are not generally available or used in development efforts for that region. In the research study it is contended that social systems (organizations) are in themselves basic resources (as is air, water, iron, trees, etc.); there may be an abundance of them, but if they are not discovered, perceived, or recognized by others as resources, then they are not generally available for use in development activities.

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<sup>1</sup>In the study, power is viewed as a social rather than an individual phenomenon--power "not of a man" but on an "organizational" basis. Power is considered to be derived from and in relationship to organized special-interest sectors. This conceptualization of power as a system of social relationships, presupposes in every community of interest a specific ongoing network of stable subsystems, "social systems" or organizations activated by social, economic, ethnic, religious, friendship, etc., ties and claims. The actions of these systems, based on their interests, values, and powers have desirable consequences for their members. That is, they tend to satisfy various human needs of their members.

For an elaboration of this position, see Robert Presthus, Men At The Top: A Study in Community Power, New York: Oxford University Press, 1964; Richard M. Emerson, "Power-Dependence Relations," American Sociological Review, 27:31-2, January 1962; Alvin L. Bertrand, "The Changing Power Structure in Agriculture as a Dimension of Agrijustment--A Conceptual Approach to the Study of Agricultural Power," Projection Papers, ed. James H. Copp, Rural Sociological Society, 1964, pp. 20-24.



Social systems or organizations tend to persist over extended time periods. Organization members do change, but the underlying network of inter-related interests, power and relations continue. The organized units making up the special-interest sectors of a given geographic area each possess a major purpose or raison d'etre. These individual units collectively are linked by issues of common concern. The units thus become parts of social systems and subsystems. As specific issues rise and fall, overlapping coalitions of special-interest groups are formed. Sometimes an organization is cooperating, and at other times competing, sometimes engaged, at other times not involved with other organized special-interest groups affected by issue resolvment.

As issues are addressed, some organizations are more powerful or influential than others. An organization's power ranking will generally vary with the issue to be solved. Organization involvement and influence in issue resolvment and/or development depends upon the place a given organization occupies in the legitimate "relevant order" of the organized community of interest affected by the issue and/or the development activity.

Organizations are control systems, which for most people represent a major part of their environment.

Man's life in contemporary society can be characterized largely as one of organizational memberships. Man commits a major portion of his waking hours to participation in at least one--and more often several--social organizations. His motivation, aspirations, his general way of life are tied inextricably to the organizations of which he is a part--and even to some of which he is not.<sup>1</sup>

Organizations tend to be highly elaborated, relatively stable, and explicitly defined in written as well as perceptual terms. Therefore, when organizations become the focus for the analysis of development in man's environment, it

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<sup>1</sup>Arnold Sherwood Tannenbaum, "Control in Organizations: Individual Adjustment and Organizational Performance," Administrative Science Quarterly, 7:236-7, September 1962.

becomes a highly stable and predictable environment.

Organizations within a given geographic region or interest sector can be seen as having a fabric of roles that constitute the structure of the region or interest sector. Within this structure individual organizations act and contribute in accordance with role prescriptions or expectations. They perform and coordinate their activities with each other in accordance with the relationships of their roles to other roles in the structure.<sup>1</sup>

Weiss and Jacobson point out that within a given organization its structure can be assumed to remain relatively constant despite changes in personnel. If a member of a relatively stable organization is replaced, the new member will ordinarily be expected to reestablish the work relations that the previous incumbent had maintained with changes only in the more peripheral contacts. Likewise within a geographic region or community of interests it can be generally assumed that the structure remains relatively stable. That if one organization and its role function is replaced, the new organization will generally be expected to reestablish the work relations maintained by the replaced organization.

The study was formulated around the postulate that the organized structure of a geographic region, such as the Upper Peninsula, is made up of constellations of interdependent interacting social systems, such as: Cleveland Cliffs Iron Company; Kimberly-Clark Corporation; Clairmont Transfer Company; Michigan Technological University; City Chamber of Commerce; city, county and state government units; Upper Peninsula Tourist Association; stores on main street, etc. All of these large or small organized systems when added together make up the organized structure of the region. As such they represent

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<sup>1</sup>A modification of the assumption made by Robert S. Weiss, Eugene Jacobson, "A Method for the Analysis of the Structure of Complex Organizations," American Sociological Review, 20:661-68, December 1955.

major resource holding, allocating and receiving units for growth and development of the region.

Constellations of many specific organizations performing a wide range of specialized functions make up what can be called Communities of Interest. That is to say, for purposes of the study, their primary activities center around the specific Interest Sectors of: (1) Forestry, (2) Agriculture, (3) Fishing, (4) Mining, (5) Tourism, (6) Manufacturing, (7) Utilities, (8) Transportation, (9) Communications, (10) Education, and (11) Service.

Each community of interest is composed of widely diverse and specified organizations. For example, the Communications community of interest consists of such varied organized units as the Menominee County Journal, White Pine TV Company, WMUP-TV, WMAB Radio, UP Microwave Corporation, Soo Cable Company, and Teleprompter of New York.

It is believed by the experimenters that the organized units composing each community of interest may affect the development efforts in a region by taking one of these three courses of action:

1. To actively organize and support a given development project.
2. To maintain a neutral position in regard to a given development project, but by so doing it becomes a potential source of organized active support or opposition to the development effort in question.
3. To actively organize opposition to a given development project.

Six basic assumptions which compose the primary theoretical features of the study are outlined. For the purpose of the research study it is assumed that:

1. Social power is structured.

2. Organizations (social systems),<sup>1</sup> not individuals, are the basic unit of power.
3. As such, organizations rather than individuals form major development policies and decisions, are influential, are powerful, and form coalitions to achieve common tasks.
4. The behavior of an organization is reflected in the actions of its members who are socialized through and have internalized the norms of the organization.
5. Such members, whether they be classified as "Decision Makers," "Influentials," "Organization Leaders," or "Spokesmen," can and do accurately reflect and transmit their organization's position on most major issues.
6. Therefore, it is possible and realistic to expect members of a given organization (key informants) to accurately and reliably provide descriptive statements about past, present and future organizational action.

As will be noted, one of the pervading theoretical notions which is present in the study is the belief that individual members can accurately reflect the interests of an organization. This belief is buttressed by the apparent effectiveness of the socialization process which involves the inculcation of organizational values and norms. Most recent community power studies are, in fact, studies of individuals who are considered to be influentials, decision makers, spokesmen, etc. The individual members are referred to throughout the research study by these labels, any or all of which are

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<sup>1</sup>Charles F. Loomis, Social Systems, New York: D. Van Nostrand Company, Inc., 1960. See pp. 1-44 for a description of an explanation of the term social system and how these interdependent units are integrated to form social structure.

considered appropriate. Commonly used definitions and distinctions of these terms are as follows:

1. Decision Makers -- Those who proved to be directly involved in vital organization and/or community decisions.
2. Influentials or Influential Representatives -- Those who are nominated as being potentially powerful in organizations and/or community decisions.
3. Organization Leaders or Top Leaders -- Those who hold organizational offices, such as president, chairman, board member, etc.
4. Spokesmen -- Those who meet the public, represent the organization, receive publicity but do not necessarily hold any decision-making power in the organization.

Positional incumbent may refer to any of the above mentioned who occupy a formal position within the organizational structure. Top positional incumbent does, however, pertain only to those who reside on the highest structural level or who maintain an executive status. Key informants and knowledgeable top-level personnel are blanket terms referring to any of the above.

It will be noted that in an examination of the first stage findings (Tables 2-6)<sup>1</sup> that several persons may be nominated as influentials for a particular organization. It has been stated that it is not one of the objectives of the research study to classify or type the persons nominated into specific categories. For this reason, they are listed under the general heading "Top Leaders."

This section has contained a theoretic rationale including a definition of terms and the underlying assumptions of the first stage on the perceived

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<sup>1</sup>These tables merely represent a selected sample of the summary charts collected on the organized interests. These charts are meant neither to be complete nor exhaustive.

organized structure. The methodological procedure involved will be the subject of the presentation in the succeeding section.

### Methodology

The primary methodological tool utilized in the first stage of the research study is a modified reputation-nomination method.<sup>1</sup> The use of the method is based on the premise that an organized power structure exists in concretely definable terms for any given geographic region. The major goal of the method is the identification and definition of the perceived organized structure in Michigan's Upper Peninsula. This identification and definition involves four distinct phases or steps.

The first step consists of a review of statistical reports and development studies relating specifically to the Upper Peninsula. The object of this step is to locate the major sectors of interest groupings. Eleven areas were defined, among which were Forestry, Mining, Tourism, Agriculture, Business, Manufacturing, Fishing, Utilities, Transportation, Communication and Government. This list does not represent an exhaustive nor mutually exclusive classification.

The second step included the design of an open-ended interview schedule, which would allow for the nomination of organizations and their influential representatives indigenous to the defined interest sectors. Nominations were made by peers in similar positions throughout the interest sectors.

In the interview schedule (Table 1), no attempt was made to limit the number of organizations and/or influentials nominated. The schedule simply

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<sup>1</sup>Floyd Hunter, Community Power Structure, Chapel Hill: University of North Carolina Press, 1953, p. 297; and Top Leadership, U.S.A., Chapel Hill: University of North Carolina Press, 1959, p. 268. Also, William V. D'Antonio and Eugene C. Erickson, "The Reputational Technique as a Measure of Community Power: An Evaluation Based on Comparative and Longitudinal Studies," American Sociological Review, 27:362-76, June 1962.



TABLE 1  
ORGANIZATION STRUCTURE OF THE UPPER PENINSULA  
SCHEDULE 1

Name	Organization			Date
INTEREST AREA	A*	E**	ORGANIZATION	TOP LEADERSHIP
FORESTRY Lumber  Paper  Chemical  Other				
MINING Iron  Copper  Non-metallic  Other				
TOURISM Food  Lodging  Recreation  Other				
AGRICULTURE Livestock  Cash crop  Cooperative  Other				

\*Area code: UP (T), East UP (E), Central UP (C), West UP (W), Michigan (M), Nation (N)  
 \*\*Educational training and retraining activity (yes) (no).

TABLE 1--Continued

INTEREST AREA	A*	E**	ORGANIZATION	TOP LEADERSHIP
BUSINESS Service  Retail  Wholesale  Financial & Advisory				
MANUFACTURING Machinery  Food  Fabrics  Other				
FISHING Commercial  Processing  Sport  Other				
UTILITIES Electric  Telephone  Telegraph  Other				

\*Area code: UP (T),East UP (E),Central UP (C),West UP (W),Michigan (M),Nation (N).  
 \*\*Educational training and retraining activity (yes) (no).

TABLE 1--Continued

INTEREST AREA	A*	E**	ORGANIZATION	TOP LEADERSHIP
TRANSPORTATION Air  Rail  Water  Motor				
COMMUNICATIONS Newspaper  Radio  Television  Other				
GOVERNMENT Legislative  Regulatory  Educational  Service				
OTHER				

\*Area Code: UP (T),East UP (E),Central UP (C), West UP (W),Michigan (M),Nation (N).  
 \*\*Educational training and retraining activity (yes) (no).

lists the categories along with suggestions as to the possible types of related organizations within the categories. For example, under the interest area of utilities are listed the subcategories of electric, telephone, telegraph and other. This was done to provide a guide for the informants in order to facilitate the nominating of the organizations and their top leadership. Also included in this interview schedule are two columns headed by an "A\*" and an "E\*\*." Originally these two designations were constructed to obtain additional information on the organizations nominated as to their extent of operations and ongoing inservice training. This was soon dropped, however, as the acquisition of the data proved too cumbersome.

The third step taken in the study design involved the definition of the population to be studied and an extraction of a sample from this population. The population consisted of only "knowledgeable top-level personnel" representing the organizations composing the interest sectors. A sample of informants from this population were drawn initially by the County Cooperative Extension Service Director of each county who was told to select those key people "who were knowledgeable and legitimate representatives or holders of operational positions" in the respective interest areas.

The fourth step consisted of interviewing those selected informants in a systematic county-by-county manner by one interviewer. The informants were asked to nominate other organizations and leaders believed to be influential in or among the eleven interest sectors.

The data obtained from the interviews were considered to be additive. Thus, as new organizations were nominated, they were added to the total structure. The frequency of nominations was used as a measure of relative importance of the organization to the region. The number of informants interviewed in each county varied, depending upon the situation in each county.

More interviews were conducted in counties of greater activities than in the less diversified, more specialized counties. An estimated minimum of 6 and a maximum of 12 or an average of 9 interviews per county seemed to be sufficient in order to accomplish the survey task in the Upper Peninsula study. Actual interviews conducted ranged from a low of 4 in Dickinson County to a high of 17 in Marquette County. A total of 139 people were interviewed in 15 counties, an average sample size of 9.2 interviews per county. Houghton and Keweenaw county data are reported together because of the natural geographic and economic similarity of these two counties.

#### Description of Results

The results of the first stage consist of data summaries in the form of tables, which are derived from the first three steps as identified in the introduction. These steps, it will be recalled, involve the identification of interest sectors, the major organizations within the sectors and the influentials who represent the interest groups.

The following will represent a description of these first stage findings as interpreted from the project text. Since a complete replication of the findings is not necessary here, only a few sample tables will be reproduced. These tables will be examined and explained briefly, again reserving discussion and comment until a later section of the thesis.

Table 2 includes a sample of the data accumulated in the systematic interviewing of Upper Peninsula counties. In this case, Chippewa County is selected for representation. The listing of the organizations and their key leaders is the result of the open-ended nomination technique described previously. Within each county, interest sectors were delineated along with the most important organizations and leaders; i.e. those who were nominated two or more times.

Tables 3-6 represent sample summary listings of four selected interest areas in the Upper Peninsula. The four areas used are Forestry, Transportation, Mass Communications and Manufacturing. As reproduced here, the tables are incomplete but do illustrate the form and content of the data compiled.

The findings (Tables 2-6) of the first stage imply a two-dimensional aspect, that is a vertical and horizontal organized pattern. First of all there is a horizontal dimension which shows the depth or number of organized interests within a county, and secondly a vertical pattern which shows the recognized regional or area scope of activity of a given organized interest in the Upper Peninsula. In other words, the horizontal pattern shows the number of organizations, their diversity and their range of activity within the counties. More specifically a particular interest area, such as Forestry, may show a strong horizontal dimension through a large number of varied organizations within a county. The vertical pattern, on the other hand, is reflected by a hierarchical orientation to regional, state and national organizations of the various local branches of the organized interests nominated. This vertical aspect can be illustrated by such organizations as the Michigan Department of Conservation, Kimberly-Clark, Inc., and WLUC-TV, all of which have a wide scope of regional influence plus connections with state and national organizations.

Table 2, which represents the perceived organized structure of Chippewa County, illustrates the horizontal pattern or the depth of organized units recognized in each of the eleven interest sectors within the county.

Tables 3-6 illustrate, besides the horizontal aspect, the vertical dimension through the multi-county nomination of particular organizations within the interest sectors. Also in these tables is noted the multi-nomination of an organization through the use of a double X (XX). Single nominations are represented by a single X (X).

The influence of these organizations may be viewed as either positive or negative. That is the organizations listed are nominated because of the potential perceived power to affect development activities. This power may be used either to promote and activate specific development projects or to successfully prevent such activities from occurring. In either case no value judgment as to the goodness or badness of this implied power is in any way incorporated into the study. Likewise the data presented in Tables 3-6 do not measure the amount of real or potential power held by any specific organization listed. Rather, the nomination listing simply indicates that the collectivity of organizations inventoried in each of the eleven interest sectors account for most of the development power sources perceived to be active in Michigan's Upper Peninsula.

Operating under the theory that a perceived organized structure can be identified and defined in a particular geographic region, an inventory of organizations and their top leadership was obtained through the use of a modified reputation-nomination method. The theory, methodology and findings of the first stage of the research project have been presented and the first three steps of the procedural framework outlined in the introduction have been completed and described.

TABLE 2

ORGANIZATION STRUCTURE OF THE UPPER PENINSULA  
SCHEDULE 1 SUMMARY

CHIPPEWA COUNTY

FORESTRY (Lumber, Paper, Chemical, Other)

- |   |   |
|---|---|
| 1. Kimberly Clark of Michigan, Inc.*                          | W. R. Kellett (Pres.),*<br>R. E. McCraney*                |
| 2. U.S.D.A. Forest Service*                                   | Richard Ruppenthal,* Malcolm McIver                       |
| 3. Michigan Dept. of Conservation*                            | W. Lahmann*   |
| 4. Mich. College of Mining & Technology*                      | Clayton Wray,* Walter Kepp                                |
| 5. Mich. State University School of<br>Forestry Exp. Station* | Maurice Day*  |
| 6. Furlong Logging Co.*                                       | F. P. Furlong*  |
| 7. Superior Studs*  | W. Parker Arthur*   |
| 8. Wood & Brooks Co.*   | (Buffalo, N.Y.) Bur Alo                                   |
| 9. Taylor Lumber*   | Sprague Taylor*   |
| 10. Barrett Lumber Co.*                                       | Fern Barrett*   |
| 11. 75 Club*  | Clayton Wray*   |
| 12. Connor Lumber Co.   | Mr. Noblet  |
| 13. Ford Motor Company  |   |
| 14. Manistique Pulp & Paper Co.                               | Frank Hoholik   |
| 15. Thilmany Pulp & Paper Co.                                 |   |
| 16. Sawyer-Stoll Lumber Co.                                   |   |
| 17. Goodman Lumber Co.  | Peter Noblet  |
| 18. Union Carbide   | George Tarbox   |
| 19. Contractors   | Harry Rath, Percy Scott,<br>Sprague Taylor, Lowell Lehman |
| 20. Industrial Comm. Ext. Comm.                               | Richard Burnett   |
| 21. Karl Pitko Sawmill  | Karl Pitko  |
| 22. Wisconsin Land & Lumber Co.                               | (Hermansville, Michigan)                                  |

MINING (Iron, Copper, Non-metallic, Other)

- |                                |                                      |
|--------------------------------|--------------------------------------|
| 1. Drummond Dolomite, Inc.*    | R. L. Miller,* A. W. Mueller (G.M.)* |
| 2. Wisconsin Land & Lumber Co. | (Hermansville, Michigan)             |
| 3. Wood & Brooks Co.           | (Buffalo, N.Y.)                      |
| 4. Cedarville Limestone Co.    |                                      |
| 5. AFL-CIO Steel Workers       | Tom Bush                             |
| 6. United Mine Workers Union   | Robert Kutz (Cheboygan)              |

TOURISM

- |  |   |
|--|---|
| 1. Sault Ste. Marie Chamber of Commerce* | Otis Rightmyer*<br>Robert Champion,* Alex Goldaid |
| 2. U.P. Tourist Assn.*                   | Ken Slater, Ken Dorman*                           |

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\*Most important organization or leader.



TABLE 2--Continued

3. Mission Hill Ski Resort*	Donald Swartz,* Dr. H. R. Allot
4. Hulbert Boat Tours*	Ken Slater*
5. Anchor Motel*	Robert Champion*
6. Caribou Lake Resort*	Kent Hamilton*
7. Iroquois Corp.	Donald Schwartz
8. DeGraff's Lodge	Phil DeGraff
9. Long Ship Motel	Harry Brattin
10. Detour & Drummond Island Chamber of Commerce	
11. Welch Lock Tours	Wayne Welch, T. C. Caffey
12. City of Sault Ste. Marie High School	
13. Sault Ste. Marie City Government	
14. Chippewa County Board of Supervisors	Alex Goldaid
15. Michigan Bear Hunters	Alex VanLuven
16. Michigan State University	Clare Gunn, Dr. Robert McIntosh
17. Les Cheneaux Chamber of Commerce	

AGRICULTURE (Livestock, Cash Crop, Cooperative, Other)

1. MSU Coop. Ext. Service*	Karl Larson*
2. Dairy Farmers*	Frank Halcin, Tom Halcin, J. Vanderstar
3. Trefoil Growers Assn.*	Melvin Stahl*
4. MacInnis Farm & Garden Center*	J. O. MacInnis*
5. Chippewa County Grange*	William Reynead, George Reynard, Robert Sutton
6. Escanaba Livestock Auction	Ernest Dunbar
7. Sault Ste. Marie Chamber of Commerce	Howard Lightfoot
8. Rudyard Cooperative	Neil Ahola
9. U.S.D.A. Soil Cons. Service	Frank Griffen
10. Michigan Milk Producers Assn.	
11. Rudyard Livestock Auction	Forbes MacDonald
12. Cedarville Livestock Company	Wilber Rasmussen

BUSINESS (Service, Retail, Wholesale, Financial & Advisory)

1. Sault Ste. Marie Chamber of Commerce*	Otis Rightmyer*
2. First National Bank*	Paul Willson,* Donald Finlayson*
3. Sault Savings Bank*	Fred K. Shafer*
4. Central Savings Bank*	Walter C. Drevdahl*
5. Soo Hardware Company*	Roy Fletcher,* Arnold C. Jorgenson
6. Group 1 Mich. Bankers Assn.*	Donald Finlayson*
7. Detour Dock Co.*	Albert Fountain*
8. Cedarville Lions Club	Lyle Hudson
9. Cedarville Business Men's Assn.	Lyle Hudson
10. Les Cheneaux Chamber of Commerce	Steven Stiling
11. Soo Auto Dealers Assn.	
12. U.P. Feed Dealers Assn.	J. O. MacInnis

\*Most important organization or leader.

TABLE 2--Continued

13. MacInnis Farm & Garden Center	J. O. MacInnis
14. Chippewa County Coop.	Willard Walker
15. Chippewa County Bar Assn.	Robert Kline
16. Sault Credit Bureau	Lionel Anderson
17. Soo Machine and Auto Co.	Duncan Hollingsworth
18. Freedman Wholesale Co.	David Freedman

MANUFACTURING (Machinery, Food, Fabrics, Other)

1. Union Carbide Olefins Corp.*	George Tarbox
2. Soo Veneer Co.*	Mr. Behling
3. Soo Creamery*	Reginald Turner
4. Manthei Veneer Co.	Manthei Bros.
5. Lock Concrete Products	William Brown
6. Chipwood Products of Rudyard	
7. Rudyard Cheese Plant	
8. Pickford Creamery	Burton Jeske
9. Soo Welding Co.	Art Fabry
10. Carpenters Union	Millard McKiddie
11. CIO-AFL	Tom Bush
12. Dredgemen's Union	Wayne Weston*

FISHING (Commercial, Processing, Sport, Other)

1. Brown Fisheries*	Tom Brown*
2. Tinker Fisheries*	Jim Tinker*
3. U.S. Fish & Wildlife Service*	Peter Drake*
4. Soo Fishermen's Assn.	Wayne Weston,* Richard Weston
5. Michigan Fish Producers' Assn.	Roy Jensen
6. Sault Ste. Marie Chamber of Commerce	
7. Leitz Sport Shop	H. Leitz
8. Isaac Walton League	Harmon Knop
9. Radcliffe Fisheries	
10. Independent Fishermen	George Newell, Burton Holmberg

UTILITIES (Electric, Telephone, Telegraph, Other)

1. Edison Sault Power Co.*	George Larke*
2. Cloverland Electric Power Co. REA*	Roy Wells, Frank Tallentin
3. Mich. Bell Telephone Co.*	Howard Haight*
4. General Telephone Co.*	
5. Western Union*	
6. Michigan Gas Co.	T. K. Horton
7. Sault Gas Co.	

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\*Most important organization or leader.

TABLE 2--Continued

TRANSPORTATION (Air, Rail, Water, Motor)

1. North Central Airlines*	
2. Soo Line R. R. Co.*	
3. Clairmont Transfer Co.*	Herbert Norton
4. Greyhound Bus Co.*	
5. County Airport	Volney Lutz
6. Famous Lock Tours	Jack Sims
7. Welch Lock Tours	Milo Welch
8. Reiss Steamship Co.	Robert Thompson
9. Red Arrow Steamship Co.	
10. Rock Port Steamship Co.	J. P. Fieck (V.P. and G.M.)
11. Boland & Corneilius S. S. Co.	
12. Detour Dock Co.	Albert Fountain
13. Chippewa County Road Commission	
14. Short Transfer Co.	Harold Short (Bay City)
15. Lock City Transportation Co.	
16. North Star Bus Co.	William Post (Grand Rapids)
17. Cedarville Freight Lines	Dale Bawks, Raymond Kielbosa

COMMUNICATIONS (Newspaper, Radio, Television, Other)

1. The Evening News*	George Osborn,* Eugene Sunstrum, Stanley R. Pratt*
2. Detroit Free Press*	
3. Detroit News	
4. Weekly Wave (Cedarville)	Marty Bradley, Jerry Bradley
5. WSOO Radio*	Ed Krieger, Russell Staffeld, Stanley R. Pratt (Pres.)*
6. CJIC Radio*	Mrs. Hyland
7. CKLJ Radio*	
8. CJIC-TV (Canada)*	Russell Ramsay, Irv Horton
9. WWUP-TV*	Donald Galager, Lee Stevens
10. WTOM-TV (Cheboygan)*	
11. Fetzer Television Co.	
12. Soo Cable Co.	Mr. Clark

GOVERNMENT (Legislative, Regulatory, Educational, Service, Other)

1. U.S. Rep.*	Victor A. Knox*
2. Michigan Rep.*	Clayton Morrison*
3. Chippewa Co. Clerk*	Judson Swart*
4. Chippewa Co. Road Comm.*	Esra Fountain
5. Sault Ste. Marie Public Schools*	Hugh Holloway,* Maurice Strahl
6. Sault Ste. Marie City Assessor*	R. O. Gustafson*
7. Sault Ste. Marie City Comm.	Roy Linn
8. Chippewa Co. Board of Supervisors	Steven Youngs
9. Chippewa Co. Sheriff	Stanley McKee
10. Michigan State Police	George Burdett

\*Most important organization or leader.

TABLE 2--Continued

11.	Sault Branch, Michigan College of Mining and Technology	
12.	Detour Public Schools	Mr. Manti
13.	U.S. Corps of Army Engr.	Clifford Aune
14.	Sault Industrial Comm.	Ted Caffey
15.	Sault Industrial Board	Allen McLay
16.	Sault Aviation Committee	Volney Lutz
17.	United Stone & Allied Products Workers of America -- CIO-AFL	Robert Kurtz
18.	Sault Ste. Marie Planning Comm.	John McDonald
19.	Chippewa County Planning Comm.	Donald Howson
20.	Michigan State Employment Service	Walter Anderson

TABLE 3  
ORGANIZATION STRUCTURE OF THE UPPER PENINSULA INTEREST AREA SUMMARY

ORGANIZED INTERESTS		COUNTIES												TOP LEADERSHIP	
FORESTRY	Houghton-Keweenaw	Ontonagon	Gobele	Iron	Baraga	Marquette	Dickinson	Menominee	Delta	Schoolcraft	Alger	Luce	Chippewa	Mackinac	(*Leadership recognized in more than one county)
USDA Forest Service	X	XX	XX	XX	XX	XX	X	X	XX	XX	XX	XX	XX	XX	John Wernham,* J.P. Orcutt, Richard Rupenthal,* etc.
Kimberly Clark of Mich., Inc.	X	X	XX	X	XX	XX	XX	XX	X	XX	XX	XX	XX	XX	C.A. Samuelson,* R.J. Wells* William Beerman,* etc.
Celotex Corp.	XX	X	X	X	XX	XX			X					X	Lynn Sandberg,* Mr. Lacey, Jim Walders, etc.
Michigan and Wisconsin Timber Products Assn.	XX		XX			XX		X	X						D.J. Massoglia,* Edward J. Anderson, etc.
Goodman & Mohawk Lumber Divisions of Calumet and Hecla	XX					XX						XX	X	X	Peter Noblet,* Charles Mein,* etc.
Cliffs-Dow Chemical Co.	X			X	X	XX			XX		XX				R.W. Jenner,* Richard C. Hammerschmidt,* etc.
Abbott Fox Lumber Co.	X	XX				XX	XX								Abbott Fox*
Huss Ontonagon Pulp & Paper Co.	XX	XX	X		XX	XX	XX	X							A.N. Cuneo,* Alvin Huss,* Abbott Fox,* etc.
Horner Flooring Co. & Chassell Box	XX														H.K. Hamer, John N. Hamar, Albert W. Quandt
Vulcan Corp. (logging)	XX														Stanley Shebuski
Gibbs City Lumber Co. (logging)	XX														Bert Ahmil
Dion Bros. Saw Mill	X														Art Dion
Donken Sawmill	X														
Michigan College of Mining & Technology	X				XX	X							XX		Eric Bourdo,* Dr. Van Pelt, U.J. Noblet, etc.

(X = single nominations, XX = multi-nominations, of organizations within the specified county.)





TABLE 5

## ORGANIZATION STRUCTURE OF THE UPPER PENINSULA INTEREST AREA SUMMARY

ORGANIZED INTERESTS	COUNTIES													TOP LEADERSHIP	
MASS COMMUNICATIONS	Houghton-Keweenaw	Ontonagon	Gogebic	Iron	Baraga	Marquette	Dickinson	Menominee	Delta	Schoolcraft	Alger	Luce	Chippewa	Mackinac	(*Leadership recognized in more than one county)
The Daily Mining Gazette	XX				XX	XX									Jack W. Rice,* Mr. Gagnon
The Book Concern	XX					X									Matt Laitala
Copper Country News	XX														Emil Rutila
Native Copper Times	X	XX	X												Edward Wolfe,* Irene Wolfe*
Ontonagon Herald Co.			XX												Lynwood Noyes,Edwin Johnson
Ironwood Daily Globe			XX												George Westlund
Wakefield News			XX												John Novascone
Bessemer Herald				XX		XX	XX								Fred Fagan, Frank Russell,
Iron Mountain News				XX											Larry Tucker, etc.
Iron River Reporter				XX		X									Gene Moore*
Diamond Drill				XX							XX				Rudolph Dalpra
The Mining Journal Co.					XX	XX					XX				Kenneth Lowe,* Frank Russell, etc.
Escanaba Daily Press					X	XX		X	XX	XX	XX	XX	XX		Jean Worth,* Frank Russell,*
The Detroit Free Press					X						XX				R. W. Menge
The L'Anse Sentinel					XX										George Osborn,* Fred Schultz, etc.
Chicago Sun Times					X										Frank Bayee
Chicago Tribune					X										James M. Ripley, Robert
Grit					X										Murphy
The Evening News						XX						XX	XX	XX	
Menominee County Journal								XX							
Menominee Herald-Leader								X							

(X = single nominations, XX = multi-nominations, of organizations within the specified county.)



TABLE 6

## ORGANIZATION STRUCTURE OF THE UPPER PENINSULA INTEREST AREA SUMMARY

ORGANIZED INTERESTS	COUNTIES												TOP LEADERSHIP		
MANUFACTURING	Houghton-Keweenaw	Ontonagon	Gogebic	Iron	Baraga	Marquette	Dickinson	Menominee	Delta	Schoolcraft	Alger	Luce	Chippewa	Mackinac	(*Leadership recognized in more than one county)
	Lakeview Lumber Co. Soli Forest Products Northwoods Lumber Co. Ruona Lumber Co. Erickson Lumber Co. Our Own Bakeries, Inc.  The H. W. Gossard Co. Cliff Dow Chemical Robbins Flooring Co. Harnischfeger Corp. Bancroft Dairy Inc. Cohodas Bros., Inc. Textile Workers Union Union Carbide Olifins Inc. Grede Foundry (Iron Mt.) Lloyd Mfg. Co. of Hayward-Wakefield Co. Lloyd Local 413 UAW-CIO Stephenson Development Comm. R. J. Enstrom Corp. King-Seeley Thermos Co. Signal Div. L. E. Jones Corp. Menominee Foundry Giddings Lewis Machine Tool Co.				X X X X X X	XX  XX XX XX X X X X X X							X		Edward Moilanen Gust Soli, Sr., Gust Soli, Jr  William Ruona  Clyde Hecox, Sherwin Overholt Kenneth Strengberg R. W. Jenner Russell Carriere Ted F. Derse* Roy Fassbender Sam Cohodas, Mr. Baril  George Tarbox* (Soo) William Grede*  Lyle Fehrenbach James Throm, Ali Jensen Herbert Corey Jack Christensen William H. Caley  Douglas Jones  George A. Salisbury

(X = single nominations, XX = multi-nominations, of organizations within the specified county.)



## CHAPTER III

### SECOND STAGE: SOCIOMETRIC APPLICATION

Representing the second major stage of the research project is this chapter on the sociometric analysis of organizations in the Upper Peninsula. This particular phase of the study is indicative of the fourth step, viz. the location and description of interactions among the organized interests of the proposed five-step framework. Since this is the most recent part of the project, it has been a secondary task of this thesis to develop a presentation and discussion of this particular step.<sup>1</sup> The format of this chapter will primarily consist of explaining and describing the sociometric tool employed, the procedure involved in its administration and the findings obtained. Preceding this discussion, however, will be a theoretic rationale providing a basis for the use of the method. Evaluative comment will be reserved until a later portion of the paper.

#### Theoretic Rationale

Noted by their absence in sociological literature are studies concerning interorganizational relations. At the same time much emphasis has been placed on small group and intraorganizational research. Etzioni<sup>2</sup> calls sharp attention to the fact that, while modern society is one of organizations, the obvious question of how these organizations interact has not been systemati-

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<sup>1</sup>Anderson, Damson and Mulvihill, loc. cit.

<sup>2</sup>Amitai Etzioni, Modern Organization, Englewood Cliffs: Prentice Hall, Inc., 1964.

cally explored. We know a great deal about interaction among persons and something about interaction among groups but surprisingly little about interaction among organizations.

Probably one of the reasons for this void in interorganizational research is the sheer bulkiness and large number of relationships to be accounted for. But now that high-speed computers are available and their application to sociological theory and research is growing, quantitative techniques such as sociometric analysis of organizational interaction patterns are now technically feasible.

With the development of sociometric techniques it was almost inevitable that these devices be applied to the study of both power and influence in the local community. Essential sociometric methods for the analysis of organizational interaction patterns have been worked out. Two specific methodologies heavily influenced the design of this study. The first was Hunter's<sup>1</sup> reputational method of social analysis and, secondly, Weiss and Jacobson's<sup>2</sup> set of structured concepts and methodology demonstrated a practical approach to the sociometric analysis of complex structures. While Weiss and Jacobson have come closer than anyone else in developing and promoting the use of the sociometric approach in the analysis of complex organizations, they do not extend such use beyond intraorganizational activity. It is at this point that the research study parts with precedent, such as it is, and attempts to apply a sociometric technique to the study of interorganizational relationships.

The sociometric tool employed in this study was utilized because of a number of reasons, not the least of which were the facility of administration and compilation of results.

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<sup>1</sup>Hunter, loc. cit.

<sup>2</sup>Weiss and Jacobson, op. cit., p. 661.

. . . ease and speed of administration and a related lack of expense are important qualities in an era where much investigation has become so expensive that only the wealthy or well-endowed may hope to compete successfully.<sup>1</sup>

Because of the rather large area encompassing the sample of influential representatives, the time element and travel factors also influenced the choice of this technique. Certain other advantages and disadvantages of the sociometric technique will be examined more completely in the next chapter dealing with a constructive critique of the sociometric approach and its utilization in this project.

The primary purpose behind the employment of the sociometric method, as implied in preceding paragraphs, is to identify and describe the nature of relationships between selected organizations and specified interest sectors in the Upper Peninsula. Although this is the major purpose of the technique, it was also the main determining factor in the choice of the method. It was believed that this tool, in view of some of the more obvious advantages as noted above, could perform an extremely useful function in the description of interorganizational relations.

It should be recognized here that the use of a sociometric technique to analyze interorganizational relationships is, in effect, an initiatory attempt to transpose what has been traditionally a small group--interpersonal approach to a large scale--interorganizational setting. Due to the recognized efforts and achievements at the small group level of operation, and to Weiss and Jacobson's use of sociometric techniques to analyze the structure of complex organizations, it was believed that such a technique could provide a useful means of gaining information at the interorganizational plane.

In simplest terms, a sociometric measure is a means of assessing the attractions, or attractions and repulsions, within a given group. It

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<sup>1</sup>Gardner Lindzey and Edgar Borgatta, Handbook of Social Psychology, p. 406.

usually involves each member of the group privately specifying a number of other persons in the group with whom he would like to engage in some particular activity, and, further, a number of persons with whom he would not like to participate in the activity.<sup>1</sup>

In essence, the above statement reflects the view that fundamentally what can be gained through the use of a sociometric measure merely is an indication of attraction or repulsion among the respondents. However, it was hoped that the sociometric choices would be made in terms of particular criteria as suggested in the test questions, and thereby emitting information, through attraction or repulsion, concerning these variables.

The subjects should be asked to indicate the individuals they choose or reject in terms of specific criteria. Each sociometric choice or rejection should be made with a particular activity in mind, and the activity should be meaningful to the subjects.<sup>2</sup>

The "specific criteria" upon which organizations would be chosen or rejected is described briefly below within the context of the test questions or items developed. The five items (Table 7) devised for the sociometric tool are constructed in such a way as to gain the following types of information. The first question attempts primarily to obtain some sort of general knowledge concerning the interorganizational interaction variable. It does this by asking the organized interests the general question: What organization does your organization deal with in carrying out its business? It is hoped that responses to this query will elicit an overall picture of "normal" or everyday ongoing interorganizational relations.

The next three questions were constructed primarily to get some idea of the degree of deference or influence which may be operating among the representative organizations. Item 2 represents a relatively strong attempt to get at this influence hierarchy. Item 3 is designed similarly but in a milder form,

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<sup>1</sup>Ibid., p. 407.

<sup>2</sup>Ibid.

TABLE 7  
SOCIOMETRIC QUESTIONNAIRE

Organization	Name	Title	Date
SOCIOMETRIC ANALYSIS OF ORGANIZATION IN MICHIGAN'S UPPER PENINSULA, SCHEDULE #1 SUMMER 1964			

- Item 1. What organization does your organization deal with in carrying out its business?  
Rate the following organizations by checking the appropriate column.
1. - frequently
  2. - occasionally
  3. - never
- Item 2. There are probably times when your organization has sought the advice of other organizations before making major operational decisions.  
Rate the following organizations by checking the appropriate column.
1. - have sought their advice.
  2. - would like to seek their advice but have not.
  3. - would never seek their advice.
- Item 3. Consider the special interest and purpose of your organization. There are other organizations or group opinions of your organization and its operation that are especially important to your organization.  
Rate the following organizations by checking the appropriate column.
1. - important as a positive factor in our decision making.
  2. - unimportant, doesn't effect our decision making.
  3. - important as a negative factor in our decision making.
- Item 4. Most organizations secure help from other organized interests in achieving certain organizational goals.  
Rate the following organizations on the basis of help given to your organization operations by checking the appropriate column.
1. - did
  2. - have not but would like them to
  3. - would not
- Item 5. From the point of view of your organization, which of the following organizations are leaders in their respective fields.  
Rate the following organizations by checking the appropriate column.
1. - are
  2. - don't know
  3. - are not

TABLE 8

SOCIOMETRIC ANALYSIS OF ORGANIZATIONS IN MICHIGAN'S UPPER PENINSULA  
ORGANIZATIONAL LISTING

ORGANIZATION	1	2	3	ORGANIZATION	1	2	3
Agriculture Stabilization Comm.(USDA)				Michigan Education Assn.			
Ahonen Land & Lumber Company				Milwaukee Road RR Co.			
American Can Corp.				Michigan State University			
ARA Area Redevelopment Commission				Michigan Technical University			
Barrett Lumber Company				Mich. & Wisc. Timber Products Assn.			
Boards of Supervisors (County)				National Park Service(US Dept Inter)			
Bureau of Commercial Fisheries (US)				North Central Airlines			
Calumet & Hecla, Inc.				North Range Mining Co.			
Celotex Corp.				Northern Michigan University			
Chambers of Commerce (city)				Ontonagon Valley REA Power Co.			
Chicago and N.W. RR Co.				Operation Action U.P.			
City and Village Government				Paper Makers & Paper Workers AFL-CIO			
CJIC-TV Sault Ste. Marie				Pettibone Mich. Corp. (Baraga)			
Clairmont Transfer Co.				Pickands-Mather Mining Co.			
Cleveland Cliffs Iron Co.				Planning Commission (City & Village)			
Cliffs-Dow Chemical Co.				Planning Commission (County)			
Cloverland REA				Potato Growers Assn. (U.P.)			
Congress (U.S.)				Public Schools			
Conner Lumber and Land Co.				Republican Party (County)			
Conservation Dept. (Mich.)				Road Commission (County)			
Coop. Ext. Service (MSU)				Sawyer-Stoll			
Copper Range Co.				Sheriff (County)			
County Dairy Herd Imp. Assn.				Soil Conservation Service (USDA)			
Democratic Party (County)				Soo Line			
Detroit Edison				State Police (Michigan)			
Drummond Dolomite Inc.				Supt. of Schools (County)			
Economic Expansion Commission (Mich)				Superior Studs, Inc.			
Edison Sault Power Co.				Teamsters' Union			
Escanaba Daily Press				The Daily Mining Gazette			
Forest Service (USDA)				The Evening News			
F. P. Furlong Co.				The Mining Journal			
FORUM				UPCAP			
General Telephone				U.P. Law Enforcement Assn.			
GOINC (Gogebic)				U.P. Power Co.			
Goodman and Mohawk Lumber Co.				U.P. Tourist Assn.			
Huss Ontonagon Pulp & Paper Co.				U.S. Army Corps of Eng.			
Inland Lime and Stone Co.				United Steel Workers AFL-CIO			
Iron Mt. News				University of Michigan			
Keweenaw Land Assn. Ltd.				WDBC Radio			
Kimberly Clark of Michigan				White Pine Copper Corp.			
Lake Shore Inc. (Iron Mt.)				Wisc. - Mich. Power Co.			
Lake Superior & Ishpeming RR				WLUC-TV - Marquette			
Legislature (Michigan)				WSOO Radio			
L. H. Shay Veneer				WTOM TV Cheboygan			
Longyear Realty Co.				WMUP TV			
Manistique Pulp & Paper Co.				Abbott Fox Lumber Co.			
Mead				M. A. Hanna Co.			
Michigan Artificial Breeders Assn.				Inland Steel Co.			
Michigan Bell				Oliver Mining Co.			

and Item 4 perhaps illustrates best a strong attempt to gain a picture of the influence hierarchy. The last question, Item 5, seeks in a direct manner to gain information primarily on the status structure among the organizational interests. The test questions in their original state are indicated in Table 7 along with the test form (Table 8).

In summary, the three variables being looked at are: first, interaction structures; secondly, deference or influence patterns; and thirdly, status arrangements.

### Methodology

A theoretic rationale along with a discussion of what is hoped to be gained through the use of a sociometric technique has been presented. This section will provide a description of the methods and procedures surrounding the administration of the sociometric tool.

It will be recalled that in the first stage of the research study the organized interests along with their respective top positional incumbents have been defined and inventoried in each of the eleven interest sectors. Only those organizations which received multi-nominations were included in the sociometric questionnaire. Multi-nominations here refers to those organizations which received two or more nominations within a minimum of one county and at least a singular nomination in two or more counties.<sup>1</sup> When these conditions were imposed, the total number of organizations selected for the study was reduced to ninety-eight (Table 8). The sociometric tool was administered to key informants of these organizations by a single investigator who was familiar with the area as well as with most of the respondents

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<sup>1</sup>In addition some value judgments were made by a panel of judges concerning the inclusion or exclusion of certain organizations before the list was finalized.

contacted.<sup>1</sup> These contacts were limited to organizational representatives residing in Michigan's Upper Peninsula. Generally, his procedure in administering the test consisted of introducing the project in terms of who originated it, why it was being done, how the information was to be obtained, and the possible beneficial results of such a project. No attempt was made to assure the anonymity of the respondents. The experimenters believed that this would not be an important influence on the nature of the information received.

The respondents, who were top positional incumbents of organizations nominated, are believed to have become structurally or organizationally socialized; i.e., the norms and values of the organization have been internalized to the extent that these respondents can reliably and accurately represent their respective organizations.<sup>2</sup>

Approximately 90% of the respondents were visited by the administrator personally, the other 10% received the sociometric questionnaire via a secretary or mail. Those who were seen personally, naturally had the opportunity to ask questions concerning what may have appeared to be ambiguous phrasing in the test items. In most cases, the administrator was not present during the completion of the test form, thus enabling the respondent to fill in the form at his leisure. The informants were then asked to mail in the questionnaire upon completion. Followup calls or visits were made to those who had misplaced the form or were lax in returning it.

The return rate on the ninety-eight sociometric questionnaires was approximately 80%. Twenty-one, slightly over 20% of the forms, were either partially completed or not returned. Among the reasons for not returning the

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<sup>1</sup>Jack Schwartz, Field Investigator for the project, held previous connections with Chamber of Commerce programs in the Upper Peninsula. This may have had an experimental effect on the findings.

<sup>2</sup>In any event, the respondents were asked to speak for their organization, and they agreed to do so.



test forms were company policy, change in management, pressing business matters, etc. The majority of the organized interests were more than willing to complete the questionnaire and a number expressed pride in being among those in the influential grouping.

Cross item analysis on Items 1 and 2 were made on sixty-nine, approximately 70% of the questionnaires. Empty cells on one of either of the items necessitated this reduction.

As mentioned, the questionnaire consists of five items to which the respondents or organizational influentials were asked to reply in one of three ways. Three alternatives were used because, traditionally, three are recommended so that the polar extremes, i.e. negative and positive, are represented along with a neutral response choice. For example, the first item reads:  
What organization does your organization deal with in carrying out its business?

1. - frequently
2. - occasionally
3. - never

The respondents would then choose the alternative they desire and then place a check in the appropriate column headed by a 1, 2 or 3. The check would go next to each of the other ninety-seven top influential organizations, according to how they perceived their relations with them. (See the sociometric listing of organizations - Table 8.) The responses emitted by the subject would, of course, vary with respect to the content of the individual items on the test form.

In the data tabulation the ranking of responses was reversed so that a positive choice would rate 3, the neutral choice 2, and the negative response 1. The responses obtained were weighted in the following way so that the computation would be facilitated:

### Values

Positive response . . . . .	9
Neutral response . . . . .	4
Negative response . . . . .	1

The "weighting" above merely involves the squaring of the 3, 2 and 1 ranking arrangement. The squaring was done to enlarge the range of values, as it was felt that a distribution based on a 1, 2 and 3 scoring system would not be discriminating enough. The weighting of values was done to magnify the range of choices. Admittedly, the scoring procedure presents a rather forced indication of intensity.

The procedures involved in the administration of the sociometric questionnaire along with a description of its form has been indicated. The next section will present the results of the second stage, showing the findings in respect to the procedures just outlined.

### Description of Results

The findings described in this section will be entirely from Items 1 and 2 of the sociometric questionnaire. The primary objects will be to show the value of the sociometric method in locating and defining patterns of interaction among perceived influential organizations and to illustrate the kinds of manipulations which can be performed on the data. Presumably these manipulations can be also applied to data from the other items if such analysis is deemed feasible. Also presented is a description and discussion of the organizational and individual variables which the experimenters selected as being pertinent to the sociometric survey.

Table 9 represents a listing of the ninety-eight organizations included in the study by rank order of sociometric scores given to and received from all other organizations in the matrix. The sociometric score represents the average of values along the individual rows and columns. For example, City

and Village Government received a score of 6.46, as shown in the SCORES RECEIVED column. This score was the highest received of any of the organizations, hence the number 1 ranking. The SCORE VALUE FREQUENCIES columns refer to the numbers of 9's, 4's and 1's received or given by a particular organization. Under the SCORES GIVEN column is the average of the sociometric scores given by the particular organized interest. In regard to Item 1, City and Village Government in their perceived interaction with others obtained a score of 4.25, which gives them a ranking of 26th among the ninety-eight organizations. Then, continuing along the top row of the table, are the value frequencies which compose the average score.

One fault inherent in the listing of these organizations, as is done in Table 9, is that by so doing an aura of legitimacy and validity is attributed to such a representation which may be misleading. The only justifiable inference which can be made from the table is simply that this listing represents one aspect of the results, placed in rank order, of the sociometric survey, given the inadequacies which have been and will be pointed out. Any other conjectures which are made are just that and merely indicate the types of implications which can be made from the findings.

It is difficult to attach any significance to the rank discrepancies which occur, primarily because of the diversity of the organizations involved and their perception of their role in the community of interests. Rank discrepancies merely refer to the differential in the rank between the scores given to and received from the organizations. For example, the rank discrepancy of the Conservation Department is only 3, while Michigan Bell is 34.

Ideally, one might desire the given and received ranks to be similar or at least bear a close relationship, but operationally this is obviously not the case. One interpretation of this discrepancy, as implied above, is the

TABLE 9

RANK ORDERED ORGANIZATIONAL SOCIOMETRIC SCORES RECEIVED AND GIVEN BY  
 SELECTED ORGANIZATIONS IN MICHIGAN'S UPPER PENINSULA IN RESPONSE  
 TO ITEM 1: "WHAT ORGANIZATION DOES YOUR ORGANIZATION  
 DEAL WITH IN CARRYING OUT ITS BUSINESS?"

Organization	Scores Rec'd	Rank	Score Value Frequencies		Scores Given	Rank	Score Value Frequencies	
			9's	4's 1's			9's	4's 1's
City & Village Government	6.46	1	44	21 11	4.25	26	30	25 42
Conservation Department	6.37	2	42	24 10	5.53	5	32	61 4
Michigan Bell Telephone Co.	6.00	3	40	20 16	3.64	37	14	48 35
Chamber of Commerce	5.87	4	35	30 11	4.94	12	38	26 33
North Central Airlines	5.58	5	34	27 16				
Public Schools	5.55	6	34	26 17				
Northern Michigan University	5.37	7	31	28 17	4.51	19	14	76 7
Michigan Legislature	5.34	8	30	30 16	3.79	34	26	21 50
USDA Forest Service	5.33	9	31	27 18	4.84	15	30	44 23
Clairmont Transfer Co.	5.30	10	30	29 17	3.89	33	26	24 47
Escanaba Daily Press	5.29	11	31	26 19	7.19	1	66	24 7
Michigan Technical University	5.16	12	31	24 22				
County Boards of Supervisors	5.06	13	26	35 16				
Soo Line Railroad	5.11	14	30	24 22	4.45	23	31	29 37
Cleveland Cliffs Iron Co.	5.04	15	29	25 22	4.45	24	22	53 22
U. P. Power Co.	5.03	16	30	22 24	5.88	4	46	35 16
County Road Commissions	4.93	17	25	33 18	3.40	40	19	27 51
The Mining Journal	4.91	18	30	19 27	5.52	6	42	34 21
Chicago Northwestern Railroad	4.87	19	26	30 21				
U.S. Congress	4.83	20	26	29 22				
Lake Shore, Inc.	4.59	21	27	19 30	6.38	3	54	30 13
Kimberly Clark of Michigan	4.47	22	21	32 23				
MSU Cooperative Extension Service	4.46	23	22	29 25	4.48	20	25	46 26
Michigan State University.	4.43	24	21	31 24	4.10	31	23	39 35
State Police	4.43	25	21	31 24	5.18	9	33	47 17



TABLE 9--Continued

Organization	Scores Rec'd	Rank	Score Value Frequencies		Scores Given	Rank	Score Value Frequencies	
			9's	4's 1's			9's	4's 1's
USDA Soil Conservation Service	3.24	55	13	22 41	4.55	18	28	40 29
Sawyer-Stoll	3.28	56	13	23 40	2.23	65	10	13 74
U.S. Dept. of Interior Natl. Park Service	3.22	57	9	33 35				
Michigan-Wisconsin Timber Products Assn.	3.22	58	11	27 38	2.02	71	9	9 79
WDBC Radio	3.17	59	12	23 41	2.41	58	13	11 73
General Telephone	3.08	60	10	26 40	3.25	46	19	22 56
Connor Land & Lumber Company	3.07	61	11	23 42	2.03	70	5	20 72
Pickands-Mather Mining Company	3.05	62	12	20 44	4.65	17	27	46 24
White Pine Copper Corporation	3.01	63	12	19 45	3.36	43	14	39 44
Republican Party	2.96	64	10	23 43	2.48	56	12	16 69
Manistique Pulp & Paper Company	2.96	65	10	23 43	2.99	48	17	19 61
Goodman and Mohawk Lumber Company	2.96	66	13	15 48	2.20	67	4	28 65
Democratic Party	2.95	67	8	28 40	5.02	11	42	18 37
Huss Ontonagon Pulp & Paper Company	2.91	68	12	17 48				
Keweenaw Land Association, Ltd.	2.91	69	8	27 41	4.88	13	35	32 30
FORUM	2.88	70	10	21 45	3.38	41	21	21 55
United Steel Workers AFL-CIO	2.82	71	13	12 52				
American Can Corporation	2.81	72	11	17 49				
Edison Sault Power Company	2.78	73	13	11 53				
Inland Lime and Stone Company	2.78	74	9	21 46	2.43	57	8	25 64
Pettibone Michigan Corporation	2.70	75	6	27 43	4.48	21	28	38 31
Longyear Realty Company	2.62	76	6	25 45	4.85	14	35	31 31
North Range Mining Company	2.59	77	8	19 49	3.90	32	28	19 50
U.P. Law Enforcement Association	2.57	78	7	21 48	2.07	69	4	24 69
Superior Studs, Incorporated	2.57	79	7	21 48	1.98	72	7	13 77
Barrett Lumber Company	2.53	80	10	12 54	2.36	62	9	20 68
Cloverland REA	2.51	81	8	17 51	2.91	50	16	19 62
F. P. Furlong Company	2.45	82	8	16 53				
L. H. Shay Veneer	2.36	83	5	21 50	2.93	49	20	9 68

TABLE 9--Continued

Organization	Scores Rec'd	Rank	Score Value Frequencies		Scores Given	Rank	Score Value Frequencies	
			9's	4's			9's	4's
WSOO Radio	2.33	84	7	15	54	8	25	72
Bureau of Commercial Fisheries	2.28	85	5	19	52	53	6	36
U.P. Potato Growers' Association	2.25	86	7	13	56	75	1	11
GOINC	2.23	87	7	13	57			85
Detroit Edison	2.06	88	2	22	53			
WMUP-TV	1.99	89	6	9	61	55	6	36
Ontonagon Valley REA	1.95	90	3	16	57	68	5	22
CJIC-TV Sault Ste. Marie	1.92	91	2	18	56	61	5	31
Agriculture Stabilization Commission	1.92	92	2	18	56	66	8	18
Drummond Dolomite, Incorporated	1.89	93	4	12	60	74	4	9
Teamsters' Union	1.80	94	2	15	59	52	9	35
County Dairy Herd Improvement Association	1.79	95	3	12	61	63	4	30
Paper Makers & Paper Workers AFL	1.78	96	4	9	63	77	1	3
Michigan Artificial Breeders	1.67	97	3	9	64	76	3	0
WTOM-TV Cheboygan	1.57	98	2	9	65	60	4	34
								59

fact that organizations perceive their role relationships with other organizations in a different light than do the other organized interests with them. This is to say that an organizational role may be of a diffuse vis-a-vis specific type in which the organized interest perceives itself as dependent upon and affected by many organizations. In such a case, its ranking on perceived interaction with others would conceivably be quite high. On the other hand, this high ranking would not necessarily see its equivalent in the computation of rankings by other organizations, primarily because the particular organized interest may be perceived as having only a secondary influence or effect on the everyday operations of the organization. Certainly this explanation cannot account for all of the rank discrepancies, but it may contribute to the understanding of some of them.

With regard to the two rankings, it is felt that the ranking derived from scores received is the more reliable indicator of an organization's standing in relation to the others. This is so largely as a result of the accumulated scores given an organization by the 80-plus interests which rated their interaction with it. The ranking derived solely from the scores given by any particular organization is obviously not as valuable in the overall picture.

"Of the first twelve (organizations listed in the table), it should be noted that only four--a telephone company, an airline, a newspaper and a railway--are profit corporations."<sup>1</sup> This is an interesting observation and one which is supported in an indirect way by Linton Freeman in a study which compares several approaches to the difficulty of identifying leaders in a community:

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<sup>1</sup>From the notes of Jack Schwartz, field investigator for the project, September 3, 1964.



The most active individual participants are typically government personnel--as a class, professional participants in community affairs should be government officials and employees or full-time professional executives of nongovernmental agencies formally and primarily committed to intervention in community affairs.<sup>1</sup>

This statement by Freeman provides, at least partially, an explanation for the proliferation of service- and education-related organizations among the highly ranked. Naturally, on an item whose main purpose is to gain a broad index of interaction patterns, those types of organizations whose *raison d'être* is to serve and meet the needs of others will be perceived as being interests with which there is high interaction. There is a matter of visibility, too, as many of the organized interests within the top-ranked are extremely active and affect many facets of everyday life.

A project which encompasses the entire Upper Peninsula of Michigan and nearly one hundred of the most influential organizations necessarily involves certain problems of technique. This is with particular regard to the diverse-ness of the organizations and the influential respondents involved. First of all, the organized interests are obviously heterogeneous not only in structure but in function. There are eleven interest sectors specified within which the organizations are again quite diverse. Quite naturally it can be expected because of the lack of similarity among the organizations that the data received will reflect many different organizational attitudes and positions. Not only this, but, as will be discussed, the individual respondents also mirror divergent attitudes and perspectives by virtue of their position within the organizations. Therefore, it seems as though we have two major areas or categories of variables or influences which should be recognized in viewing and understanding the results of this project.

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<sup>1</sup>Linton Freeman, Thomas J. Fararo, Warner Bloomberg, Jr., and Morris H. Sunshine, "Locating Leaders in Local Communities: A Comparison of Some Alternative Approaches," American Sociological Review, 28:791-8, October 1963.

The first broad category of variables would include those associated with the organization per se. That is, those factors, such as size, ownership or leadership, location, structure and function, which are indigenous to any organization and which would affect, to some degree, the reactions of its personnel to questioning from the outside. The second broad category of variables influencing responses would be those surrounding the personnel themselves. For example, the position of the person in the organizational hierarchy, the duties, powers and responsibilities which accrue as a result of that position, and the environmental and psychological factors peculiar to the individual would all be variables which, again, may affect to some degree the responses of that person to questions regarding the organization.

Most probably these variables are not independent of one another and it would be illogical to consider each one in isolation as to its effect. Therefore, all must be recognized as contributing in some way to the whole and thereby cannot be fully understood out of the context of the complete scheme. Thus, when hierarchical position or organizational ownership is discussed, this is not meant to imply that the other variables are not important or recognized; it is meant merely to suggest that in terms of this project certain variables have more relevance than others.

In respect to the final sampling of the ninety-eight perceived influential organizations, certain of the "organizational variables" are looked at in the context of responses to Item 1 on the sociometric questionnaire. The variables examined in this study have to do with the Primary Organization Interest (Utilities, Mining, Tourism, Education, Communications, etc.), Organization Control (Labor, Government, Entrepreneur, or Corporation), and the Geographic Area of Operation (West, Central, East, etc.).

The organizational variable which proved the most interesting and

fruitful was, as one might expect, the primary interest factor. The computer is programmed to separate the organizations according to primary interest grouping or interest sector, and by analyzing the subsequent matrix can offer some implications concerning inter and intra sector relationships.

The sociogram presented in Figure 1 reflects the perceived interaction among the interest sectors in Michigan's Upper Peninsula. The method of deriving this sociogram involved the following. For the eleven specified interest sectors (Mining, Forestry, Service, etc.) sociometric scores were obtained of the perceived interaction (Item 1) between the organized interests composing them. Two sets of scores were obtained--one denoting the sociometric score an interest sector received from all others and one containing the sociometric score given to all other interest sectors (Table 10).

An arbitrary distinction was made concerning the sociometric scores listed. It was decided that scores received or given above the 4.00 level would be considered indicative of "high interaction." This level was chosen because of the nature of the scoring system. The highest average score possible is 9.00, the lowest 1.00, and a neutral response 4.00. Therefore, an organized sector which gave or received an average score above 4.00 would imply that enough "nines" were in that particular distribution to raise the average score over the neutral (4.00) level, thus intimating a more positive interacting relationship.

This criterion was applied to the data and projected in sociogram form. Each sociometric bond reflects what can be called a perceived high interaction relationship. Reciprocal relationships are represented by double bonds. Sociometric values of the bonds (Figure 1) give some measure of interaction activity between sectors. Value scores presented in each circle represent the interaction scores among the organizations comprising that specific interest

TABLE 10

RANK ORDERED AVERAGE ORGANIZATIONAL SOCIOMETRIC SCORES GIVEN AND RECEIVED BY SPECIFIED INTEREST SECTORS IN MICHIGAN'S UPPER PENINSULA IN RESPONSE TO ITEM 1: "WHAT ORGANIZATION DOES YOUR ORGANIZATION DEAL WITH IN CARRYING OUT ITS BUSINESS?"

INTEREST SECTORS	Transportation	Education	Services	Tourism	Manufacturing	Forestry	Mining	Communication	Utilities	Agriculture	Fishing	Total Given
Tourism	8.38	8.44	7.85	9.00	5.80	4.25	5.83	8.17	5.17	3.75	4.00	6.69
Communication	4.30	5.96	5.38	5.69	2.64	3.09	3.07	3.48	4.19	3.13	2.13	4.00
Transportation	5.34	3.02	3.79	3.30	5.65	2.83	5.45	2.63	3.20	2.10	1.60	3.93
Education	3.69	7.60	4.85	6.25	2.69	2.79	2.74	4.01	2.33	4.13	3.33	3.91
Utilities	5.13	3.81	3.86	4.13	3.40	3.78	3.77	3.67	5.10	1.75	2.50	3.79
Mining	6.05	3.78	3.71	2.29	2.90	3.07	5.10	2.86	3.14	1.11	2.14	3.58
Forestry	3.82	3.10	2.91	3.29	5.31	5.45	3.80	2.29	2.36	1.50	1.00	3.48
Manufacturing	5.51	3.44	3.03	2.00	4.56	4.60	3.15	2.40	2.58	1.13	1.25	3.40
Services	3.74	4.77	4.62	3.68	2.00	2.17	1.88	4.01	2.21	2.61	3.00	3.25
Fishing	4.13	3.56	2.15	2.50	1.80	2.13	2.25	3.17	3.83	1.75	0.00	2.61
Agriculture	1.81	4.17	2.63	1.38	1.68	1.97	1.48	2.81	2.21	3.75	1.75	2.37
Total Received	4.50	4.44	3.97	3.55	3.37	3.31	3.23	3.23	2.91	2.24	2.13	3.55

Possible Score Range 1.00 - 9.00

Rows = Scores Given

Columns = Scores Received

High Interacting Interest Sectors = Scores  $\geq 4.00$

Median Interacting Interest Sectors = Scores  $< 4.00 \geq 2.50$

Low Interacting Interest Sectors = Scores  $< 2.50$

sector.

There are precedents for this type of sociometric presentation including Hunter's<sup>1</sup> use of an illustrative method to picture the choice pattern of leaders. An attempt is made here to reflect the number of bonds given or received in terms of circle size. The three largest circles consist of the Transportation, Tourism and Education sectors, while the more isolated sectors, Fishing and Agriculture, are represented by the smaller circles.

This picture of interaction among organizations distinguishes two rather interesting constellations. On a general interacting criterion, it appears as though Service, Communication and Education form a tight reciprocating bloc with few strong ties with other organized interest sectors.

A second major constellation consists of the Mining, Transportation, Manufacturing and Forestry sectors. The linkage is similar in form to the chain-like communication net of Bavelas.<sup>2</sup> In this case, the Transportation and Manufacturing sectors occupy positions of "relative centrality." The Transportation sector also occupies a central nonreciprocated position with four other interest sectors--Communications, Fishing, Utilities and Tourism. Agriculture is reciprocally linked only to the Education sector. Relatively speaking, the Fishing sector is isolated from any reciprocal attachments and thereby lies on the periphery of interaction activity.

Another general distinction which can be made, although not perfectly represented, is the overall nature of the organizations in the two constellations. The triad of Service, Education and Communication seems to be more public service-oriented as opposed to the profit-making goals of the Fishing,

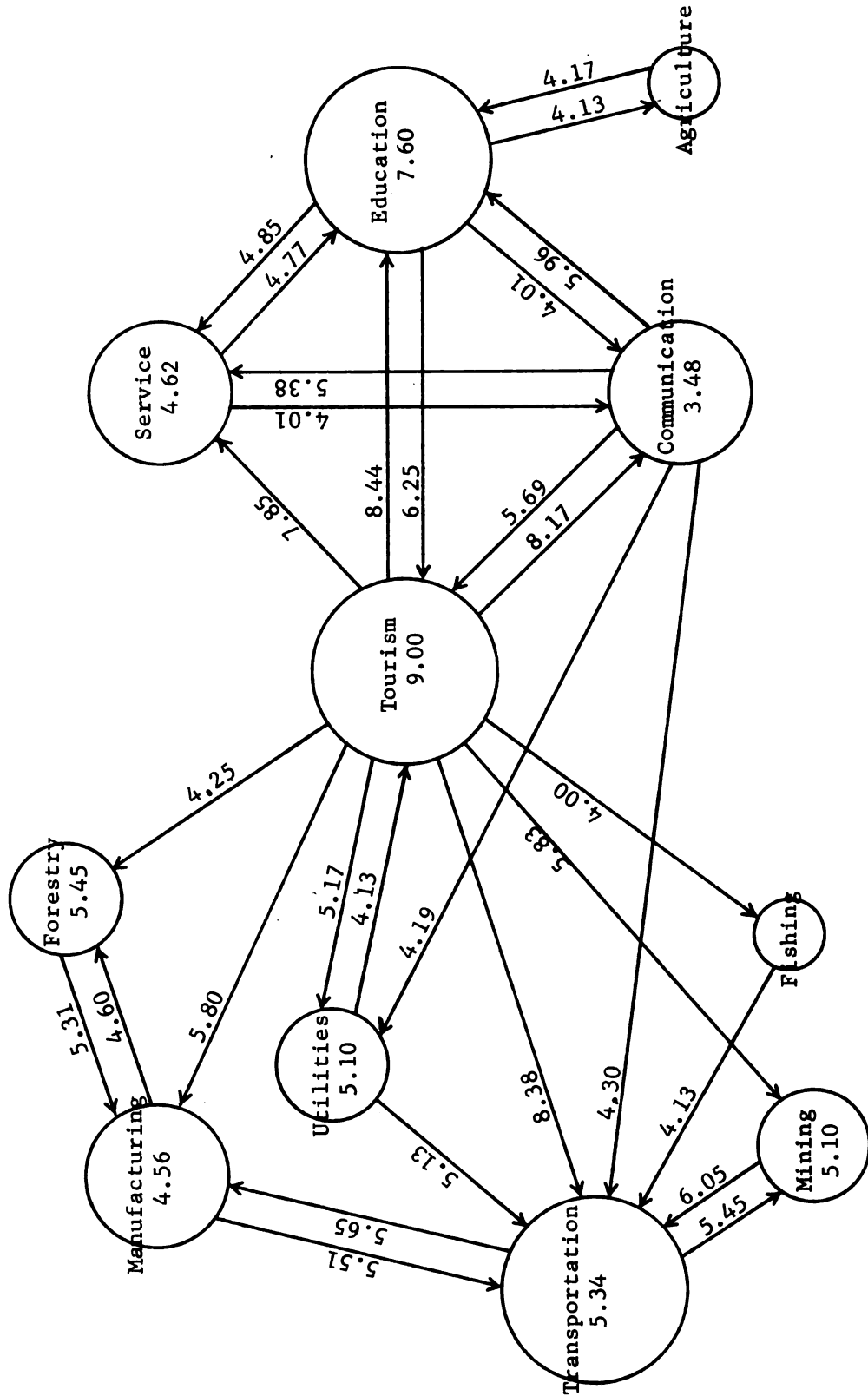
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<sup>1</sup>Hunter, op. cit., p. 69.

<sup>2</sup>Alex Bavelas as examined in Robert T. Golembiewski, The Small Group, pp. 94-97, and Michael S. Olmsted, The Small Group, pp. 102-04.

FIGURE 1

SOCIOGRAM REFLECTING PERCEIVED HIGH INTERACTION AMONG INTEREST SECTORS IN MICHIGAN'S UPPER PENINSULA. RESPONSE TO ITEM 1, "WHAT ORGANIZATION DOES YOUR ORGANIZATION DEAL WITH IN CARRYING OUT ITS BUSINESS?"



Mining, Transportation, Utilities, Manufacturing, and Forestry interest sectors. The Tourism sector seems to provide a linking-pin function<sup>1</sup> between the public service- and profit-oriented interest sectors.

Before too much importance is attributed to the Tourism sector, it is necessary to point out here that Tourism is represented by only one organization and that is the Upper Peninsula Tourist Association. In way of understanding its apparent perceived high interaction rates with the other composite interest sectors, one might speculate that its promotional and public relation goals would dictate such an outer-directed role.

The organizations composing the eleven specified interest areas are distributed in this manner:

<u>Interest Sector</u>	<u>No. of Organizations Represented</u>
Forestry	8
Agriculture	4
Fishing	1
Mining	11
Tourism	1
Manufacturing	16
Utilities	6
Transportation	9
Communications	13
Education	8
Service	20
Other	<u>1</u>
	98

Ideally, from a statistical standpoint, a uniform distribution with perhaps eight to twelve organizations in each sector might be desired; but nonetheless, these are the organizations perceived as most influential in the Upper Peninsula and, quite possibly, a sample twice as large would contain organizations in relatively the same proportion. For purposes of interpretation, however, the number of organized interests within each sector is

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<sup>1</sup>Rensis Likert, New Patterns of Management, pp. 113-15.

important as it may contribute to the understanding of the data. One must keep in mind, however, that certain sectors, though relatively "under-represented," still contain one or more organizations which are perceived as among the most influential in the Upper Peninsula and by virtue of that fact must not be discounted or underestimated in their scope of activity or sphere of effectiveness.

The sociogram, as indicated in Figure 2, reflects the perceived interaction among interest sectors when Item 2 (Table 11) was used. Note that one tight reciprocating constellation emerges. It includes the Service, Education, Communication and Tourism interest sectors. This bloc is fundamentally the same as that which appeared in Item 1, with the only exception being that of Tourism. A second nonreciprocating interaction bloc is also detectable which includes the above-mentioned tight reciprocal constellation plus the Mining, Transportation, Utility, and Agriculture interest sectors. Two relatively isolated sectors emerge--those of Manufacturing and Fishing. Several sectors appear to be isolated to the extent that they do not perceive themselves as seeking advice or counsel from any interest area including themselves. These areas are Transportation, Manufacturing, Fishing, Agriculture.

It is interesting to note that the organizations which formed the public service-oriented triad in Item 1 now reach out to profit-making interest sectors for advice and counsel. This interaction is, in general, not reciprocated by the profit-making interest sectors. It is also interesting to see that the Tourism sector enjoys more reciprocal interaction with both profit and service type interest sectors than it did in Figure 1, where normal business dealing was the test.

A second major organizational control exercised on the data was the Geographical Region of Operation. This control was so designed to classify



TABLE 11

RANK ORDERED AVERAGE ORGANIZATIONAL SOCIOMETRIC SCORES GIVEN AND RECEIVED BY SPECIFIED INTEREST SECTORS IN MICHIGAN'S UPPER PENINSULA IN RESPONSE TO ITEM 2: "THERE ARE PROBABLY TIMES WHEN YOUR ORGANIZATION HAS SOUGHT THE ADVICE OF OTHER ORGANIZATIONS BEFORE MAKING MAJOR OPERATIONAL DECISIONS."

INTEREST SECTORS	Education	Transportation	Tourism	Service	Forestry	Manufacturing	Mining	Utilities	Communication	Agriculture	Fishing	Total Given
Tourism	7.33	5.25	9.00	6.95	5.13	5.07	5.00	7.33	8.53	3.00	1.00	6.15
Communication	6.03	4.11	5.38	5.43	3.19	2.53	2.84	4.00	3.48	4.22	3.38	4.00
Service	6.43	4.92	5.61	6.10	3.29	3.05	2.98	3.18	4.54	3.95	4.36	4.43
Education	7.54	3.67	5.75	5.26	2.40	3.00	3.19	2.61	4.53	4.13	2.33	4.12
Utilities	4.14	4.59	4.38	4.05	3.94	3.18	3.58	5.00	2.96	2.69	1.75	3.74
Forestry	3.03	3.59	4.07	3.64	4.90	3.60	3.35	1.86	1.65	1.96	1.43	3.17
Mining	3.56	4.14	1.79	3.46	2.41	2.10	5.13	3.24	1.87	1.39	1.00	3.04
Manufacturing	3.25	3.97	2.67	2.65	3.66	2.93	2.37	2.64	1.80	1.06	1.00	2.71
Agriculture	3.92	1.91	1.75	2.95	2.06	2.00	1.75	1.75	1.75	3.08	1.75	2.33
Transportation	1.80	3.26	1.00	2.68	2.18	3.08	2.62	1.90	1.33	1.30	1.00	2.31
Fishing	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.00	1.00
Total Received	4.58	3.98	3.85	4.20	3.20	2.87	3.05	2.94	2.89	2.65	2.22	3.45

Rows = Scores Given.

Columns = Scores Received.

High Interacting Interest Sectors = Scores  $\geq 4.00$

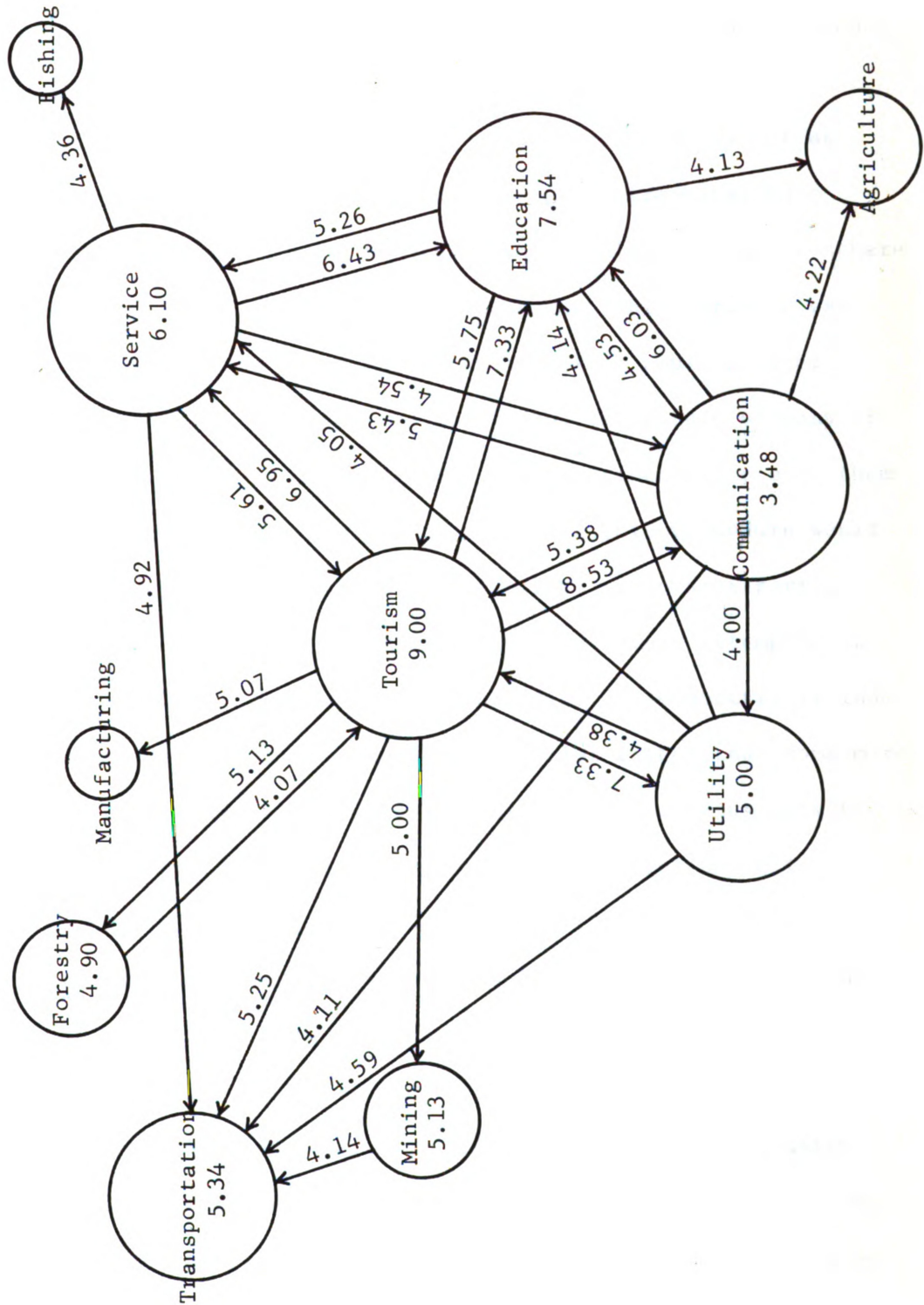
Median Interacting Interest Sectors = Scores  $< 4.00$   $\geq 2.50$

Low Interacting Interest Sectors = Scores  $< 2.50$

Possible Score Range 1.00 - 9.00

FIGURE 2

SOCIOGRAM REFLECTING PERCEIVED HIGH INTERACTION OF ORGANIZATION WITHIN AND AMONG INTEREST SECTORS OF MICHIGAN'S UPPER PENINSULA. RESPONSES TO ITEM 2, "THERE ARE PROBABLY TIMES WHEN YOUR ORGANIZATION HAS SOUGHT THE ADVICE OF OTHER ORGANIZATIONS BEFORE MAKING MAJOR OPERATIONAL DECISIONS."



the organizations according to their geographic base of operation. The six geographical areas distinguished are the West (Gogebic, Ontonagon, Baraga, Iron, Houghton, and Keweenaw counties), Central (Marquette, Menominee, Delta, Dickinson and Alger counties), East (Schoolcraft, Luce, Chippewa and Mackinac counties), West Central, East Central and All U.P.

This variable is somewhat more difficult to analyze as it is not as clearly defined as the others may be. For example, the geographical base variable runs into such problems as how to deal with organizations whose sphere of influence extends into more than one designated area. This variable was originally introduced in order to see whether organizations would cluster together on a geographic basis. However, as mentioned, the nature of many of the selected organizations make it difficult for the experimenter to sort them into clear-cut geographic sectors. One way to objectify this procedure would have been to strictly limit the respective organizations to an arbitrarily defined area on the basis of address alone without subjectively attempting to identify a "sphere of influence." The attempt to define these sectors is made more awkward by the use of political or county boundaries rather than some more "logical" criteria. Implied above is the essential problem of being able to assign a geographic area to many of these organizations whose influence is extensive and which may, in fact, spread to the whole of the U.P. In an attempt to alleviate this difficulty, the category "All Upper Peninsula" was developed to include many higher level government agencies, certain large economic corporations, several utilities, etc.

This category soon enlarged to such an extent that any meaning which these geographic areas could convey may have become severely restricted. Two other geographical categories also were designed by the experimenters to cope with the "extent of influence" problem. The East Central and West Central

areas include those counties in both sections within which certain organizations operate extensively. These organizations, though they may reside in one of the three main sections, carry out a good proportion of their activities in two of these areas.

Tables 12 and 13 contain the sociometric data as concerns the designated geographic areas with regard to Items 1 and 2.

Figures 3 and 4 show in sociogram form the perceived interaction among the organizations as classified on the basis of a geographical criterion. Figure 3 represents this control as it applies to the responses to Item 1; Figure 4 reflects data from Item 2. These figures contrast sharply with Figures 1 and 2, not only because of the paucity of high perceived interaction but also because of the lack of reciprocal choice bonds.

Possible reasons for this could include the conjecture that a geographical control is simply not important or necessary to the understanding of interorganizational behavior in the Upper Peninsula or that, with regard to this study, the basis used to designate the geographic areas is inadequate. Quite conceivably a combination of the above has influenced the results to a degree. On the other side of the coin, however, is the notion that this control proved so strong that geographical sectors are indeed shown to be relatively autonomous-nonintegrative areas of activity.

In any event, a couple of trends seem particularly evident. The East sector on both items is completely isolated from any perceived activity. The Central and West Central areas, primarily in Figure 3, are represented by unreciprocated bonds with other geographic regions. Ostensibly the trend in organizational interaction appears to lead toward the central portion of the Upper Peninsula.

When Item 2 is introduced some of the high interaction bonds disappear,

TABLE 12

RANK ORDERED AVERAGE ORGANIZATIONAL SOCIOMETRIC SCORES GIVEN AND RECEIVED BY GEOGRAPHIC REGIONS OF MICHIGAN'S UPPER PENINSULA IN RESPONSE TO ITEM 1: "WHAT ORGANIZATION DOES YOUR ORGANIZATION DEAL WITH IN CARRYING OUT ITS BUSINESS?"

INTEREST SECTORS	Central	All U.P.	West Central	West	East Central	East	Total Given
Central	5.40	4.43	3.82	2.56	2.84	2.07	4.09
West Central	4.16	3.70	5.24	3.52	2.99	1.79	3.75
West	4.04	3.41	4.64	4.58	3.24	1.60	3.61
All U.P.	3.94	3.87	3.19	2.81	2.92	2.51	3.46
East Central	2.64	3.36	4.97	4.25	2.75	1.30	3.41
East	2.97	3.24	2.03	1.51	2.46	3.32	2.79
Total Received	4.04	3.85	3.74	2.96	2.90	2.26	3.55

Rows = Score Given

Columns = Score Received

High Interacting Interest Sectors = Scores  $\geq$  4.00  
Median Interacting Interest

Sectors = Scores  $<$  4.00  $\geq$  2.50

Low Interacting Interest Sectors = Scores  $<$  2.50

TABLE 13

RANK ORDERED AVERAGE ORGANIZATIONAL SOCIOMETRIC SCORES GIVEN AND RECEIVED BY GEOGRAPHIC REGIONS OF MICHIGAN'S UPPER PENINSULA IN RESPONSE TO ITEM 2: "THERE ARE PROBABLY TIMES WHEN YOUR ORGANIZATION HAS SOUGHT THE ADVICE OF OTHER ORGANIZATIONS BEFORE MAKING MAJOR OPERATIONAL DECISIONS."

GEOGRAPHIC REGION	Central	All U.P.	West Central	West	East Central	East	Total Given
Central	5.82	5.36	3.97	3.36	2.60	2.16	4.44
West	3.71	3.63	4.53	3.68	4.02	1.72	3.64
All U.P.	4.17	4.13	2.94	3.10	2.84	2.67	3.59
East Central	3.55	3.22	4.29	2.00	3.80	1.00	3.23
West Central	3.67	3.05	4.09	2.79	3.05	1.47	3.12
East	2.35	2.44	1.69	2.34	1.47	2.02	2.16
Total Received	3.77	3.57	3.15	3.03	2.73	2.18	3.45

Rows = Score Given

Columns = Score Received

High Interacting Interest Sectors = Scores  $\geq$  4.00  
Median Interacting Interest

Sectors = Scores  $<$  4.00  $\geq$  2.50

Low Interacting Interest Sectors = Scores  $<$  2.50

Possible score range 1.00 - 9.00

FIGURE 3

SOCIOGRAM REFLECTING PERCEIVED HIGH INTERACTION AMONG GEOGRAPHIC REGIONS IN MICHIGAN'S UPPER PENINSULA. RESPONSE TO ITEM 1, "WHAT ORGANIZATION DOES YOUR ORGANIZATION DEAL WITH IN CARRYING OUT ITS BUSINESS?"

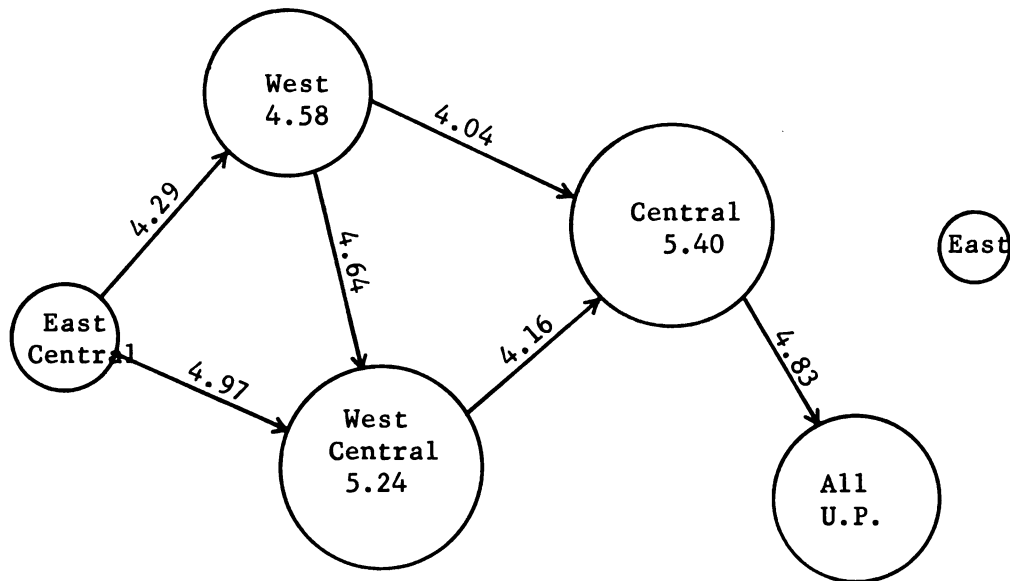
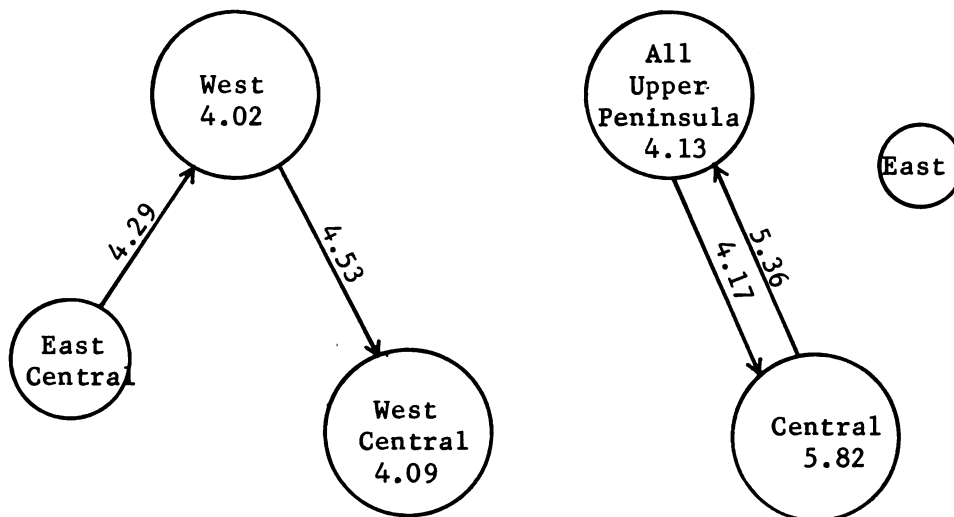


FIGURE 4

SOCIOGRAM REFLECTING PERCEIVED HIGH INTERACTION AMONG GEOGRAPHIC REGIONS IN MICHIGAN'S UPPER PENINSULA. RESPONSE TO ITEM 2, "THERE ARE PROBABLY TIMES WHEN YOUR ORGANIZATION HAS SOUGHT THE ADVICE OF OTHER ORGANIZATIONS BEFORE MAKING MAJOR OPERATIONAL DECISIONS."





perhaps pointing out the reluctance of certain localized areas to seek advice or counsel. The noticeably high rate of interaction and consultation within several of the geographic areas support the obvious lack of perceived activity with other sectors of the Upper Peninsula. One might speculate that a regional area, such as the Upper Peninsula, in need of a viable development program would reflect just such a pattern of noninteracting areas. A tight reciprocal bond appears between the All U.P. sector and the Central area. This bond was not present with regard to Item 1.

In summary, the sociograms depicting the perceived interaction relationships among the interest sectors and geographic regions in the Upper Peninsula are admittedly incomplete and an abstraction of reality. However, their usage has reflected new insights about interorganization interaction patterns in Michigan's Upper Peninsula.

The final organizational variable which was examined, and only cursorily in the study, is that dealing with Organizational Control. This variable is considered to have nine aspects by the experimenters. These aspects concern the nature of the organizational control: Labor, Local Government, County Government, Michigan Government, U.S. Government, Entrepreneur (local), Entrepreneur (foreign to the U.P.), Corporation (local), and Corporation (foreign). The local and foreign designations refer to ownership whether it be within or outside of the Upper Peninsula. The distribution of this variable looks like this:

<u>Control of Organization</u>	<u>Number of Organizations</u>
Labor	3
Local Government	3
County Government	5
Michigan Government	14
U.S. Government	8
Entrepreneur (local)	2
Entrepreneur (foreign)	0
Corporation (local)	25
Corporation (foreign)	<u>38</u>
Total	98

As with the other controls, this one aroused the curiosity of the experimenters in respect to the possible patterns of interorganizational interaction which may occur. The matrix formed, however, did not indicate any noticeable concentrations of high or low interacting responses.

Approximately 30% of the organizations are linked with some level of the government. Nearly 65% of the interests are profit-making or economic organizations. A conceivably higher rate of interaction among the governmental or tax-supported institutions is not supported by this data. Neither is there support for conjectures about high interaction rates among the economic institutions or between local and/or foreign-controlled organizations. In short, observation of the matrix discourages any further attempts at analysis of the data and might point to the possibility that such a variable may not be of worthwhile importance in future studies of a similar nature.

Stated at the beginning of this chapter was reference to the two major categorical divisions of variables associated with this study. These were organizational and personnel variables. Three organizational variables were defined in this study and discussed above. Of the three, the Primary Organization Interest variable proved the most valuable and interesting. The usefulness of this variable has been at least partially demonstrated by some of the manipulations performed on the sociometric data.



The second broad category distinguished has to do with the individual or personnel variables and encompasses a whole list of psychological variables. Obviously not all of the personnel variables can or should be examined. The only individual variable examined in light of the sociometric data received in the study is that dealing with the Position of Respondents. This variable was coded in the following manner by the experimenters: A "1" was given to a respondent who was considered by the experimenters to be a Top Upper Peninsula Executive; a "2" was given to those respondents who were Not Top Upper Peninsula Executives; a "3" was given to those questionnaires filled out by a Committee.

This control, which theoretically could prove extremely interesting, falls apart in its execution. In essence there are only two major classifications--"Top" executive and "Not Top" executive--as only one organization fell under the "Committee" classification. Given the belief that in this case a minimal condition for reasonable results would be a homogenous selection of respondents, this distribution does not pass the test. The "Top" and "Not Top" executives are evenly divided while the "Committee" in actuality consisted of two top management officials who collaborated in filling out the questionnaire. The distribution of the respondents with regard to the three distinctions breaks down as follows:

<u>Organizational Variable</u>	<u>Number of Respondents</u>
Top U.P. Executive	41
Not Top U.P. Executive	39
Committee	<u>1</u>
	81

Again, the 81 refers to the number of organization representatives out of a possible 98 who responded to Item 1. The distribution of "Top" executives is composed of district, regional and general managers, presidents, vice presi-

dents and owners, whereas the "Not Top" category consists of supervisors, executive secretaries, sales managers, public relations men, office managers, etc.

The matrix, organized in respect to the three designations of the respondent position variable, emits no observable significant interaction patterns. This is to say that there is no apparent difference in the way the "Top" executives perceive interactions with organizations and the manner in which the "Not Top" executives perceive interaction--and there is no logical reason why this should show up in this matrix. The argument that is being presented here is that the perceptions of a "Top" and a "Not Top" executive from the same organization will have a tendency to vary and this type of comparison cannot be made with this data.

This chapter contained a theoretic rationale, methodology and description of the findings from the second stage of a research study on the perceived influential organizations in Michigan's Upper Peninsula. Most of the data presented in this section is derived from Items 1 and 2 of the sociometric questionnaire and is illustrated in the form of appropriate tables and figures. The variables examined in the sociometric analysis are organizational (interest category, control and geographic base) and individual (organizational position). The most interesting and potentially productive variable seems to be the one concerning organizational interest sectors. One of the more important findings indicated points out the distinctive patterns of interaction regarding what are referred to as public service- and profit-oriented organizations. The most valuable contribution of the second stage of the research project is the location and definition of interaction patterns through the use of the sociometric technique and an exploration of the ways in which the data may be manipulated.

The next chapter will consist of an evaluative critique of the research

project including a detailed examination of the sociometric and reputational methods.

## CHAPTER IV

### THIRD STAGE: CRITIQUE

#### Sociometric Application

##### Introduction

The purpose of the present chapter is to evaluate the research project as outlined in the previous two chapters. The order of the evaluation will be to examine, first, the sociometric application and, secondly, the perceived organized structure in terms of the theory and procedures employed.

Before an analytic discussion is to begin concerning the sociometric technique used in the project, perhaps an indication of the two major areas to be covered should be presented.

The first area concerns the use of the sociometric method per se and its specific application in the research project. Actually two points are detected here, but the nature of the evaluative discussion requires their combined treatment. That is, even though some general critical points are noted about the sociometric method per se, they are examined in terms of their relevance to the research design. Specific questions which arise that will be addressed in the ensuing section include: Is the sociometric method an accepted and viable means of gaining information? What are some of the general problems inherent in the use of the technique? What specific difficulties are contingent to its use in this particular research study? In other words, with regard to the employment of the sociometric method in the project, what specific technical problems are associated with it? A second part of this query

might include an examination of the alternative ways in which those technical problems could be avoided or minimized.

A second major area focusses on the question: can the sociometric approach be applied to an organizational setting and still maintain its effectiveness? This is in view of a long tradition of its use within small group and primary group settings. A step included in this transition from small groups to large organizational structures is the assumption that influential representatives participating in the sociometric study accurately reflect their organizational base. In a different sense, can the information obtained from the individual representatives be attributed to their respective organizations in any meaningful sense? Also, associated with this interesting problem is the question of who is in the best position to represent an organized interest. In other words, are there hierarchical incumbents who by virtue of their positions within the organization have become adequately socialized so that they can accurately represent organizational values and goals? If there are certain positions peculiarly suited to this, who are they and where are they? What is this concept of organizational socialization and is it meaningful? Are certain hierarchical strata more amenable to this phenomenon than others?

### The Sociometric Method and Its Design

#### Sociometric Choice

Robert Golembiewski<sup>1</sup> has stated that there are at least three substantial difficulties concerning the use of the sociometric technique in group study. First, there is the problem raised of what sociometric choice conceptually "is." Second, there seems to be a similar difficulty on the operational

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<sup>1</sup>Robert T. Golembiewski, The Small Group, pp. 110-17.

level concerning the location of or quantification of sociometric choice. Finally, the predictive aspect of sociometric choice with regard to certain group goals is hindered by poor research design and "conceptual imprecision."

It has been thought previously by some, e.g. Lindzey, that sociometric choice merely involves the attraction or repulsion of persons for each other. However, it has been found that at least two dimensions may be operating with regard to sociometric choice on a particular variable. These two dimensions are "affectional" and "instrumental." Related to these dimensions are the aspects of public and private choice, which involves the question of locus of sociometric choice. This is to say that private choice would reflect sociometric selection on the basis of an interpersonal type of feeling, whereas public choice would involve the taking into account of one's recognition of his role within the relevant group or groups. In sum, affectional and instrumental dimensions plus public and private considerations influence sociometric response. Recognition of these factors is necessary not only so that test design may be "tightened" but also so that results may be interpreted more adequately.

With reference to the items used on the sociometric questionnaire, it may be difficult to verify a unidimensionality. For example, Item 1 and indeed all of the other items, theoretically at least, are supposed to evoke responses appropriate to an instrumental-public dimension. However, there is no guarantee that this is the case, as certain individual responses would indicate. It will be recalled that Item 1 reads: What organization does your organization deal with in carrying out its business? It is apparent that in certain instances either this question was very loosely interpreted or the item itself is open to question as to clarity and/or intent. In the first case it seems as though the affectional dimension or a private-interpersonal criterion influenced sociometric choice. In other words, business dealings for some might include

a public relations-social interaction type of consideration. It is conceivable that the exchange of opinion over a meal at the meeting of a service club would constitute "business dealings" in a general sort of way for certain influentials.

In the second case as to the item's clarity and intent, the sentence was designed first of all to gain a general view of organizational interaction; however, this interaction was supposedly to reflect responses in accord with an instrumental-public dimension, and insofar as this is accomplished, the item could be considered valid. But, as has been intimated, no certainty exists that this indeed happened; in fact, evidence seems to point to the contrary. Item 1, in the generality of its intent, appears to have sacrificed strength in tightness of construction and therefore presents a dubious preface to the interpretation of its results.

#### Sociometric Scoring

A second difficulty involved with the use of the sociometric technique, as outlined by Golembiewski, is the lack of refinement at the operational level. Essentially this refers to those studies which sum equally weighted attraction values to arrive at a sociometric rank. The problem arising here being one of whether the scores given can be meaningfully combined in view of the variable individual motivations and degree of choice intensity operating. An associated difficulty would concern the seeming necessity of taking into account the relative sociometric standing of the choice makers themselves in the weighting of their respective scores. Obviously neither of these difficulties have been adequately dealt with, although a partial solution has been suggested to the effect that a deriving of a ranking agreement score, i.e., the degree to which the ranking of the group members are in agreement,<sup>1</sup> rather than a choice total might be more effective and convincing.

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<sup>1</sup>Ibid., p. 115.

In relation to the project sociometrical design, the above mentioned problems are also reflected. In other words, there is little in the scoring procedure to permit any valid discussion of intensity of sociometric choice. Mary Northway also recognizes the difficulty involved with choice intensity and sociometric scoring:

The possibility is that the sociometric test itself will not provide an answer to the problem of personal intensity in human relations. This will have to be investigated through other measures. One attempt to take this factor of difference in intensity into account was to give weights of say 5, 3, 1 to a first, second or third choice. This was criticized as being arbitrary . . . it must be remembered, however, that to consider each choice statistically equivalent, in terms of psychological factors is in itself an arbitrary decision.<sup>1</sup>

Even though the subjects were given a choice of alternatives to utilize, these still are inadequate in their inference of motivational strength. The alternatives included a positive, negative and neutral response, representing a fixed choice and thereby emitting a paucity of important information concerning intensity. The scores given or received by the organizational interests are weighted equally regardless of group sociometric standing; i.e., the relative importance of the individual decision maker is not taken into account in the derivation of scores. This seems to be a circular type of argument in that this relative importance is based in most cases upon a sociometric rank of some kind. Criswell continues the discussion in this vein and mentions a possible solution:

Another scoring problem concerns the possible predictive usefulness of choices received not only by the individual himself but by those who choose him. Possibly it is better to receive two choices from individuals who are themselves well chosen than to receive six choices from isolates. One solution to this problem is a scoring method recently completed by Leo Katz, in which an individual's status measure takes into account not only the number of choices he receives but also the choice status of each individual who chooses him, the status of each

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<sup>1</sup>Mary C. Northway, A Primer of Sociometry, p. 14.



who chooses these in turn, etc.<sup>1</sup>

#### Predictability of Sociometry

A third problem associated with the use of the sociometric approach, as seen by Golembiewski, is that of predictability, particularly concerning the productivity or effectiveness of sociometrically self-chosen groups. Simply because a group is sociometrically self-selected does not mean that it will of necessity form a functional effective unit. The implication is, of course, in most studies that reciprocal sociometric selection means optimum performance in groups, and this is not necessarily the case. Therefore in studies such as the one involving the organized structure in the Upper Peninsula, a pattern of reciprocal sociometric choice will not automatically imply a viable working relationship. Why this is so was partially explained by the previous discussion on the apparent vagueness of an operational and conceptual perception of "sociometric choice."

The problem which confronts us, however, is that even if patterns of sociometric choice are located, what do they mean in terms of the ultimate goal, i.e. the development and growth of a geographic area? In other words, even though it appears as if certain sociometric channels have been identified, this is not a necessary reason to believe that these arrangements will be effective in the initiation and implementation of a development program. This speculation is particularly made in reference to the first item which was designed to indicate an overall interaction pattern. As may be recalled, the item was phrased in terms of a business interaction criteria which, in fact, may have little relationship with the kinds of cooperative behavior necessary

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<sup>1</sup>Joan H. Criswell, "Sociometric Measurement: Some Practical Advantages and New Developments," Sociometry and the Science of Man, J. L. Moreno, ed., New York: Beacon House, 1956, p. 389.

in a growth program. No guarantee exists which would assure that those organizations which are perceived as having a high degree of interaction on a business level would maintain or permit such relations in a service operation such as the one implied. Certainly it will be recognized that business relationships are necessary before any regional or community development is to take place; however, these relationships do not compose the type of interactions necessary in situations where nonbusiness considerations are utilized. One of the problems involved then, and perhaps the most crucial one, is that of the apparently untenable position of critical transposition. This is to say that it seems extremely difficult to generalize or transpose a sociometric pattern derived from a "business" interaction criteria to a situation requiring a cooperative-service relationship. Likewise with the four remaining items, three of which are constructed to gain a picture of some sort of influence hierarchy and one which attempts a look at a status structure, what is the feasibility of relating the information gained to the central aim of the project, particularly when, as explained, the types of critical situations involved are diverse? One of the central aspects pertaining to a project of this nature is the construction of test items so that problems of this nature do not appear. In other words, there is a necessity of designing test items so that they closely supplement or simulate situations similar or identical to those concomitant with the central objective. Insofar as this is accomplished, the information thus obtained is amenable and relevant to generalization about the primary aim. The further removed the test items become from the locus of inquiry, the less applicability and hence validity the data so obtained would have.

Although the sociometric results may in themselves not be the prime determinants of a growth planning program, they may provide the initial

information necessary to give such a program a healthy beginning. One can't say that the sociometric patterns identified, because of the reasons discussed above, will lead to a viable development program, but one can say that this sociometric survey could affect or influence the nature of such a program. All that is really obtained through the use of this sociometric technique is a general, albeit loose, indication of an interaction pattern among organizations and does not in itself lead to statements of a tight conclusive nature. This modified view of the use of the sociometric findings in this project is a realistic one and one which takes into account the limitations of the design.

#### Fixed Choice

Michael S. Olmstead<sup>1</sup> offers several objections to or criticisms of the sociometric method which are appropriate and supplementary to this discussion. As I have stated in a preceding paragraph, the sociometric tool used in the project presents the subject with a fixed choice situation; i.e., the informant is required to select one of the three alternatives available even though neither one may adequately express his true feelings. "Even when a respondent has a clear opinion, a fixed-alternative question may not give an adequate representation of it because none of the choices corresponds exactly to his position, or because they do not allow for qualification."<sup>2</sup> The choice alternatives were constructed in such a way as to elicit either a positive, negative or neutral response. This is substantially the point which Olmstead makes when he remarks: "This restriction is wonderfully convenient from the point of view of the investigator but leaves much to be desired as a method of apprehending

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<sup>1</sup>Michael S. Olmstead, The Small Group, p. 95-99.

<sup>2</sup>Claire Selltitz et al., Research Methods in Social Relations, p. 260.

the complexities of reality."<sup>1</sup> Selltitz et al. comment: "The closed question has the advantage of focusing the respondent's attention on the dimension of the problem in which the investigator is interested; by the same token, it does not provide information about the respondent's own formulation of the issue, the frame of reference in which he perceives it, the factors that are salient for him, the motivations that underlie his opinions."<sup>2</sup> In essence then, the fixed choice situation, even though statistically and economically convenient, really provides little in-depth information on dynamic ongoing group processes. Ideally an open-ended technique of some kind would be preferred; however, this is hardly a practical alternative in face of the computational, economic and temporal problems involved. Selltitz et al. suggest what might be a solution to the difficulty by intimating a mixture of the two methods, i.e. the open and closed questionnaires. "For many purposes, a combination of open and closed questions is most efficient; an interview or questionnaire need not consist entirely of one type or the other."<sup>3</sup> They go on to suggest the using of an intensive, freer interview with a subsample of the population to discover the probable range of responses and types of interpretations given the question wording. After this initiatory sort of procedure, then more meaningful questions can be developed.

A more immediate practical solution to the difficulty could be the extension of the number of choices. A broadening of the choice alternatives to five would enable the selector to more accurately express his feelings or opinions thereby increasing the preciseness of the entire tool. This would provide only a minimal answer to the problem, however.

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<sup>1</sup>Michael S. Olmstead, op. cit., p. 98.

<sup>2</sup>Selltiz et al., op. cit., p. 262.

<sup>3</sup>Ibid., p. 263.

## Multidimensionality

Another criticism or, rather, limitation which Olmstead points out is that sociometric data is not a picture of what is but of what is said to be. The data obtained from the test are, after all, only a recording of what individuals claim to be the situation and it may, in fact, not be the actual case. "It (the sociometric test) records only what people say (write) and has the virtues and limitations of any such subjective data."<sup>1</sup>

Criswell looks at this aspect a little deeper and in a way not unrelated to Golembiewski's plea for recognition of multidimensionality in sociometric choice. "Sociometric measures have often failed to distinguish between the elements in choice which are contributed by the official requirements of the communication network (the formal), the individual's adaption to these requirements (the actual), and the way he would like to adapt to the requirements (the desired)."<sup>2</sup>

One design as mentioned by Criswell and Golembiewski which represents an attempt to examine this limiting factor is the Multi-Relational Sociometric Survey of Tannenbaum, Massarik, and Weschler.<sup>3</sup> The MSS tries to locate and identify four structural networks besides the prescribed or formal one supposedly operating within a given situation. The four types of information were obtained from the following questions:

1. The perceived: Who is supposed to give you directions (or orders) in your work?
2. The actual: Who actually gives you directions (or orders) in your work?

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<sup>1</sup>Ibid., p. 98.

<sup>2</sup>Joan H. Criswell, Sociometry and the Science of Man, p. 386.

<sup>3</sup>Robert Tannenbaum, et al., Leadership and Organization: A Behavioral Science Approach, pp. 346-70.

3. The desired: If it were up to you to decide, whom would you choose to give you directions (or orders) in your work?
4. The rejected: Whom would you least want to give you directions (or orders) in your work?<sup>1</sup>

A thorough examination of this particular method seems unnecessary here as the question arises concerning the applicability of the MSS to the project under discussion. There is only a connection in a very general instructive way because the goals and operational milieu of the two studies are quite different. As Tannenbaum et al. point out, the MSS is concerned with the measurement of interpersonal variables associated with organizational effectiveness and has its parturition in the context of the theoretical distinctions between formal and informal organization. The instructive connection between the sociometric tools utilized seem to be one of simply recognizing that other dimensions of structure may or should operate within the context of the sociometric questionnaire. In other words, it appears reasonable to expect either an attempt on the part of the experimenter at a unidimensionality or an identification and specification of the structural elements to be tapped. In reference to the project under examination, theoretically this represents a unidimensional attempt to get at the perceived interorganizational relations, not the prescribed, actual, desired, or the rejected. The perceived aspect may, in fact, be the only dimension which one can obtain from a sociometric questionnaire, because in a sense, regardless of how you label your structural categories, it is still the perception of the individual which determines or influences his responses.

In summary, it is necessary to realize in regard to the above discussion that several dimensions may be operating in the situation. Whether these dimensions can be specifically identified and controlled is questionable, but

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<sup>1</sup>Ibid., p. 350.

at least they may have some influence or effect on the design of the sociometric instrument. For example, and this will be discussed later, the wording in certain portions of this sociometric questionnaire confuses the perceived with the desired and rejected dimensions. Under the circumstances it is impossible to calculate the effect of such confusion, but regardless of this, the logical necessity for consistency in content and purpose seems clearly indicated.

#### Sociometric Response and Administration

A third and not uncommon criticism, which, as Olmstead mentions, is related to the previous limitation, is that the information received from the sociometric device is composed of conscious opinions given to an outsider. Because of this, the data obtained may be misleading, incomplete or a deliberate attempt to conceal or protect actual opinions or attitudes. This might seem especially important in the situation where the sociometric approach is utilized primarily as a psychological device in the traditional Moreno sense. However, this does not imply that this limitation would not be germane to the technique as it has been utilized in this study. Indeed, this particular type of approach used in an organizational setting has to be used with extreme tact and sensitivity. This is to say that organizations, especially economic interests, are suspicious and often hesitant to submit to questioning concerning their relations with other organized structures. In the process of administering the sociometric questionnaire, it was noted by the interviewer that "several respondents were at least aware of the possibility of anti-trust implications to their answers."<sup>1</sup> Because of this, the wording of the questionnaire has to be appropriate and sufficiently neutral so as not to provoke any undue

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<sup>1</sup>From the notes of Jack Schwartz, field investigator, September 1964.

antagonism. As a result, the test items are often ambiguous and lacking in precision. It would be difficult to speculate upon the degree to which the findings are influenced by the lack of item content clarity. The imposed conservative style of wording may have relinquished the opportunity to gain some real insight into the sphere of organizational relations. As implied, however, the item phrasing may have inhibited certain respondents from answering in a "truthful" manner. A closer look at the item content will be offered in another part of this section.

Since a certain amount of distortion is present in any type of social data, the only thing which one can do is to design the tool in the most precise meaningful way possible. It is then necessary to identify conceivable intervening variables, interpret and explain the possible ways in which they may have influenced the data. The simplicity of the sociometric approach seems to be deceptively susceptible to the pitfalls of social research. Selltiz et al. warn us that "despite the use of administration . . . the analysis of sociometric data is frequently more complex than we anticipate."<sup>1</sup>

Another limitation prevalent in the use of the sociometric method is the tendency to confer undue importance upon it and the data gained. A complete dependence upon sociometric data is unwarranted. It should be supplemented by other information and, if possible, by other testing procedures. A total reliance upon the sociometric findings in this project would yield in some instances an ambiguous and seemingly senseless pattern. For example, the extremely high degree of interaction between two ostensibly unrelated organizations was explained by the fact that the president of one was a member of the board of directors of the other. The data alone do not show or emit this kind of information, which, undoubtedly, is necessary to a complete understanding.

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<sup>1</sup>Selltiz et al., op. cit., p. 269.



To digress once more to the possible dimensions of a sociometric situation, it is perhaps unrealistic to ask that total reliance should be placed on perceived information as obtained through the sociometric questionnaire. The supplementation of this information by actual fact and observation among other techniques would be most helpful in establishing a tight useful method.

#### Item Sequence--Fatigue and Psychological Set

Since this sociometric instrument is a type of modified questionnaire, some of the same considerations which are involved with the operation of attitudinal questionnaires are applicable here. One of these considerations would include the notion of question sequence. As this term is used by Cannel and Kahn, it refers to the arrangement of questions so that they make the most sense to the respondent. They feel that "a well-designed questionnaire facilitates the easy progress of the respondent from item to item and often leads him to anticipate the next question because it seems to him the logical topic to discuss."<sup>1</sup> This is the kind of consideration which may be of importance particularly to an opinion survey but may not have a significant bearing on the kinds of questions utilized in this project. This is to say that the items are of a type which do not require a change in the frame of reference nor are they of a type which would be enhanced by a sequential gradation from generality to specificity. Therefore, the sense in which the concept "question sequence" will be employed here refers to the randomization or rotation of the items as they are administered to the respondents. It is believed that a variation in the order of the items may have produced a noticeable change in the responses given. As noted above, after the first item a number of the respondents lapsed into a kind of psychological set and caused the choice of

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<sup>1</sup>Charles F. Cannel and Robert L. Kahn, "The Collection of Data by Interviewing," Research Methods in the Behavioral Sciences, Leon Festinger and Daniel Katz (eds.), New York: Holt, Rinehart & Winston, Inc., 1953, p. 348.

alternatives to become less discriminating. If the sequence of the questions were varied as they were administered to the respondents this kind of phenomenon may have been "canceled out" to a certain extent. Given the length of and the peculiar nature of the test form, the variation of the question sequence quite possibly could have contributed some to the strength of the device. As it is now, the first item may be the only one which will yield useful information. Actually, the source of the problem lies not only in the failure to vary the item order but also rests with the nature of the form itself in that it is conducive to mental tediousness. The question of item sequence is still pertinent, however, and would reduce the possible effect of psychological set and fatigue plus other influences which may, unknowingly, be built in or are situational. This same observation could apply to the sociometric listing of the organizations, as their rotation might minimize any operating "set" effect.

#### Item Content--Semantic Difficulties

Briefly touched on in Chapter III were some of the reasons why this type and form of research device, i.e. the sociometric questionnaire, was employed. It might be beneficial to again look at some of these reasons and consider them in the context of constructive criticism. Fundamentally the reasons are outlined by Selltitz et al. in their discussion of advantages in the use of the questionnaire. Some of these reasons are the following: The questionnaire is less expensive, involves less skill in its administration, can be mailed or handed to respondents with a minimum of explanation, and it is possible to cover a wide area and obtain information from more people by means of the questionnaire.

The impersonal nature of a questionnaire--its standardized wording, its standardized order of questions, its standardized instructions for

recording responses--insures some uniformity from one measurement situation to another.<sup>1</sup>

Certainly all of the above notions were taken into consideration in the choice of this particular method. However, contingent with these pragmatic advantages are drawbacks which ought to be recognized here and should be taken into account and in surveying the project. Implied by Selltitz as a disadvantage is the differential perception of the respondents with regard to the item content. Despite the supposed uniformity of the items and the forms, each individual seems to have a peculiar interpretation of the item phrasing. When, in fact, the questions do contain wording which could cause confusion and interpretative problems, the situation is doubly endangered.

From a psychological point of view, however, this uniformity may be more apparent than real; a question with standardized wording may have diverse meanings for different people, may be comprehensible to some and incomprehensible to others.<sup>2</sup>

As we have seen, hierarchical position within the organizational structure would appear to have an effect upon the way questions are interpreted. The life chances and life style of personnel within the organizations plus the socializing effect of the organization itself has determined or influenced greatly the perspective and manner in which meaning is attributed to the phrasing employed in the tool such as the one used. As Selltitz points out, even though such a technique can help focus the attention of the respondents upon a particular dimension of the problem interested in, there is no means by which information can be obtained concerning the respondent's motivation, logic, or frame of reference used in formalizing his choices on the sociometric test.

In the succeeding paragraphs, time will be taken to examine the five

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<sup>1</sup>Selltitz et al., loc. cit., p. 239.

<sup>2</sup>Ibid.

questions or statements utilized in the sociometric tool and point out where inadequate or ambiguous wording may have affected the responses. Separated from criterial problems, fixed alternative objections, and all of those difficulties previously discussed, the items will be considered in terms of their own worth as adequate research devices.

Item 1: What organization does your organization deal with in carrying out its business?

1. - frequently
2. - occasionally
3. - never

This appears to be a simply worded, straightforward item, but may, in fact, cause various interpretations of its content. For example, what does "carrying out its business" mean? Does this imply certain necessary and important functions of the organization or does it refer to secondary casual interaction among the interests? Perhaps some designation should have been made here with regard to the kind of "business" implied. For example, suppose the phrase "carrying out its important business" were substituted? The chance for variable interpretation would still be present but minimized, in that part of the ambiguity would be eliminated.

If the item refers to any business interaction, how valuable is the data received? Intimated in the alternatives available is the belief that the importance of the interaction will be implied by the response choice, i.e. frequently, occasionally and never. Again this may not necessarily be the case, as frequency of interaction does not always indicate the significance of the business transacted. What is meant by frequent or occasional business dealings? Does frequent imply once a month, twice a year, or three times a week? Obviously these alternatives were not and cannot be perceived uniformly by the respondents. Perhaps the choice of words for the alternatives was unfortunate and might have been remedied by specifying the rate of interaction,

e.g. twice a month, twice a year, etc.

The word "deal" in the item might also emit dubious connotations and thereby cause unfavorable reaction among the respondents. "Deal" has too often been associated with extralegal or illegal operations and could imply concealed activity through irregular channels. Replacement with the term "interact" may have alleviated this difficulty.

In summary, even though the analysis of this item content may seem picayunish it is a necessary task and could perform a vital role in future studies along similar lines. Wording of questions to insure a maximum of response uniformity is no small problem and involves much study.

Item 2, like its predecessor, runs into semantic difficulties. The item reads:

Item 2: There are probably times when your organization has sought the advice of other organizations before making major operational decisions.

1. - have sought their advice
2. - would like to seek their advice but have not
3. - would never seek their advice

The major problem inherent in this item lies with the phrase "has sought the advice of." Expressed by various organizational representatives, as noted by the test administrator, was the feeling that a positive response (alternative 1) to this statement would be an admission of weakness on the part of the organization or the individual himself. "Sought" or "seek" implies to some a degree of obsequiousness or submissiveness which is distasteful to the image of a progressive and aggressive organization. In other words, there is a superior-inferior relationship connotated here which may alienate the respondents and affect his answers. An item which would eliminate this inference would be more conducive to better response. A conceivable substitution for this phrase might be "has consulted with other organizations...." This does minimize the

positional intimation and introduce a coequal atmosphere.

The phrase "making major operational decisions" is liable to a wide range of interpretation especially in regard to the variety of organizations represented. That is, a major operational decision as viewed by Inland Steel Company officials is substantially of a different nature than that faced by the Potato Growers Association. There is really no getting around the problem of interpretation with regard to this phrase, but at least, unlike the previous item, a decision was made as to the degree of importance in which the operational decision is to be considered.

Alternative 2 of Item 2--"would like to seek their advice but have not"--is not consistent with the other choices in that it appears to tap a "desired" dimension rather than the perceived actual dimension upon which the device is based. More appropriately, can an organizational representative state what an organization would like to do? The term or word as it is used attributes more reality to the organization as an organic unit than is warranted. In any event the deletion of the affect laden "like" would lend more consistency to the alternatives. The use of the word "never" in the third alternative is regretful and only serves to muddle the situation. Many people, particularly conservative executives, are hesitant to use the word never. The employment of the word "not" as a replacement could tighten up this aspect of the item.

A possible restatement of Item 2 taking into account the above analysis could include the following:

There are probably times when your organization has consulted with other organizations before making major operational decisions.

1. - have consulted with them
2. - would consult with them but have not
3. - would not consult with them

Item 3 is stated in the following manner:

Item 3: Consider the special interest and purpose of your organization. There are other organizations or group opinions of your organization and its operation that are especially important to your organization.

1. - important as a positive factor in our decision making
2. - unimportant, doesn't effect our decision making
3. - important as a negative factor in our decision making

This item, as compared to the previous one, concerns itself with group opinion as opposed to advice. There does not seem to be any appreciable qualitative difference in the fundamental aim of the items in that both attempt to get at an influence hierarchy. In this respect, this item and Item 4 could be deemed redundant.

The major part of Item 3 which appears as though it could cause some confusion is alternative 3, i.e. "important as a negative factor in our decision making." This alternative purports to imply a situation in which the respondent organization considers other organizations as competitors for mutually desired resources, and in that respect are important as a "negative factor" in their decision making. The test administrator has mentioned that many respondents "scrupulously" avoided the use of this "negative response." This, he claims, was particularly the case with those organizations which were more exposed to public opinion.

Item 4: Most organizations secure help from other organized interests in achieving certain organizational goals.

1. - did
2. - have not but would like them to
3. - would not

As in Item 2, the phrasing is such as to imply a superior-inferior relationship. The words "secure help" are particularly indicative of this. The test administrator has noted from the comments received by several organizational representatives that the items "seemed loaded in that they seem to feel that indicating they had gotten advice or help was an admission

of a weakness in their own ability."

Also, the same difficulty is again present in the alternative listing with regard to the word "like." This is an affect-laden term and is technically out of place in this particular test.

Item 5: From the point of view of your organization, which of the following organizations are leaders in their respective fields.

1. - are
2. - don't know
3. - are not

This item is by far the most ambiguous and confusing of the entire group. In the first place, the respondents were not given any idea of a categorical reference so that a judgment could be made in the relative leadership gradation among the organized interests. In other words, on what basis could these interests be rated as leaders? How applicable is this item to such organizations as the Michigan Legislature, County Superintendents of Schools, Upper Peninsula Tourist Association, etc.? With regard to The Mining Journal, is this organization rated on its leadership in a geographic area, in respect to other Upper Peninsula newspapers, in the communications sector as a whole or within the entire range of economic organizations listed? As the test administrator himself points out, it is very difficult to evaluate a government agency which has no competition as to whether or not it is a leader in its respective field.

The objective of this item was to gain a look at the status structure which may be prevalent among the organizations. This is to say an attempt was made to see if the organizations would rank each other in terms of conferral of prestige. A quick glance over the raw data would subsume any hopes of reaching that aim. Many of the respondents were nondiscriminatory in the choice of alternatives, i.e. consistently chose either alternative 1 or 2



throughout the list. Very few respondents recognized any organized interests which were not leaders in their respective fields; either they thought that they were or they used the "don't know" response.

In short, the nature of the item does not lend itself to proper interpretation in light of the stated objective. Because of this difficulty, it was decided by the experimenter to forego any extensive analysis through the use of the computer or any other techniques.

This subsection dealt with the nature of the sociometric method per se and the difficulties inherent in its application to the research project. Problem areas which are recognized by authorities in the field were examined in regard to the project at hand. Finally, specific technical problems relating to the sociometric design employed were discussed and several recommendations were suggested concerning the improvement of the instrument.

The forthcoming section will concentrate on the theoretical problem of being able to transpose an interpersonal sociometric method to an interorganizational milieu.

#### Sociometric Transposition: Individual to Organization

##### Organizational Representation

One of the underlying notions of the experimenter influencing the choice of the sociometric technique is the belief that this method which has been utilized many times in small group situations can be viably transposed to an organizational milieu. In other words, the sociometric approach which has been employed in determining interactive relations within many types of social groupings is now being applied to the organizational realm. This transposition to the organizational level involves the belief that the respondents do in fact accurately reflect organizational behavior. Thus while many of the merits of

such an approach are transferred so are many of the faults, and these may indeed be magnified in the process and even new problems evolved. So it appears that one of the primary concerns here rests with the permissibility of generalizing a small scale technique to a large scale setting. This becomes especially poignant when controversy regarding the technique at a lower level has not yet and may never be resolved.

In Chapter II, it will be recalled that a number of assumptions were listed which formed the underpinning theoretical framework of the research project. Several of these assumptions have particular relevance to the present discussion:<sup>1</sup>

1. The behavior of an organization is reflected in the actions of its members who are socialized through and have internalized the norms of the organization.
2. Such members, whether they be classified as "Influentials," "Organization Leaders," or "Spokesmen," can and do accurately reflect and transmit their organization's position on most major issues.
3. Therefore, it is possible and realistic to expect that members of a given organization can accurately and reliably provide descriptive statements about past, present, and future organizational action.

It is believed by the experimenter that generally anyone who is a member of an organization regardless of hierarchical position can, as the assumptions indicate, accurately provide descriptive statements about organizational behavior. Implied, however, and as shown in the operationalizing of the beliefs, is the feeling that personnel above a certain hierarchical cut-off point are in a better position to indicate or reflect organizational behavior than are those incumbents of lower position. Where in the structural arrangement the "cut-off" line is, is not specifically delineated. Assumption number

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<sup>1</sup>The other three assumptions listed in Chapter II will not be examined in this thesis. The reasons for this include the fact that some of their important implications will be discussed in conjunction with the above enumerated assumptions, and also it is believed that the examination of the assumptions singly will not contribute significantly to the overall understanding of the project.

two intimates the types of personnel which would fall above this line. These titles or labels still indicate a rather wide range of personnel and thereby do not clarify certain problems which arise. For example, the designation "spokesman" could refer to the public relations man, a secretary, an assistant to an executive, or the executive himself--in other words, people from many organizational levels. Frankly, the primary purpose here in this discussion is to convey the belief that where a person resides in the organizational hierarchy does make a difference, in terms of his reactions concerning the organized interest. Because it makes a difference, studies utilizing organizational personnel must either (a) be selective in their choice of organizational representatives or (b) make certain that an adequate population of incumbents from multiple hierarchical strata is obtained. Since the scope of the study precludes any reasonable fulfillment of the latter, it seems as though the former should have been adhered to firmly. In way of explanation, alternative "a" stated above simply means that the experimenters should have attempted to obtain a population of respondents with relatively homogenous job descriptions. This, however, was not done in the administration of the sociometric questionnaire. It is obvious from looking through the actual questionnaire forms that the respondents did not represent a homogenous sampling. This is to say that the sampling does not consist of all presidents, or all managers, or all public relations men, but instead is composed of a mixture of respondents of whom only minimal effort was made to categorize in terms of actual responsibility or position. This, it would seem, should be a necessary step or procedure in the development of a "strong" research design. It is realized that the procedure employed was dictated by and consistent with the theoretic assumptions; it is hoped that the subsequent appraisal may affect some modification of these beliefs.

Robert A. Gordon recognizes the differential perspective which accrues to hierarchical incumbents, particularly owners vis-a-vis professional managers.

Professional executives do not necessarily react to business situations in the same way as owner-managers. The personal attributes, background, and training of the salaried manager are likely to differ from those of the owner-entrepreneur of an earlier day or of most owner-managers operating in the modern industrial scene.<sup>1</sup>

Gordon goes on to point out how the respective environmental milieu of the professional manager and owner entrepreneur may affect their actions.

. . . top management in the large corporation must also deal with directors and with important outside groups. The "institutional environment" of the salaried executive, therefore, differs from that of the owner-entrepreneur, particularly of the small concern. In many companies, of course, the role of the nonofficer director is a minimal one. But where the influence or leadership of directors is important, the resulting business decisions may well reflect an undue degree of financial caution. On occasion, they may well reflect interests outside the business, which particular directors wish to further.<sup>2</sup>

Therefore, applying this to the respondents in the study, one can readily see how the varying environmental conditions surrounding the top executives in certain organizations as opposed to the conditions operating at the same level could have a very noticeable effect on their respective responses.

Peter Rossi looks at this same phenomenon and provides a supporting view or interpretation of it:

At the higher level of decision-making, roles vary widely in: First, the higher the prestige of the office, the more the decision-maker will be able to act independently. Secondly, decision-maker roles in organizations which have an independent financial base are less vulnerable than those in organizations dependent upon support controlled by other persons or organizations.... Finally, decision-makers may derive independence from their basis of tenure.<sup>3</sup>

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<sup>1</sup>Robert A. Gordon, "Leadership in the Large Corporation," Social Organization and Behavior: A Reader in General Sociology, Richard L. Simpson and Ida Harper Simpson (eds.), New York: John Wiley and Sons, Inc., 1964, p. 172.

<sup>2</sup>Ibid.

<sup>3</sup>Peter H. Rossi, "Community Decision Making," Administrative Science Quarterly, 1:415-43, March 1957.

The first and third statements of Rossi, in particular, are relevant here in that they support the argument that a differential perspective exists among varying levels of incumbents. Amount of prestige, financial base and tenure are all influencing factors in the manner in which the positional incumbents reflect organizational behavior.

R. H. Hall reports another factor which could affect the responses of organizational representatives:

Varying degrees of bureaucratization would certainly have concomitant effects on other organizational phenomena, such as participants behavior, effectiveness of goal-attaining endeavors, and relations with the external environment, both in terms of individuals and other organizations.<sup>1</sup>

Therefore, in organizations manifesting varying degrees of bureaucratization, "who answers" for the organization can be a crucial element.

The role expectations indigenous to positions within the organizational hierarchy have a definite influence in shaping and molding the perspective of the role incumbent. The duties, responsibilities, goals, and problems of a position can reinforce, enlarge or alter the behavioral patterns contingent with that position.

We agree with March and Simon, therefore, that, given the basic dilemmas, the intensity with which each role occupant develops a special point of view and then persists in adhering to it may depend on the goals of his position, and the extent to which his attention and communication intake have been focused and limited through that position.<sup>2</sup>

The essential point which should be emphasized is simply that the hierarchical position of one within an organizational structure influences his perspectives in regard to attitudes concerning organizational direction. The extent to which the lack of control over this positional variable has influenced

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<sup>1</sup>Richard H. Hall, "Intra-Organizational Structural Variation: Application of the Bureaucratic Model," Administrative Science Quarterly, 7:307, Dec. 1962.

<sup>2</sup>Henry A. Landsberger, "The Horizontal Dimension in Bureaucracy," Administrative Science Quarterly, 6:326, Dec. 1961

the data is a debatable point. The primary concern here is, however, that this is one questionable aspect of the project which could have been eliminated through a more careful research design. It seems that it would be advantageous to future studies of a similar nature, to incorporate the administration of the sociometric questionnaire to either incumbents of similar hierarchical position or stratum or to deliver the form to several members within or from varied levels. Ideally the latter alternative would be desirable not only because it would provide a broader base for organizational representation but also because it would tend to modify extreme responses given by any one individual. The use of this alternative, however, would necessarily involve the belief that the incumbents at several levels could accurately reflect and transmit their organization's position on most major issues. A modification of this view would be the utilization of incumbents of several positions within the upper management level. Presumably, as stated before, members of the top management level who are more intimately associated with the decision-making procedures can more accurately transmit information concerning organizational position. Therefore, if there is multiple representation from the upper management level, the sociometric data received regarding interorganizational relationships would be enhanced and strengthened. Perhaps an average of the sociometric values could be obtained, thus providing a more accurate representation of organizational behavior than would a single score. Economically and temporally this method may not be feasible, but from many other standpoints it is certainly desirable.

The use of a stratified sample, and the term is used in a descriptive vis-a-vis technical sense, in which the organizational representatives are all incumbents of similar position, might be economically expedient but limited insofar as the kinds of useful information which could be obtained. For example, if only the public relations men from the various organizations were polled concerning organizational issues, this would hardly constitute a valid

basis for generalizations about the organizations as a whole. The only thing that could be done is to restrict comment and generalization to that specific population and, hence, limit the scope of the study considerably. Likewise, in the project under examination, only one respondent acting as a representative of an entire organization does not form a tight foundation from which to generalize about organizational relationships. In this case, one cannot even say that the opinions of a particular level of people are reflected, as the respondents are from many positions within the organizations. Thus it appears on this basis alone the value of the data received in this study might be severely limited.

One of the basic problems which underlies the preceding discussion and to some extent has influenced the procedures used concerns the tendency to see the organization as an organic unity:

One analyst has noted the "error in anthropomorphism" in constructing a model of the corporation simply in the image of individual man. Organization theory view the enterprise as made up of many participants, such as suppliers, the many categories of employees, executives, dealers, and stockholders.... It does not possess a single mind, "conscience," or set of motivations as does an individual for it is, in an organization theory model, a coalition of many individuals and groups.<sup>1</sup>

If the organization did indeed possess a "single mind" then perhaps one representative could accurately reflect its "behavior." However, the organization is, as was mentioned, a coalition of groups and individuals and therefore does not make itself easily amenable to singular representation.

#### Organizational Socialization

Inextricably associated with the problem of differential perspective, as it is manifested by organizational representatives, is the concept of organ-

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<sup>1</sup>Harold L. Johnson, "Alternative Views of Big Business Goals and Purposes," Annals of the American Academy of Political and Social Science, 343:7, September 1962.

izational socialization. In an introductory statement preceding the sociometric critique, this concept is mentioned in conjunction with the problem of locating within the organizational hierarchy those incumbents who are "adequately" socialized and, consequently, could reflect organizational behavior. The question was then asked whether certain positions carry with them or require a higher degree of socialization than do others. If certain positions or levels of positions do require relatively more socialization, this would have considerable influence on the value of the data obtained in this study and the design of future studies. This would be especially helpful in respect to the number and kinds of respondents selected to receive the questionnaire and also to the interpretation of the results.

The area of socialization is relatively untapped insofar as it concerns complex organizations. Few sociologists have concerned themselves with this specific subject area but have concentrated primarily on socialization in general--as Talcott Parsons, who offers us his definition of socialization as "the acquisition of the requisite orientation for satisfactory functioning in a role."<sup>1</sup> Etzioni simplifies and narrows this somewhat sophisticated version by stating that "the study of organizational socialization, like that of communication, is concerned with the processes by which the beliefs, norms, and perspectives are brought into line with those of the organization."<sup>2</sup> William Evan also focuses our attention on organizational socialization and on the formal organization as a prime medium for this process:

One of the principal agencies of "adult socialization" in industrial society is the formal organization. In all such organizations there are various procedures for socializing new members to the particular goals, norms, attitudes, and values. These procedures may vary considerably

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<sup>1</sup>Talcott Parsons, The Social System, p. 265.

<sup>2</sup>Amitai Etzioni, An Analysis of Complex Organizations, p. 142.



depending on the size, goals, functions, institutional context, and other characteristics of the organization. For instance it is probably true that the larger the organization, the more formal its procedures for socializing its members.<sup>1</sup>

As implied above, there are many variables connected with this phenomenon, most of which have yet to be examined in empirical terms. However, as with many abstract concepts, it is often easier to talk about them theoretically than it is to specify and objectify them. Etzioni admits that it is difficult to assess the amount of socialization which would be required by an organization for an individual to function effectively. One way which is postulated for measuring this would be to determine the amount of formal, informal, or "in-service" education necessary to fulfill the job expectations. Even this measure, as Etzioni points out, does not indicate to what extent the organization can control the socialization process for its own needs. This is because the socializing agents, which may be outside of the organization (university, church, service groups, etc.) or within (lower level participants), are less subject to direction by the organization than are the top level office holders. The point is that incumbents of different positions and levels within the organizational structure have been exposed to varying degrees and types of socialization processes and therefore manifest differential perspectives and outlooks when asked to react to questioning concerning organizational policy.

Along this vein, Pellegrin and Coates comment on the position of the executive, especially a professional manager, with regard to representing the organization:

As an agent of his corporation, the executive is cautious in his public pronouncements. His superiors expect him to keep in mind company

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<sup>1</sup>William M. Evan, "Peer-group Interaction and Organizational Socialization: A Study of Employee Turnover," American Sociological Review, 28:436, June 1963.

policies and interests, and he knows that he should emphasize at opportune moments a firm conviction that what is good for the corporation is good for the community.<sup>1</sup>

Incumbents of lower positions might not feel this same kind of pressure in representing the organization and therefore may differ in the nature of response given.

Almost without exception, the men chosen to represent the corporation are high level executives with lengthy service. They have demonstrated time and again that they are familiar with corporation policies and that they can be relied upon to do a good job of representing the company and its interests. They will express opinions on any subject which indicate that they cherish the "proper" social values.<sup>2</sup>

Implied in this statement is the feeling that only the top level executives with "lengthy service" have sufficiently internalized organizational values and can therefore adequately represent the corporation in public affairs. If either factor, a top level position or long service, is missing in the organizational representatives utilized in a research project, the data subsequently obtained must be seriously questioned. Both of these qualities were assumed to be associated with the organizational representatives to whom the socio-metric questionnaire was administered, but they were not specifically controlled.

Since the term organizational socialization is nebulous, its use as an important rubric in a research study spawns many problems. Obviously any body of organizational representatives will be socialized, but how and to what degree is variable. Simply assuming that members can accurately reflect their organization is not enough; perhaps the application of the criteria, position and length of service can provide a beginning step in screening out "socialized" organizational members.

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<sup>1</sup>Roland J. Pellegrin and Charles H. Coates, "Absentee-Owned Corporations and Community Power Structure," American Journal of Sociology, 61:417, March 1956.

<sup>2</sup>Ibid., p. 416.

This subsection began with a listing of several assumptions which provided a theoretic base for the methods employed in the research study. The subsequent discussion centered primarily around two problem areas, organizational representation and organizational socialization, both of which were concerned with the transposition of an individual technique to an organizational setting. Organizational representation was examined with regard to who should be selected to reflect organization policy and to the differential perspectives peculiar to the positional incumbents. Organizational socialization was discussed in terms of its conceptual meaning and the possible influence on organizational representatives.

The final section of this critique involves an evaluation of the first stage on the perceived organized structure. The format will be one of discussing the reputational method, its application and the related area of organizational selection and classification.

### The Perceived Organized Structure

#### Introduction

The first stage of the project involved the definition of organized interest sectors along with the identification of the perceived influential organizations composing them. It is to these general areas that this section is devoted.

The identification of organizations involved the use of the reputational method, which will be examined first in regard to several theoretical considerations, and secondly in respect to its actual application in the research study. Closely connected with the use of the reputational method is the definition of interest sectors and the proper placement and classification of organizations within them. This general subject area will be examined in the

second part of this section.

In way of review, the initial body of nominators contacted were the County Cooperative Extension Service Directors. They were given the form as shown on pages 13-15, and using this were asked to select key people to be interviewed. These key people were described as those who are knowledgeable and legitimate representatives or holders of operational positions in the various influential organized interests found in that county. These representatives who were interviewed systematically, county by county by one interviewer, were asked, using the same type of interview schedule, to nominate influential organizations and their top leadership in the eleven interest areas. Then, as stated previously, those organizations receiving multi-nominations were placed on the sociometric questionnaire.

### The Reputational Method and Its Application

#### Theory

The reputational or power attribution method has come under fire by certain social scientists, viz. Nelson Polsby, Robert Dahl, and Raymond Wolfinger, within the past five or six years primarily because those using the technique were attributing undue weight and importance to it.

It can be argued that the reputational method should be regarded as merely a systematic first step in studying a city's political system rather than a comprehensive technique for discovering the distribution of power.<sup>1</sup>

Despite the incongruous context of the above quote, the substance of it is quite relevant. The reputational method is seen as a first step in the study of the organized structure of the Upper Peninsula--and nothing more. It is not regarded as a primary means for gaining some form of a power distribution

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<sup>1</sup>Raymond Wolfinger, "Reputation and Reality in the Study of Community Power," Administrative Science Quarterly, 15:637, October 1960.

but merely to obtain an overview of the perceived influential organizations in the Upper Peninsula.

Most of the reputational researchers, by their failure to specify scopes in soliciting reputations for influence, assume that the power of their leader-nominees is equal for all issues; some researchers specifically state that they are concerned with a "general" category of community leadership.<sup>1</sup>

Recognized by the experimenters is the fact that individuals and organizations will mobilize differentially around issues. However, since organizations are generally perpetuated and remain relatively stable with regard to resources, it is felt that some sort of general index can be obtained of the nominated influential organizations.

Peter Rossi<sup>2</sup> also discusses the use of the reputational method and questions whether issue outcomes are actually "heavily affected" by those individuals nominated on the basis of reputation. He goes on to mention that Katz and Lazarsfeld have shown that the "persons who actually influenced specific opinion changes are likely to be very different from persons designated as potential sources of influence."

One major aspect which should be remembered here is that this project attempts to deal with organizations rather than with individuals and, as such, is concerned with patterns of relatively stable relationships with its surrounding environment. This is to say that in any particular area the listing of the major influential organizations will remain relatively unchanged over time; whereas, the influence of any one individual will tend to fluctuate over any particular time span. Therefore, in regard to any regional development activity, those organizations perceived as influential, as shown in a listing

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<sup>1</sup>Ibid., p. 638.

<sup>2</sup>Peter H. Rossi, "Community Decision Making," Administrative Science Quarterly, 1:429, March 1957.

obtained from the use of the reputational method, are most likely to affect the success of such a program. As implied previously, the types of activities and issues involved will determine which and what types of organizations will participate most actively. Granted then, the influence of any one organization will vary according to the issue at stake. This fact is recognized by the experimenters who do not pretend to set up any hard and fast hierarchy of influential organizations.

#### Method

Other criticisms which are directed at the reputational method center around the nature of the procedure used in gaining information. For example, certain directions given the nominators may contain words of an ambiguous, confusing nature and would then be subject to a variety of interpretations. The instructions given, whether received orally or in written form, may lack clarity and not satisfactorily outline the task. The experimenter in the research project under analysis used both oral and written means to explain the nature of the participation expected. The verbal contact with the Cooperative Extension Service Directors was made at a general meeting, at which time effort was made to solicit support with regard to the project as a whole and their contribution to it. Written instructions were sent to each director with additional description of the project. In general, it appears as though the directions and the nature of the overall study were well defined and relatively free of ambiguity.

Some studies utilizing the reputational method designate limits on the number of individuals which can be nominated, thus lowering the effectiveness of the method in the eyes of some critics. In the instructional letter to the Extension Service Directors, it was suggested that a sample of six to eleven per county would be sufficient in most cases. Presumably their "six to eleven"

designation was arrived at primarily because of the limited time available for interviewing those nominated. It is unfortunate, although expedient, that this restriction had to be used; however, it seems to imply that perhaps the number of county units involved are unwieldy and that a project of this scale is too ambitious. No numerical limits were imposed on the number of organizations which could be nominated by those initially selected by the Extension Service Directors; however, as will be discussed, certain guides were indicated which helped channel the nomination process.

In commenting on the nominational interview schedule (Table 1), it should be noted that the experimenters felt that the inclusion of subheadings under the interest areas would elicit a more exhaustive and accurate accounting of the influential organizations than would a totally undirected method. It was found by the investigators in a prior test trial using an undirected technique that the responses received were incomplete, particularly in the breadth of the organizations nominated. On the other hand, a guided approach as employed here could have the undesirable side effect of causing the nominators to name organizations corresponding to the subheadings, regardless of whether they are actually influential in area activities. This effect would be somewhat lessened or eliminated by the multi-nomination condition imposed for the sociometric listing of influential organizations in that the less important organizations would be deleted.

In conjunction with this, it might be well to recognize the "built-in" bias of the body of nominators who were, as stated, the County Cooperative Extension Service Directors in the Upper Peninsula. One can assume, perhaps, without benefit of a personnel profile, that these fourteen directors share a certain similarity in training, job requirements, etc., and because of this might well be inclined to over-select or under-select organizations in partic-

ular interest areas. It is also quite possible that the nature of their positions would restrict their knowledge of organizations in certain areas and thereby lead to ignorance of influentials in some interest sectors. Despite the conceivable deficiencies which may have been operating, the subsequent interviewing of the organizational representatives nominated probably would have nullified or at least modified these defects--this is to say, modified to the extent that any further information obtained was considered additive and included in the total pool of data on the perceived organized structure.

Floyd Hunter,<sup>1</sup> in his Atlanta study, selected his initial informants from four major community groups--business, government, civic associations and society activities. These informants were then asked to list persons "presumed to have power in community affairs." Although there are numerous differences<sup>2</sup> between the Hunter study and the one under discussion, one of these differences is pointed out here relating to the nature of the initial group of informants selected. In the one instance, these informants represented four major community groups, and in the other, a single homogenous grouping of nominators were employed. Given the vast difference in the amount of resources (money, time, personnel, etc.) available in the respective studies, one can easily see that a project encompassing the entire Upper Peninsula would run into serious logistic and economic difficulties if it utilized a group of initial informants similar to those of Hunter. Conceivably, the lack of sophistication in the first phase of this project may have bypassed certain accepted operating procedures without seriously endangering the results obtained. In fact, there may be something said for the use of a homogenous grouping of nominators, par-

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<sup>1</sup>Floyd Hunter, op. cit., pp. 11-12.

<sup>2</sup>Two major differences being that in this study emphasis is placed on the organization, not the individual, and the fact that the nomination procedure is an additive, not a reductive process.



ticularly on a regional scale, who are intimately acquainted with their bailiwick and committed to a conscientious job of reporting. In any event, the selection of the initial informants in this study is of minor importance but is necessary in any evaluating attempt of the project as a whole.

#### Organization Selection and Classification

A major difficulty associated with the reputational method in the research project is the limiting, selecting and classifying of organizations. Since it is a problem which affects both stages of the research project, its implications on the sociometric application will also be presented below.

The experimenters in the project decided to include in the final sociometric listing, second stage, only those organizations which were nominated at least twice within a county and at least once by two or more counties. This is an arbitrary decision, of course, on their part, and no absolute certainty exists that this criterion manages to select those organizations which are indeed the most influential. For example, the imposition of this criterion eliminates the possibility that an organization which is extremely influential within one county, e.g. a bank, or that an organization which spreads its influence throughout the Upper Peninsula but is not concentrated in one place, e.g. county bar associations, from appearing on the final listing included in the sociometric questionnaire. This seems unfair. One possible solution to this difficulty would be to include any organization in the final population which receives a multi-nomination from one as well as several counties.

It is difficult to suggest a solution to this problem because no matter what is decided some organizations will be eliminated from a final listing. Apparently the experimenters believed that the organizations which should be selected for the sociometric form should exhibit both depth and breadth in their nominations--depth, meaning a multi-nomination within at least one

county, and breadth, at least a single nomination from two or more other counties. Ostensibly this criteria does seem reasonable if applied consistently.

This same criticism, i.e. the exclusion of certain organizations, could be directed at the interest area categories themselves, which contain, on the surface at least, no provision for religious, professional or service organizations. A casual examination of the interest areas listed could lead to a hasty conclusion as to the apparent incompleteness of the sectors. A more thorough look at the numerous organizations included under the headings will support the fact that almost all organizations of any size and stature in the Upper Peninsula were nominated and listed in the inventory. The three types of organizations mentioned above (religious, service and professional) were included under the "catch-all" classification of Government. It is interesting to note that these three seemingly important areas of social organization did not meet the test as influential factors in Upper Peninsula activity. The primary reason for this seems to be that these organizations are composed of many localized autonomous groups and are, therefore, ineffective and unimportant as effectively functioning regional units; consequently, they do not appear on the final sociometric listing of influential organizations.

The impression has been given that the experimenters applied the admission criterion objectively and fairly to those organizations who qualified for the sociometric listing. This is, unfortunately, not true, as more than a few organizations were deleted from the final population. The reasons for so doing are diverse, but none are methodologically justifiable. One of the primary reasons implied by the researchers is that certain organizations, taking into account the nature of their operations and other ancillary factors, were simply not relevant to the influential grouping. Perhaps this reason was deemed

economically and even technologically expedient at the time, but a strictly analytic view of the situation would question the judgment of the experimenters at this point.

A comparison of interest areas on the interview schedule with those used in the sociometric phase of the study will reveal two changes which took place. The Government and Business interest areas are replaced by Service and Education. The Business sector collapsed because there were not enough organizations which were multiply nominated to warrant the continuance of that area. The Government interest area proved to be too inclusive, so it was divided into the Service and Education sectors. Included in the Service area are most of the government-related agencies, while the Education sector is composed entirely of education-related organizations. This ex post facto rearrangement of interest categories may be questionable but serves to point out the flexibility of what is admittedly an exploratory research study.

The problem of the proper placement of the interests within the categories plagued the experimenters throughout the project. This was especially true of those organizations (primarily public-service oriented) which could rightfully be placed in several of the interest areas. There was no objectively defined criteria to follow in the placement of organizations, hence the difficulty in the interpretation of the findings on the basis of interest sectors. The problem of placement arises as soon as categories are defined because they are not mutually exclusive.

Possible answers to this problem might include the collapsing of categories into two inclusive classifications, such as public-private or profit-nonprofit. At the other extreme, categories could be so specified so that little question would exist as to the proper placement of an organization. Both of these solutions seem to suffer from the same basic defect--neither

would be of real value in the understanding of interorganizational relations, the one because it is too inclusive, the other because it is too specified.

Another solution to the problem has been suggested by a similar study done in the Grand Traverse Bay Region of Northwest Michigan.<sup>1</sup> The nominations of the organizational representatives (as selected by the County Extension Service Directors) were categorized as to the interest sector in which they were perceived as being influential. In other words, organized interests, such as the Farm Bureau, Chamber of Commerce, USDA Soil Conservation Service, etc., are often perceived as being influential in different interest areas by different respondents. The frequency of times they were nominated in a particular interest sector was recorded.

If this same technique had been employed in the Upper Peninsula, the problem of organization placement might have been eliminated simply by placing the interest into the sector in which it was perceived by the most nominators as being influential. If this could have been done, the design would have been tightened and an objective criterion would have existed as standard procedure for organizational placement.

In this brief section discussing the reputational method and organizational classification, several aspects of this initial phase of the study have been brought to light and examined. Perhaps the most cautious way to evaluate the utilization of the reputational method in this project would be to quote Wolfinger, as he says that it is merely ". . . the elaborate variant of the older procedure of asking insiders--reporters, politicians--for a quick run-down on the local big shots in order to identify potentially useful interviewees."<sup>2</sup> This is essentially what the experimenters hoped to accomplish, and

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<sup>1</sup>Anderson and Connally, loc. cit.

<sup>2</sup>Wolfinger, op. cit., p. 637.

did to a great extent, given the limitations involved. As soon as the researchers attribute more importance to the method and the results than has been stated--particularly in regard to a power ranking based on this information alone--then many of the criticisms which have been leveled at the technique become applicable.

Even though the reputational method provides a tried technique for the identification of influentials, it also imposes a limitation on the kinds of generalizations and implications which can be inferred from the results. The reputational method, as it is employed in the project, does not restrict the types, size, or number of organizations which can be nominated. Because of this, the experimenters are required to classify, limit and select, all calling for arbitrary decisions which can contribute to the weakening of the study as a whole. However, as has been pointed out, judgments have to be made and no research study is immune. The employment of the technique in this project is done admirably and with few modifications seems to have potential in the location of influential organizations in future similar projects.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Summary of the Thesis

The major effort in the preceding chapters has been concentrated on three tasks--those of describing, interpreting and constructively criticizing. These three analytic aspects have been applied to a research project concerning the perceived organized structure of a specific geographic region and the utilization of a sociometric design on selected organized interests within the structure.

Five steps were contained in the original research project which composed a procedural framework for furthering attempts to aid in the planning of growth and development programs:

1. The location and definition of organized interest sectors.
2. The identification of the influential organizations within the sectors.
3. An indication of the key leadership representing the organized interests.
4. The location and description of interaction patterns among the organizations and interest sectors.
5. The validation of the procedure through actual assistance in planning development programs.

The fifth step was considered beyond the scope of the research project but may, to some extent, be influenced by the analysis presented in this thesis. The first three steps composed the first stage of this thesis, while the fourth was the primary concern of the second stage. Both stages were discussed in

terms of their theoretic base, the methodology employed and the findings obtained. The third stage of the thesis contained an evaluative critique of the preceding stages along with appropriate recommendations pertaining to the strengthening of the research design. The method utilized in this critique consisted of a comparison and application of procedures and critical comment found in social science literature to the procedural design of the research project.

### Conclusions

Generally, this thesis was involved with contributing, through a comprehensive analysis, to the culmination of two goals--i.e. the design of an operational framework for assistance in development activity and the furtherance of organizational and interorganizational research.

To the extent that the use of the reputation and sociometric methods are perceived as adequate means for obtaining information concerning organizations, and to the extent that the procedures employed represent exploratory and demonstratory efforts, it is believed that a valuable contribution has been made to the study of organizations and interorganizational relationships.

It is believed that it has been demonstrated that an extensive inventory of influential organizations can be produced for a geographic region. Furthermore, the reputational method has proven itself to be a useful means for evolving this listing of perceived influential organizations and their key leadership. However, some of the limitations concerning the reputational method and its application are noted: (1) the belief that undue importance is attributed to the method as a means for identifying a power hierarchy, (2) the question of whether the method actually does locate influentials, (3) the open versus "guided" technique for obtaining nominations, and (4) the selection of an initial body of nominators. Connected closely with the discussion of the

reputational method was the area of organization selection and classification. The problems examined under this heading were: (1) a numerical criteria for the nomination and selection of influential organizations, (2) difficulty in defining interest categories, and (3) the proper placement of interests within the categories.

The application of a sociometric design to the study of organizational relations is vulnerable to defects, but, despite this, the method has demonstrated its utility and presents great potential to the area of interorganizational analysis. For example, noticeable patterns of interaction among organizations and interest sectors were located through use of the method. Also noted were reciprocating blocs of interest sectors, particularly in regard to a public service- or profit-oriented criterion. The areas in which the sociometric method and its application in the research project require further study and refinement are the following: (1) conceptual meaning of sociometric choice, (2) sociometric scoring, (3) predictability of sociometric selection, (4) fixed choice, (5) multidimensionality, (6) item sequence--fatigue and psychological set, and (7) item content--semantic difficulties. Associated with these problem areas is the question of being able to transpose the sociometric method from an individual to an organizational setting. Examined in this general area were the difficulties of who actually represents the organization and to what extent socialization processes have influenced their response.

The enumerated points outlined in the above two paragraphs were contained in the critique of the research project and represent areas of the research design which require strengthening and/or revision. A pioneering effort is nearly always subject to problems and deficiencies, insofar as this effort is seen in the broad view as providing a workable framework for future



organizational studies and contributing to the general body of organization and interorganizational knowledge, then the goals of the project have been fulfilled.

#### Problems for Future Research

Major difficulties which will face future research studies will include the definition of a manageable region or area for examination, a clear-cut procedure for organizational selection and placement into interest sectors, and decisions as to the nature of organizational representation for the purposes of sociometric information. It is also evident that serious effort should be placed on the pretesting of such a design.

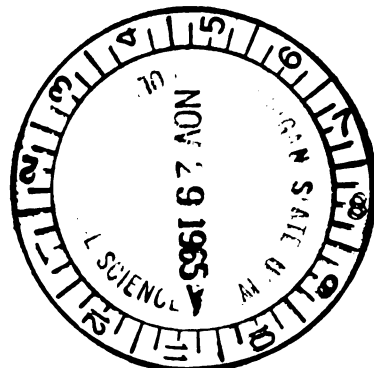
Since the ultimate goal is an operational procedural framework to aid in the planning of growth and development activities, the essential problem becomes one of following through on such a research design to see if, in fact, it will provide a valuable basis for development programs. When this is accomplished, then and only then will the project be seen as complete in the true sense.

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