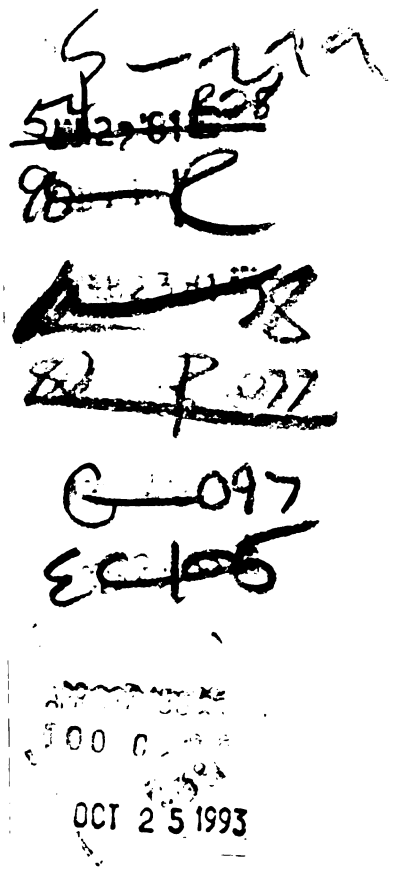
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ABSTRACT

THE SELF-MAXIMIZATION POSTULATE: A FORMULATION OF SCOPE CONDITIONS AND EMPIRICAL TEST WITHIN EXCHANGE NETWORKS OF A NORTHWOODS FARMING COMMUNITY

By

Michael Martin Loukinen

A basic assumption guiding most of the current theoretical work on exchange behavior is that in virtually all social contexts transactors are "profit-seeking"--trying to maximize gains and minimize losses. The author regards a self-maximizing orientation as but one of several orienting modes transactors adopt in their exchanges with one another. In this study an attempt is made to formulate scope conditions for the self-maximizing assumption.

The fieldsite for the empirical work was a small, rural community, named Finn River, located in the northernmost region of Michigan's Upper Peninsula. The residents are second and third generation Finnish-Americans. As an adaptive response to a harsh environment the Finn River people have developed an elaborate inter-household exchange system involving helping, loaning and borrowing, and gift-giving.

The author lived in the community for almost three years, participating in the local exchange systems and observing exchange phenomena in the natural community settings. On the basis of these observations a systematic, grounded, exchange network questionnaire was administered to 96% of the residents to find out who exchanged what with whom during the course of a one-year time period. A follow-up interview was conducted in which 17% of the original respondents were asked to rate various aspects of the exchange behavioral tendencies of their exchange partners.

The five variables examined in this study are:

1. Self-maximizing orientation: the extent to which a transactor is primarily interested in maximizing gains and minimizing losses during exchanges.

2. Attraction: the extent to which a transactor intrinsically values interaction with another, independent of extrinsic rewards.

3. Density: the extent to which the personal visiting networks of two transactors overlap.

4. Historical concern: the extent to which a transactor remembers exchange consequences with a particular exchange partner.

5. Range of exchange content: the number of different kinds of exchange contents a transactor perceives to have been exchanged with a particular exchange partner.

Hypothesis 1 asserted an inverse relation between the range of exchange content (independent variable) and self-maximizing orientation. It was assumed that as the qualitative diversity of exchange contents in a particular exchange relation increases, transactors are more likely to

find contents incommensurable and will find it difficult to assess gains and losses in their transactions. A moderate zero order association was discovered to be a consequence of the intervening effect of high attraction. Findings support the claim that extrinsic exchange is a means of expressing and maintaining intrinsic attachment (Blau, 1967). To avoid potential costs of losing positive regard of friends, transactors refrain from excessive self-maximizing exchange behaviors.

Hypothesis 2 asserted an inverse relation between the range of exchange content (independent variable) and historical concern. Qualitative diversity and the associated high volume of exchanged content were assumed to precipitate an interference phenomenon inhibiting retention of past exchange consequences. Findings refute the second hypothesis. An insufficient diversity and volume of exchange content was transacted between members of different households; hence, the information processing capacities of transactors were not inundated. Inter-household relations in Finn River were inadequate for testing this assertion.

Hypothesis 3 asserted a direct relation between historical concern (independent variable) and self-maximizing orientation. I assumed the less transactors remember exchanges, the less aware they are of gains and losses; hence the less these conceptions of exchange outcomes affect their behavior. Instead of the anticipated positive, linear relation I found an inverted U-curve relation. Additional analysis revealed that transactors' perceptions of the state

of the existing exchange record explains inverted U-curve shape. Transactors perceive "creditors" as self-maximizing to the extent to which they remember exchanges; but perceive "debtors" as less self-maximizing to the extent they fail to remember exchanges.

Under conditions of high attraction and low density there was a consistently stronger association between historical concern and self-maximizing orientation. The findings suggest under high density conditions there occurs a shift from diadic exchange structures to a Levi-Straussian model of generalized exchange (Levi-Strauss, 1969).

Hypothesis 4 asserted an inverse relation between density (independent variable) and self-maximizing orientation. It was assumed that the existence of mutual visitors between two transactors acts as an intervening moral force promoting fairness norms which constrain self-maximizing behavior. The fourth hypothesis was weakly supported by the data. It was discovered that non-liked persons were included into what was supposed to be the calculation of affective density and this lowered the level of association in the relationship.

While controlling for the effects of historical concern in Hypothesis 4 the findings reveal a positive, linear relation between density and self-maximizing orientation under the condition of high historical concern; whereas under low historical concern there was a negative linear relationship. This again supported the interpretation of a generalized exchange system emerging under high density conditions.

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By

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Finally, I wish to express my gratitude and affection to the good people of Finn River for willingly subjecting themselves to the ordeal of completing that enormous questionnaire. In particular, I wish to thank those Finn River residents who helped me administer the questionnaire. Any experienced sociologist would never dream of asking everyone in a community to complete a six-hour questionnaire, but such researchers have evidently not had the privilege to carry out their work in communities where people actually do believe in helping one another. But most of all I shall treasure that strange feeling of being cared for by an entire community.

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PREFACE

The original seeds from which this study ultimately grew were planted in the spring of 1969 when, as a consequence of enrolling in Bo Anderson's seminar on comparative stratification systems I was puzzled by the apparent stability of so many traditional peasant-landlord relationships (Moore, 1967). How could such obviously asymmetrical power relations persist without being shattered under the weight of inequity perceptions?

While in Fred Waisanen's seminar on the comparative study of modernization and social change I was busy contrasting traditional and modern conceptions of social structure, and thinking of the interactional modes associated with these social structural conceptions, in terms of exchange behavioral styles. I began to think the traditional, "multiplex" (Gluckman, 1962) structure of role relations prevented the occurrence of self-maximizing behavior, since the inequity perceptions occurring within one role will have the effect of spreading conflict into other role contexts. Hence, the cost of excessive self-maximizing is higher in multiplex role relations.

Then our attention turned to a consideration of patron-client relationships (Paine, 1970). The interesting feature was that the obscurance of inequity perceptions was associated with a wide variety of exchange obligations. Gradually into our discussion Bo and I introduced examples of the exchange processes in our own lives. Conversational interaction was so intense that before long I was living my exchange theories. I tried to calculate the profitability of exchange outcomes in relationships with friends and found that even when I deliberately tried to do so my efforts were thwarted by the qualitative complexity of the kinds of rewards exchanged and the sheer volume of exchanges. It then occurred to me that a pivotal factor possibly impeding both perceptions of inequity and the calculation of profits in lord-peasant, patron-client and many friendship relations was the qualitative diversity and high volume of contents exchanged in the relationships. The following study is a consequence of the reworking, formulation and testing of these ideas.

In Chapter I the study begins with a detailed elaboration of the theoretical argument, specifying scope conditions for the self-maximization hypothesis. Measurement procedures are mentioned briefly in this first chapter, but a detailed account of the development of grounded indicators during the course of extensive participant-observation fieldwork is included in Appendix E.

The steps in the analysis of the data are presented in Chapter II. A summary and interpretation of the findings is included in Chapter III, along with possibilities for future analysis.

Strictly speaking, these findings cannot be generalized to all communities and it is simply beyond the capacity of a single researcher to collect holistic exchange network data in several communities. Additional data are now being collected, but until we have a much wider data base, generalizations of these findings must be limited and cautious.

Macro-structural features of collective units, and the historical circumstances under which exchange systems evolve, seem to effect diadic exchange processes. The self-maximizing behaviors Blau believed he was observing were likely to be consequences of the organizational features of the larger bureaucratic structure surrounding the transactors (Blau, 1967). Certainly one condition promoting the advice-for-status deference transactions is the fact that individual, competitive mobility is emphasized in modern bureaucracies. The occupational reward systems tell transactors that anything they do at work must be seen from the point of view of gaining career advantages. Furthermore the modern, highly specific roles in bureaucratic settings are conducive to the calculation of exchange outcomes in terms of costs and gains. The explicit task performance

specifications and explicit contingencies for merit raises and status privileges facilitate cost-gain calculations.

Given the possibility that larger social structural conditions may shape the kinds of exchange processes studied between individuals, it is important for the reader to grasp the essential features of the community context in which these data were collected. Just as it is important for the experimentalist studying exchange processes in laboratory settings to give very thorough descriptions of the experimental apparatus procedures and the contextual setting in which the observations were made; it is equally important for the fieldworking sociologist to provide a description of the natural social context surrounding the observations presented in his analysis.

A detailed description of the Finn River community is included in the four appendices immediately following the main text. These appendices are <u>not</u> in any way incidental to the theoretical study. It was my original intention to include the descriptive material in the main text preceding the theoretical chapters and to bridge the two sections with a detailed ethnography of social exchange behavior based upon the qualitative data I collected during the two years of participant observation fieldwork. But time and cost problems forced me to postpone writing the ethnographic report for the purposes of completing the dissertation.

Appendix A is a descriptive account of the ethnohistory of Finn River. Since there was no written history of the community, the data were collected in unstructured, tape-recorded interviews with the "old-timers." These data were transcribed verbatum, to preserve, insofar as possible, the natural perspective of the residents. The ethnohistory presented describes the sequences of experiences as they are interpreted by the people who lived them. It is a grass-roots account of the settlement of a northwoods farming community.

Appendix B is a general description of Michigan's Upper Peninsula as a regional context surrounding Finn River. Appendix C describes the micro-ecological setting of the community and includes several photographs to visually document the nature of the community setting. Appendix D provides a description of the Finn River population.

As a suggestion to the reader seriously interested in exchange behavior in natural settings, I think it would be profitable to scan the first four appendices before dealing with the theoretical issues.

CHAPTER I

THEORETICAL FRAMEWORK

Underlying most social behavior is a more concrete and fundamental process of social exchange. Individuals are continually performing transactions with one another. Some persons are explicitly aware of this process and give it linguistic notice. In the English language speakers commonly refer to it as "give-and-take," "scratching each other's back," "tit-for-tat," and "cooperation." A significant feature common to these folk categorizations is the idea that each of the participants must give and is thereby entitled to receive. The term exchange as used by both sociologists and laymen defines the character of the relation between acts giving and receiving.

The core assumption guiding most of our current theoretical work on exchange behavior is what the author calls the self-maximizing orientation. Many American sociologists assume that virtually all social behavior is continuously oriented toward the maximization of rewards related to the individual's values. Current work on

exchange theories appears somewhat stifled as a consequence of assuming the universal validity of the self-maximization assumption.[1]

I shall attempt to formulate scope conditions stating the conditions under which we can expect Person to abandon a self-maximizing orientation in transactions with Other.[2] In order to proceed with this theorizing, specific definitions of exchange concepts will be required.

Definition 1: Exchange content refers to the tangible and intangible media transactors perceive to be given and received during the exchange process. Exchange content may vary according to the particular cultural setting. It may be hours of work, a salary, a borrowed object, a favor, women, advice, or anything Person perceives to be given or received during a transaction.

In this study the exchange contents regularly transacted by the residents of Finn River were discovered during the course of a year of participant observation fieldwork. The list of regularly exchanged contents includes 24 different kinds of help; six categories of loaning and borrowing; two kinds of ceremonial gift exchange and eleven categories of informal gift exchange. See Appendix E for a detailed description of exchange contents.

Definition 2: The content comparison process is a cognitive operation performed by transactors when they compare the exchange content(s) they perceive themselves to

have given, with respect to those exchange contents they perceive themselves as having received, in a transaction.

Definition 3: Range of exchange content refers to the number of qualitatively different kinds of exchange contents perceived by Person as having been exchanged with Other.

The idea of a variable range of exchange content transacted between two persons has long been considered an important issue by social anthropologists studying exchange phenomena in primitive economic systems (Malinowski, 1922; Mauss, 1935; Firth, 1939; Bohanan, 1959; Dalton, 1965). Sociologists have traditionally conceptualized the idea in terms of variable dimensions of social relationships. This has been discussed as "single and multi-bonded" relations (Sorokin, 1929); "simplex and multiplex" role relations (Gluckman, 1955: 20 and 1962: 28); as "specific versus diffuse role expectations" and at another analytical level as "particularistic versus universalistic patterned value orientations" (Parsons, 1951: 86). More recently there has been an abstract conceptualization as "links" or "ties" between nodes of a social network (Mitchell, 1969: 20; and Barnes, 1972: 3).

Range of exchange content is operationalized as the number of different kinds of help, loaning and borrowing events, and gift-giving episodes occurring between Person and Other during the course of a one year interval.

Definition 4: Self-maximizing orientation, the basic dependent variable in this study, is defined as the extent to which transactors are primarily interested in minimizing the value of exchange contents they perceive to be giving, and maximizing the value of exchange contents they perceive to be receiving, during transactions. Self-maximizing orientation is operationalized in terms of Person's judgements on a 1-9 scale of the extent to which Other is "good-hearted." The scale was afterwards inverted so that a low score on goodheartedness would be a high score on the self-maximizing orientation variable, and vice versa.[3]

The self-maximizing assumption has been a fundamental and controversial issue in the history of social thought and in both classical and modern sociological theory. Its intellectual roots are traced to hedonistic assumptions of human nature found in classical Epicurean ethical thought (Abrahamsson, 1970). The idea was transformed into a social doctrine by generalizing the principle from egoistic pleasure and pain to "the greatest good for the greatest number" (Everett, 1960).

Hedonistic assumptions about the essence of man in "the state of nature" justify a strong central state in political philosophical thought (Hobbes; 1651). In more recent political science and political anthropology the self-maximizing postulate is translated into an assumed universal quest for power (Laswell, 1948; Leach 1954: 10).

It has been a basic assumption of classical economic theory (Smith, 1904). One finds it rooted deeply into psychological theories in the form of assumptions about the tendency for the human personality to operate so as to maximize pleasure and minimize pain (Freud, 1928: 18). In classical sociological theory we find the self-maximization assumption considered as a type of social action (Weber, 1947: 115); and as the central organizing principle of urban, capitalistic society (Toennies, 1957: 65).

Definition 5: Historical concern is defined as the extent to which a transactor remembers past transactions. The idea of remembering past transactions is implicitly built into several crucial exchange theoretical concepts, but to my knowledge has never been explicitly recognized as an important variable. To be meaningful the concept of reciprocity (Gouldner, 1960; Blau, 1967; Sahlins, 1968) assumes that a receiver of exchange content will remember the donor's act of giving. The concept of trust (Blau, 1967: 91; Mauss, 1954; Levi-Strauss, 1969: 265) considered as the giver's assessment of the likelihood that a receiver will reciprocate is also based upon the premise that the receiver will pay sufficient attention to the history of past exchange flows to remember the donor's acts of giving. One of the main thrusts of this paper is the claim that if a transactor is to calculate such abstractions as profit, equity or inequity he must to some degree be concerned with remembering the history of exchange content flows.

For the purposes of this study, the extent of Other's historical concern is measured in terms of Person's judgements of the degree to which Other "keeps track of the give-and-take that goes on in our daily life."[4]

Definition 6: Interpersonal attraction is defined as the extent to which a transactor intrinsically values interaction with an exchange partner, independent of any material benefits such interaction may produce.

The theoretical importance of the affective or "friendship" dimension of social relationships as it is related to exchange processes is emphasized in the classical sociological literature (Toennies, 1957; Weber, 1947; Malinowski, 1922; Mauss, 1954). Modern theorists analyzing exchange transactions have considered attraction in the form of "liking" and "intrinsic rewards" both as a dependent and independent variable (Blau, 1967: 69; Homans, 1974: 64).

In this study, Other's attractiveness is empirically indicated in terms of Person's estimates of the degree to which he "likes and enjoys the company" of Other.

Definition 7: Visiting common structural density is defined as the extent to which there is an overlap of the visiting networks (set of persons visited) of Person and Other. Operationally, it is defined as the number of persons who visit and/or are visited by both Person and Other.

The idea of structural density seems to have emerged in sociological literature as a consequence of rural-urban

social structural comparisons.[5] Generally the concept has been expressed in varying metaphors such as a "web of affiliations" (Simmel, 1955: 89), the "familiarity of neighborhood" (Toennies, 1957: 39), "interlocking roles" (Nadel, 1957), "close-knit and loose-knit" (Bott, 1957: 59) and "connectedness" (Reader, 1964: 22).

Recently it has been defined more precisely, as it has been closely coordinated with the concept of a social network (Mitchell, 1969). Social network researchees have available a precise definition of density as "the ratio of the actual links between a set of nodes to the theoretically possible number of links" (Barnes, 1966); but to my knowledge there has been no systematic empirical research accounting for or ascertaining the consequences of density, simply because it is so difficult to get an accurate measure of it in a field setting (Mitchell, 1969: 19).

Density can be calculated on the basis of any theoretically meaningful relationship between the persons in a social network. For the purposes of this study I have selected visiting density because of the characteristics of the visiting exchange relation in the community of Finn River.[6] The theoretically relevant properties of the visiting transaction as it occurs in Finn River are: Visitors generally like one another (see Table 42 in Appendix F); and visitors exchange information about the exchange performances of mutually known, non-present third persons.

Now that we have reviewed the definitions of variables examined in this study, let us turn to a consideration of the major assumptions and a statement of the hypotheses to be tested.

Assumption 1: Let us assume that transactors are primarily motivated by the desire to minimize the value of the exchange contents they perceive themselves as giving and to maximize the value of the exchange contents they perceive themselves to be receiving, whenever the costs of so doing do not outweigh the benefits.

A self-maximizing orientation toward social behavior is but one of several orienting modes individuals adopt in their transactions with one another (Meeker, 1971; Burns, 1972). Person may be equity-oriented in transactions with Other insofar as he wants to get what is believed to be deserved (Berger, Zelditch, and Anderson, 1972). Person may be oriented toward maximizing the joint utility as in healthy marriage relationships; or Other-oriented as in the case of altruism and parent-child relationships (Berkowitz and Daniels, 1963). Person may also be collectivity-oriented when the welfare of a larger social unit (family, club, team) transcends a consideration of individual costs and benefits.

For the purposes of this study I shall assume the existence of a general self-maximizing orientation in order that I may try to state the conditions under which transactors will elect to not self-maximize in their exchanges.

Assumption 2A: In order to assess the profitability of exchange outcomes it is necessary for transactors to perform a content comparison process. According to Definition 2, Person must compare what he perceives to have given against that which he perceives himself to receive, if even the crudest assessment of "profit" (Homans, 1974: 31) or the "goodness of outcomes" (Thibault and Kelley, 1959).

Assumption 2B: As the range of exchange content expands between Person and Other, the increasing differentiation of content introduces a qualitative complexity into their exchange calculations, which increases the likelihood that they will find exchange contents incommensurable. There are some exchange relationships in Finn River where Person and Other may exchange such a vast variety of goods and services it is unlikely that they will have available a common standard by which to assess their relative value. This provides the background for our first hypothesis:

> Hypothesis 1: The wider (narrower) the range of exchange content transacted between Person and Other the more likely they will have weaker (stronger) self-maximizing orientations.

Assumption 3: Let us assume there are limits on the information-processing capacity of transactors with regard to their ability to remember the history of past transactions with exchange partners. As the range of exchange content transacted between two persons expands, the qualitative diversity of stimuli and the sheer volume

(frequency) are likely to produce an interference phenomenon inhibiting the retention of past exchange consequences.[7] The argument is simply that it is more difficult for Person to remember incidents in the exchange history with Other when there is a wide range of qualitatively different kinds of exchange content transacted, and a high volume of transactions with Other. The third hypothesis is based on this assumption of an interference phenomenon.

It is difficult to separate the effects of the qualitative diversity of exchange content and the volume of exchange content to assess their independent effects on exchange memory. The volume of exchange content transacted must be equal to and may be greater than the range of exchanged content, but they are so closely related empirically that they cannot be separated in this analysis.

> Hypothesis 2: The wider (narrower) the range of exchange content exchanged between two transactors the more likely they are to display low (high) historical concern.

The rationale underlying the next hypothesis is that as Person keeps track more closely of past transactions, the more acutely aware he becomes of gains and losses. Such a heightened awareness of gains and losses should increase the reinforcing impact of these perceived exchange outcomes to a level where they increasingly regulate exchange behavior. By Definition 4, this involves an increase in the level of a transactor's self-maximizing orientation.

Similarly it is assumed the less closely Person keeps track of past transactions the less aware he is of

gains and losses. A lessened awareness of gains and losses diminishes the reinforcing impact of these outcomes, and by Definition 4, this reduces the level of Person's self-maximizing orientation.

> Hypothesis 3: The greater (lesser) Person's historical concern, the more likely is he to have a strong (weak) self-maximizing orientation.

The final hypothesis includes a structural property of a social network--visiting common structural density as a predictor variable and self-maximizing orientation as the dependent variable. Let us proceed with the argument, supposing, for the purposes of illustration, that Person has been engaging in rather excessive self-maximizing exchanges with Other.

Assumption 4: Let us assume that Person and Other like and are liked by the mutually visited persons included in the intersection of their visiting networks. I suspect this assumption would be empirically sound in many different cultural settings because people generally prefer to visit those people whose company they enjoy. While discussing the findings, I shall assess the empirical accuracy of this assumption.

Assumption 5: Let us assume the mutually visited persons dislike self-maximizing exchange behaviors. The historical circumstances of the community of Finn River were such that, as an adaptive response to a harsh environment, there emerged a normative system emphasizing <u>social</u>

responsibility (Berkowitz and Daniels, 1963) (see Appendix A).

Hidden behind this assumption that people generally dislike self-maximizing behaviors is another assumption that people expect fairness or equitable exchange. It is precisely when the expectation of equity is violated that disliking is precipitated. The assumption of equity expectations does not contradict the assumption that people generally do engage in self-maximizing exchanges. Both phenomena occur in social reality and this is one of the most basic sources of conflict.

Assumption 6: Let us also assume the mutually visited persons will hear that Person was engaging in excessively self-maximizing exchange behaviors with regard to Other. It is not uncommon for people to complain about the exchange performance of someone who has self-maximized against their interests. It is my impression that complaints of this nature are made to listeners who also, in some capacity, know the exchange deviants. In the community of Finn River (and in many other communities), such complaints generally occur during the context of visiting conversation, when the participants report their recent experiences to one another and discuss the activities of other, non-present persons.

These assumptions can be represented in the form of two balance triads as diagrammed in Figure 1 on the next page.

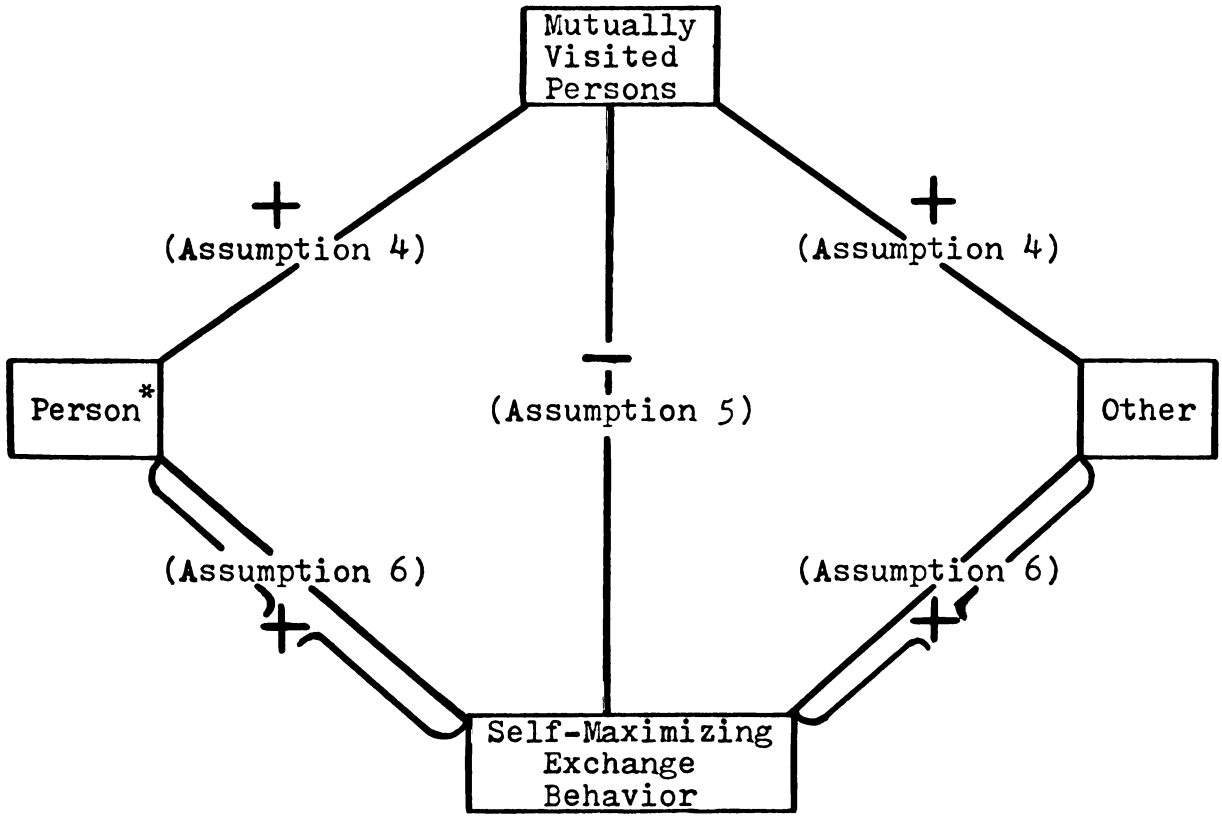


Figure 1. Balance Triads Illustrating the Constraining Effect of Visiting Common Structural Density on Self-Maximizing Orientation.

*It is assumed that Person has a positive self concept and this is omitted from the diagram. Standard balance theory notation is based on Cartwright and Zander, 1960.

As a consequence of liking Person, disliking self-maximizing acts, and hearing from Other that Person self-maximized against his interests, the mutually visited persons will be in a state of dissonance (Heider, 1958). Assuming the unit formation between Person and the self-maximizing exchange acts is too strong to segregate via denial or reinterpretation, the mutually visited persons are likely to resolve dissonance by redefining Person negatively (see Blau, 1967 on "social disapproval"). Person is likely to suffer costs in the form of a potential loss of future intrinsic and extrinsic benefits associated with the friendship with the mutually visited persons; and will be likely to experience a loss in self-esteem as a consequence of the social disapproval. I assume the costs should be approximately in proportion to the number of mutually visited friends who are angry with him. As the number of mutually visited friends increases we can expect Person to be more likely to forego self-maximizing at Other's expense and conform to the fairness norms held by the affective density cluster.

If person makes a concession and conforms to the fairness norms, he is not totally abandoning a self-maximizing orientation in the sense that he is still trying to minimize costs by avoiding the negative sanctions. The direction of the self-maximizing orientation shifts from diadic exchange with a particular Other toward the group of mutually visited persons. Perhaps we could best describe

this complex exchange orientation as a joint self-maximizing and collectivity orientation. It is certainly possible for several exchange orientations to operate in one transaction episode. The final hypothesis can be formulated as follows:

> Hypothesis 4: The greater (lesser) the visiting common structural density embracing two transactors the more they are likely to have weaker (stronger) self-maximizing orientations.

It is necessary to include the balance triad where the mutually-visited persons like Other, dislike self-maximizing acts, and know that Other has been exploited. It should make a difference if Other is liked or not liked as to whether or not negative sanctions will be directed at Person. People are more upset when they hear that friends were cheated than when they learn that the same has happened to strangers or disliked Others. If Other is strongly liked, and the unit formation between exploitation and Other is strong and undeniable, the mutually visited persons may expect Person to somehow readjust the exchange imbalance by reimbursing Other.

There are always alternative modes of dissonance reduction, but the balance theory argument seems to best explain the constraining effect affective structural density has on self-maximizing behavior in diadic exchange situations. Arensburg and Kimball noticed in their studies of social structure in rural Ireland:

> Ordinarily, of course, failure to fulfill such obligations either directly in social situations or in agricultural cooperation does not lead to violent conflict, but rather to an estrangement.

> The niggardly friend, especially one who fails to return an obligation, is held up to general condemnation, not only by his kindred but by the whole community (Arensburg and Kimball, 1940: 74).

Now that we have reviewed the major concepts and theoretical arguments, let us test the hypotheses. Included in Appendix E is a detailed description of the operationalization procedures for the reader interested in these issues.

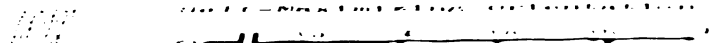
CHAPTER II

TESTING STRATEGY AND ANALYSIS

The relation between range of exchange content and self-maximizing orientation

In the first hypothesis, a negative, linear relation is asserted to hold between the range of exchange content and the extent of Other's self-maximizing orientation. It is assumed that the increasing variety of exchange content generates in the minds of transactors a commensurability problem which makes assessments of the profitability of transactions exceedingly difficult.

Figure 2 on the next page illustrates the trend of the relationship between self-maximizing orientation and range of exchange content under the zero order (no controls). Mean values of self-maximizing orientation are plotted across range of exchange content categories. There appears to be a substantial negative and sufficiently linear relationship. The data upon which the graph in Figure 2 is based is included in Table 1 of Appendix F. There is also a substantial degree of statistical association with asymmetric Somer's $d_{yx} = -.26$.



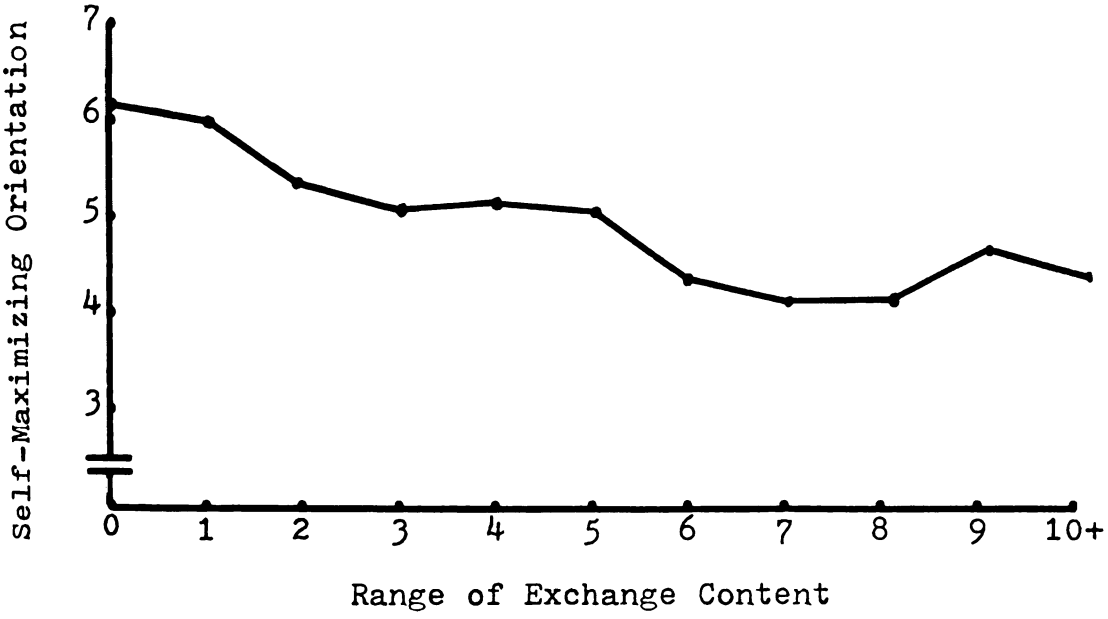


Figure 2. Self-Maximizing Orientation by Range of Exchange Content (Zero Order).

If we assume that in the case of intrinsic attraction the exchange of extrinsic benefits is essentially a means of expressing and winning intrinsic attachment (Blau, 1967: 76), then we can expect Person to refrain from self-maximizing against the interests of well-liked Others, in order to avoid the costs of losing the intrinsic rewards. If the thought of losing intrinsic attachment contains a transactor's self-maximizing motivation, we can expect an inverse, negative relation between the extent of self-maximizing orientation and degree of attraction. Figure 3 expresses this relation. See Table 2 in Appendix F for the cross-tabulated data.

Our expectations are confirmed as we find a negative, linear relationship between self-maximizing orientation and attraction. It is also a strong negative association with asymmetric Somer's $d_{yx} = -.56$, assuming attraction is the predictor variable.

Given the strong negative association between self-maximizing orientation and attraction, the intervening effect of attraction accounts for the zero order relation in Figure 2. Attraction is introduced as a control variable and its effects on the self-maximizing orientation by range of exchange content relationship are represented in Figure 4. Cross-tabulated data for graphs in Figure 4 are presented in Tables 3 and 4 in Appendix F.

The graphs under both the low and high conditions of attractions show a less negative slope than in the zero

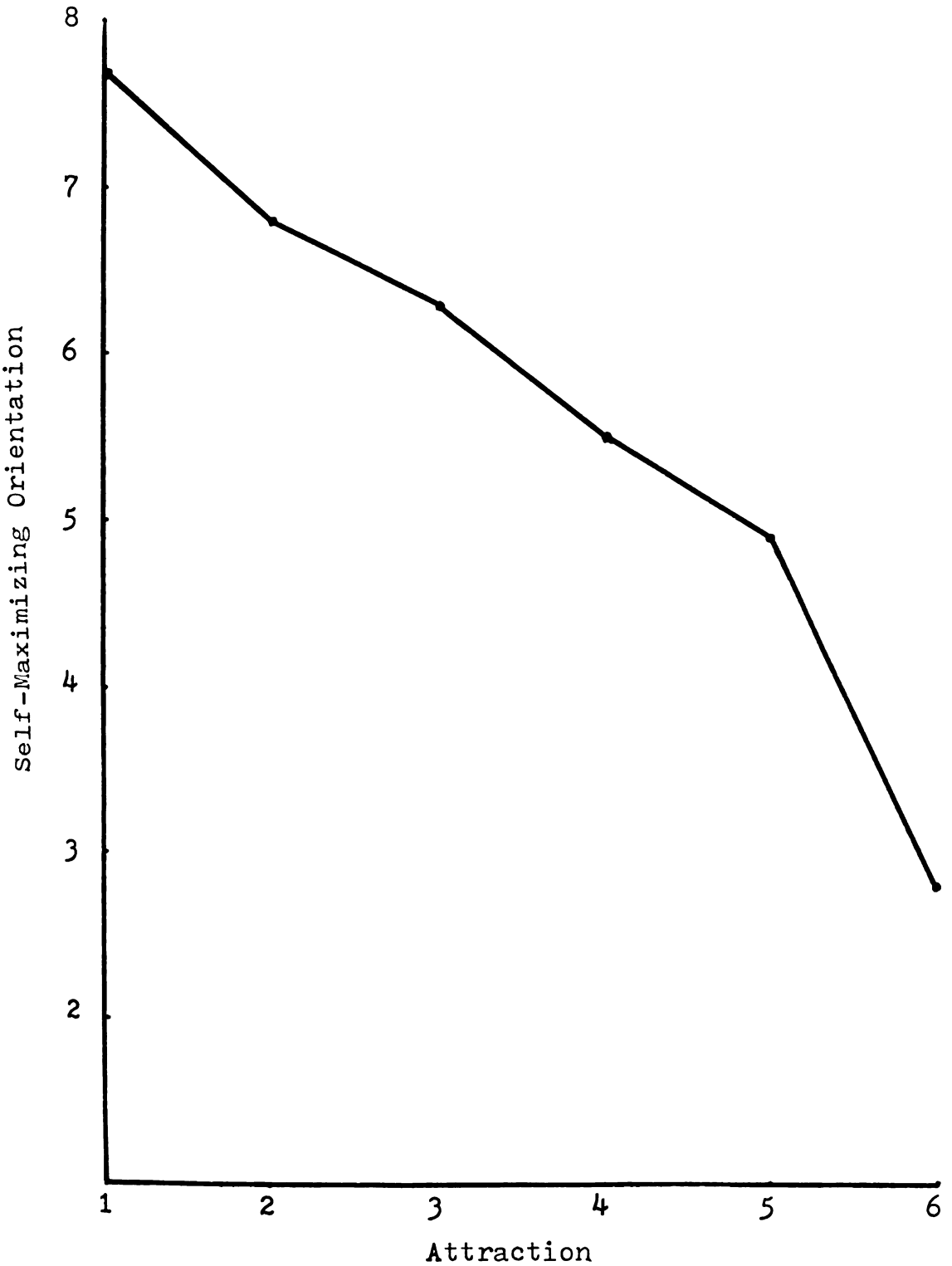


Figure 3. Self-Maximizing Orientation by Attraction (Zero Order).

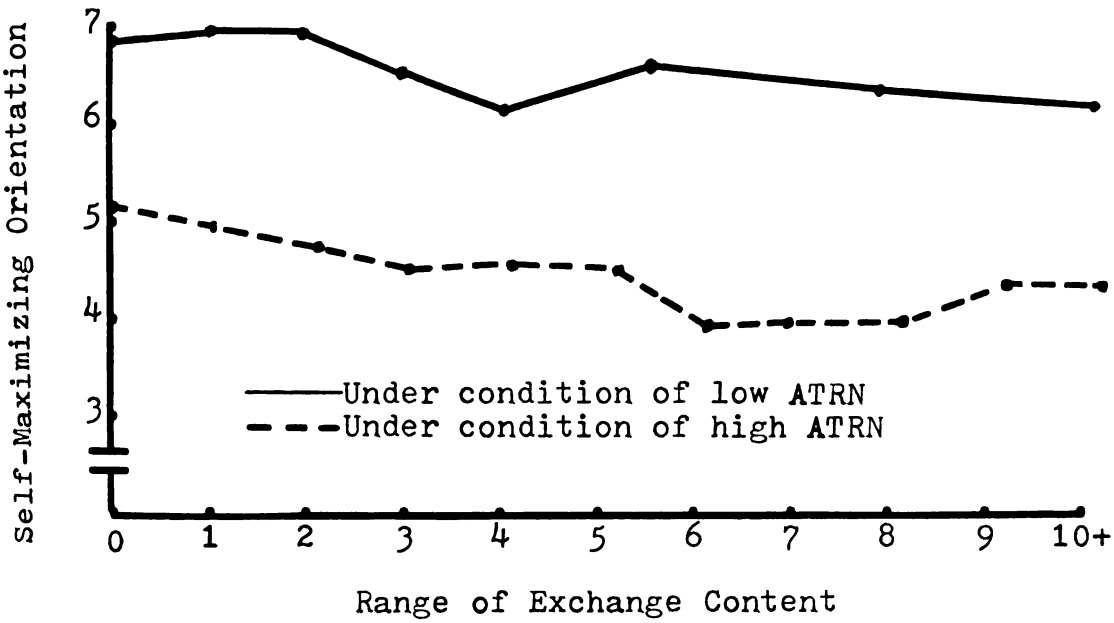


Figure 4. Self-Maximizing Orientation by Range of Exchange Content under Conditions of Low and High Attraction.

order condition. There appears to be a slightly sharper negative slope under the condition of high attraction. Somer's d_{yx} under the low attraction condition is -.08, whereas under the high attraction condition d_{yx} = -.20.

The anticipated effect of exchange content incommensurability is virtually negligible. The apparent association between self-maximizing orientation and range of exchange content is due to the intervening effect of high attraction. Hypothesis one is not supported by the data.

The relation between range of exchange content and historical concern

In the second hypothesis a negative, linear relation is asserted to hold between the range of exchange content as the independent variable and historical concern as the dependent variable. It is assumed that as the range of exchange content increases the qualitative content will produce an interference phenomenon inhibiting exchange memory.

Figure 5 presents a graph of the historical concern by range of exchange content relation under no control conditions. Table 5 in Appendix F contains the cross-tabulated data.

Both the graph and the table refute the second hypothesis. There is no discernable relationship between the expanding range of exchange content and historical concern.

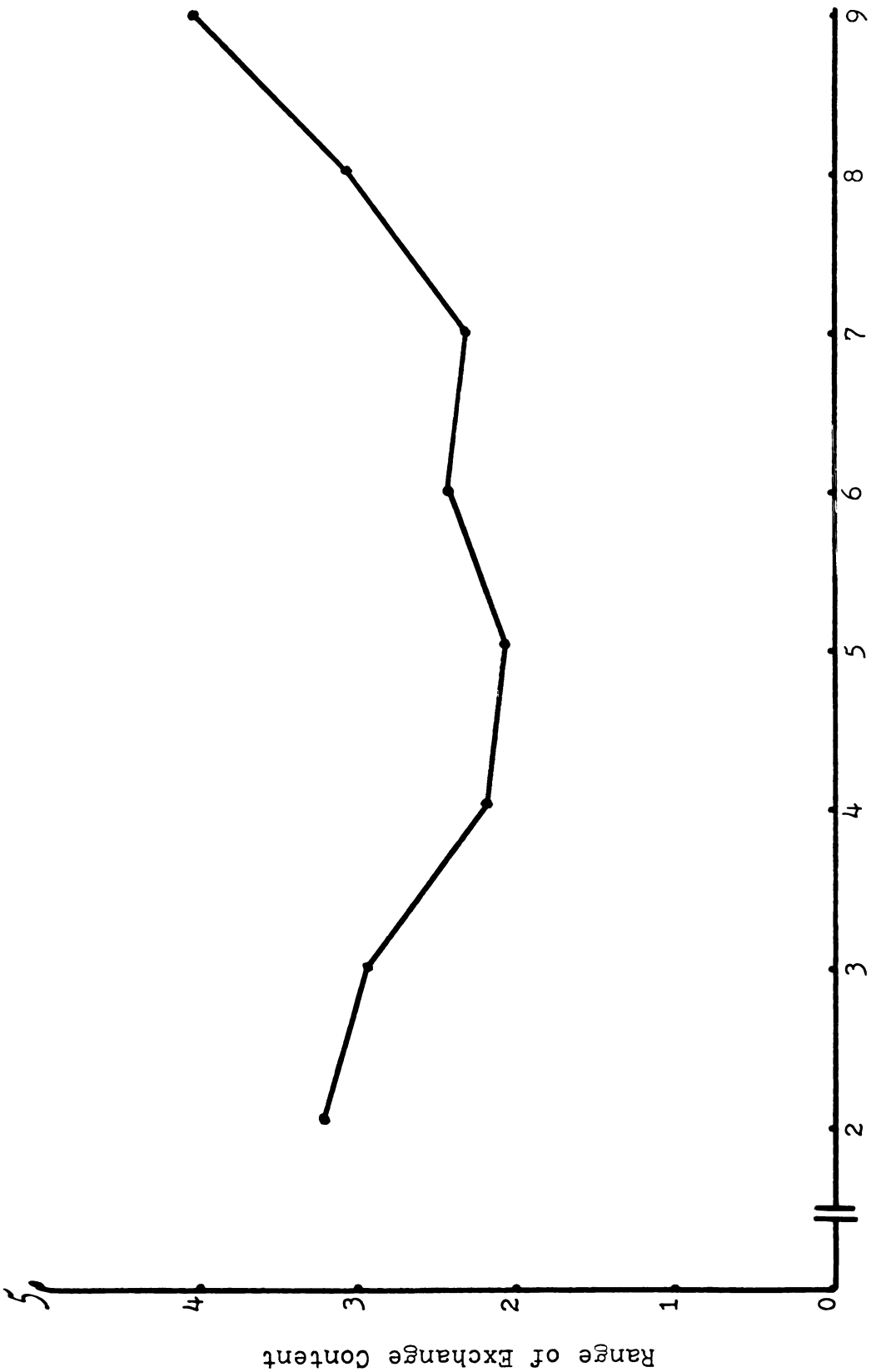


Figure 5. Range of Exchange Content by Historical Concern (Zero Order).

On the basis of naturalistic fieldwork observations, this researcher believes, in spite of this refuting evidence, that there are in fact some exchange relations between transactors where such a high volume and wide variety of exchange content is exchanged that Person and Other do not even try to remember the exchange record. And while collecting these data, a few respondents voluntarily expressed this feeling during the course of judging Others on the extent to which they display historical concern. Two of these relations were between kinsmen-neighbors, and two between close neighbors. In these cases the individuals exchange a very wide range of exchange content between one another and interact practically every day, and have done so for many years. These cases do not effect these data because there are so few of them in the follow-up sample, and so few of them in the actual exchange network.

While observing natural settings these kinds of relations appeared between members of households. The exchange network data concern only those transactions between households. I began asking questions about transactions between household members, but stopped when it became obvious that the people resented what they regarded as an intrusion into their marital and familial relationships. In this community, transactions occurring within the family are privatized and not spoken about to non-family members of the personal network.

The relation between historical concern and self-maximizing orientation

Our third hypothesis asserted a positive linear relation between historical concern as an independent variable and self-maximizing orientation as the dependent variable. The rationale underlying this assertion is that the more (less) closely Persons keep track of past transactions the more acutely aware they become of gains and losses. Such a heightened awareness of gains and losses should increase (decrease) the reinforcing impact of these exchange outcomes to a level where they increasingly (decreasingly) regulate exchange behavior. By Definition 4, this involves an increase (decrease) in the level of a transactor's self-maximizing orientation.

Since we have found such a strong negative association between attraction and self-maximizing orientation, we cannot examine the self-maximizing orientation by historical concern relation without controlling for the effects of attraction. Figure 6 presents graphs of the self-maximizing orientation by historical concern relation under no controls, and under conditions of both low and high attraction. The cross-tabulated data are included in Tables 6, 7, and 8 in Appendix F.

In Figure 6 notice the inverted U-curve form of the relation in both the zero order and high attraction conditions. In the low attraction condition this inverted U-curve shape virtually disappears. At low levels of

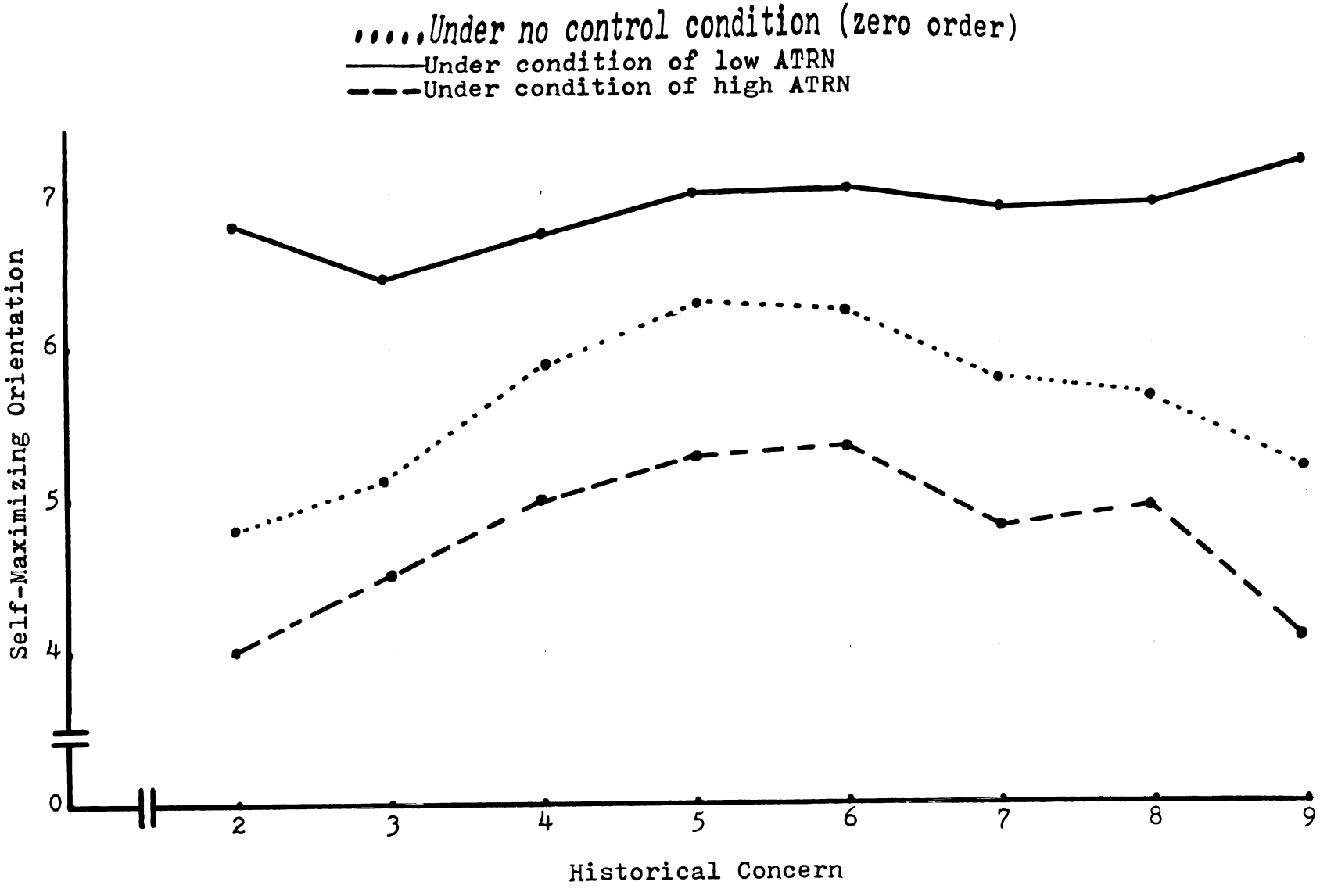


Figure 6. Self-Maximizing Orientation by Historical Concern under Conditions of High and Low Attraction.

historical concern, defined as categories 2-5 on the X axis, under both low and high conditions of attraction, to the extent that Other is observed to "keep track" of past transactions, Person is likely to attribute to him stronger self-maximizing intentions. At low levels of historical concern the graphed relations support the hypothesis. Highest levels of attributed self-maximizing orientation Person generally attributes toward those Others at medium levels of historical concern: that is, those "keeping track about as much as most people." An exception is in the low attraction condition where a slightly higher level of self-maximizing orientation is attributed to those relatively non-liked Others displaying the greatest concern for remembering past exchange consequences.

Measures of association calculated for the entire lengths of the graphs will conceal the association pattern. One can consider the strength of the positive association at lower levels of historical concern since here the relationship appears sufficiently linear; and there is a natural transition point at the end of the first derivative at the point where the slope begins to change sign. Measures of association for low levels of historical concern (categories 2-5) for the self-maximizing orientation by historical concern relation under zero order, low and high attraction conditions are represented in Table 9.

Table 9. Measures of Association for Self-Maximizing Orientation by Historical Concern Relation at Low Levels of Historical Concern.

		Context of Relationship	
Measure of Association	Zero Order	Low Attraction	High Attraction
Tau_b	.323	.219	.259
Asymmetric Somer's d_{yx}	.318	.200	.241

The amount of association present with attraction held constant at either low or high levels is substantially less than in the zero order condition where attraction varies. Therefore some of the association between historical concern and self-maximizing orientation is due to the fact that both are associated with attraction. Some of the association is due to the spurious effect of attraction. By averaging the amount of association in the low and high partials and subtracting it from the amount of association in the zero order condition we get an approximate measure of the amount of association due to the spurious effect of attraction. Using Tau_b we find that about 25% of the zero order association is spurious. Using asymmetric Somer's d_{yx} the spurious portion is calculated to be about 30%.

It is clear that positive association between historical concern and self-maximizing orientation is stronger in the high attraction condition than in the low attraction condition. Therefore some of the association present in the

zero order relation (about 12%) is due to the intervening effect of attraction. Yet, there is still considerable association between historical concern and self-maximizing orientation in the low attraction condition (Tau_b = .219, Asymmetric Somer's d_{yx} = .200) so the spurious and intervening effects of attraction cannot account for all of the observed association. This amounts to 63% of zero order association based upon Asymmetric Somer's d_{yx} and 68% based upon Tau_b.

At higher levels of historical concern the picture is different. The intervening effects of attraction upon the self-maximizing orientation by historical concern relation are strongest at higher levels of historical concern (categories 6-9) where Others are perceived to "keep track more than most other people." As we see in Figure 6, at high levels of historical concern under low attraction, the association between historical concern and self-maximizing orientation virtually disappears into a plateau effect. Relatively non-liked Others whom Person perceives as keeping track more than most people are all regarded as having generally the same high level of self-maximizing intentions and there is no evidence of Person attributing differential self-maximizing intentions on the basis of Other's concern for remembering past transactions.

At higher levels of historical concern, the negatively sloping portion of the graph of the self-maximizing orientation by historical concern relationship is the result

of the intervening effects of high attraction. Among well-liked Others seen to show more concern than most people for the exchange record, these seen by Person to display more concern for the exchange record are likely to be regarded as being less self-maximizing. However, this is not the case for non-liked Others under the same conditions.

Let us consider measures of association of the self-maximizing orientation by historical concern relationship at higher levels of historical concern (categories 6-9), that portion of the graph having a negative slope.

Table 10. Measures of Association for Self-Maximizing Orientation by Historical Concern Relationship at High Levels of Historical Concern.

		Context of Relationship	
Measure of Association	Zero Order	Low Attraction	High Attraction
Tau_b	-.183	-.062	-.232
Asymmetric Somer's d_{yx}	-.173	-.052	-.209

These data support the conclusion drawn from the graphed relationships. There is virtually no association between historical concern and self-maximizing orientation at high historical concern levels under the low attraction condition; whereas a strong negative association is observed under the high attraction condition. This indicates the intervening effect of high attraction is responsible for the

negative association appearing at higher levels of historical concern in the zero order relation.

The relationship between historical concern and self-maximizing orientation is drawn more clearly into focus by observing the relationship between self-maximizing orientation and attraction while controlling for the effects of differential concern for remembering the exchange record (historical concern). Figure 7 presents graphs of the self-maximizing orientation values plotted across categories of attraction. Table 11, 12, and 13 in Appendix F illustrate the relation between self-maximizing orientation and attraction under separate conditions of low, medium and high historical concern respectively.

The graphs of the self-maximizing orientation by attraction relation at different levels of historical concern provides us with additional insight into the self-maximizing orientation by historical concern relation. Throughout all but the very lowest level of attraction, the strongest self-maximizing intentions are attributed by Person to medium historical concern Others: those whom Person regards as "keeping track about as much as anyone else." These cases fell at the apex of the inverted U-curves of the self-maximizing orientation by historical concern order and high attraction graphs in Figure 6.

Also suggested by the self-maximizing orientation by attraction graphs is that with the exception of the extreme high and low levels of attraction, the high historical

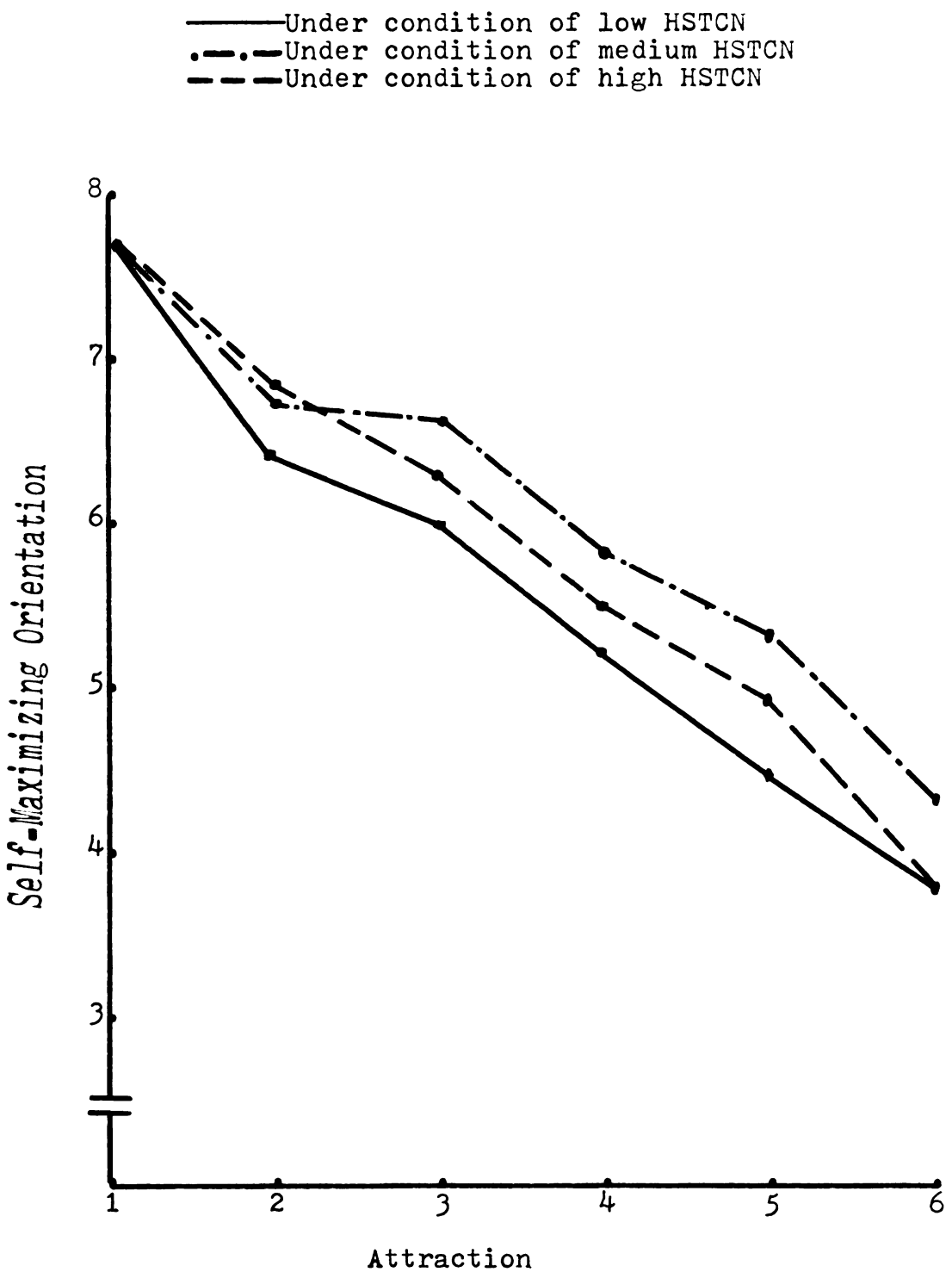


Figure 7. Self-Maximizing Orientation by Attraction under Low, Medium and High Levels of Historical Concern.

concern Others--those perceived by Person to display considerable concern for the exchange record, are generally regarded as being more likely to have strong self-maximizing orientation intentions than Others showing little concern. Excluding Others at the lowest levels of attraction, those paying considerable attention to past exchange consequences are generally less self-maximizing than Others revealing average or "normal" degrees of such concern. Hence, Others displaying varying levels of historical concern as seen by Person during the course of their transactions may be ordered according to Person's perceptions of increasing self-maximizing inclination in the sequence: low, high and medium historical concern.

In this analysis it is evident that attraction spuriously effects the self-maximizing orientation by historical concern relationship due to its association with both. We have observed the strong negative linear association between self-maximizing orientation and attraction. Let us now turn to the attraction by historical concern relationship.

Figure 8 illustrates the graphed relationship between attraction and historical concern, and Table 14 in Appendix F shows in cross-tabular form the data from which the graph was constructed.

Mean attraction values are plotted across the historical concern axis forming a flat U-curve pattern. This graph is the opposite of the self-maximizing orientation by

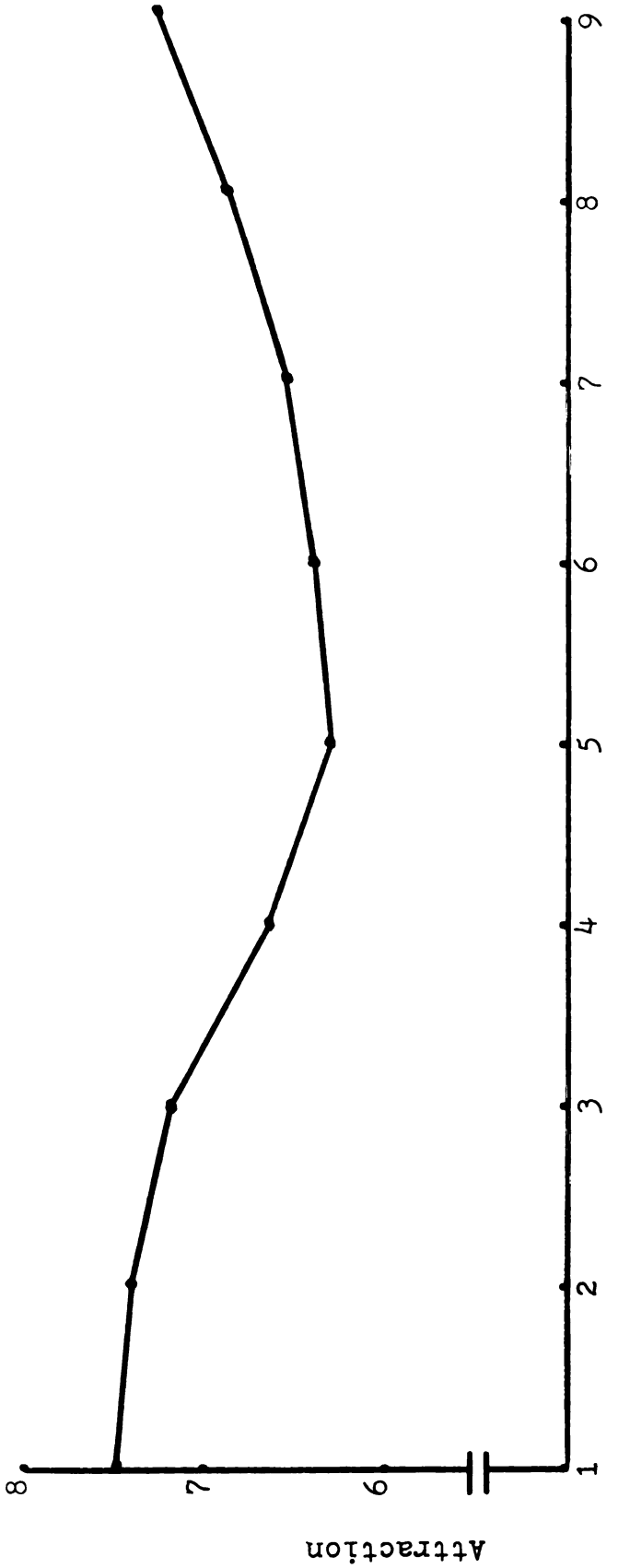


Figure 8. Attraction by Historical Concern (Zero Order).

historical concern inverted U-curve because of the negative association between attraction and self-maximizing orientation. High attraction scores are distributed on the same low and high historical concern values as are the low self-maximizing orientation scores. Since we can break the attraction by historical concern curve down into two linear slopes of opposite sign; a negative slope at low levels of historical concern and a positive slope at high levels of historical concern, we can calculate measures of association for each portion of the curve.

Table 15. Measures of Association for the Attraction by Historical Concern Relationship Under Low and High Levels of Historical Concern.

Measure of Association	Low HSTCN*	High HSTCN*
Tau_b	-.257	.180
Asymmetric Somer's d_{yx}	-.217	.157

*Historical Concern

Independent of its sign, the attraction by historical concern association is stronger at lower levels of historical Concern, as is the self-maximizing orientation by historical Concern association in the zero order, low and high sttraction conditions. We notice that the U-curve form of the attraction curve plotted across the historical concern axis is the inversion of the inverted U-curve of the self-maximizing orientation by historical concern relation. This was expected because of the strong negative linear

association between attraction and self-maximizing orientation. The inverted U-curve of the self-maximizing orientation by historical concern relation is due to the spurious effect of the association between attraction and self-maximizing orientation, and attraction and historical concern. In all control conditions there is a stronger positive association between historical concern and self-maximizing orientation at low levels of historical concern than there is a negative association at higher levels of historical concern, since the graph of the attraction by historical concern relation clearly indicates a stronger negative association at low levels of historical concern than a positive association at higher levels of historical concern.

There is an alternative explanation both for the inverted U-curve shape of the self-maximizing orientation by historical concern graph, and the U-curve shape of the attraction by historical concern relation. It may be the case that whether or not Person perceives Other's increasing concern for remembering the exchange record as a sign of a self-maximization strategy depends upon Person's perceptions of the state of the exchange record. If Person perceives Other as a "creditor" because Other has given more than Person has returned, Person is likely to perceive Other as having a stronger self-maximizing orientation and will dislike Other to the extent that he perceives Other as paying close attention to the exchange record. On the other hand, if the perceived state of the exchange record is in

Person's favor, so that Other is perceived as a "debtor," then Person is likely to perceive Other as being less self-maximizing and will like Other to the extent that Other is perceived to pay close attention to the exchange record. Hence, Person may expect Other to keep track very closely when Other is regarded as a debtor, and to avoid excessive concern for the exchange record when Other is regarded as a creditor.

If this argument is empirically sound, at low levels of historical concern where we have found a positive association between self-maximizing orientation and historical concern, Other is likely to be perceived as a creditor. At higher levels of historical concern where we found a negative association between self-maximizing orientation and historical concern (under zero order and high attraction conditions), Other is less likely to be perceived as a creditor.

We may empirically assess such an anticipation by cross-classifying low and high levels of historical concern against the number of times Other is reported as giving help, loaning something, and giving an informal gift; and the number of times he is reported as receiving within those same spheres of exchange. Table 16 presents such a cross-classification.

Aside from how the data are genuinely and artifactually scewed in favor of Other's giving to Person, let us observe the theoretically crucial giving-receiving differences between low and high historical concern.[9] We see

that it is in fact true that Others displaying low historical concern are more likely to be creditors than Others displaying high historical concern.

Table 16. Person's Perceptions of the Frequency of Other's Giving and Receiving by Historical Concern.

	Historical Concern: Low	Historical Concern: High	
Other's Giving Frequency	642 73.7%	1322 69.0%	1964
Other's Receiving Frequency	241 27.3%	594 31.0%	835
	883 100%	1916 100%	N=2799

If Person perceives Other as a creditor, and if Other is seen to pay very little attention to the exchange record, then he is likely to be attributed a low self-maximizing orientation. In other words, exchange creditors are most likely to be those Others Person perceives to display low historical concern, and low self-maximizing orientation; and least likely to be Others Person perceives to display high historical concern, and high self-maximizing orientation. We can assess the empirical soundness of this assertion by making a crosspartition of self-maximizing orientation by historical concern and calculating a ratio of giving to

receiving for the Others included in each of the cells and in the marginals.

Table 17. Person's Perceptions of Other's Ratio of Giving to Receiving[10] Under Conditions of Self-Maximizing Orientation and Historical Concern.

Self-Maximizing Orientation	Historical Concern: Low	Historical Concern: High	
Low	3.02	2.61	2.72
High	2.42	1.88	2.06
	2.70	2.27	

The give-receive ratio is higher under conditions of low historical concern with low self-maximizing orientation; and is the lowest under high historical concern with high self-maximizing orientation. This is what we expected. From the cross-classified give-receive ratios we can clearly see that Others keeping track very little of the exchange record are more likely to give more and receive less (be perceived as a creditor) than Others more inclined to pay attention to the exchange record. This is evident in the difference between the give-receive ratios in the column marginals: 2.70 for low historical concern and 2.27 for high historical concern.

Table 17 also demonstrates the validity of the self-maximizing orientation indicator. Independent of the level

of historical concern, Others attributed strong self-maximizing orientation intentions are more likely to have a lower give-receive ratio than is the case for Others attributed weak self-maximizing orientation intentions. This is shown in the difference between the give-receive ratios in the rwo marginals: 2.72 for low self-maximizing orientation and 2.06 for high self-maximizing orientation.

The effect of visiting common structural density upon the self-maximizing orientation by historical concern relation

As shown in Figure 9 there is a substantial positive linear association between visiting common structural density and attraction. The graph plots mean visiting common structural density values across attraction categories. To see how the actual distribution of visiting common structural density varies with low and high categories of attraction observe Table 19. Since there is a substantial positive association between visiting common structural density and attraction, we will assess the effect of visiting common structural density upon the self-maximizing orientation by historical concern relation while holding attraction constant.

First let us consider the effect of visiting common structural density upon the historical concern-self-maximizing orientation relationship by holding it constant at low attraction and observing differences between low and

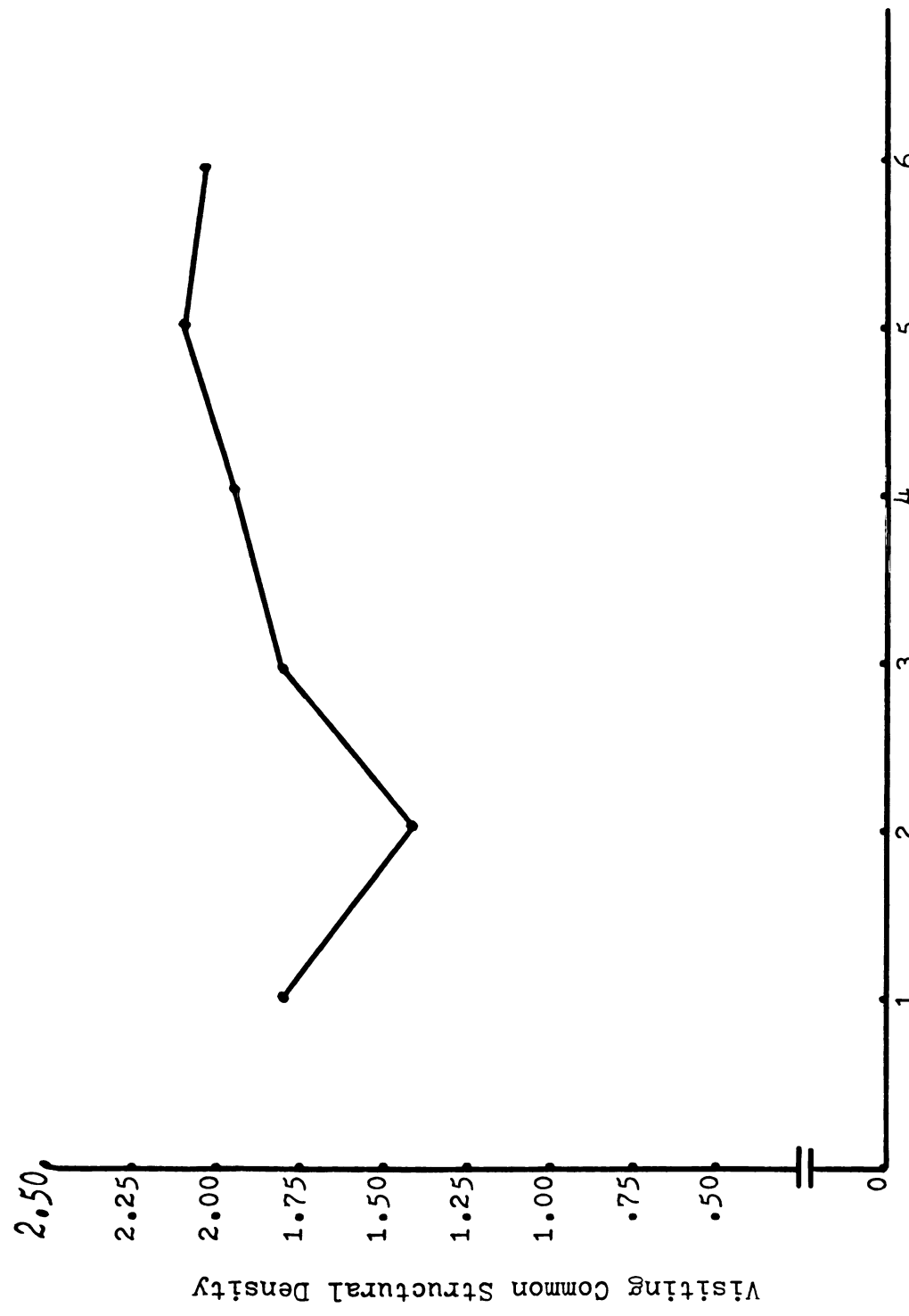


Figure 9. Visiting Common Structural Density by Attraction (Zero Order).

high visiting common structural density curves. Figure 10 illuminates these relationships. Table 20 shows the self-maximizing orientation by historical concern relation under low attraction with high visiting common structural density and Table 21 shows the historical concern-self-maximizing orientation relation under low attraction with low visiting common structural density.

Under the low attraction, low visiting common structural density condition the graph of the self-maximizing orientation by historical concern relationship slope changes sign at a lower level of historical concern than in any of the graphs we have examined up to this point. As we shall soon see this phenomenon occurs in the high attraction, low visiting common structural density condition as well. Hence, it must be due to the special effects of low visiting common structural density and is independent of attraction.

Under the low attraction, high visiting common structural density condition the self-maximizing orientation by historical concern inverted U-curve disappears; at low levels of historical concern, and at higher historical concern levels it turns into a sequence of up and down fluctuations indicating virtually little consistent association and perhaps a weak negative association. Let us consider measures of association at low historical concern levels of the self-maximizing orientation by historical concern curve under the conditions of low attraction with both low and high visiting common structural density.

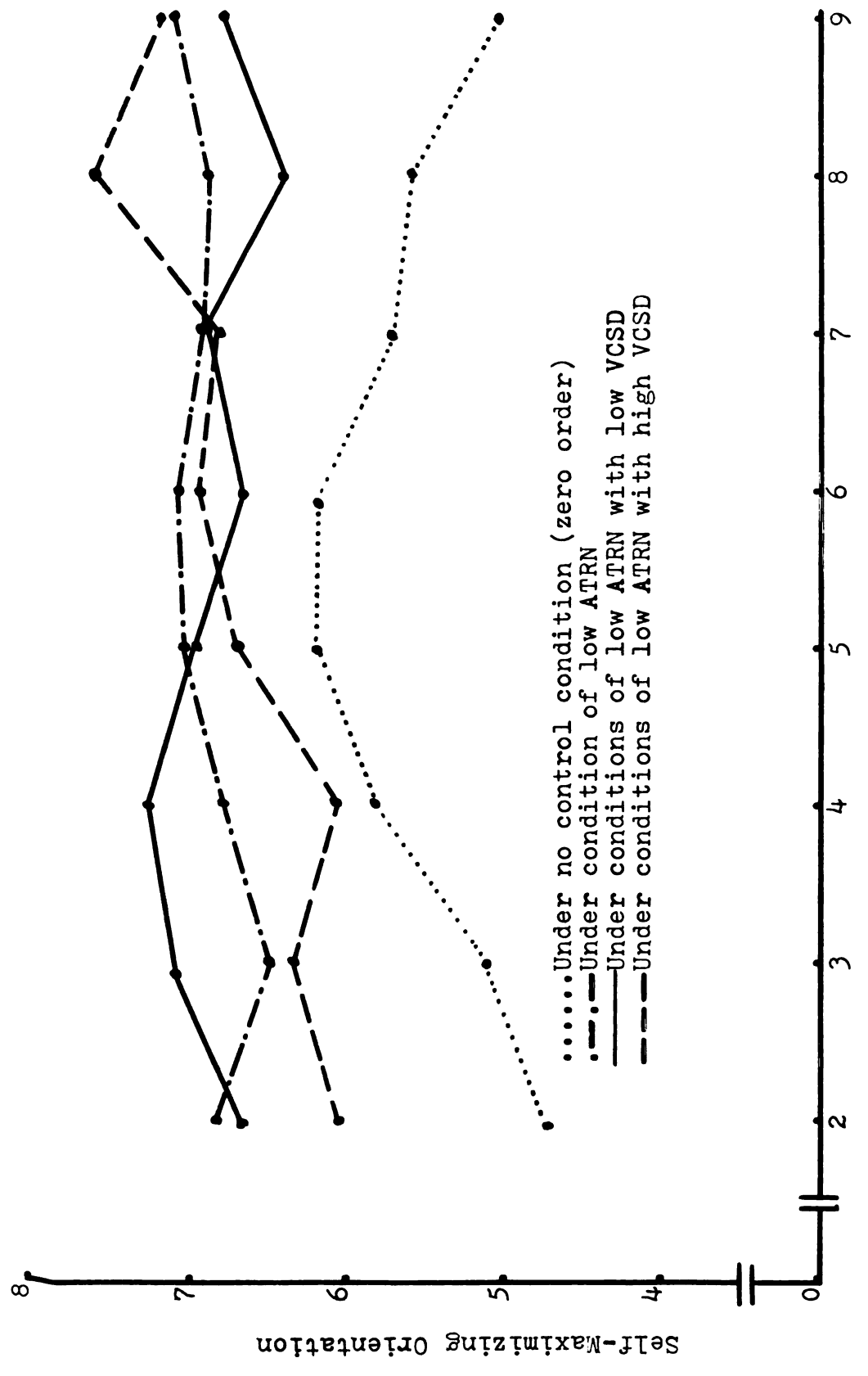


Figure 10. Self-Maximization by Historical Concern under Joint Conditions of Low Attraction with both Low and High Visiting Common Structural Density.

Table 22. Measures of Association of the Self-Maximizing Orientation by Historical Concern Relation at Low Levels of Historical Concern under the Condition of Low Attraction with Both Low and High Visiting Common Structural Density.

Measure of Association	Zero Order	Low ATRN*	Low ATRN* Low VCSD**	Low ATRN* High VCSD**
Tau_b	.323	.219	.255	.170
Asymmetric Somer's d_{yx}	.327	.200	.226	.157

*Attraction

**Visiting Common Structural Density

It is clear that a substantially higher association exists between historical concern and self-maximizing orientation at low levels of historical concern under the low attraction, low visiting common structural density condition than under the low attraction, high visiting common structural density condition. According to the data, among non-liked Others whom Person perceives to "keep track of the day-to-day give and take" less than most Others, if there are no friends visited by both Person and Other, the more likely Person is to perceive greater concern for the exchange record as a sign of self-maximizing exchange behavior. And under the same set of conditions if there are one or more friends visited by both Person and Other, the less Person is likely to regard Other's increasing concern for remembering past transaction consequences as indicating self-maximizing intentions.

Let us now consider measures of association at high historical concern levels of the self-maximizing orientation by historical concern negatively sloping curve under the conditions of low attraction with both low and high visiting common structural density.

Table 23. Measures of Association of Self-Maximizing Orientation by Historical Concern Relation at High Levels of Historical Concern under the Condition of Low Attraction with Both Low and High Visiting Common Structural Density.

Measure of Association	Zero Order	Low ATRN*	Low ATRN* Low VCSD**	Low ATRN* High VCSD**
Tau_b	-.183	-.062	-.127	-.067
Asymmetric Somer's d_{yx}	-.173	-.052	-.109	-.056

*Attraction

**Visiting Common Structural Density

We notice that under the low attraction, low visiting common structural density condition there is approximately twice as strong a negative association than under the low attraction, high visiting common structural density condition. But here we are dealing with very weak negative associations between historical concern and self-maximizing orientation. From the viewpoint of avoiding the disruption of exchange relations with non-liked Others by minimizing the likelihood of perceptions of self-maximizing orientation intentions during the exchange process, from the data it appears that it is

wiser for Person to display concern for the exchange record under low visiting common structural density than under high visiting common structural density.

Hence, among non-liked Others, independent of level of historical concern and the sign of the relationship, there is a stronger association between historical concern and self-maximizing orientation when Person and Other have no common visiting partners than when they have one or more. It appears that exchange memory is more important in regulating exchange relations between non-liked transactors in low structural density zones of an exchange network than in higher density zones. The presence of common visited friends between non-liking transactors provides a structurally-situated, natural, "third party" (Nadel: 1957) transaction monitoring system. This, in turn, makes it less necessary for transactors individually to rely upon excessive concern for the exchange record with regard to particular Others. The data support this argument. Let us now consider what happens under the condition of high attraction.

Under the condition of high attraction we noticed several differences in the shape of the self-maximizing orientation by historical concern curve at different levels of visiting common structural density. Observe Figure 11. Cross-tabulated data for the self-maximizing orientation by historical concern relation under high attraction with low visiting common structural density is in Table 24, and with high visiting common structural density in Table 25.

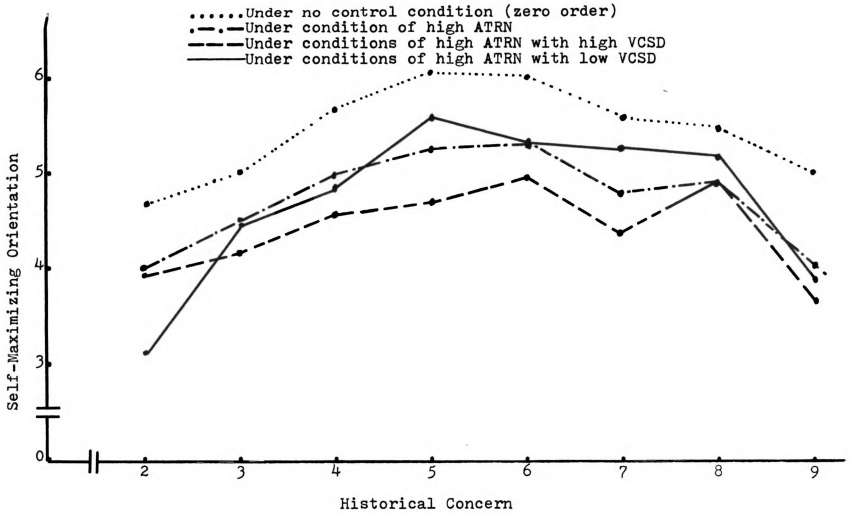


Figure 11. Self-Maximizing Orientation by Historical Concern under Joint Conditions of High Attraction with both Low and High Visiting Common Structural Density.

The inverted U-curve shape persists at high attraction, independent of the effects of visiting common structural density. At low levels of historical concern the positive slope of the high attraction, low visiting common structural density graph is considerably greater than the slopes of either high attraction graph or the high attraction, high visiting common structural density graph. High visiting common structural density under the condition of high attraction has the effect of decreasing the slope of the self-maximizing orientation by historical concern curve at lower levels of historical concern.

According to these data if low historical concern Others reveal increasingly more concern for past transaction consequences, Person is likely to perceive stronger self-maximizing orientation intentions underlying transactions of well-liked Others if Person and Other have no friends in common than if they have one or more friends in common. (Persons having no visiting partners in common were assigned to low visiting common structural density while persons having one or more visitors in common were assigned to the high visiting common structural density category.) Among high attraction transactors, at low levels of historical concern, keeping track may only appear to be regarded as more self-maximizing under low visiting common structural density than under high visiting common structural density conditions, because Person is more reluctant to attribute self-maximizing intentions to well-liked Others if they have

several friends in common than if they have few friends in common.

If Person, while transacting with Other, notices Other's high concern for remembering the outcomes of past transactions, Person is likely to hesitate to attribute self-maximizing intentions to Other if they have several friends in common. If he attributes self-maximizing tendencies to Other in the presence of one of their mutual friends he increases the level of dissonance-induced tension experienced by the mutual friend. Since there is a strong negative association between the self-maximizing orientation exchange strategy and liking, the mutual friend will reduce dissonance by redefining Other negatively; redefining Person negatively for attributing such dreadful things to his friend (Other); or will sever the Heiderian unit relation (the perceived connection) between the self-maximizing act and Other by denying that the episode happened as Person interpreted it.

Also very apparent in the self-maximizing orientation by historical concern graph under high attraction and low visiting common structural density as compared with the high attraction, high visiting common structural density condition is the different location on the X axis of the transition point at which the slope of the graphs change their sign. The positive slope stops and shifts to a negative sign at a lower level of historical concern under the high attraction, low visiting common structural density condition. We

recall this was also the case in the low attraction, low visiting common structural density condition. The highest level of attributed self-maximizing orientation occurs at a lower level of historical concern under the low visiting common structural density condition independent of the effects of attraction.

This would mean Person tolerates Other's increasing concern for past transaction outcomes more when they do not have any close friends in common than if they were to have several in common. And Person is less tolerant of Other displaying increasing concern for the exchange record when they have one or more friends in common. (See Figure 14 which highlights this finding.) As we have done for the other inverted U-curve relations, let us consider measures of association calculated for the low historical concern portions of the curves; that is, the positive-sloped linear segments.

Table 26. Measures of Association of Self-Maximizing Orientation by Historical Concern Relation at Low Levels of Historical Concern.

		Context of the Relationship		
Measure of Association	Zero Order	High ATRN*	High ATRN* Low VCSD**	High ATRN* High VCSD**
Tau_b	.323	.259	.506	.281
Asymmetric Somer's d_{yx}	.318	.241	.481	.255

*Attraction

**Visiting Common Structural Density

Under the high attraction, low visiting common structural density conditions at low levels of historical concern, we observe the strongest association between historical concern and self-maximizing orientation. It is clear that if exchange relations are to remain stable under such conditions, transactors are expected to avoid paying attention to the exchange record. The large difference between high attraction values and high attraction, low visiting common structural density values is a measure of the contribution of the low visiting common structural density context to the association.

At higher levels of historical concern under high attraction conditions, there is a negatively sloping portion of the curve. Visiting common structural density does not appear to effect the shape of the curve at higher levels of historical concern. With the exception of a very minor fluctuation both the low and high visiting common structural density negative portions of the curve are similar in slope along the historical concern values. Let us consider measures of association calculated for the higher levels of historical concern.

We notice a slightly stronger association between self-maximizing orientation and historical concern when visiting common structural density is low as compared to when it is high.

Table 27. Measures of Association for the Self-Maximizing Orientation by Historical Concern Relation at Higher Levels of Historical Concern.

Measure of Association	High ATRN*	High ATRN* Low VCSD**	High ATRN* High VCSD**
Tau_b	-.232	-.267	-.277
Asymmetric Somer's d_{yx}	-.209	-.250	-.233

*Attraction

**Visiting Common Structural Density

Table 28 summarizes the analysis of the asserted direct relation between historical concern and self-maximizing orientation. The unexpected inverted U-curve clearly refutes the third hypothesis.

One interesting finding is that independent of the level of historical concern and visiting common structural density, the self-maximizing orientation by historical concern association is always stronger under high attraction than under low attraction. However, given the inverted U-curve shape, the sign of the association is positive at low levels of historical concern and negative under high levels of historical concern.

A second finding is that independent of both the level of historical concern and attraction, the association between self-maximizing orientation and historical concern is always stronger when visiting common structural density is low than when it is high. Once again, given the inverted

Table 28. Measures of Association Summarizing the Relation Between Self-Maximizing Orientation and Historical Concern.*

Zero Order

Low HSTCN	High HSTCN
.318	-.173

Low ATRN

Low HSTCN	High HSTCN
.200	-.052

High ATRN

Low HSTCN	High HSTCN
.241	-.209

Low ATRN Low VCSD		Low ATRN High VCSD		High ATRN Low VCSD		High ATRN High VCSD	
Low HSTCN	High HSTCN	Low HSTCN	High HSTCN	Low HSTCN	High HSTCN	Low HSTCN	High HSTCN
.226	-.109	.157	-.056	.481	-.250	.255	-.233

*Measure of association is asymmetric Somer's d_{yx}.

U-curve shape of the graph the sign of the relation is different at low and high levels of historical concern.

Now that we have analyzed the very complex relationship between self-maximizing orientation and historical concern, let us turn to the fourth and final hypothesis in this study.

The relation between visiting common structural density and self-maximizing orientation

In the fourth hypothesis we asserted a negative, linear relationship between visiting common structural density as the independent variable and self-maximizing orientation as a dependent variable.

We have already seen evidence of the substantial positive association between attraction and visiting common structural density (see Figure 9). We have also seen the strong negative linear association between attraction and self-maximizing orientation (see Figure 3). Given these relationships it will be necessary to examine the association between visiting common structural density and self-maximizing orientation while controlling for the effects of attraction.

Figure 12 illustrates the self-maximizing orientation by visiting common structural density relationship under the zero order (no control) condition and under conditions of low and high attraction. The cross-tabulated data from which the graphs in Figure 12 were constructed are included

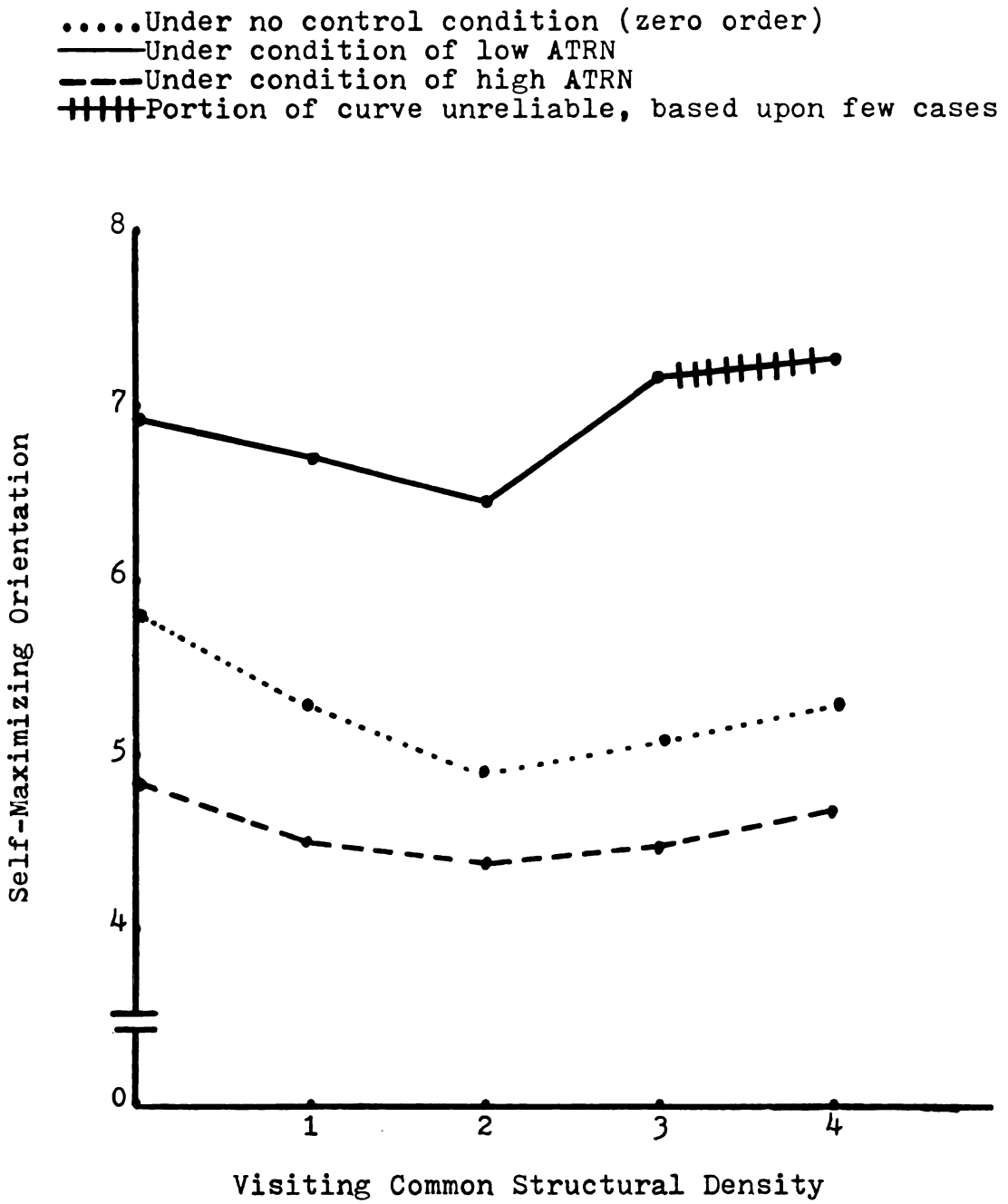


Figure 12. Self-Maximizing Orientation by Visiting Common Structural Density under Control Conditions of High and Low Attraction.

as Tables 29, 30 and 31 in Appendix F. In the zero order and low attraction condition we observe a sharp U-curve, but under the high attraction condition we detect only the faintest impression of a U-curve pattern. The graphs suggest that while the number of persons visited by both Person and Other ranges from zero to two, increasing visiting common structural density is negatively associated with attributed self-maximizing orientation, and the association is substantially stronger when Other is relatively non-liked. When visiting common structural density goes beyond two persons, we notice a sudden shift in the sign of the slope, indicating the beginning of a positive association between visiting common structural density and self-maximizing orientation. This transition point is clearly evident under the zero order and low attraction conditions; whereas it is less noticeable under the high attraction condition.

Let us compare measures of association for the negatively sloping linear portion of the curves for zero order, low and high attraction conditions of the self-maximizing orientation by visiting common structural density relationship since the sign of the slope of the different graphs changes at the same transition point on the visiting common structural density axis.

Under both low and high attraction control conditions the association is somewhat less than that in the zero order relation where attraction varies. In the zero order relation some of the apparent association is the anticipated

Table 32. Measures of Association for the Self-Maximizing Orientation by Visiting Common Structural Density Relation from 0-2 Visiting Common Structural Density under Conditions of Low and High Attraction, and the Zero Order (No Control).

Measures of Association	Zero Order	Low ATRN*	High ATRN*
Tau_b	-.178	-.124	-.107
Asymmetric Somer's d_{yx}	-.189	-.116	-.102

*Attraction

spurious effect due to the association by both visiting common structural density and self-maximizing orientation with attraction. However, we do notice the independent association between visiting common structural density and self-maximizing orientation accounts for over half of the zero order association. Both the graphs and statistical evidence supports the asserted negative self-maximizing orientation by visiting common structural density association between visiting common structural density zero and two, independent of attraction.

Perhaps we can assess more precisely the effect of attraction upon the self-maximizing orientation by visiting common structural density relation by observing the self-maximizing orientation by attraction association under conditions of low and high visiting common structural density. The vertical separation (self-maximizing orientation difference) between the low and high visiting common structural density curves is a good indicator of the association

between self-maximizing orientation and visiting common structural density. Let us observe Figure 13. Cross-tabulated data are included in Table 33 and 34 in Appendix F.

It is apparent that the low visiting common structural density curve is above (at a higher level of self-maximizing orientation) than the high visiting common structural density curve with the exception of the extreme low and high levels of the attraction scale. A skeptical interpretation of this graph would focus attention to the points along the attraction axis where there does not appear to be a difference between the low and high visiting common structural density graphs. One could just as easily find evidence to refute the asserted negative self-maximizing orientation by visiting common structural density association in this graph. Considering the locations of the points of convergence and divergence, however, it does seem that self-maximizing orientation has a weak negative relation to visiting common structural density when transactors are neither especially non-liked nor especially liked.

Let us consider the relationship between self-maximizing orientation and visiting common structural density when the density score extends beyond two persons. The sudden shift to a positive slope when density values increase beyond two persons is very puzzling.

It is obvious that the intervening effect of low attraction plays a very salient part in the sudden shift of the self-maximizing orientation by visiting common

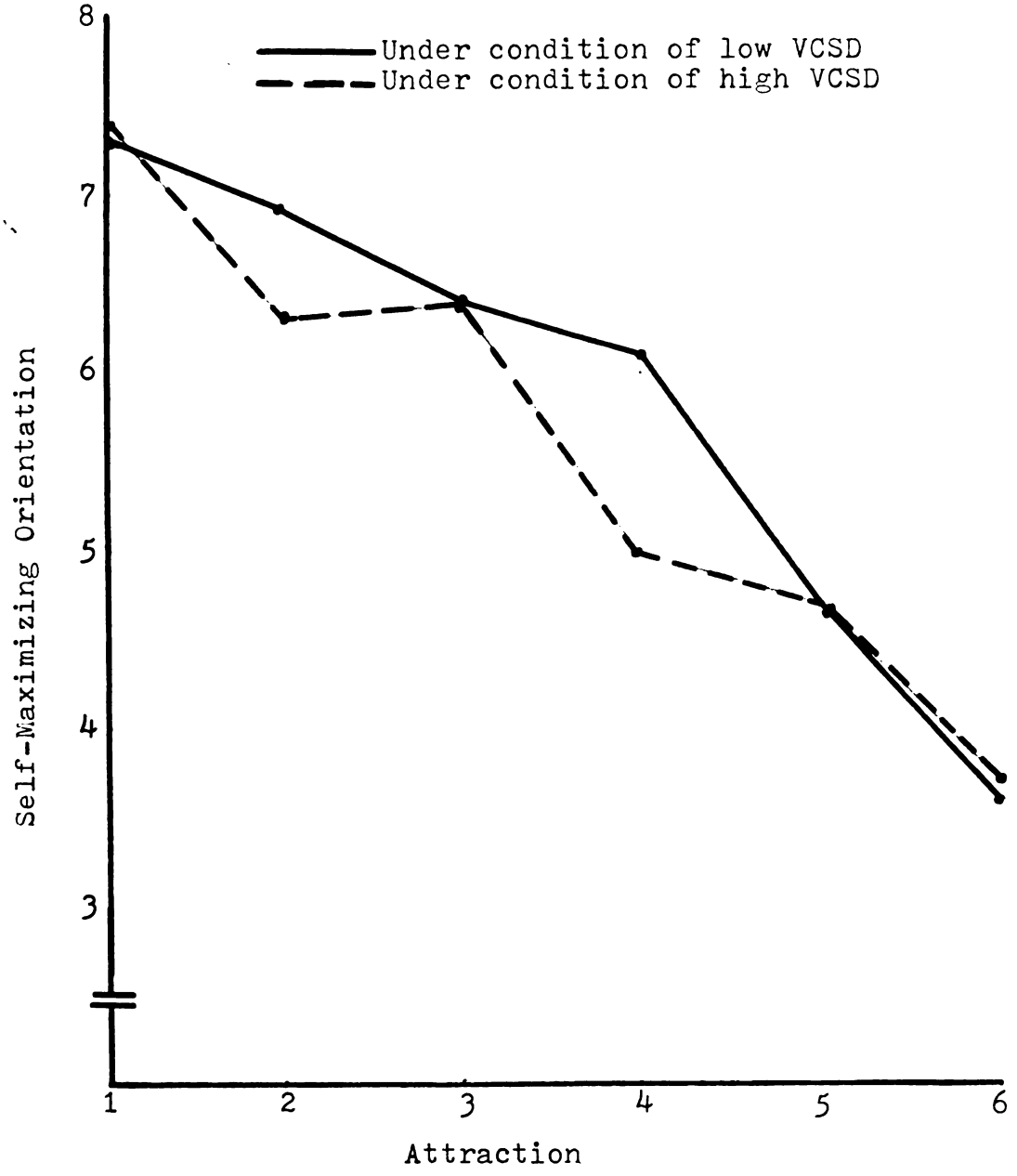


Figure 13. Self-Maximizing Orientation by Attraction under Conditions of Low and High Visiting Common Structural Density.

Table 35. Measures of Association for Self-Maximizing Orientation by Visiting Common Structural Density Relation for Visiting Common Structural Density Ranging from 2-4 Persons Under Zero Order, Low and High Attraction Conditions.

Measures of Association	Zero Order	Low ATRN*	High ATRN*
Tau_b	.041	.209	.036
Asymmetric Somer's d_{yx}	.043	.217	.035

*Attraction

structural density curve to a positive slope after visiting common structural density equals two persons. Virtually no association appears under the zero order and high attraction conditions, but we observe a substantial association when Person is relatively non-liked. If Other is not especially liked by Person as more than two persons are included in their visiting cliques, Person is evidently likely to perceive self-maximizing motives in Other's transactions.

The pattern of the graphs and even the very weak positive association under the zero order and high attraction suggests that a certain tension is present when visiting cliques expand beyond four persons. The substantial positive association between visiting common structural density and self-maximizing orientation under the low attraction condition suggests that low attraction provides the necessary precipitating context dramatically increasing the likelihood of Person perceiving self-maximizing orientation intentions to motivate Other's transactions.

Let us now assess the effect historical concern has on the self-maximizing orientation by historical concern relation. We may indirectly observe the negative association between visiting common structural density and self-maximizing orientation which is independent of attraction by examining the self-maximizing orientation by historical concern graphs which hold attraction constant and displays the self-maximizing orientation level at low and high levels of visiting common structural density. The extent to which low visiting common structural density graphs are above the high visiting common structural density graphs in reference to the self-maximizing orientation axis, there is evidence of negative association between visiting common structural density and self-maximizing orientation. Let us observe the self-maximizing orientation by historical concern graphs first under low attraction with low and high visiting common structural density.

If the reader will turn back to Figure 10, we will see that the low attraction, low visiting common structural density graph is clearly above the low attraction, high visiting common structural density graph at lower levels of historical concern. Hence, toward relatively non-liked Others paying less than normal amounts of concern for the exchange record, Person is likely to perceive stronger self-maximizing orientation intentions in Others with whom he has no visiting partners in common than in Others with whom he has one or more in common. High visiting common

structural density clearly suppresses self-maximizing orientation perceptions toward Others not especially liked who keep track less than most people.

Assuming Person's perception of Other's exchange tendencies are accurate, Other is less likely to engage in a self-maximizing orientation exchange strategy with non-liked persons showing little concern for the exchange record if he has one or more visiting partners in common with him. But at higher levels of historical concern, the low attraction high visiting common structural density graph appears to be consistently above the low attraction, low visiting common structural density graph indicating the shift to a positive self-maximizing orientation by visiting common structural density association. Hence, at low levels of historical concern there is a negative association between visiting common structural density and self-maximizing orientation but at high levels of historical concern there is a positive association between visiting common structural density and self-maximizing orientation.

Observe the self-maximizing orientation by historical concern curves in Figure 11 to indirectly examine the self-maximizing orientation by visiting common structural density relation under the condition of high attraction with both low and high visiting common structural density. With the exception of the very lowest value of historical concern the high attraction, low visiting common structural density curve is clearly above and at a stronger self-maximizing

orientation level than the high attraction, high visiting common structural density curve. Under high attraction the evidence supports the asserted negative association between the extent of visiting common structural density and likelihood of Person perceiving self-maximizing orientation behavior in Other.

Under the high attraction condition, the self-maximizing orientation by visiting common structural density relation did not appear to have the same transition point as it did under the low attraction condition. Throughout all but the lowest level of historical concern the high attraction, low visiting common structural density curve is consistently above the high attraction, high visiting common structural density curve. This separation by vertical distance indirectly indicates the extent of association between visiting common structural density and self-maximizing orientation.

We can more directly observe the effects of the level of historical concern on the self-maximizing orientation by visiting common structural density in Figure 14. Cross-tabulated data are included in Table 36 and 37 in Appendix F. This is perhaps the most dramatic finding in the study. It is clear that the self-maximizing orientation by visiting common structural density relation is definitely affected by the extent to which Other keeps track of exchange flows. The negative slope of the low historical concern condition is consistent with our findings based on the vertical

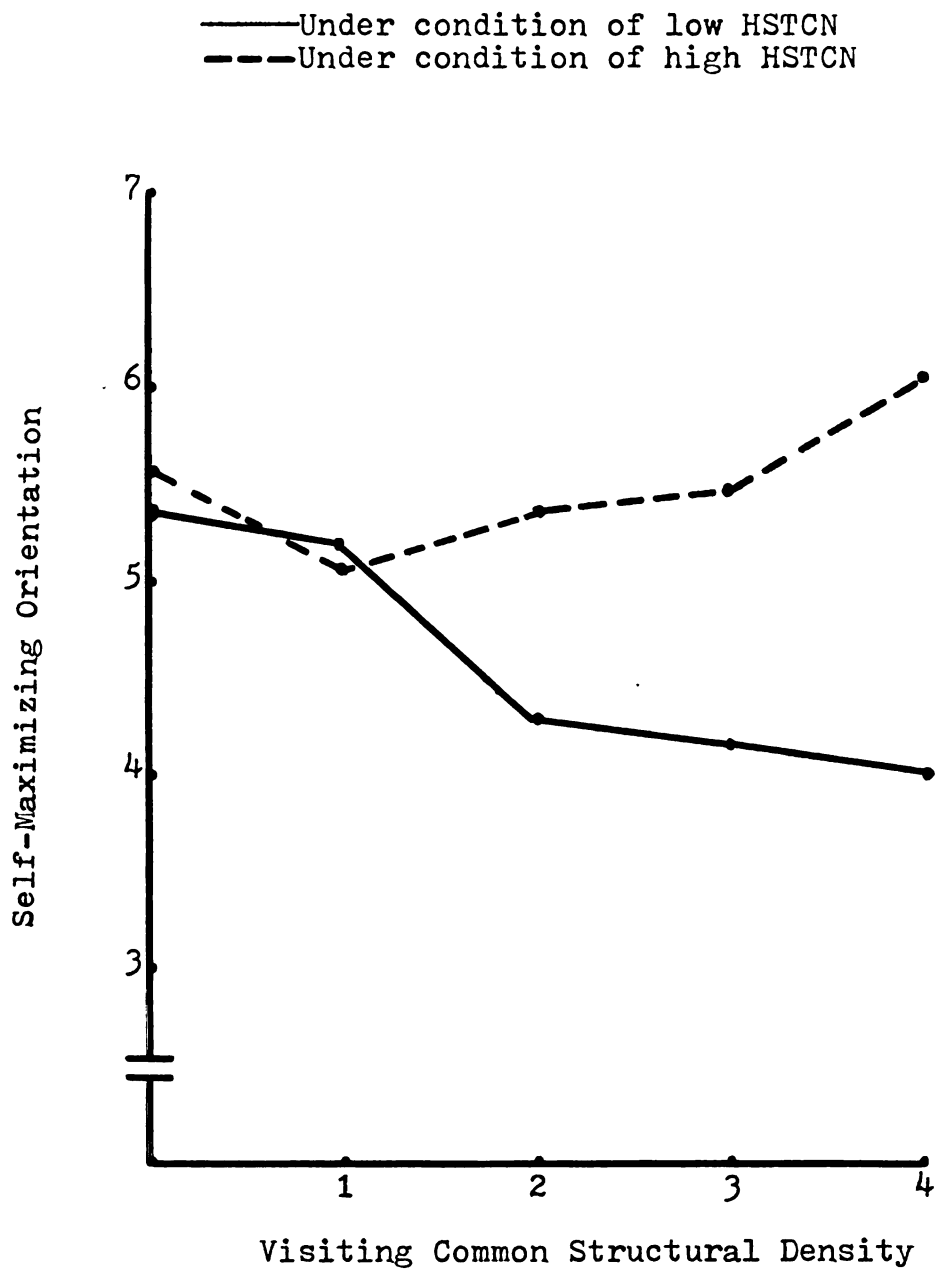


Figure 14. Self-Maximizing Orientation by Visiting Common Structural Density under Conditions of Low and High Historical Concern.

separation (self-maximizing orientation distance) between the self-maximizing orientation by historical concern graphs under low and high visiting common structural density. The graphs suggest that as visiting common structural density increases, transactors are expected to pay less attention to the exchange record.

Since we know attraction is associated with both self-maximizing orientation and visiting common structural density, let us see how historical concern affects this relationship, while holding attraction constant. Figure 15 presents graphs of the self-maximizing orientation by visiting common structural density under joint conditions of low attraction, high historical concern. The cross-tabulated data are in Table 40 and 41 in Appendix F.

Under conditions of low attraction, high historical concern (non-liked Others keeping track more than most people), there is virtually no association between self-maximizing orientation and visiting common structural density between visiting common structural density values zero through two, but when Person and Other's visiting network overlaps to the extent of three mutually visited individuals, we notice a sudden increase in the level of attributed self-maximizing orientation. Under the low attraction, low historical concern condition (non-liked Others "keeping track less than most people") there is a negative association between self-maximizing orientation and visiting common structural density.

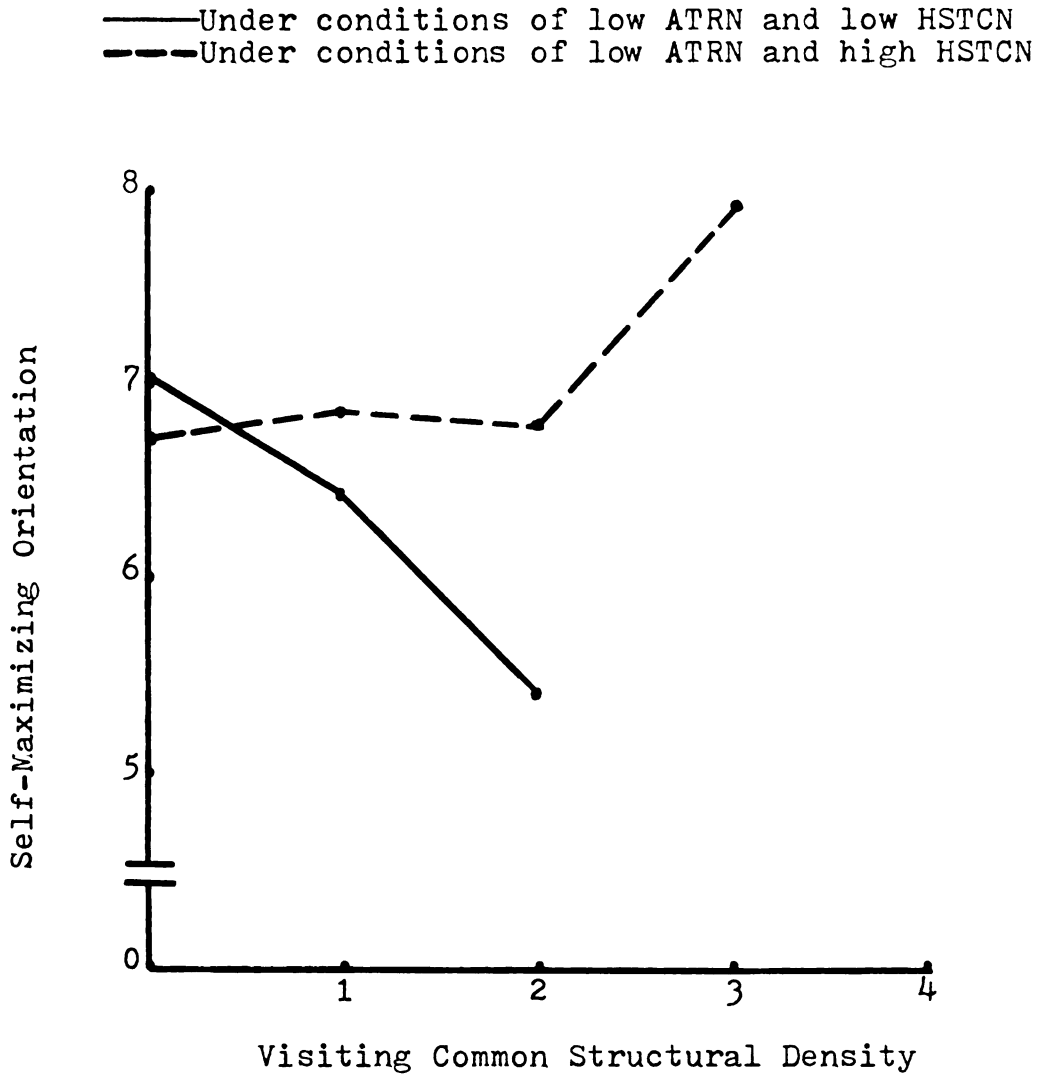


Figure 15. Self-Maximizing Orientation by Visiting Common Structural Density under Joint Conditions of Low Attraction with Low and High Historical Concern.

Figure 16 presents the graphs of the self-maximizing orientation by visiting common structural density relation under conditions of high attraction with both low and high historical concern. Cross-tabulated data are included as Tables 43 and 44 in Appendix F. Other than for the surprising finding of a transition point where Person and Other's visiting network overlaps to the extent of one mutually visited individual, self-maximizing orientation and visiting common structural density has a negative association under the high attraction, low historical concern condition and other than for this peculiar transition, where visiting common structural density equals one point under the high attraction condition with both low and high historical concern, the evidence suggests that independent of the effects of attraction, the self-maximizing orientation by visiting common structural density relationship is positive under conditions of high historical concern and negative under conditions of low historical concern.

If we assume that the frequency with which Person attributes strong self-maximizing intentions to Other represents a threat to the continuity of their exchange relation, then one effect of visiting common structural density is to present a social structure atmosphere conditioning transactors to pay less attention to the exchange record. In all cases where visiting common structural density increases beyond one mutually visited individual,

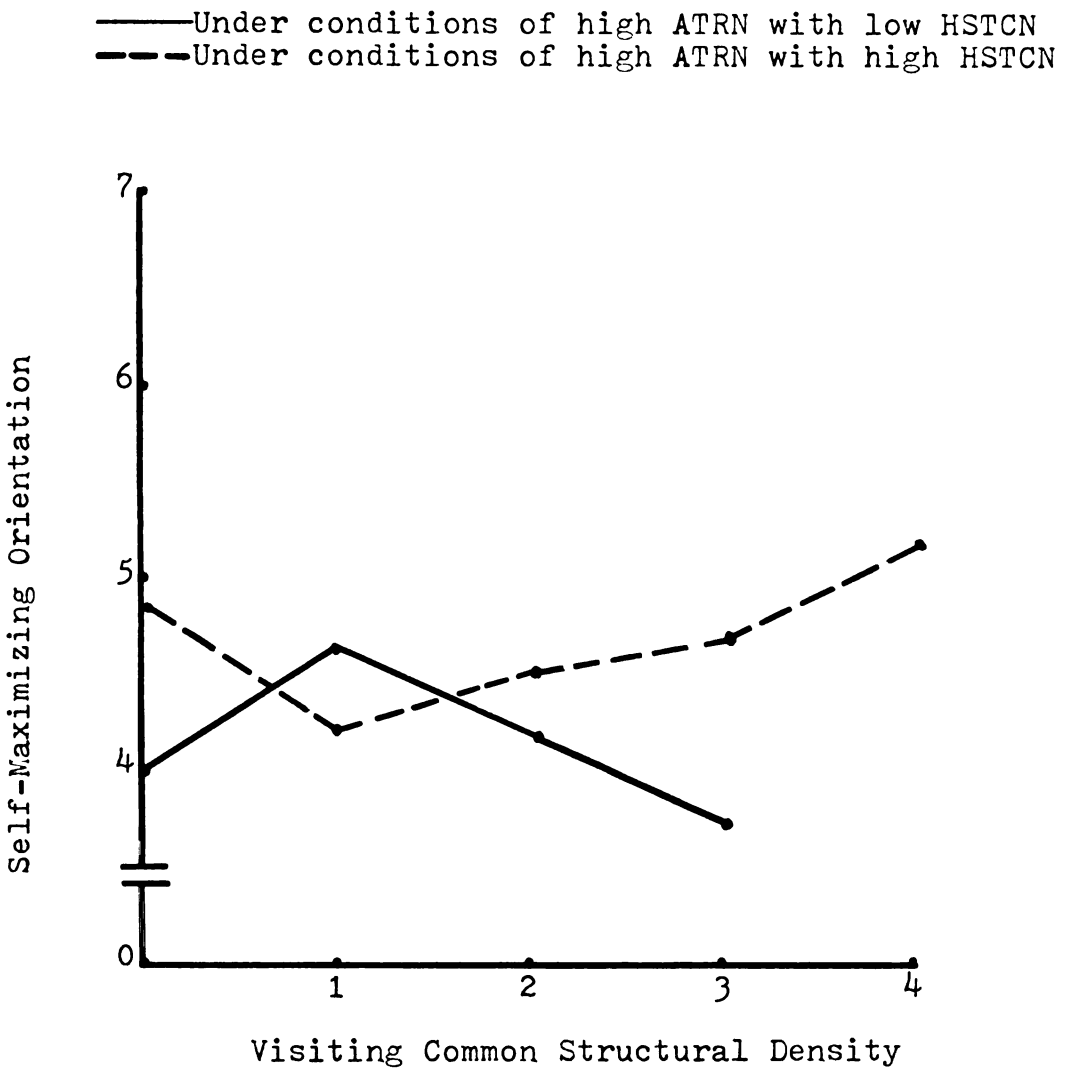


Figure 16. Self-Maximizing Orientation by Visiting Common Structural Density under Joint Conditions of High Attraction with Low and High Historical Concern.

the extent to which transactors are perceived to display concern for the exchange record they are attributed stronger self-maximizing orientation intentions.

CHAPTER III

SUMMARY OF RESULTS AND CONCLUSION

The first hypothesis asserted an inverse relation between the range of exchange content as the independent variable and self-maximizing orientation as the dependent variable. The hypothesis assumed transactors would encounter difficulty in calculating "profit" because exchange contents would be incommensurable. A substantial negative association under no control conditions was later found to be a consequence of the intervening effect of high attraction.

Transactors are unwilling to self-maximize against the interests of Others who like them, for fear of losing positive regard. The unwillingness to incur the costs of losing friendship accounts for the negative association between the range of exchange content and self-maximizing orientation (see Figure 4).

The findings in this study coorborate Blau's argument that extrinsic exchange is merely a means of expressing and winning intrinsic attachment. However, the inverse relation between self-maximizing orientation and attraction

can also be explained with attraction as an independent variable, using a balance theory argument. For instance, if Person likes Other, dislikes self-maximizing acts, and then knowingly self-maximizes against Other's interests, he will be in a state of dissonance. To avoid dissonance, Person is likely to not self-maximize against well-liked Others.

It may be the case that as the range of exchange content expands between two transactors they are likely to develop a high level of attraction. Assuming the range of exchange content is the predictor variable, and attraction the dependent variable, asymmetric Somer's $d_{yx} = -27$. We can expect Person to like those Others perceived as a source of many different kinds of rewards. In future analysis, I shall examine the relation between the range of exchange content and attraction while holding interaction frequency and cognitive similarity constant. At the zero order, range of exchange content appears to be a better predictor of attraction than interaction frequency ($d_{yx} = .20$).

The second hypothesis asserting an inverse relation between the range of exchange content as the predictor variable and historical concern as the dependent variable was refuted by the evidence. We assumed the qualitative diversity and sheer volume of exchange content would precipitate an interference phenomenon inhibiting retention of past transactions. Even though the diversity and

frequency of stimuli are variables producing interference which does inhibit memory, it did not occur in the exchange settings we studied.

In the community of Finn River the focus was upon inter-household transactions over the course of one year. There simply was not enough exchange between households to inundate the information-processing capacities of the transactors. As it turned out, 91% of the 1,741 exchange relations in the sample had range of exchange content values of eight or less. And since these transactions were spread over the course of a one year interval, the interference effect was unlikely.

In spite of this clear refutation by the systematic evidence, I still believe there are some social relationships in which there is a sufficient range and volume of exchange content transacted to produce the interference effect. Several naturalistic observations supported the hypothesis, and a few respondents commented while estimating the extent to which Other keeps track, "We help each other in so many ways we don't even bother to keep track." Such inter-household exchange relationships in Finn River and probably in many communities are rather rare. It is my impression that such wide range and high volume of exchange content flows are generally found <u>within</u> households. I could not obtain these kinds of data within the community of Finn River because of norms which emphasize the privacy of exchanges within the nuclear family.

The third hypothesis asserted a direct relation between historical concern as the predictor variable and self-maximizing orientation as the dependent variable. The evidence refuted the hypothesis; the relationship appeared in the form of an inverted U-curve.

One explanation of the inverted U-curve shape is in terms of the effects of Person's perceptions of the state of the exchange record. If an Other is perceived as an exchange "creditor," that is, if Person feels as though he "owes" Other, then to the extent that Other is perceived to keep track of the exchange record, he is seen as self-maximizing and is disliked. Whereas, if Others are seen as "debtors," that is, Person feels as if they "owe" him, then to the extent that "debtor" Others keep track they are seen as less self-maximizing and are liked.

The data support this argument (see Tables 16, 17, and 18), but there are certain problems with the data. Reporting of transactions is skewed in approximately a ratio of 2:1 in favor of reporting exchange content <u>received</u> as opposed to reporting exchange content <u>given</u>. Further work is needed to take into account monetary reciprocation in the calculation of giving/receiving ratios. A computer program now almost completed will compare Person and Other's reports of transactions in their questionnaires and "correct" the errors of omission. Then I shall reanalyze the exchange ratio data.

Another problem in relating the giving/receiving ratio data to the data based on Person's judgements of Other's exchange tendencies is the fact that the judgemental data were collected almost one year later. The giving/receiving balance could very easily have been altered in some exchange relationships. The comparison assumes the initial exchange flows detected have a consistent balance pattern. Both Homans and Blau argue that over time certain rather constant rates of exchange are established between transactors (Homans, 1961: 55; Blau, 1967: 151).

An alternative explanation of the inverted U-curve shape is based on ethnographic data. In Finn River I have repeatedly heard persons complaining in a mood of mild discontent about not being able to reciprocate with certain people because they always insist upon "paying you back twofold."

Some persons keep track very closely of exchanges for the explicit purpose of making sure they always are giving more than their share. There are quite a few of these people in Finn River and they disturb their friends and neighbors because they often deny them the opportunity to reciprocate. The motivations attributed to practitioners of this exchange style are consistent with the self-reports of these transactors.

Persons keeping track excessively for the purpose of making sure "they are always on the giving end," say they are (and are said to be) "too independent and don't

like the feeling of owing anybody anything." Such transactors associate with exchange obligations a mild sense of servitude, an obligation to display deference which they find distasteful.

The "too independent" transactors may be following a general exchange strategy or may only experience a distasteful sense of servitude toward particular Others. Status-inconsistent transactors may have their self-concept at stake in these kinds of situations, and the costs in terms of humiliation may be more than they wish to endure. Or, the relative status of the giver and receiver may have effects here (Blau, 1967). If Person perceives Other ambiguously regarding their relative status (that is, Other may be sorted into the "grey" area between superiority and equality), then Person may not wish to incur an obligation to Other, in order to avoid acknowledging his superiority. These issues will be dealt with in future research.

Another motivation attributed to transactors displaying high concern for exchange flows in order to give more than they have received is that "They don't want anybody to be able to say they have not been fair." Evidently some transactors, either as a general exchange strategy or only as an exchange mode with particular kinds of Others, want to preserve a good exchange reputation in the community. They are willing to give more than they receive as a longer range investment in their exchange performance reputation. The extent to which this is a general exchange

strategy or one geared to particular Others will have to be investigated in future research. Such transactors may be more likely to incur short-run losses as a "hedge" against the possibility of untrustworthy Other's post-transaction complaints about their exchange performance.

There were two consistent findings related to the relation between historical concern and self-maximizing orientation. Independent of the effects of all control variables employed in the analysis, the association between historical concern and self-maximizing orientation was always stronger under the condition of high attraction; and also stronger under the condition of low visiting common structural density. However, given the inverted U-curve shape of the graphed relation, the association was positive at low levels of historical concern and negative at high levels of historical concern.

I suspect that at low levels of historical concern where the association between historical concern and self-maximizing orientation is positive and stronger under the condition of high attraction the stronger association is due to a violation of exchange expectations. When high-attraction Others display high concern for the exchange record they are likely to violate Person's expectations that intrinsic rewards are primary in the relationship. This may precipitate an emotional reaction by Person, who may redefine Other negatively and attribute strong self-maximizing intentions to Other.

Other is expected to enjoy interacting with Person somewhat independent of the consequences of transactions. It is Other's particularistic preference for Person which supplies Other with intrinsic satisfaction (Blau, 1964: 34). The stability of the exchange relation is based upon the intrinsic satisfaction mutually given exchange partners by the presence of the particular person in the relationship. Material exchange content transacted in such relationships is expected to play an incidental role in the relationship.

Self-management strategies of the transactors are especially important in high attraction relationships such as these. The allocation of attention during the course of interaction operates as a signal, a very subtle cue indicating intentions of the transactors. In exchanges with high attraction incumbents it is necessary to direct one's attention upon the subject matter of conversation and reveal pleasure upon encountering one another as agreers meeting in the same areas of liking and disliking. One is expected to show enthusiasm in the ideas and actions exciting the other, to laugh at jokes and to find the same events saddening.

Other is expected to not be concerned with material content, but to almost ignore it. If Person borrows something and is returning it, Other will say, "Oh! I completely forgot about it." If Person expresses gratitude for having received help, Other is expected to dismiss it as not having been any trouble, or to say, "It was nothing. Forget it."

On the other hand if a well-liked, low historical concern Other pays more attention to past transaction consequences he sends a message to Person indicating that it is not just Person as a particular individual that he is interested in but the consequences of the material exchange content flow. As Other shows more concern for the exchange record, Person is likely to perceive Other's primary interest to lie not in interaction with him as a valued person per se but in the flow of exchange content between them. Other is displaying different priorities than Person's, by allocating increasing attention to the non-intrinsic exchange benefits.

No interpretation is offered at higher levels of historical concern, where the association between historical concern and self-maximizing orientation is stronger under high attraction, but the sign is negative.

The discovery of a stronger association between historical concern and self-maximizing orientation under low visiting common structural density suggests there may be two different kinds of exchange systems operating.

If we make the reasonable assumption that transactors expect equity or fairness in their transactions, then the attribution of self-maximizing intentions serves as a negative sanction regulating the exchange process. In natural social settings this assumption is usually evidenced by the casting of negative labels such as "greedy," "selfish," or "out for himself." If historical concern is

more closely associated with regulative sanctions under conditions of low density, it is because keeping track is a vital part of the exchange process when Person and Other have no friends in common. When Person and Other have no friends in common (low density) their transactions are strictly diadic. There is no structurally situated, natural arbitration system monitoring their transactions. Neither Person nor Other must take into account the normative expectations of an intervening social unit. The fairness of exchange outcomes rests solely upon the extent to which each pays attention to and keeps track of exchange content transfers.

As common structural density increases there may be a shift from diadic exchange to "generalized exchange" (Levi-Strauss, 1969: 265). Generalized exchange is described as a situation where A surrenders a wife or daughter to B, and B surrenders one to C who is likely to give a woman back to A. According to Levi-Strauss, the system depends upon trust--the belief that the cycle will eventually close.

Within the affective density cluster, the predominating exchange norm might be for Person to help whomever needs help rather than to help specific Others who have previously helped Person. If there is "credit" or a sense of owing, it may be oriented toward the transcending social unit (density cluster) rather than being oriented toward specific Others. It represents a shift from a diadic

exchange orientation to a collectivity orientation. Let us turn to a consideration of the relation between visiting common structural density and self-maximizing orientation.

In the fourth hypothesis I asserted an inverse relation between visiting common structural density and self-maximizing orientation. I assumed the mutually visited persons, because they expect fairness and dislike self-maximizing acts, would exert pressure on self-maximizing transactors to enforce the fairness norms.

A moderate negative association between visiting common structural density and self-maximizing orientation (asymmetric Somer's $d_{yx} = -.19$) was discovered, but a portion of the association (about 35%) was due to the spurious effect of attraction.

The association between visiting common structural density and self-maximizing orientation is not strong enough to suggest the hypothesis is confirmed. One problem lies in the lack of empirical support for the assumption that visitors like one another. As it turns out, Person likes 68.7% of the mutually visited persons counted in the density variable. (See Table 42 in Appendix F.) I had assumed visiting common structural density was <u>affective</u> density, but it turns out that 31.3% of the mutual visitors are not liked by Person.

The inclusion of the non-liked people into the affective density calculations reduces the value of the association. Non-liked people now subsumed included those

whom Person pays obligatory visits (e.g. kinsmen); people who visit Person whom Person does not visit in return; and spouses accompanying Person's friends who visit only because there are norms prescribing joint visiting by married couples. When non-liked persons are excluded from the affective density count, I suspect we will find a more substantial relationship.

It will also be useful to include in the recalculated affective density scores those Others with whom Person engages in recreation and leisure activities. Younger and middle-aged couples prefer leisure activities more than ritual visiting; whereas the older couples seem to prefer participation in the ritual visiting sphere. By combining leisure partners and well-liked visitors into a recalculated affective density variable, I expect to find a stronger negative association with self-maximizing orientation.

A surprising observation in Figure 12 is the change in slope of the self-maximizing orientation by visiting common structural density graph at the point where the number of mutually-visited persons equals two. If it is the case that among Person, Other and the mutually visited persons, virtually everyone visits everyone else; what we may be observing is a structural limit upon the size of stable visiting clusters. Given the time requirements of the visiting ritual, there may be limits on the number of Others Person can maintain in his visiting network. As the

number of mutually visited Others increases, Person may encounter difficulties in fulfilling visiting obligations. It may become increasingly difficult for Person to conceal his affective preferences because the Others he does not visit will learn that Person did seem to find the time to visit some people. This may produce resentment and a redefinition of Person's exchange intentions as being self-maximizing.

From the graph in Figure 12, it appears that the upper size limit of stable visiting clusters may be four persons. As the clusters get larger, it appears as if non-liked Others are increasingly likely to be attributed self-maximizing intentions.

This ad hoc comment on the puzzling change in sign of the self-maximizing orientation by visiting common structural density graph will certainly require a more precise delineation of affective cliques, and a comparison of affective clique size, with Person's perceptions of Other's exchange tendencies. The data at this point merely suggest the possibility that Person's failure to fulfill visiting obligations may produce resentment in Other, which may negatively alter Other's perception of Person's exchange performance.

The most interesting finding in this study is the positive relation between self-maximizing orientation and visiting common structural density under the condition of high historical concern and a negative relation under the

condition of low historical concern (see Figure 14). This again supports the idea that a Levi-Straussian generalized exchange system may emerge under high affective density conditions. Persons keeping close track of exchange content transfers with regard to particular Others may be seen as violating the exchange norms associated with a generalized exchange system, and are regarded as self-maximizing. As the affective density increases, Others displaying high concern for the exchange record in diadic transactions are regarded as increasingly self-maximizing. Whereas, as affective density increases, Others paying little attention to the exchange record in diadic transactions are regarded as increasingly less self-maximizing.

The data certainly suggest a possible emergence of generalized exchange under high affective density conditions. Once again this will require a more precise delineation of clique structures and a comparison of density values within different cliques with the exchange perceptions and behaviors of the clique members.

Conclusion

Social exchange is a far more complex phenomenon than I originally expected. Linear modes of thought and analysis are inadequate for dealing with the complicated curvilinear relationships discovered in the analysis. It certainly seems as if the relationships are far too complicated to be comprehended with a single-minded

insistence upon the self-maximizing orientation in exchange relations, or any single exchange orientation for that matter.

The main task from my point of view is to formulate the specific conditions which produce particular exchange orientations. I may have discovered conditions which precipitate a shift from diadic exchange structures to generalized exchange structures, but a more precise analysis of affective density clusters is needed before we know whether or not these speculations are accurate.

As far as the exchange and network data analyzed in this study are concerned, not even the tip of the iceberg has been touched. In the follow-up sample alone there are many more variables than have been introduced in this study. There are such variables as: interaction frequency; cognitive similarity; length of time transactors have known each other; perceived average time span of exchange cycle; perceived dependability; perceived trust with regard to keeping a secret; and perceived certainty of future exchanges.

Another analytical perspective which I shall soon try is to analyze consistencies and inconsistencies between Person and Other's perceptions of each other's exchange acts. This is possible because 96% of the residents completed the questionnaire.

The analysis in this study is a crude first step both for myself as an analyzer of data and for the data. The next, immediate step will be to study the exchange

ethnographic data and try to discover the sources of some of the complex findings reported here. At the same time, I wish to do an analysis of the affective structure of the whole network, but with a special focus upon density clusters. Then I should be able to begin interpreting ethnographic exchange data from a point of view considering the actor's position in the larger network structure. Hopefully, shifting back and forth between the systematic and qualitative data will be "profitable."

APPENDIX A

AN ETHNOHISTORY OF FINN RIVER

Introduction

From the point of view of exchange theoretical work, the Finn River history is important because it demonstrates that natural exchange systems are adaptive, socially organized responses to environmental conditions. Exchange behavior in natural settings is a very serious undertaking, often either directly or indirectly related to physical survival. There is a danger that as sociologists we may someday begin to believe that the peculiar kinds of exchange games we invent in controlled laboratory settings are the same as what happens in the natural world.

It is important for the reader to have a feeling for the historical circumstances that shaped Finn River's exchange systems. The kinds of data analyzed in this study are difficult to collect. It is simply beyond the capacity of a single researcher to collect exchange network data for several communities. However, if the findings in a study such as this are to be the basis for generalized statements about exchange behavior, additional exchange network data should be collected in a variety of community settings.[1] It is quite possible that some of the findings in this study are consequences of distinctive features of the historical

development of Finn River's exchange system. Until additional exchange network data are available it is important for us to be aware of the particular historical circumstances shaping the Finn River exchange system.

Finn River has maintained its history by passing knowledge down through the oral tradition. One articulate son of a pioneer farmer was informally charged with the responsibility of writing a history, but he suffered an incapacitating stroke before finishing the job. Consequently, the community has no written history.

Local history is an important kind of knowledge in the community of Finn River. Insiders are identified by their ability to use the name of original homesteaders when referring to a particular farm or location within the community. The ability to tell stories about "olden times" is valued by all age groups. It is not uncommon to see, during a group visiting occasion, younger and middle-aged persons sitting silently around an old-timer telling stories.

Finn River residents have identified several older persons who are believed to have a good memory for "olden times" as their historians. These folk historians are the last surviving members of the second generation, the sons and daughters of the original pioneer farmers. The role of a folk historian is taken very seriously in Finn River.

The folk historians told me the stories their parents recalled about hardship in the old country. They recalled their fathers angrily discussing the issues of working conditions and wages in the Copper Country mining towns; and their mothers worrying about the ethnic conflicts between miners, the hazards of their husbands working underground, and the growing violence between the miners and bosses during the 1913-14 Copper Country Strike.

Their recollections unanimously stress the hard work required to manually carve a farm out of the wilderness. Fresh in their minds are memories of the arduous toil of those fall and winter days when mothers and children were left alone to work the farm while fathers were away working in lumbercamps deep in the virgin forests.

Also impressed on their minds are the warm feelings Finn River residents shared during the communal labor episodes during which they built the barns now standing empty and abandoned. While reminiscing, they recalled how the impoverished farmers united and formed a thriving cooperative store, in the attempt to purchase essential supplies without having to pay the prices set by the two merchants of the community. They spoke vividly of how the "Christian" farmers thwarted the local communists' scheme to gain control of the cooperative store and to use the surplus capital to support communist political activity.

Permanently imbedded in their memories are the days when the Mineral Range Railroad roared through the community; when the potato and cabbage farmers organized cooperative marketing systems; the annual threshing and wood-cutting crews moved through the community; when the teacher in the one-room schoolhouse would not let them speak their native Finnish language; and when the Finnish language was still spoken in the Sunday sermons.

The data from which this ethnohistory was reconstructed was collected during tape-recorded interviews with Finn River's folk historians. During the interviews at times I encouraged detailed verbal elaboration by the informants. The tapes were transcribed, coded and cross-classified, according to selected topics, and studied thoroughly, using cross-checking procedures, to obtain a higher measure of accuracy. This ethnohistory is from the point of view and spoken by the people of Finn River. It was my privilege to reconstruct their history in manuscript form.

Hardship in the Old Country

The Finnish-Americans living in Finn River are second and third generation offspring of peasants emigrating from Finland between 1890 and 1910. Most of these immigrants came from the western and northwestern coastal regions adjacent to the Gulf of Bothnia, from an area ranging between latitude 62° and 66° north, and going into the interior slightly beyond longitude 26° east. In Finnish politico-administrative terms this roughly corresponds to the rural provinces of Vaasa and Oulu.

Between 1870 and 1900 Finland's agrarian sector became economically transformed. As rural society oriented itself toward the urban market system of rewards, social relations associated with the traditional subsistance-oriented mode of production were altered. In response to these changes and combined with population growth, the number of agricultural dependents and landless laborers increased. It is essentially from this group that most of Finn River's ancestors originated.

Traditional Finnish agrarian social organization revolved around the ownership of land. By 1901 landowners constituted 23% of the rural populace, tenants made up 34% of the households, and the landless laborers constituted the remaining 43% of the rural population (Hoglund, 1974: 5). The tenants leased land from the landlord and repaid him with an unspecified amount of labor. Landless laborers

moved from farm to farm living in small cottages and working for their food and shelter.

Between 1870 and 1900 larger landowners in Finland shifted away from traditional grain production toward commercialized dairy agriculture and logging. Dairy agriculture required less labor than grain production, and the arrival of horsedrawn mowers and rakes considerably reduced the need for a constant large supply of manual labor. The landed class turned gradually to commercial sources for their supplies as cash became readily available. Subsistence farming declined as landlords came to perceive land as a money-making resource: They evicted tenants to increase their pasture and forest lands. A good indicator of the increasing dependence of agricultural society upon the cash economy is shown by the increase in the number of small country stores: 700% between 1865 and 1900 (Hoglund, 1960: 7).

Many farms were too small to actively engage in commercialized agriculture. By 1900 approximately 70% of the households had less than 22 acres that could be cultivated, and over 30% had less than five acres (Hoglund, 1974: 3). Since small farms could not be further subdivided and yet maintain a reasonable chance of successfully participating in the economic arena, the children of many of these small farmers had a very dim economic future in the Finnish countryside.

To make a living during the summers, the landless and the children of small landowners joined the legion of migrant laborers working on the large railroad construction projects in the northern areas of Finland, and in winter, they migrated south to work in the forests and sawmills. Some of the dispossessed found work in the industrial cities of Helsinki and Tampere, but at that very time the Industrial Revolution was in its very early stages in Finland, and there were not enough jobs to absorb all of them. This is suggested by the fact that in 1900 only 12% of the Finnish population lived in urban areas (Hoglund, 1960: 6).

Finland heard the cries of "exploitation" and the need for land reform, but little reform came. Since ownership of land was a legal prerequisite for political enfranchisement, and since the crown held vast areas of land and outcasts from the rural sector held none, significant reforms were very unlikely.

An elderly Finn River resident recalled his father's ideas about life in the "old country": (Virtually all of this is without elicitation on the part of the interviewer.)

> Land was so precious to the old Finns because in the old country they didn't own any land. . . . They couldn't. Very few owned any over there. They were what they called "torpparit." I guess you'd call them "share croppers." Yeah. Say you're the big land owner . . . they'd build something like a little shack on your land and then they had to work for you. That's how it was in the old country. Work for the big land owner and live in a little shack in one corner, and then they could raise a little garden on that if there was enough daylight after they got through working for this big fellow. I guess some of them had a cow. But then again

> they had to work for the church and then again for the minister. So many days for each . . . you know. The church was the government. You know, the church ruled the country. Yeah, the minister himself owned, say, two or three forties, but the congregation had to work for him . . . to donate their work for him. If they didn't donate their work they were kicked out of the congregation. . . . And then you had to practically move because you couldn't get a . . . couldn't live on the land. Then you had to look out for your own good.

This historical period also witnessed tenant strikes, but it was not until the latter part of the century that the issue was seriously discussed in the Parliament. In 1902 the Parliament passed a law requiring a written contract specifying the obligations landlords and peasantry owed one another. However, this law failed to require an exact statement of the length of the peasants' working day. Landlords took advantage of this ambiguity and demanded very long work days from their dependents, and further tenant strikes followed. It was not until 1905 that tenants became enfranchised, and until 1909 that the Social Democrats mobilized their support and began to articulate their interests (Hoglund, 1974).

Migration to America, the "land of the gold" diverted attention away from the increasingly bitter confrontation but only served to postpone the further accumulation of resentment against the landed gentry.

Available data on the emigration of Finns during the period between 1893 and 1920 show that 68.3% of the emigrants came from the rural sectors of Finnish society. Observe Table 43 illustrating Finnish emigration according

to province of origin. In this table many of the emigrants classified as having "urban" origins had lived in Helsinki or Tampere for only short periods while searching for secure employment. Those emigrants from rural areas, when classified by occupation, clearly show the economic dislocation processes operating in the rural sector. (See Table 44.) Of the emigrants coming from rural areas, 92.1% did not own any land. Children of the small landowners, and children of tenants leasing entire farm units were rapidly joining the ranks of the landless migrant labor army.

The problem was even further compounded by population growth. In 1815, 50% of the rural household heads were landowners, but by 1901 this number had declined to less than 23% (Hoglund, 1960: 5). Between 1815 and 1875 tenant farmers increased at twice the rate of the population of landowners, and the landless laborers increased at five times their rate (Hoglund, 1960: 5).

The landless Finnish emigrants who eventually found their way to Finn River, Michigan were forced to move from their homeland because they were rendered economically obsolete by the changing forces of production centering around the commercialization of agriculture. The basic reason for emigrating was due to the fact that they did not own land. Emigration to America was a quest for land in the spirit, "One's own place, one's own master."

The upper ranks of Finnish society had very little sympathy for the plight of the landless who emigrated.

Table 43. Finnish Emigration According to Province of Origin 1893-1960.*

	1893-1895	1896-1900	1901-1905	1906-1910	1911-1915	1916-1923**	1924-1930	1931-1940	1941-1950	1951-1960
Finland	14,517	32,671	81,056	77,776	50,668	39,785	35,452	8,844	22,329	54,052
Urban	1,557	2,291	12,050	9,880	7,954	..	..	..	..	..
Rural	12,960	30,380	69,006	67,896	42,714	..	..	..	..	..
Vaasa	9,676	23,144	39,007	34,429	20,099	16,034	13,978	2,346	10,867	15,229
Urban	455	833	2,640	2,702	1,822	..	..	..	..	..
Rural	9,221	22,261	36,367	31,727	18,277	..	..	..	..	..
Oulu	2,556	5,981	12,635	10,782	5,363	4,123	3,547	1,127	1,812	4,922
Urban	245	454	1,458	965	639	..	..	..	..	..
Rural	2,311	5,527	11,177	9,817	4,724	..	..	..	..	..
Turu-Pori	1,207	1,732	12,621	14,556	9,593	3,900	4,097	633	1,203	5,023
Urban	118	138	1,748	1,744	1,320	..	..	..	..	..
Rural	1,089	1,594	10,873	12,812	8,273	..	..	..	..	..

*Source: Moline, N., "Finnish Settlement in Upper Michigan" 1966. Unpublished M.A. Thesis. University of Chicago. Taken from: for 1893-1915, John Kolehmainen, Haven in the Woods (Madison: State Historical Society of Wisconsin, 1951), p. 153; for 1916-1960, Statistical Yearbook of Finland, compiled in Finnish-American Blue-White Book 1965 (Brooklyn: Finnish Newspaper Co., Inc., 1965), p. 135.

**Data on rural-urban emigration characteristics for 1916-1960 are not readily available. However, the province of origin in itself is indicative of this characteristic in that the three provinces cited are predominantly rural.

Table 44. 1890-1920 Finnish Emigrant Population of Rural Origin by Occupation.*

Occupational Description	Frequency	Percent
Landowners	14,774	7.9
Landowners' children	66,593	35.6
Tenants leasing entire farm units	7,112	3.8
Tenants' children	25,710	13.7
Landless farm workers	72,271	38.7
Miscellaneous agricultural laborers	609	.3
Total	187,069	100%

*Source: John Kolehmainen and George Hill, Haven in the Woods: The Story of the Finns in Wisconsin (Madison, Wisc.: Wisconsin University Press, 1951).

Governmental leaders scorned them as lacking in patriotism. Clergymen derided them on the grounds that to even think of leaving the fatherland was to live in sin and immorality. Military leaders decried the loss of manpower which would undermine the nation's strength. Landowners and industrialists moaned over the loss of cheap labor (Hoglund, 1974). A conscious propaganda campaign was organized to curb the emigration. Articles regularly appeared in newspapers and magazines, discussing the evils of emigration, and the character defects associated with individuals leaving the country. Only a few voices pointed to the need for land reform and work for the landless, and few listened. Finnish society was sharply stratified and those in the upper ranks knew very little about life at the bottom of the stratification system.

"Making a go of it" in the copper mines

Finns formed scattered settlements in Massachusetts, New York, Ohio, Illinois, Montana, Oregon, Washington and California. But the most striking feature of their settlement pattern is the sharp concentration in the Upper Great Lakes Region. (See Figure 17.) Since all Finns were literate as a result of Lutheran confirmation tradition, many letters were sent back to their kinsmen describing similarities between their new homesite and Finland. Back home these letters were passed throughout kinship networks,

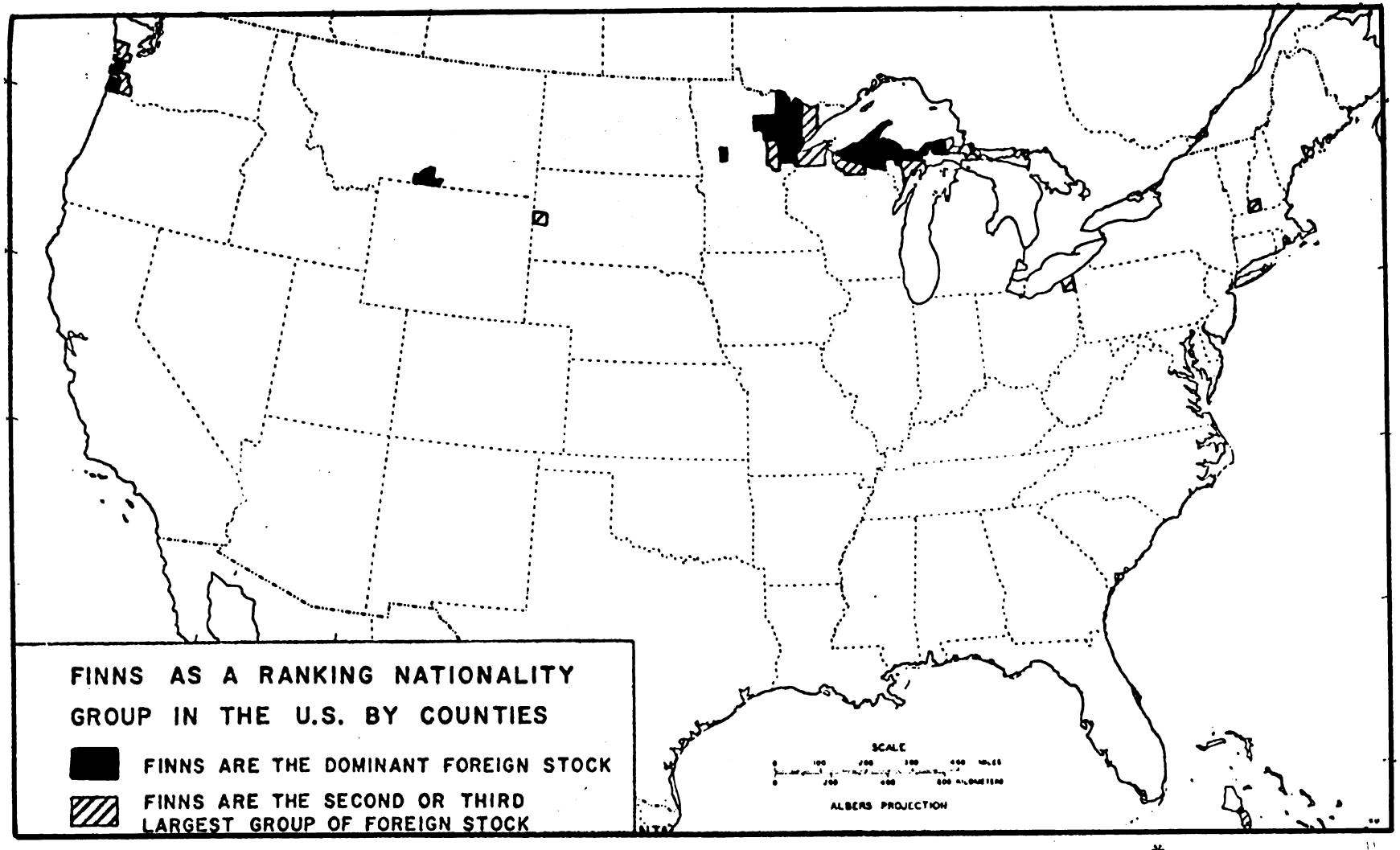


Figure 17. Finns as a Ranking Nationality Group in the U.S. by Counties.*

*Source: Norman Moline, "Finnish Settlement in Upper Michigan" (Unpublished M.A. thesis, University of Chicago, 1966), p. 46.

and news spread with the effect of soothing the anxieties of migration. It did not seem so bad to move to another place just like Finland (Van Cleef: 1931; Davis: 1933). Most cultural geographers now appear to agree that the economic opportunities associated with expanding mining industries in the Minnesota Iron Ranges and the northern Michigan Copper Range was the pivotal factor contributing to heavy concentration of Finnish immigrants in this region.

The typical historical pattern of economic activity of the original Finn River settlers began with full-time copper or iron mining from 1890 to 1913; part-time logging and part-time farming from 1913 to 1945; full-time farming up to the latter 1950s; part-time farming and part-time logging and/or factory employment from the latter 1950s; and finally up to the present, an increasing tendency to engage in full-time employment in factories or construction work outside the community.

Copper production in Upper Michigan soared upward steadily from the end of the Civil War until the end of the First World War. In 1865 the level of copper production was 6,410 tons, increasing to 22,204 tons in 1880; 45,273 tons in 1890; 102,874 tons in 1905; and 135,000 tons in 1916 (Steven, 1920: 1594). Similar expansion occurred in the Minnesota Iron Range from 248,000 tons in 1864 to 19,506,000 tons in 1916 (Steven, 1920: 1595).

Finns had a reputation for being hard workers and were welcomed by the mining companies. Occasionally,

mining company agents recruited emigrants in the railroad stations and docks of Finland (Murdock, 1943). As early as 1860 the northern Michigan copper mining companies organized the Mine Emigrant Society explicitly for that purpose (Meeks, 1964: 137).

At the time, what is called the "Copper Country" in northern Michigan did not have railroad connections with the rest of the Midwestern states, and immigrants were greatly dependent upon the Great Lakes waterways for transportation. It was relatively easy for an immigrant seeking employment to travel by water directly from New York to the Copper Country, in contrast to opportunities for travel to other areas of the country (Meeks, 1964: 138).

Finnish immigrants came with a very strong desire to own land and begin farming. However, the better farmlands were already homesteaded by earlier German, Norwegian and Swedish immigrants following passage of the Homestead Act in 1862. Germans settled in most of the prime farmland in Indiana, Ohio and southern Illinois. Shortly afterwards Norwegian and Swedish immigrants homesteaded the "second best" lands, in central and northern Illinois, lower Michigan, Wisconsin, Minnesota and parts of Iowa. When the more solid stream of Finnish immigrants began to flow in 1890, well over 4,500,000 Germans and 1,000,000 Norwegians and Swedes had already arrived (Moline, 1966: 34).

Thus when land-hungry Finnish immigrants came to America the only available farmlands in the midwest were a

few scattered homestead tracts and the cut-over areas of pine forests in the Great Lakes Region. So they took jobs in the mines in order to save money to buy a farm. Thousands of Finns in the Great Lakes Region and most of those founding the community of Finn River followed this pattern of settlement.

Although Finnish immigrants had no previous mining experience, since there were few other opportunities available, they became miners. Furthermore, some of the immigrants were indebted to the mining companies for the cost of their trip from Finland, so they had few other options.

The copper mining industry was well established by the time the Finnish settlers came to the Copper Country. Cornish, Irish, French-Canadian, Italian, Croatian, Norwegian, and a few Swedish immigrants were already working in the mines. An occupational status order existed within the mining industry which coincided with ethnic status. The Cornish miners (Cousin Jacks) had a long tradition of mining experience, and they were the foremen. Irish and Italian men were drillers and blasters. French-Canadians were involved with the woodswork associated with mining, making ties for the railroads and laying the wooden structure which supported the walls and ceiling inside the mines.

Finns were generally trammers; the human workhorses shoveling the ore into cars, pushing cars out of the mine and unloading their contents into larger railroad cars. Trammers were paid less than any other workers, and they

had less prestige. Finns also worked in the woodswork jobs associated with the mining activity.

Although initially grateful for the jobs, Finnish miners disliked mine work for several reasons. They made smaller wages than the other miners; mining work at this time was dangerous; there were intense ethnic conflicts in the mining towns; and mining company "bosses" were virtual dictators controlling the towns, stores, bars, housing facilities, courts, and church leaders. Bosses reminded Finnish immigrants of the exploiting landed and clerical elite they had left in Finland.

Miners frequently died in the mines, but the mining companies always seemed to escape any responsibility. Health and safety conditions were never seriously implemented. A Finn River woman told me of her father's experiences in the mines:

> Dad didn't like working in the mines because it was so dangerous. One day some rock fell and injured his eye. Never could see much with that eye. Ma was always trying to coax him to leave the mines and move out on a farm, but Dad said, "It was easier to make your bed out of the rock than in the woods."
>
> But Ma was always worried because there were a lot of accidents in those days. My dad was in number one shaft when it was burning in Huron Town there. Yeah. Two of his friends got left in there. . . . Never made it out. Same thing with a Polish lad he knew. You know, they would have made it . . . the guy and his son got just. . . . If they would have waited long enough to get up there where they were intended to go, they would have survived. But they got spooked. Dad, he took the ladder and got up to the surface and my uncle went to number two shaft. Well, he got saved that way and so did the rest of the guys. Dad said, "They got them by the shirt collar and dragged them out."

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> Ma thought the next time he might not make it out. You know, there were always accidents and explosions. She kept coaxing, "On the farm . . . on the farm."

After listening to people in Finn River describe the living and working conditions associated with working in the copper mines it is apparent that the early immigrants were very appreciative for any opportunity to work, or they would not have tolerated early copper mines. To them it was a life better than that which they had known in the old country.

After working a mile beneath the surface, breathing foul air, and watching friends get injured and killed, it became increasingly apparent to the miners that the wealthy absentee mining company owners who lived in Boston were totally unconcerned with their welfare. Several times I have heard older men say, "If a man accidentally hurt or killed a mule he was fired. But if a man were killed on the job, nothing was said. Bosses used to say, 'We can always get another man but we gotta pay a lot for them mules.' You know, they cared more about those mules than a man's life."

The theme of perceived exploitation in this recurring story comparing treatment of a mule with the treatment of a man's life was startling. Evidently this was a theme which fit perfectly with work experience of the miners. It was repeated in the shafts, on the ladders, behind ore cars, and in the bars. The story put working conditions and experiences into a perspective which gave them a shocking

sense of injustice. The story is always told with raised eyebrows, head nodding in the affirmative emphasis of credibility, the gestures communicating the message, "That's right. I'm not kidding you. They thought more of a mule than a man's life!"

It was not company policy to tell a man his life was worth less than a mule's. It may have been said by a foreman to one of the drillers over a beer. But even now a stranger can hear any old miner tell the same story. Today one might regard it as an amusing tale, but to the early Finnish miner it revealed the ugly side of absentee ownership in a capitalistic economy: It told the Finnish immigrants that mining companies operated only to make as much money as they could, and they were unconcerned with the fate of the workers.

Finnish miners at the bottom of the pay scale resented the bosses. An old Finn River man told me:

> Dad had an opportunity to take over a foreman's job in the Isle Royale Number Four Shaft. As a trammer he started that one with the first shovelful . . . in Dodgeville. . . . No one liked bosses then, and he didn't like it. He said, "I'll never be a boss for anyone." So that summer they came out on the farm.

The bosses were probably so disliked by the Finnish miners that they were afraid their ethnic peers might resent even a Finn who became one.

Finnish immigrants were involved in ethnic conflicts in the mines, the streets and the bars. Finns fought with the "Cousin Jacks", the Swedes, Irish and

French Canadians. French Canadians were very competent woodsmen and did most of the woodswork involved in mining. Finnish immigrants were also very competent woodsmen. Since both ethnic groups offered similar skills to the market in return for wages, they became economic competitors. Throughout American labor history, each successive immigrant group was perceived as a threat to the occupational security of the established workers. Such economic competition produced animosity and bitterness between the Finns and the French Canadians. This never amounted to widescale organized conflicts, but fist-fights and resentments were commonplace in mining towns.

Talking to the older men in the Finn River area, one hears stories about the local cultural heroes of the ethnic street brawls. Memory is undoubtedly selective, and they recall instances where a single Finn whipped several others. Conversational settings are usually all male and one man's story is usually followed by another of this theme: a solitary Finn fights off several Irishmen, Swedes or Frenchmen.

> When Dad was working at the Rock House there was a mob of them [Irishmen] and they wanted to see for themselves how many he could handle alone. There were about five or six that tackled him and he took the first one and grabbed him by his arms right here [between shoulders and elbows] and used this man as a club. The man was screaming as Dad swung him through the air belting the rest of them. When he dropped this man down he was as limp as a rag. He didn't show up for work for about a month. When he did he showed everyone his arms and all the flesh and muscles deteriorated where Dad had a grip

> on him. He held him so tight while swinging him through the air that he was never able to use his arms much after that.

The combined effects of fear of one day not walking out of the mine; dislike of the foul air; resentment toward the bosses perceived economic discrimination with respect to the Cornish, Irish, and French; and ethnic conflicts precipitated migration from the mining towns into the peaceful countryside.

Perceived injustices and occupational grievances accumulated and reached a crisis point during the famous Copper Country Strike of 1913-14. The strike issue mobilized all of the miners, cutting across all ethnic groups, and galvanized workers into a confrontation with the bosses. Conflict quickly became organized as the bosses hired strike-breaking thugs from New York to intimidate the workers. Upon the request of the governor, Federal troops were sent into Calumet to squelch the conflict. Hatred and violence were increasing as the companies blackballed anyone sympathetic to the strikers (Murdock, 1945).

Some Finnish socialists were involved in the strike, and anyone suspected of sympathy with the strikers was accused of socialism and was blackballed. This even happened to non-socialist "church-going" Finns during the excitement. So Finns began to move into the countryside to escape the turmoil in the mining towns, and to realize their original dream of owning their own land.

Many of the Finns moving into the Finn River area had been blacklisted for supporting the strikers. One man told me:

> Many of these people here were blacklisted and the bosses wouldn't give them a job after the strike. Some of them maybe were a little outspoken . . . maybe took a stand during the strike . . . maybe just stepped out of line. They just wouldn't take them back in the mines. Bosses kept a record on each employee and the different companies sent these lists to one another so if they had a bite on a man he couldn't get work no place on the Range [Copper Range]. They passed these lists to the iron mines in Minnesota and Ishpeming . . . to all the mines . . . silver mines . . . as far as Montana. If they had a bite on a man he couldn't get work any place.

"Land Fever" struck the Finnish immigrants. Migration into the countryside took the form of a social movement. Finnish newspapers, established as soon as the immigrants settled in the mining towns, celebrated the existence of the "Finnish rural spirit," "an instinct born of generations of contact with the soil," the "unswerving attachment to the land," and the "Finnish backwoods dweller's soul" (Kolehmainen, 1951: 44). Newspapers such as the American Uusitet, American Suomalainen, and the American Suomentar referred to the swelling back-to-the-land movement disparagingly, fearing that all Finns would become farmers. They published editorials refuting the view that all other occupations should yield to farming. The socialist-oriented Työmies portrayed the movement as a way to escape the "monied bosses."

Land advertisements designed by real estate brokers familiar with the Finnish immigrants' history of exploitation in the old country and in the mining towns appealed to the basic motives of the land fever. "Take hold, Finland man, of the earth's surface from which you made a living in Finland. Be your own master and boss! Let the inferior bow to the lords and listen to the blasts of the whistle" (Kolehmainen, 1951: 49). The rural movement reached such proportions a very knowledgeable real estate man said that he thought it safe to say that, "Every Finlander who comes to this country has the ambition to own a little home of his own and farm it" (Kolehmainen, 1950: 45).

Migration into the countryside

Between 1880 and 1900 Finn River was a site where Great White Pine logs were hauled and piled during the winter, then dumped into the river during the spring floods caused by melting snow. It was a settlement of scattered subsistence farms inhabited by French Canadian lumberjacks and their families who had begun cutting pine in Canada, and followed the forests across the western and northwestern regions of the Upper Peninsula.

Finn River lies strategically between three rivers that once floated the huge pine out of the virgin forests to the sawmills in towns on Portage Lake and Keweenaw Bay. When Pine was "King" the only transportation routes were trails made by great oxen dragging massive logs to the river

banks. Were it not for the three adjacent rivers, Finn River never would have become a settlement.

French Canadians in Finn River never farmed commercially because they were too isolated from the mining town markets: Dairy products would have perished during the long journey to even the closest mining town. The little farming they did was in cut-over stump clearings used as pastures, and they planted vegetables between the large pine roots.

The last of the Great White Pine fell at the turn of the century, so French Canadian families moved to nearby sawmilling towns for work, and single men moved westward toward other virgin pine forests. French Canadians were glad to relocate closer to their church. The nearest church had been over nine miles away, a whole day's journey. They depended upon their faith as a means for coping with the harsh wilderness environment. So they sold their homesteads to the "clannish" and land-hungry Finns who came from mining towns, and moved closer to work and church.

Several Swedish families had already established themselves in Finn River. Most of them worked in sawmills in the nearest towns, and some gradually moved out farther out into the stump clearings around the towns. They did not get along well with Finns. Large brawls and street fights were common in nearby towns, but in Finn River there were only a few Swedish families, so few hostilities broke out.

Finnish immigrants began moving into the Finn River area at the turn of the century, and the stream of migration continued until the mid 1920s. As soon as a family saved enough money to buy a horse and a cow, they acquired land in the countryside. During the years between 1910 and 1917, a three year span preceding and following the Copper Country Strike, the stump clearings were quickly inhabited with Finns.

Economically the times were very hard for the ex-miners. Most Finn River folk stress the severity of the early settler's economic hardship by saying "the depression was nothing compared to the lean years of the Copper Country Strike." Farmers fortunate enough to move into the Finn River area before the Copper Country Strike actually benefited from it: Miners and their families moving into the area were hungry, and worked all day for a farmer in return for food and a place to sleep in the haybarn. As one old man told me,

> See, on our farm we had four or five from the Copper Country Strike. There was no food over there. That was a more drastic depression than the regular depression we had after. That's right. That was worse. That's when this area filled in. That's when she started. . . . You betcha. All they cared about when they came to our place was food and some Peerless Tobacco. . . . That's all they wanted. They didn't want any more . . . just some food and Peerless. And smokes were so tight at that time that you know they smoked two pipefuls; one in the morning and one in the evening. And then they would take that terva [accumulated nicotine residue in the pipe] and put it in their mouth for noon. Yeah, they'd scrape that teräs out of their pipe for noon-time. That's how tight it was.

One Saturday evening while sitting with two old Finn River men behind a sauna, one who was cooling off and swatting mosquitoes said to me,

> During the Copper Country Strike so many people and their friends came into this area. Our back field was cleared by those people who didn't have any work then . . . four and a half acres. And that's the time Ma and Pa had that old shack made into a sauna.

The younger man nodded in agreement,

> Same way over at Dad's. That's when we cleared some land, and built that chicken coop. They built a sauna too. There was two guys who came from the Strike and stayed. Dad paid 'em a dollar a day and eats. That was in the spring and believe it or not they used to get suckers three times a day from the river . . . breakfast, dinner, and supper. They had a net in the river and every morning that was some chore to go down to the river, pull the net up, and carry back those fish. I don't know how the dickens they could eat that many fish.

Early Finn River residents were essentially without cash reserves. Most came into the area penniless after enduring the lean years of the Copper Country Strike. If some had a little money it went to the initial down payment of the land. Making land payments was a major source of anxiety for the first generation Finnish settlers. Their deep hatred for any form of indebtedness was fashioned from memories of the earlier subordination to the landed gentry in Finland, as well as the more recent encounters with mining company bosses. Yet they were faced with the inevitable need for cash in order to buy the land they so desperately wanted.

Mining companies encouraged the farming and settling of some of their lands because it insured them of an adequate supply of farm and dairy products for their mining towns. They encouraged tenancy contracts with immigrants desiring to escape the mines, but their annual reports indicate that Finnish people were very reluctant to enter into tenant farming contracts. Finns wanted their own land. Cultural geographers studying the Finnish settlement patterns have noticed that as compared to all of the immigrant groups, the Finnish population in the United States has the highest percentage of rural residence, and has always had the highest proportion of farmers owning their own land as opposed to renting or working under some kind of tenant arrangement (Meeks, 1964: 146).

Finn River pioneers chose to go into debt in order to have the appearance of owning their own land, rather than to accept a tenancy contract. Loan companies were waiting for them, eager to get a land-hungry Finn's signature on a high interest loan. Immigrants were desperate; not understanding everything loan officers said about the terms of the contract, they signed these agreements any way. For the rest of their lives many of this first generation of Finnish farmers would remain suspicious and distrustful of contractual relations with strangers.

A few of the earlier arriving Finns homesteaded land allocated for such purposes by the Homestead Act of 1862. Homesteaders were required to live on the land for six

months of the year, and after five years they had to clear at least five acres of forested land. Many cleared land for six months, and then moved temporarily back into the mining town, sawmill town or lumbercamps to make enough money for another year's supplies.

Lands purchased by the Finns were generally sold by French Canadian families, logging companies that had cleared the area of the Great White Pine, and the Duluth South Shore and Atlantic Railroad Company. In those days the Federal Government gave railroads several miles of land on each side of the track as an incentive to construct transportation systems in the unsettled areas.

Locally, a Duluth, South Shore and Atlantic Railroad Company "colonizing agent" named Jasberg became rather famous for settling Finnish people. They trusted him, as he evidently was partially fluent in their language. He sold farms to several thousand Finnish families in the Upper Peninsula, and he sold many farms in Finn River. J. H. Jasberg saw himself not as a real estate salesman but as a patron for the Finnish immigrants, as a person selflessly doing a great service by helping them find and purchase the land they so deeply desired. He thought Finnish people were especially suited to settle the rugged cut-over pine forest areas because they were accustomed to the very harsh climate, to physical hardship, and were fanatical workers. In Jasberg's mind, quoted from Meeks,

> The most desirable settler for such cut-over areas were those who had many children, and whose wife would work hard; the type of wife whose working days can be measured in terms of eight hours--eight in the morning and eight in the afternoon (Meeks, 1964: 150).

A vast majority of the Finns went into serious financial debt to pay for their land. The Hardy-Ryan Loan Company of Chicago, with an office in Hancock, Michigan, sponsored many of these loans. Two store owners in a nearby town pooled their resources to make loans for needy Finnish farmers. It may shock the reader to know that in the decades between 1900 and 1920 loans were given the high rates of seven to eight percent annual interest!

"Making a go of it" in the northwoods

Finnish people in the Upper Peninsula use the phrase "making a go of it" to refer to the economic struggle to survive. The phrase connotes the struggle to live, and the necessity to do everything in one's power to have food on the table and a roof over one's head. It is a phrase our generation cannot fully comprehend. The early settlers in Finn River were in a very difficult situation. Most of them took out loans of $1000 to pay for their lands. Reflecting on the economic hardship of the original settlers, an old man said to me:

> I got some papers of Dad's yet that shows the interest rates and everything. It's been seven . . . eight percent and it's been so that you had to renew that loan every year. If you weren't

> able to pay . . . well, they wouldn't renew it. They wouldn't make a loan for any longer than a year. They loaned money to the farmers for a year, just, and if they couldn't pay that in a year, why, they took everything you had.

According to local people, between 1900 and 1915 land around Finn River averaged $250 for 40 acres, and many of the farmers bought four forties. According to the interviews I have conducted with Finns, most of the farmers could barely scrape up $70 for interest on the principal. During the early days of settlement, it was almost unheard of to actually pay toward the principal. And land taxes were not very high in those days, but even the $12 to $15 demanded by the government was a burden to the settlers. Most families needed $90 to $100 to cover interest payments on the loan and pay land taxes. This does not seem to be a great amount of money, but the reader must remember that Finn River was isolated in the wilderness with few work opportunities available. When the last of the pine floated down the nearby rivers, and the mines were on strike, there were virtually no opportunities to find work that would pay cash. One could find an endless amount of non-monetary work, and the early settlers worked hard from sunrise to sunset clearing their lands, building homes, and planting crops; but money was very scarce, and its accumulation was a source of great anxiety to impoverished Finns.

Natural and man-made transportation systems open the community to the external cash economy

As when the outside cash economy had once reached into the wilderness, extracting the Great White Pine for homes in Detroit and Chicago, and wooden safety matches for people all over the United States, it again touched the face of Finn River around 1900. Mining companies developed a more efficient technique of separating copper embedded in other kinds of rock. This technique was known as "stamping" and it amounted to shattering the rock surrounding the copper deposits to separate the copper. A stamp plant was built east of Finn River adjacent to the Duluth, South Shore and Atlantic Railroad.

West of Finn River several copper mines operated. Mining companies decided to build a railroad connecting the mines to the stamping plant. It so happened that Finn River was located next to the shortest and most convenient route between the mines and the stamping plant. Thus, national demand for copper combined with the geographical location of mine sites and stamping plants made it possible for Finn River to have a transportation route to the outside world.

Thirty years earlier the three rivers provided the basic ecological conditions for a French Canadian settlement. Only because the rivers could float it to the sawmills could white pine be extracted from the forests surrounding Finn River. A community developed only because a natural

transportation facility allowed the national cash economy to consume its resources.

In 1900 the Mineral Range Railroad was built through Finn River. Now a man-made transportation facility made it possible to satisfy the requirements of the national economy while at the same time giving an isolated community an economic lifeline to the outside world. The Mineral Range Railroad had a very wide range of influence on this little settlement which was very little more than a clearing in a vast forest.

The railroad made it possible for the local people to exchange the products of their labor for cash from the outside market. Once again the national economy demanded lumber; this time, to build the cities of Chicago, Detroit and Milwaukee. Hardwoods--maple, birch and elm--were too heavy to float, so they were left standing as long as the rivers provided the only means of transporting logs. In the pre-railroad years without transportation facilities hardwood was not marketable. Many of the farmers even burned gigantic piles of hardwood logs while clearing their lands.

When the Mineral Range Railroad came through in 1900 it was possible to ship out hardwood logs by rail to sawmills in local towns. Since all of the farmers had some woodland, they could log their own land during winter, skid them to the siding in Finn River, and have them shipped to one of the sawmills in nearby towns. After farmers logged their own lands, they worked during the fall and winter for local

entrepreneurs who had a contract with one of the nearby sawmills. By logging either for himself or for a local contractor, the immigrant farmer was able to scrape up enough money to pay for his land.

Finn River became known as a big logging center. Local people recall that sometimes 50 teamsters and their teams were working in the village area, piling logs and loading them onto flatcars. By the end of the winter log piles as high as the rooftops lined both sides of the main road for a mile north and south of Finn River.

Entrepreneurs arose from the ranks of the Finnish farmers. Four logging contractors became wealthy during the hardwood logging boom. These men had come earlier into the Finn River area, had already established homes and families, and were in a position to take advantage of a cut-rate labor force as the ex-miners moved into the countryside.

Ex-miners worked from daylight to dark for $1 a day, performing strenuous and dangerous physical labor. Many were without the necessary team of horses needed to log their own lands, and needed some cash to pay off the interest on their loans, so they logged for one of the local contractors. The ex-miners went very deeply into financial debt simply in order to purchase their land.

The railroad, logging, mining and dairy industries were interdependent. The mining companies needed large amounts of timber to operate the mines. Four foot hemlock or cedar logs, hewed on two sides, were used as ties for the

tracks that hauled ore out of the mines. "Stulls," used as pillars supporting mine tunnels, were made from eight foot hardwood logs. "Legging," used to support walls of the shafts, were generally 12 foot cedar logs split down the middle. "Flat timber" supported the ceilings in the tunnels and generally cedar, spruce, balsam or hemlock of variable lengths--12, 14 and 16 feet and hewed on two sides. Big furnaces heating the mines, generating steam, and melting ore used four foot cordwood, generally maple or birch, as fuel.

Miners living in the mining towns needed cordwood for cooking and heating fuel in their homes. In the early 1900s all of the homes used wood exclusively as fuel. They also needed dairy products, eggs, cabbage and potatoes because they did not have enough land in the towns to produce these foods.

The railroad made it possible for the mining operations to be supplied with the necessary wood products, and the mining town population supplied with products they needed from the countryside. It gave the Finnish immigrant farmers an outlet for the products of their labor, and a means for obtaining the supplies but could not produce for themselves. The railroad needed what seemed to be a never-ending supply of eight foot cedar, hemlock, and later, maple ties hewed on both sides.

Until the railroad came through Finn River, virtually all farming activity was subsistence oriented.

Dairy products are highly perishable and simply would not last the day-long trip into one of the nearby towns during the summer months. Such a journey was seldom feasible during the winter. It was not long after the first whistle blew that Finnish farmers were hauling their cream cans to the Finn River Station. After a few years the farmers organized a cooperative creamery to make butter to ship out by rail. Farmers generally received from $1.50 to $2.00 for five gallons of cream. This is not very much, considering the large volume of milk required to make five gallons of cream and the work involved in separating it.

The Mineral Range Railroad needed workers to maintain the tracks. Heavy damage occurred during the hard winter months. Finn River had a section house, which lodged two foremen and their families. Each foreman had a crew of five or six men whose jobs were laying ties, rails, and repairing switches. In 1902 wages were 15¢ an hour for section hands.

The Mineral Range Railroad sustained the growth of Finn River by constructing an economic lifeline from deep in the heart of the wilderness to the mining and sawmill towns nearby. As mining operations and hardwood markets declined, the railroad finally shut down. In 1936 the company removed its tracks. Today the younger generation is not even aware of the fact that their community was once a logging boom town, made possible only because of a railroad that no longer exists. The railroad disappeared at a time when the

people had already adapted to other forms of transportation, so the community lived on.

Farming and logging

When pioneer families arrived in the Finn River area, they were confronted with a combination of harsh living conditions. Because of the very short growing season, the climate is unfavorable to farming. Winters are long and severe. Six months of the year the ground is covered with snow. Temperatures go down to 35 degrees below zero, and it is cold from the latter part of October until late May, when spring plowing can begin. Lake Superior, one of the largest and deepest fresh water lakes in the world, is the basic factor shaping the temperature of the region. Its waters are deep and cold, and when prevailing winds cross over them they are chilled. When winds blow from the east, the lake air cools Finn River. Because of cool temperatures, the growing season of the Finn River area is 30 days shorter than in the more productive southwestern sections of Michigan. Furthermore, even during the growing season, Finn River is likely to have one or more frosts. Any kind of farming is difficult simply due to the temperature patterns.

Other factors make farming difficult in Finn River. The soil is acidic because for centuries the needles of the Great White Pine fell to the forest floor. Massive stumps were stubbornly rooted in the soil, along with mixed hard

and softwood trees. Fields were cultivated between stumps in cut-over clearings which were microscopic in contrast to the size of surrounding forests. Even today 90% of the land in the county is forested.

Farming in the Finn River area faces even more climatic difficulties because of heavy snows and fall rains. Heavy snowfalls delay spring plowing because when the snow finally melts, it takes two to three weeks for the fields to dry enough to work. In August, Lake Superior is at its warmest and cool air masses traveling over it acquire additional moisture causing heavy rains during that month. This often prevents the farmer from completing his plowing. Hence, cultivation is hindered by wet fields before and after the short growing season.

The first great task facing Finn River pioneer families was clearing the land. Trees and stumps became something to be conquered, cut down and burned. A family's prestige became associated with the size of their clearings. After falling the trees, skidding away and piling the logs, the farmer had to face the most difficult problem, removing the stumps. Generally a farmer dug a hole underneath a stump and started a fire. It would burn for several days and be left to rot for a year or two. Then he put dynamite in the crevices to blow it into several manageable pieces. An ox or team of horses would pull apart the dynamited pieces, aided by a grunting, sweating Finn, pulling and prying on an oversized equivalent to a crowbar.

An aging second generation Finn River man told me from his hospital bed of his recollection of clearing the land.

> They had to clear the land of the giant stumps. After the First World War the government had a surplus of dynamite called picric acid. Pa used to just glance at one of those stumps, size it up and know just how many sticks to put in it, and know just where to put them. I remember one stump took 35 sticks of dynamite. You know what that means. Those stumps were so big that the roots would go 30 feet underneath the ground and they were as big around as a grown man. I remember once my pa and the neighbor teamed up their horses trying to pull out a big stump. It made you shiver nervously to see how hard those horses were straining. You were afraid they might die on the spot from a bursted heart.
>
> Another neighbor came over with his ox and Pa said that was really some sight to see that ox strain against that stump. He was almost doubled up in a hump straining so hard against that stump. Our neighbor was proud of that ox and he drove hard trying to show Pa that he could pull it out. That ox would double up, pull very slowly and when he could feel that there was something very heavy holding him back, he would back up a few steps, double up so it looked as if he had a great hump on his back, and lunge forward with all his might against the resistance of that stump.
>
> Everyone was clearing land in those days. I can remember that we could see big clouds of black smoke going high in the air when they were burning stumps and brush piles over as far as French Hill. During the day you would be hearing explosions all over the country like there was a war going on. At night we saw big bonfires when the other farmers were burning stumps and brushpiles.

Clearing the land was everyone's job. Adult males did the heavier work of prying and chaining the stumps, but the women and children jumped on or pulled a long bar which ripped apart huge masses of wood. Women and children carried and piled brush and branches. The forest contained both

the big pieces and the small pieces of wood, and everyone did what their physical limitations allowed.

During this period of clearing the land, pioneer settlers adapted to the conditions and developed an exchange pattern to satisfy basic energy needs. Stumps were often too difficult to remove with only one horse, so neighboring farmers combined their horses into a team, doubling their horsepower. Since each man knew the idiosyncracies of his own horse and the little tricks required to make him work, it was often necessary for the neighboring farmers to work together, several days on one man's land and then several days on the other's.

In the early days most farmers had only one horse. A horse was initially a very expensive purchase, later requiring what at that time was a great deal of grain, hay and shelter. As soon as a farmer could accumulate enough money, he generally bought another horse.

When he became accustomed to working with his new team, a farmer could use them as a means to make money. Every logging contractor needed teamsters in the winter. Teamsters kept their horses in the company barn, cared for them, and worked them during the daylight hours. A teamster was always needed to haul logs on sleds and pile them both in the woods and in the railroad spurs. They worked four hours longer than the regular jacks, but made about twice as much money. As farmers bought their own teams of horses,

they no longer needed regular horse exchanges with their neighbors, and this early "horsepower" exchange custom ended.

Those farmers who settled before the heavy migration movement during the Copper Country Strike were in a position to play, on a very small scale, the role of the landed gentry of the old country. Hungry ex-miners and their families would work all day clearing land in return for food and shelter. These labor for food and shelter exchanges did not last very long, but it gave a few farmers a head start in making a farm out of stump clearings.

Logging contractors usually had farms larger than the other farmers. During the spring and summer months they hired landless lumberjacks to clear their land, generally in return for food and shelter and sometimes a very small wage. Landless lumberjacks cleared many acres of farmland in the Finn River area even though their names seldom appeared on deeds. These bachelor lumberjacks moved in with the family, ate with them, and became in a sense a regular part of the family. Many farm families allowed old lumberjacks to live out their days in small shacks when they became too old to work either on the farm or in the woods.

This tradition still exists today in Finn River: occasionally a farm family will take in an old bachelor and let him live out his days in return for minor work. When one brother inherits a farm the unmarried siblings generally are permitted to live on the farm in return for participating in the chores.

Clearing the land presented the early pioneers with the constant threat of forest fires. If a sudden gust of wind blew from Lake Superior, huge fires burning large hardwood logs, which were unmarketable in pre-railroad days, sometimes got out of control. The physical proximity of such a huge body of water made the wind conditions unpredictable. Aging members of the pioneer generation recall fears of forest fires.

> Years ago there were a lot of forest fires. People were always clearing land and burning brush piles and they never took care of them and the wind would come up and blow the flames and sparks out into the woods and in minutes it was uncontrollable. We had no fire-fighting equipment then and it would just burn for miles and miles until it naturally burned itself out. Our clearings weren't very big then and with the woods so close to the house, sparks would fly from the burning trees onto our cedar shingled roof.
>
> I remember in 1907 I saw the fire coming while playing in the school yard during recess. I told the teacher I had to go home and warn Ma. She let me go and I ran all the way home. When I got to the river my brother was there fishing and I told him I saw the fire coming toward the house. We both ran home and we helped Ma move all the furniture out into the field away from the other buildings. With snow on the ground it might not burn. That's why all these farmers had haybarns out in the fields away from the house and cow barns, and why there are so many separate little buildings around the farm.
>
> We ran back down to the river and got down close to the water with the neighbors. The men went back and tried to save the buildings. I remember we put all our clothes into a square box and brought them down to the river. Two neighbor families were there with their children.
>
> They tried to get our bachelor neighbor away from his home but he wouldn't leave it. Every little while they would go see if he was alright because the smoke was so terrible you couldn't see. He had managed to cover his eyes because his eyes were so . . . you know . . . burnt by

the smoke. His chicken coop burnt up and so did the new school.

A man over in the area west of the cemetery would not leave his farm even though the rest of the family and the neighbors begged him to go. No, he wanted to stay there and save it. They came back three days later because the ground was so hot even after the fire that you couldn't even walk on it with shoes and boots on. They found him down in the well. It got so hot he went down there to keep from burning and he suffocated down there, and was roasted to death.

We were always on the lookout for fires in olden times.

That fire in 1907 helped clear a lot of the land around here even though it killed some of the people and burnt many of their homes. The French lumberjacks had taken all the pine out and the rubble was left. You can imagine what pine needles and branches are like when they are dry; just like a tinder box. The fire started over here just west of the cemetery and roared through like a flash. When the fire finally died out, all that was left were charred stumps. All the farmers had to do was gather up the remaining brush and start plowing. And that same year they planted hay on it. And you know, that hay grew so high that you couldn't see a grown man if he were out in it. That's right, higher than a grown man. [Today a three foot hay crop is excellent.]

Early attempts at farming were entirely oriented to subsistence. Rich black soil lay around the hardwood stumps. Farmers planted potatoes, carrots, and rutabagas; and rye, barley and oats in between the stumps. Soil was improved because the fires left enough potash to neutralize the acidic soil. The farmers were pleased with this rich black soil which for centuries had accumulated the composted leaves and twigs falling from the trees.

You should have seen those potatoes Pa grew in between the roots of those stumps. His secret was to clear a spot of ground in the late fall and then plant potatoes there in the spring. Those potatoes

were like small footballs, and the cabbage and rutabagas grew big too.

The farm provided the first generation with necessary food and shelter, but that was not enough. They needed money to pay off the loan interest and the land taxes. From the early 1900s up until the mid 1930s, the average Finn River farmer needed approximately $100 a year to cover interest and taxes. They tried every possible means of making money.

Beginning in November the adult male of the household logged his own land or hired himself out as a lumberjack for one of the local entrepreneurs holding a logging contract with a nearby sawmill. If he were lucky he might work until the beginning of April and would gross $400 at the very most. If he had a team of horses he might make as much as $600 to $700 hauling logs for a contractor. Although teamsters made more money, farmers were reluctant, because horses could be injured hauling and piling logs in winter, and it did not take many winters to wear out the work potential of a good horse. Horses were needed on the farm.

Many woodsmen were paid in company script because two of the early contractors owned general stores in Finn River. This seemed to be the pattern all over the Upper Peninsula. Local logging contractors also owned the only, or one of the few general stores. This was quite an advantage to the entrepreneur. He could insure a steady supply of customers, and the company script he paid would all come

back to him in the store. The circulation of his own currency within the community released a considerable portion of his own monetary reserves for capital investment to expand the scope of his logging operations. He could also deduct the "costs" of his wages from his taxes as if they were actually paid in monetary currency.

Even if he paid his lumberjacks in dollars, the money would virtually all be recycled back to him since there were few other stores in the area. He could charge high prices either in his own script or in dollars because with few other stores around, his customers had no other shopping options and were unable to compare his prices with those of other retailers.

At the end of March the lumberjack-farmer might have $350 saved, if it were an exceptionally good year. After paying the loan interest and land taxes, this amount would be reduced to $250. This would have to cover investments in farm animals, farming equipment, tools, building supplies, ropes, cattle and chicken feed, seed, household supplies, clothing which could not be made, and medicine, grocery, and blacksmithing bills. If any money were left over from these expenses, it went toward paying off the actual loan.

Little money was made on Finn River farms in the early 1900s. Farmers with larger herds could make about $1.75 a week selling a five gallon can of cream. When one considers the amount of milk a cow on winter feed must give

to make five gallons of cream, and the amount of work required to separate it, the money seems little. But every cent counted toward paying monetary expenses; and virtually every cent was saved. A culture of thrift evolved because monetary cost-minimization became the basic life style of the first generation Finn River pioneers.

The husband received the cream money because it was he who transported it to the railroad depot. Some of the cream was churned into butter and along with the surplus eggs were exchanged at the general store in return for monetary credit toward items which were purchased. The butter and egg money belonged to the wife. However, she never actually touched this income; it was always applied to the grocery bill. Butter was worth 12¢ a pound and eggs were worth 10¢ a dozen.

For the first generation, life was geared toward the hard physical work necessary for survival. Logging and subsistence farming were the fundamental economic activities, and they were determined by seasonal constraints.[2] During winter, farming was restricted to milking and caring for the herd. Logging was possible only during winter because the log hauling technology at the time was confined to the sleigh. Iced sleigh trails were necessary to overcome the friction between runners and the track surface. Horses

could not haul a load of logs in spring, summer or early fall.

The solution to the problem of when to do which tasks was fixed by climatic variation. Men worked in the logging industry in the winter and worked fields during the summer. Women and children assumed full responsibility for the farm during the winter and in the summer divided their work between the hay fields and the household garden.

In the lumber camps, an hour before daylight the camp foreman shouted, "Daylight in the swamp." Seasoned jacks jumped from their bunks and snatched the finest and driest wool socks and choppers from the clothesline. Slower greenhorns ended up with "air conditioned" or damp socks and worn out choppers.

Silence was the standing rule in the mess hall. A hungry jack could only speak to ask for food. The rule was designed to get them "chowed down" and out in the woods without wasting time, as well as to avoid arguments and brawls. Chow was the best available. These tarpapered shacks hosted some of the heartiest meals in the countryside. Breakfast was of gigantic proportions; eggs, bacon, sausage, fried potatoes, steaks, hot cereal, and especially flapjacks and Kayro corn syrup. Sandwich bread and cold cuts were usually at one end of the mess hall and after breakfast jacks made their own lunches. If the men were not working too far from camp or too widely scattered, a choreboy drove a lunch sled out to them at noon.

After breakfast the jacks returned to the bunkhouse, got their gear, and then walked into the woods. At the first crack of dawn sawyers were already working. They worked a shorter day than the other jacks because if they felled too many trees the "skidders" could not drag them all to the logging roads.

"Swampers" were generally greenhorns or young men not thoroughly familiar with woodswork. They spent the entire day chopping and piling brush to clear skid trails to make it easier for the skidders to drag out the fallen timber. This was dangerous work because a razor sharp axe could bounce off a frozen sapling into a leg or foot. Swampers often chopped the limbs off fallen trees, also a dangerous job. Fallen trees often pinned down maple and birch saplings underneath the surface of the snow. When a swamper or sawyer chopped limbs from a fallen tree, he might unsuspectingly release a pinned down sapling that could spring back with enough force to smash a man's skull. Those with broken jaws, dislocated vertebrae, and fractured skulls were the most fortunate survivors of such accidents.

A Jesuit missionary wrote of his first experiences working in the virgin forest:

> Another hemlock fallen the same day had its slender top bent like a bow between two smaller trees. As I walked along it, trimming off the branches, I cut loose a little birch tree that had been bent down by the hemlock. As it whipped back it hit me a stinging blow in the forehead. This caused me to fall down 15 feet into deep snow. I landed leaning backward and sprained my spine. That was not all. I climbed back on top

> of the big hemlock and went on trimming away branches. Then my bouble-bit axe slightly caught on an over-hanging branch during my backswing and swerved as it came down, cutting through my left shoe and inflicting a deep wound on my left instep. The wound bled profusely and stained the snow as I hobbled home leaning on Peter's shoulder. (King, 1968: 14)

Men who dragged logs to loading jammers on the main logging roads were referred to as "skidders." Skidding involved attaching a "choker" cable to one end of the log, and with a team of horses the log would be "skidded" along the "skidding trail" to the main logging road. Skidders also ran the risk of injuries, from spring poles. As soon as the big log began moving, spring poles flashed back and forth. If a sapling did not hit, it might catapult branches at a velocity that could seriously injure a man. If a man had his own team, he could make almost $2 a day skidding logs.

Men were needed to pile logs onto the heavy sleighs. They used cabled hooks controlled by a pulley at the apex of an "A-frame" jammer, erected at a loading site on a main logging road. Two hooks grabbed the log and a team of horses pulled on the cable, raising the log over the sleigh where it would be lowered when in the correct position. When the last log was placed into position, the load was bound and chained. A careless load might result in the death of the teamster. Piling snow- and ice-covered logs was a particularly hazardous task. If one were not careful the load could easily collapse and crush a man beneath it.

An experienced loader could anticipate the danger and "do some very quick stepping" to avoid being crushed. It was common for men to die beneath a collapsed load.

Perhaps one of the coldest jobs was driving a team of horses hauling a load of logs by sleigh. A teamster drove the horses sitting high on the top of the frozen, snow-covered log pile. Cold winds blew through his woolens. The teamster had no one to keep him company between the loaders to the jammer and the men in the Finn River railroad yard.

Teenage boys were hired to pack down the sled runner trails with snowshoes and pour buckets of water to make ice layers to facilitate hauling large loads. Danger spots were steep downhill slopes where the load might gain its own momentum and run out of control, killing the horses and the driver. Boys scattered sand along such downhill slopes so the friction would prevent an accident.

After the railroad came through, farmers fortunate enough to live near railroad spurs and to own a good team of horses would try to hire out as a teamster in winter. This way, they could earn money without living in a camp. Some of these farmers woke up at 3:00 A.M. to feed and water their horses so that they might be able to haul two loads of logs to Finn River. After unloading the second load, a teamster drove his team home for the night. Work did not end for him until later that night when the horses were rubbed down,

brushed, fed and watered. Teamsters worked the longest day. They were the first ones up and the last to go to bed.

After an enormous dinner of either roast beef, pork chops, ham, and perhaps venison, homemade bread, potatoes, rutabagas, and coffee with pie and cake for dessert, the well-stuffed jacks retired to the bunk house. While laying in their bunks, sawyers filed their saws, chewed Peerless, and carved wedges, setting them under the stove to dry for the next morning. Socks and choppers were hung up on the clotheslines over the stove, everyone silently looking for tomorrow's first choice. Some jacks played poker under the kerosene lanterns, some read books and newspapers, while most just lay back in their bunks and listened to someone's stories.

Life was very difficult back on the farm. Whereas the men had only one job at a time, either woodswork in the winter or field work in the summer, women were left with dual responsibilities during the winter months. The woman of the household was left all alone to manage the farm, while at the same time keeping disciplined order within a usually very large family of children, and also managing the household. According to John Kolehmainen, "the Dean of Finnish-American historians," "the overburdening of the woman with work is an old custom with the Finns, passed on since pagan times, from one generation to the next" (Kolehmainen, 1951: 59).

The woman of the household arose first to start the fire in the kitchen stove, make the morning coffee, and cook a breakfast of eggs and oatmeal. Then she and the children over six years old would go out into the barn and feed the cattle. Walking to the barn through snow drifts carrying a kerosene lantern was a dreaded journey after being so snug in bed, and then warm next to the wood stove. Feeding and watering the cows and horses was the first barn chore of the day, assuming the woman did not have to dig out a path through a snow drift covering the barn door. Then the cows' udders were washed by one of the children while the mother began milking by hand. After milking the woman shoveled manure and wheelbarrowed it out through the snowdrifts to the manure pile behind the barn.

The farm woman then had to hurry back to the house to get the children ready for school, find their clothes, and get them dressed for the long walk to the one-room schoolhouse. If her children were very small, in addition to caring for them, she would also have to gather the eggs, feed and water the chickens, fill the woodbox, keep the fires burning, separate the cream and get it ready to deliver to the railroad depot, and churn butter to exchange with the storekeeper.

If she needed groceries she would have to hitch up the horse to the sleigh, or if her husband were using the horse in the woods, she would have to ski to the store in

Finn River. Sometimes she would be able to jump onto a passing log sled and get a ride all the way there.

In the afternoon she might bake bread and nisua (coffee bread), knit sweaters, socks or mittens for her family, darn socks, perhaps spin wool to make yarn, or weave rag rugs for the floors.

After dinner it was time to do the barn chores again. Younger children stayed inside to wash and dry dishes. Their mother had to make the children study their school lessons. Perhaps after getting them off to bed she might have a chance to relax, while perhaps sewing a quilt. The woman also had to manage the household finances, deliver calves, and care for sick or injured animals.

If her children were too young to work, she pumped water for the house and the animals, a dreaded task in cold winter. Outside water pumps were always frozen and generally required several trips back to the house for water to prime the pump. After filling the water barrels, she carried pails of water back into the house to fill the copper boilers and kettles. She also had to pull the sleigh bearing heavy barrels of water through the snow drifts back to the barn for the animals.

If you walk through the Finn River cemetery and look at the residents' life spans, it is clear that the women died at younger ages than the men. While doing all this work, they were often either pregnant or nursing a

child. It occasionally happened that a woman would give birth to a baby at night and in the morning do the barn chores.

If the weather permitted the man usually returned home from the lumber camp on Friday night. He could generally ski directly home or ride the train to Finn River and ski home from there. His wife tried to get all the chores done earlier than usual so she would have time to visit with him. Saturday and Sunday were a bit of a rest for her because her husband might do some of the heavier work, if there were no sleighs, horse harnesses, or wagons to repair. Or he might saw ice chunks out of the frozen mass covering the river, and haul them to the ice house where they were covered with sawdust for next summer. The woman and children, however, still did all of the barnwork because that was considered "woman's work," and a man would appear deviant if he were to do such things. It was not until milking machines entered the local dairy industry that men began working in the barn. Machines needed a man's "know-how" to run properly.

Saturday night was and still is sauna night. It was the man's job to fire up the sauna. On winter days this began early in the afternoon in order to thaw out the frozen cedar log walls. Older children carried in water as soon as it warmed up. Sauna visitors might come over. These were (and are) generally the closest of friends and family who had been going over for sauna for many years, and were

expected to come without invitation every Saturday night. The males from the visitor's family and then the females of the visitor's family would take a sauna. Cross-sexual saunas other than a husband and wife were not taken.

After sauna everyone assembled around the kitchen table for coffee and pastries. Children ate quietly while the adults talked. As soon as the children finished, they ran to another section of the house to play, hidden from the surveillance of their parents. If one of the adult males began to tell stories the children might return to the kitchen, find a warm spot next to the stove and listen with keen interest.

Sunday morning after the barn chores and breakfast the man and the oldest male child hitched up the team of horses and sleigh and everyone went to church. In the very early days of the settlement the community was so isolated that they had a preacher only once every two or three weeks. After hearing the sermon and singing the closing hymn, all went downstairs and visited over coffee and the noon meal. Men took one section of the dining room or perhaps went outside for a smoke or chew and visited out there.

After Sunday dinner a couple either visited a relative or neighbor, or went home to receive visitors. It was a choice; generally the man preferred to stay home after being at the lumbercamp all week, and the woman wanted to go visiting after being on the farm all week.

The harsh winter placed real constraints on social life. It was difficult to go out and visit because of the time required, both to hitch up the team and drive to and from the neighbor's home meant being outdoors in the cold night air for a long time. Extremely cold nights precluded visiting. But Finn River people maintain that, despite apparent hardships, in "olden times" more visiting went on, because people had time for one another.

Spring comes on very quickly in Finn River. When the spring thaw begins people are more cheerful. Settlers in a neighborhood in the northeast corner of Finn River awaited the rising flood waters of the river. The cabbage farmers there watched nervously as the floodwaters covered their fields and flooded their basements. Rowboats were used whenever someone had to go to the village area of Finn River. In the blacksmith shop and the general stores men wondered aloud whether the bridges would be washed out. Some complained about getting stuck in knee-deep mud, while others cursed the prospect of walking on the slippery logs of corduroy roads.[3] The early Finn River pioneers did very little traveling in the spring thaw, as the frost-heaved roads were impassible. Visits were confined to the near neighbors.

Everyone waited for the last of the snow to melt and for the fields to dry. Men had a break from logging because for several weeks, roads were too muddy to travel. The break gave them a chance to catch up with their farm work. The women and older

daughters did the spring cleaning as the house was scrubbed from the floor to the ceiling with soap and water. Rugs and carpets were carried out and beaten by the younger children.

As soon as the fields dried, toward the first of May, men began spring plowing. Stumps were easier to pull out in the soft water-soaked soil and the "war" against the forest began as blasting was heard throughout the busy settlement. Men plowed, and women and children planted the seeds in the garden. Other than plowing, the household garden was the domain of the woman of the house, and her children, under her supervision.

People did specifically springtime activities. Trappers got their equipment ready for trapping beaver, muskrats, mink and coyotes. Woodsmen looked for coyote tracks and followed them to dens where they dug out the pups, killed them and collected the $15 or $20 bounties for them. Some families collected maple sap and boiled 40 gallons of it down to one gallon of maple syrup. Fishermen set their illegal nets and home-made fish traps when the spring rainbow run began. Men fixed harnesses and repaired wagon wheels, plows, and planters.

Children worked in the barns, chicken coops, hayfields and gardens. Since seeds are not digested in a cow's system, gardens fertilized with cow manure grow a thick crop of weeds. Everyone in the second generation remembers weeding the garden while wanting to play.

Toward the end of June and the beginning of July the haymaking season began. Hay harvesting was a very important activity when there was little money for purchasing hay seed, because cows were fed cured hay in the barn for over six months of the year. No one was spared from haymaking; the very young and the very old all pitched in. Toddlers walked alongside the horses to chase flies off of them with elder branches. Those on the top "panked down" the load by jumping and stomping on the hay pitched up by their father, and perhaps uncle and older brother.

In the earliest days of haymaking between stumps, men started cutting the hay just before daylight with a scythe and would quit by 10:00 A.M., as the day became too hot to work so intensely. After a day of drying, the next morning women and children raked the hay into piles while men cut the next area to be harvested. Men afterwards carried these piles, bound by a green inch-thick elder pole, over their shoulders back to the haybarn where children jumped and played while scattering and packing the hay. If one had his hay out on the field and rain clouds appeared suddenly, neighbors helped each other gather it in. Later, hay was carefully piled on a hay wagon with a pitchfork. Someone rode the horsedrawn load back to the barn where it was unloaded by a large "hayfork." The mechanically operated hayfork carried a mound of hay into the barn, and dumped its load when someone below tripped it by pulling a rope.

On Saint John's Day local Finns stopped working to celebrate. It was the twenty-fourth of June and the Finns called it Juhannus (midsummer). Bachelors hit the bars, and families attended large picnics. There was music, singing and dancing, and a grand feast. At night local people burned candles on the window sills. It was a time to celebrate the Finnish cultural spirit.

Just 10 days later Finn River people were celebrating the fourth of July. The American national holiday was a big event in the lives of the first generation pioneer farmers. Farmers and lumberjacks lined the streets of the nearby town to see the parade. Aside from celebrating the birth of the American nation, it was an excuse for persons isolated on a backwoods farm to go to town and see friends living beyond the narrow confines of their own neighborhood. For some of the Finns, it was a time to really celebrate, and a time for the more religious to quietly assemble in the church picnic site behind the parsonage.

After the haymaking season the entire family went blueberry picking. Blueberries thrived in the burnt-over clearings. Each family packed their lunches, cookware, clothing and buckets into the wagon and drove out to the best blueberry grounds, 12 miles away. Many families went together, picked during the day, and sat around the campfire at night. It was a holiday for everyone, a special occasion.

Back at home the work really began. Pots of berries simmered on the stove as the women and older daughters canned them and made jams and jellies. For several weeks the house was so hot one could barely stand it in the kitchen. Fortunate women years later talked their husbands into building a "summer kitchen," usually attached to the sauna, for canning.

The garden vegetables were also canned. Mother and children picked vegetables and again she and the older daughters cooked over the hot stove.

In the fall a cooperative momentum swept the community since the basic survival tasks had to be done quickly before the rains and winter snow. Grain harvesting pulled the community together as "threshing crews" moved from one farm to another. Each farmer would fall his own firewood logs and skid them to the woodshed in preparation for the woodcutting bees which also moved from farm to farm. The blocks were split and piled in the woodshed. Men and their horses plowed fields anxiously trying to finish before the rains made the soil into unworkable mud.

Everyone went into the potato fields and with pitchforks, manure forks, grub hoes and shovels, all dug potatoes, brushed off the sand and dumped them into gunny sacks. Potatoes were usually carried into the cellar underneath the house where the frost would not harm them. Rutabagas and turnips were washed and dipped in parafin for protection. Carrots were dug out in the early morning and buried in bins

filled with river sand. Apples were picked and wrapped carefully either in a sheet of newspaper or with a page of the Sears and Roebuck catalog and packed in crates to ripen later on in the winter. When it was cold enough to freeze, a cow or pig was generally slaughtered. The rainbow trout began their upstream journey, and the brown trout began their spawning run. Everyone was scurrying around busily trying to do just one more job before the snows fell.

Adult men began oiling their rifles, sharpening hunting knives, and talking about where might be a good place to deer hunt on opening day. In the village area of Finn River farmers were talking to logging contractors who might need woodsworkers and teamsters. And once again the cycle started: adult men left their homes to make enough money to pay off the land taxes and the interest on their land loans.

Adapting to a commercial world

A pioneer Finn River farmer's basic problem was to scrape up enough money to pay monetary debts to loan companies, in a setting where few cash employment opportunities were available. A large reservoir of labor presented local logging contractors with a buyer's market. Local merchants enjoyed a seller's market because the nearest competition was nine miles away. To the immigrant farmers it seemed as

though wherever they turned, "profit-seekers" were trying to take advantage of them.

In response to these pressures, the first generation Finns began to close ranks and shut themselves off from the exploiting and hostile world. Relying upon their old country cultural traditions they developed an exchange system within the community as a means of coping with their problems. Several social organizations were intentionally created by the immigrant farmers to cope with their economic distress by orienting collective activity toward the goal of minimizing economic costs.

To the immigrant Finnish farmer, the outside, English-speaking world was filled with sinful knaves who would take economic advantage of poor people. Every now and then farmers heard of another farmer losing his land for failing to make the interest payments on the loan. Periodically an English-speaking bill collector working for the absentee loan companies traveled through the area "visiting" farmers who were late making payments. Several of the second generaton remember how nervous everyone suddenly became when a member of the family would alarmingly whisper, "Here comes an English-speaking stranger."

For the Finnish farmers moving into the Finn River area there was no immediate escape from ethnic conflicts.

Even though most of the French moved away to nearby sawmill towns, those staying in the area were not trusted. Several French families lived adjacent to the Cabbage Road neighborhood toward the east in what is called French Hill.

Finns in Finn River also disliked the Swedes.[4] They felt as though the Swedes still believed themselves superior so they resented and excluded Swedes from the community social life. In the early days of Finn River's settlement there were four Swedish families living in the area. All of them had arrived 15 years earlier, and because of their head start, were more prosperous than the Finns.

The Swedes interacted mainly with other Swedes and French Canadians. Both of these ethnic groups thought the Finns were "clannish" because Finns refrained from extending their social life to others. They resented this social exclusion.

In the nearby town, ethnic relations between Swedes and Finns were different than in Finn River. Between the two places a Swedish farming settlement was established. Further east, the town was the scene of many fights between Swedes and Finns. As a Swedish lumberjack told me over a beer,

> It has been so that the Finns did not dare go alone on the streets after dark, so they always had to go in bunches. The Swedes were always watching for the Finns so that if they'd come they'd get the best of them. So . . . was a young man then. He was still single. The Finns planned it that they'd put . . . going ahead alone and the other ones would watch to see if the Swedes came after him. He was a trained man, so he had hit that first Swede a glancing blow that ripped his ear off and he started screaming. But that didn't stop the rest of them, and they all got into a pretty big fight. He was six foot four and raw boned. Not an ounce of fat. And a very peaceful man; but he was nobody to go and fool around with.
>
> Remember that . . . who had a farm here and ran that saloon in . . . ? The Swedes used to hang out there and sometime a Finn would come in there by himself and the Swedes would bunch up on him and get the best of him. Once a Finn had a gun and when the Swedes jumped him he shot that . . . in the arm.

After experiencing ethnic discrimination in the mining towns with the "Cousin Jacks" and the Irish, and in the sawmill towns with the Swedes and the French Canadians, the Finns closed ranks and formed communities of their own kind. To this very day Finn River is perceived by outsiders in nearby towns as a closed community inhabited by Finns who "like to keep to themselves," and who resent intrusions into their community affairs. For the early immigrants, Finn River became the neutral center of a hostile world surrounded by unfriendly and exploiting people. Finns learned to trust and cooperate with one another.

As the first generation Finn River residents withdrew from the larger local society, they fell upon the adaptive features of their own cultural tradition. Not

unlike other ethnic groups, the Finns had old traditions of cooperation. Since ancient times there has always been the communal labor festival for larger building projects such as houses, churches, barns, cooperative stores, and church boats in Finland. There are also grain harvesting and wood-cutting communal labor festivals. Seal hunting and salmon fishing were masculine communal activities in Finland. Kinsmen and neighbors left home together and camped out on river banks and in the forests for many days for these activities.

A tradition peculiar to Finnish rural culture centers around the community church boat. Finland is interpenetrated with interconnected rivers and lakes that provided for many years a natural transportation system. Each community built its own church boat and all of the men, women and children pitched in. Every Sunday morning the entire community traveled in this boat by a river route to their church. Often different communities raced. Keen rivalry developed, and certain communities had reputations for having more cooperation and hence a more beautiful and effective church boat than others. The extent of community cooperation was symbolized by the quality and appearance of the boat, which was a statement of the community's status with regard to other early settlements.

The pioneer Finn River farmers had within their old country cultural heritage a set of beliefs focusing upon the necessity of mutual aid as a means to struggle against a

very harsh climate. In spite of the very limited resources of these people, belief in the legitimacy of various forms of interfamilial pooling of labor and economic resources gave them the collective strength to "make a go of it."

In 1904 a group of Finn River farmers pooled their meager resources and purchased a steam powered threshing machine for $700. That was far more than an individual farmer could afford to pay for a piece of machinery to be used on his own farm only a couple of days a year. Shares were sold for $10 each. Many of the farmers wanted the organization to be a cooperative by intentionally separating a member's investment from his political influence within the organization. But they could not mobilize enough money to meet the necessary $700, so some of the members had to buy considerably more shares than others. Interested parties had a meeting and four men said they would pitch in the balance, but they demanded one vote per share, which would transform the organization into a corporate structure. Members voted to go along with it even though they disliked the inequality, because they really had no other choice. Several members withdrew their shares on the grounds that this very decision would give a few more influence within the company and within the community, and "this would be planting the seeds for further troubles." The four men investing the most money had enough votes between them to decide company policy.

A price of $2.50 per setting was decided upon. There were no price advantages for members, but their fields were threshed before nonmembers'. A farmer could have up to 100 bushels threshed for the $2.50, and anything beyond that quantity cost approximately 2¢ per bushel. The company generally lost money threshing rye because there is such a high proportion of straw per bushel of grain. Both hayseed and peas were threshed at an hourly charge.

Grain harvesting season is short in the Upper Peninsula. Everyone works anxiously to beat the fall rains. The first problem confronting the new threshing company was whose grain would be harvested first? Members decided that the thresher would travel on a specified route. It traveled up and down the farm roads, stopping at adjacent farms. One year it started at the North Road part of Finn River and worked north and east toward the Finn River village area. To avoid inequities, the following year the thresher would begin at the other end of the line in Finn River and work its way back toward the North Road area.

Even though the political structure of the organization was corporate, it was essentially a non-profit organization designed to get the members' grain threshed. One year after the expenses were paid, it had a balance of $180. The sum was divided among the members, and the following year the fee was reduced to a level which the membership expected to put the company just beyond the break-even point.

The members with disproportionate political influence did manage to take advantage of their position, and get a few favors. If a nonmember wanted his grain threshed or wanted to become a member, "he had to get in good with one of the big shareowners first." The president's office was generally held by one of the larger shareholders. Since the number of members had to be restricted in order to get the grain harvested before the fall rains, the community needed several threshing companies.

In the Finn River area there were several other threshing organizations, and all of them were "small scale profitmaking" operations designed primarily for getting the grain harvested. Spruce Creek had a threshing company; a man from Cabbage Road worked all over the Finn River area with his own thresher; there was a threshing company working in and around the village area of Finn River; someone worked the Hemlock Siding area, and another worked around M-35 and the Mill Road area.

One person was generally hired by the company to oversee all threshing operations, and to maintain the thresher. This job usually went to the son or another close relative of one of the larger shareholders.

Threshing was a big event in the lives of the Finn River farmers. It was one of the most exciting activities the isolated families had to look forward to. A great deal of preparation was necessary for the family hosting the threshing crew. All of the grain had to be cut with a

scythe and stacked in the barn, ready to go into the thresher. A large pile of hardwood was split and piled where the steam engine would sit. Children collected "gunny sacks," and binder twine was gathered into rolls. The woman of the household began cooking days in advance for the large threshing crew and all the neighbors who would come to watch. It was very essential for all the preparatory work to be done so that the threshing crew was not delayed. Time was very scarce because the fall rain season approached rapidly. All the hurried, last minute preparation stimulated the expectations and imagination of everyone in the family, making the event even more exciting.

Children stayed home from school to watch that big threshing machine all the activities.

Early in the morning of a family's threshing day, the woman of the house began cooking a large breakfast for the neighbors and threshing operator coming in for the traditional morning coffee before starting to work. She knew the children would forget all about their chores once the excitement started and she would not have time to supervise them, so she made them hurry to get chores done early.

Soon neighbor men converged upon their farm. It was the neighbors' turn to help on the threshing operation because soon the thresher would be at their homes. When they and the thresher arrived, they set it up near but not too close to the granary and straw barn because the chimney

belched smoke and sparks when threshing began. They also fired up the boiler.

The woman of the household invited her neighbors to come in. The threshing crew then walked to the door and wiped their feet carefully on the doormat so they would not track dirt onto the kitchen floor. The family sat around the table and listened closely as the men talked about the threshing operations and problems encountered along the road. The hostess urged them to eat more nisua and have another cup of coffee. The neighbor men politely accepted and complimented her on the quality of her nisua. She blushed and dismissed the compliment, but everyone in the kitchen knew that it was "sweet music to her ears." This was her big day. It was her chance to demonstrate before all the neighbors her skills as a cook. As the men walked out to their jobs, they thanked her for the coffee.

The threshing operator assigned jobs and the hard work began. Threshing generally required a crew of five to seven men. If sheaves were in the barn or in the field, two teams carried them to the thresher. One man operated the thresher, feeding firewood into the furnace and carrying water to fill the boiler. Children old enough carried water. They also might help carry the straw into the barn and pack it down. Smaller ones watched and played.

Someone cut the twine off the sheaves and fed them into the hopper. The thresher operator watched the bushels filling the tipping into the sacks, and kept count of the

volume. Generally the man owning the farm held, exchanged and tied gunny sacks as they filled with grain. Another worker carried the heavy grain-filled sacks into the granary. Someone else gathered straw into piles, and perhaps with the help of the older children, carried it to the barn.

In Figure 18 is a photograph of a threshing crew at a farm in the Church Road neighborhood, taken in 1910. On the left next to the steam engine is a pile of firewood and a water barrel. The very long belt kept the spark-snorting steam engine a safe distance from straw-filled barns. The sheer weight of this belt maintained enough friction on the pulleys to prevent slippage. Remains of a pine stump still stand in the middle of the yard. In the distance one can see the forest's edge, the battle line between the pioneers and nature. Notice by the size of the children that they are not very far apart in age. Women were very busy making the second generation. In this photo they seem to be wearing their "Sunday best." Figure 19 shows a working crew.

At noon the farmer's wife announced it was time to eat. The men washed outside by the well and soothed their parched throats with a drink of cool water. Inside on the kitchen table was the finest dinner the woman could provide. Chicken was about the best anyone could do at that time of the year, and the threshing machine operator managed to smile so as not to offend the hostess, as he sat down to his seventh straight chicken dinner. Plenty of chicken, potatoes, and vegetables were there and the woman of the

Figure 18. Finn River Threshing Days.

Figure 19. Threshing Crew at Work.

house, helped by a relative or neighbor woman, encouraged everyone to eat more.

Threshing days were a very serious time for the woman of the household. A woman's self-worth was determined by how successfully she performed the roles of wife and mother. An important attribute of each role was her cooking skill. Men complimented her and she blushed and insisted that her meal was not very good at all. But she would study very carefully the expressions of the men while they ate. The men in turn were very careful to express favorable gestures.

After the main course all were confronted with home-made pies, cakes, and plenty of coffee. Men conversed with one another, stopping every now and then to compliment the hostess. They might have said, "I've been on this threshing crew for three days now and this is the best pie I've had yet," and several others would echo in agreement. She knew exactly where the threshing machine had been, and she mentally compared her performance with that of the nearby neighbor women. She also knew that after the men left her kitchen they would eat in the kitchen of the next neighbor woman down the road, so she had better do a good job. The traveling threshing crews generated mild competition among the women of the community. As an old thresher operator told me, "Everyone tried to outdo the others. She made sure her very best was on the table. But do you know, even to

this day I don't want to see any more chicken or lemon meringue pie."

Threshing bees were not simply working occasions but a time for festive enjoyment. Very warm feelings were created as the receiving family experienced gratitude. Their neighbors "felt good inside," since by working together for a neighbor they were experiencing the joy that comes when circumstances permit one's actions to match deep-seated values. Emotions surrounding this ritual are blended with gaiety as laughter and storytelling capture the attention. Folks went home at night feeling very good.

Threshing bees as well as other communal labor events gave each individual an opportunity to place himself into a perspective along with other members of the local neighborhood. Normally personal existence was immersed in the family context, but such communal assemblages allowed each to determine his standing vis-a-vis a neighbor peer.

Men were very eager to demonstrate being a "hard worker," one of the highest achievements possible in this physical setting. Very subtly, and sometimes openly, they competed to see who could do a job most quickly. It was especially a time for younger men to demonstrate that they could work alongside the older men. Youths were enthusiastic. At times the older men winked at one another upon seeing a young man run ahead of them to carry the last sack of grain to the granary.

The threshing bees were a very central part of the community life that lasted for almost 40 years until the mid 1930s. Then, almost overnight, technological innovation and the diffusion of a new grain harvesting technology eliminated communal threshing events. The new store-bought machine was called a "combine," and it eliminated the need for an alternating crew traveling throughout the community. Now with the help of a machine which could be purchased from a modern factory far away, the help of the neighbors was no longer essential in the grain harvest. And so ended the rotating labor crews, the child's excitement upon seeing the puffing and snorting thresher. And the hungry crews no longer sat down in the fall to the best meal a woman could offer.

Today the Finn River residents look back upon the threshing days with a warm nostalgia. They feel vaguely as though something valuable has been lost but they are unable to say what it is. Communal labor harvesting rituals tied the people together, and a change in the mode of production rendered this social form obsolete. An old man, staring away, gazing without a clear focus at the fields behind his sauna, said, "It was really something to see that thresher coming up your road. Yep, that was really something to us kids who did not have very much in those days."

In a climate where winter actually lasts for over six months and temperatures go as low as 40 degrees below zero, home heating fuel is a serious concern. Early homes were constructed of solid logs anywhere from 8 to 10 inches

thick that provided a very good insulation from the cold air. Hardwood forests, generally maple or birch, were the source of fuel used by the early pioneers.

Most homes had two stoves, a cooking stove in the kitchen and a heating stove in the living room. Both burned all day long, and just before bedtime, a big block was thrown into each firebox to burn slowly during the night. Sometimes it was a slightly green block because green burns slower, and was more likely to last throughout the night. In the morning, the woman of the house scattered the remaining hot coals, dropping in a few sticks of cedar kindling and a few pieces of split and dried hardwood. In five minutes both stoves were crackling and popping as the heat once again radiated throughout the house.

"Making wood," as the Finn River folk say, requires very strenuous physical labor, yet it was essential to survival. During a year, each household burned 25 to 40 cords (4'x8'x16") of hardwood. To make the task easier for everyone and to make sure that every family had enough firewood for the winter, the early immigrants organized woodcutting bees. Bees were generally held in October after the fields were harvested and plowed, after fall rains ended and when the air was brisk and cool. Labor exchanges worked along the same principles as the threshing companies. Either a private- or company-owned circular saw driven by a two-cycled gasoline engine moved along the farm roads with crews, stopping at adjacent farms. As the group went further down

the road one farmer left the rotating labor crew and another one joined as the saw approached his farm.

Again a great deal of preparation was required of the individual farmer, so that the crew would not be held up. Earlier in the year a farmer felled several dozen big hardwood trees, cut off the limbs and let them dry out in the woods thoroughly. Before the saw came around to his farm, he and his older sons harnessed their team of horses and skid the logs out of the woods, and across the fields, piling them next to the wood shed. Sometimes they cut smaller trees in eight to ten foot lengths so that a man could carry them onto a wagon.

Early in the morning neighbors gathered in the yard and visited with one another. After the circular saw apparatus was assembled next to the pile of logs, the men responded to the call for coffee. After the coffee ceremony and compliments to the cook for her fine nisua, all began to work. One man ran the saw, two men held logs while they were being cut, and several others picked up the blocks and tossed them into a pile next to the woodshed.

The work team did not split the blocks; each individual farmer did his own. Splitting required a two to three week ordeal of strenuous and dangerous work. Blocks were split with a sledge and piled in the woodshed. Sometimes they were delicately piled outdoors with a certain care for the aesthetic touch. Generally larger pieces were stacked on the bottom of the pile and smaller ones toward

the top. One Finn River man even measured each and every block, and carefully cut each into 14-inch lengths. This was of course an eccentric habit.

The woodcutting bee was a great labor-saving event for the individual farmers. Many hours of exhausting work was saved by each individual farmer as his neighbors helped him saw firewood blocks. He could never have afforded to purchase the circular saw just for his own use. For a very small fee, his winter's wood was cut.

Once again, the work was very enjoyable. Communal labor events were seasoned with pranks, joking, who-can-work-the-fastest competition, coffee ceremonies, and grand feasts at noon. So enjoyable were these events that a spectator would find it difficult deciding whether the participants were working or simply enjoying each other's company.

Today, as with the old threshing days, Finn River residents look back nostalgically at the old woodcutting bee. Warm feelings among the neighbors were created as they joyfully worked, making sure that each family survived the coming winter in the warm, cozy comfort that only a wood fire can give. Now they wish they still had the woodcutting bees.

Woodcutting bees were eliminated by the invention and diffusion of oil fueled furnaces and bottle gas stoves. After the great Depression, in the latter 1930s and early 1940s families slowly began to adopt kerosene and fuel oil space heaters. It was not long before most of the households

completely converted to modern cooking and heating fuels. Again a technological innovation invented many miles away and produced in a modern factory entered the life of the community, and in the process eliminated a cooperative ritual.

Even before the Mineral Range Railroad entered Finn River in 1900, it had a general store. It was located a half mile north of where the central village area afterwards developed. The store sold dry goods, groceries, hardware, and even farming supplies. At first, the owner, an old French Canadian, hauled his goods by horse and buggy from the nearest town. When the Mineral Range came through, he promptly moved his store adjacent to the tracks on the northern side to facilitate unloading merchandise.

The storekeeper bought seed, cattle feed, and other farming supplies in large quantities and resold it to the Finnish farmers at a profit. Many of the socialist Finns resented any merchant making a profit from "helping the people." Gradually resentment accumulated as the storekeeper continued profiting at the expense of their neighbors. Whenever possible small groups of farmers circumvented him, pooled their resources and purchased directly from a wholesale distributor.

In 1912 a larger general store was built across the street from the first.

This new storekeeper spoke Finnish with the local farmers and invited them up into his kitchen to participate

in the Finnish coffee ceremony. By making very salient his ethnic bond, he won most of the business in Finn River. In the beginning he cut prices to compete with the other merchant, who had a long list of Finns who owed him money and were obligated to continue patronizing his store.

The new storekeeper became a modest logging contractor and gave impoverished farmers credit at his store if they would work for him as lumberjacks in the winter. Most of his men were paid in his own company script, a paper voucher entitling the man to credit in proportion to the amount he worked.

Because of his Finnish nationality, his store, and his logging outfit, he occupied a very strategic place in the local exchange system. This newcomer's structural position was that of a "broker" mediating between the local farmers and the external cash economy at two points in the system. He mediated the "money-for-essential-supplies" transaction for goods coming into the community, making a monetary gain through that channel. His new position in the exchange network allowed him to also mediate between the woodsmen and the sawmills, thus converting the logs into more money. With more money he could afford to give more credit to poor families thereby insuring a steady supply of long-term customers and also a labor supply for logging operations. With his surplus cash he could expand his logging operations by purchasing woodlands and logging equipment.

The French Canadian could not withstand the new competition. It was not long before he hired a manager. A French Canadian merchant could never withstand competition from a Finn in the middle of a solid Finnish population. He could not even speak their language, and was forced to hire Finnish women to run the store. This additional labor cost also hastened his financial distress.

Figure 20 presents a graph of the Finn River economic exchange network between 1912 and 1917. Local merchants mediated egg and butter transactions between farm women and mining town grocery stores. They acted as intervening small scale wholesalers of these products. In return they gave "credit" in lieu of cash. That is, the women loaned the storekeeper their butter and egg money until they made a purchase when they would be paid back in essential goods. By giving a farm family credit the local merchant insured himself of a long-term customer. It was expected that a debtor should give his creditor business in return for getting credit. Also by not having to give the women money the storekeeper had a greater capacity to buy a wider variety of merchandise. This also increased the dependence of the local consumers on him. The merchant profited by the egg and butter exchange with farm women. Since the women were isolated, he could lower the price he paid for these commodities without them knowing what eggs were selling for in the mining towns.

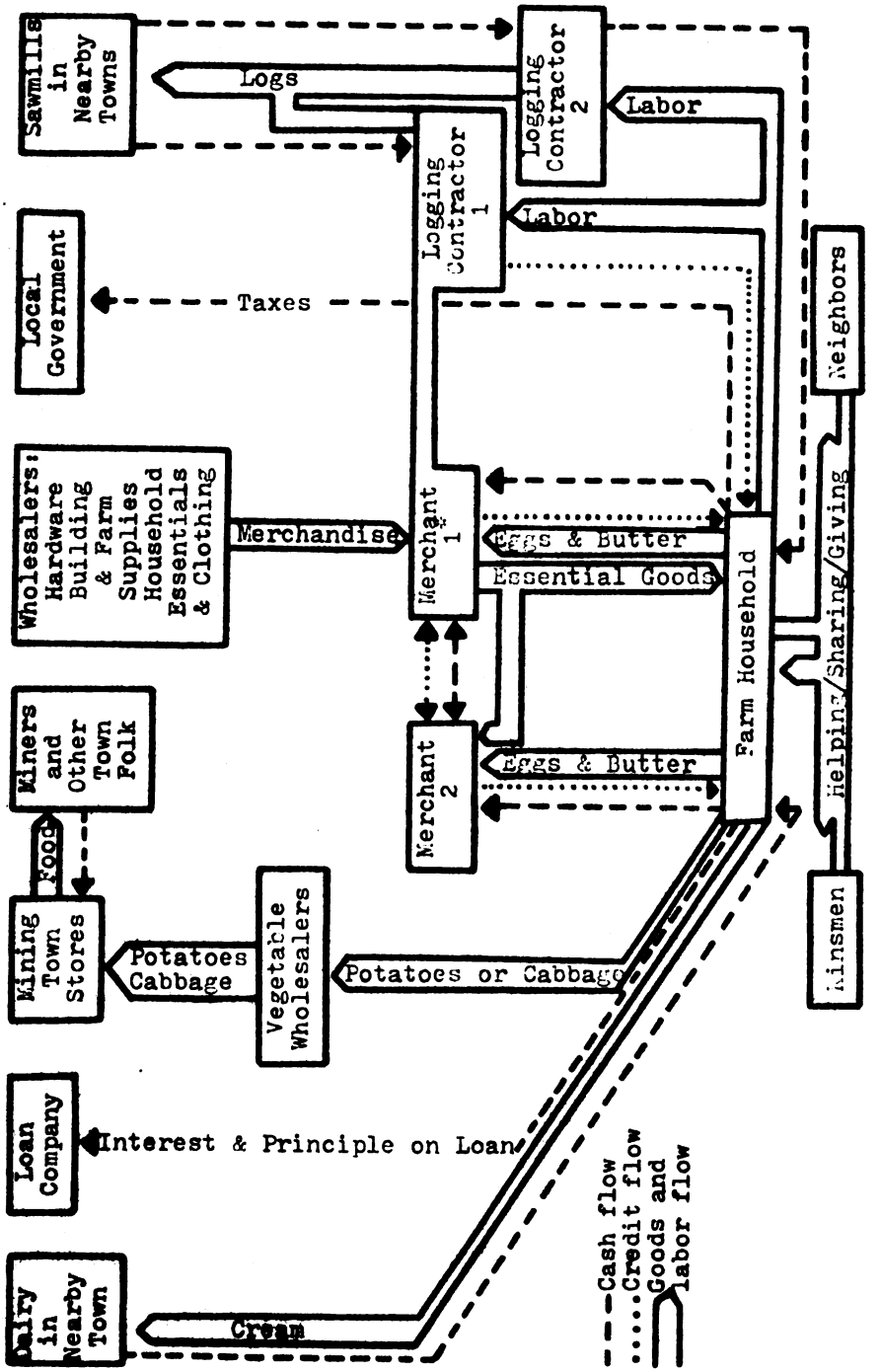

Figure 20. Finn River Economic Exchange Network, 1912-1917.

*Merchant 1 and Logging Contractor 1 refer to the same person

Even with a manager, the old shopkeeper could not compete with the shrewd new one, and it was not very long before most of the customers did business at the new store.

The blacksmith's shop in Finn River was a place where men gathered to visit while their wives were shopping. In winter and on rainy days in summer one could see several men squatting, "shooting the bull."

The blacksmith was the informal leader of the socialists in Finn River. He was very skilled at his trade and had a reputation for his work. Even now one hears remarks about the "business integrity" he had. He was also very articulate and well read and versed in socialist ideology. He saw that the shopkeepers were making substantial profits from their stores, and he began telling people.

Farmers all over the Finn River area began to think of ways to circumvent the local merchants as middlemen. Seed, tarpaper and cattle feed could be purchased at wholesale prices only in very large quantities, most often a railroad carload. Some farmers got together with their neighbors, pooled their money to buy seed from wholesalers at a considerable savings over seed bought through one of the local merchants. It was not long before the other farmers heard of the savings and how the local merchants were profiting, and they, too, wanted to get into these organized purchasing activities.

Things got worse for the economically distressed farmers before they got better. The new merchant won most

of the business, and as competition became increasingly less threatening he raised his prices. In 1917 a local Finn bought the French Canadian's store. He was the son of one of the struggling farmers and was short on capital along with the others. The other Finnish merchant offered to buy one-half interest in the store, and the new Finnish store-owner agreed to this deal. The two men kept their partnership secret. Interestingly enough there was never any pricing competition between them.

The blacksmith compared prices and asked the clerks some questions. He knew immediately that the two local merchants had agreed to minimize competition. Back in his shop he told the farmers that the two shopkeepers were conspiring to keep prices high, and the farmers were outraged. It was not until many years afterward that the community learned that the two Finns were secret partners in one of the stores.

For several years the farmers had managed to pool their cash resources to buy carloads of seed, cattle feed, and other farming supplies. Cooperative stores were successful in the Finnish mining towns and in Minnesota, so several of the farmers and socialists got together and decided to start one on a very small scale. Respected farmers from the different neighborhoods of Finn River met together in 1917.

They drew up a charter and began selling shares to all interested parties. It was a true cooperative because

one's voting power was explicitly separated from the number of shares he owned. At the end of the year the profit balance after expenses was to be divided among the members in proportion to the amount of their purchases for that year. They elected a board of directors and provided for regular elections every two years.

The two shopkeepers were outraged and started complaining to the wholesalers; they threatened to boycott on the grounds that as local merchants they could not afford to lose the farmer's business. The wholesalers sold to anyone who wanted to buy, and ignored the panicking local merchants. The two merchants boycotted the wholesalers but even that did not affect the continuing flow of large purchases of farming essentials.

One shopkeeper personally incited a local communist scare campaign in his church. He pointed out that "communists in Russia kill the preachers and burn the churches, and that's what might happen here if this godless organization grows in strength." Some of the church members avoided the cooperative store because the socialists did in fact play the biggest role in founding the organization. In Finn River as in many other Finnish immigrant communities, "socialism was the father of the cooperative movement" (Kohehmainen, 1951: 104). But through the influence of two respected local farmers, the Christian farmers began to see that the cash savings outweighed fears of "the communist take-over."

Many farmers heard of the significant savings they could have by purchasing through the cooperative, and membership expanded so quickly that the young organization ran into management problems. Initially only two dedicated farmers distributed most of the purchased goods to the members on their own time and expense. But soon the job demanded more and more time until they were forced to either do less of the work or see their own farms deteriorate. Members began taking regular turns at coordinating and distributing the farm-related merchandise. As more farmers joined and bought shares, this arrangement became very difficult to control. The members decided that the sheer demand for joint purchases justified creating a farmers' cooperative market to store and coordinate the distribution of farming essentials. After $1,400 was collected they started to construct a building and were about three-fourths finished when they ran out of money. The directors voted to sell the building as it was in order to repay those farmers who invested their hard-earned dollars in it. But the membership protested and went to the next meeting in force. They were determined to have their own cooperative store, so they decided to sell more shares, and they raised enough money to finish the building. In the latter part of 1917 they opened the Farmers' Cooperative Trading Company. It had a small inventory which was underwritten by individual members with good credit ratings in the external economy.

A man who had years earlier successfully operated a general store in a nearby farming community was elected as the first manager. He had developed a good credit rating with many outside wholesale companies, and he was trusted and respected by both the Christian and Socialist farmers. He was alotted a small salary and the Coop began operating.

Soon the Farmers' Cooperative Trading Company began to offer a wider variety of merchandise. Customers came from other areas miles away from Finn River to do business with the store. It grew so that it was necessary to hire one clerk, and then another. But the Farmers' Cooperative store was not by any means over its main obstacles. The ideological conflicts resulting from the diverse base of support still remained.

After the success of the Russian Revolution, some of the members of the socialistic Finnish Workers Federation wanted to merge their organization with the American Communist Party. From 1918 until 1926 Communism was an attractive ideal for some of the militant Finnish workers. Members of the Finnish Workers Federation built halls throughout the countryside in the Upper Peninsula, Minnesota and Wisconsin to provide a place for cultural activities for their people. It was also a place to educate the immigrants into the doctrines of socialism.

Around 1912, a socialist hall was built on the main road of Finn River. On the weekends, large dances attracted people for many miles. Young people danced and went

"courting" afterwards. Boys from Finn River usually "had it out" with boys from the nearby sawmill town before the night was over. Occasionally a speaker would lecture on the principles of socialism.

In the latter part of the 1920s, perhaps in the spring of 1928, a local "Christian" "got a whiff of something funny in the air." He noticed some of the local socialists who had actually joined the American Communist Party talking busily near the blacksmith shop, and in the streets of Finn River. Some entered the Farmers' Cooperative Trading Company store and tried peddling their newspapers and literature. He had the feeling they were planning something, but was unsure of their intentions. A few days later he heard that in Covington and Bruce Crossing, local communists were trying to take over the cooperatives.

The "Christian" went over to the blacksmith shop to get his horse shoed and see what he could find out. The blacksmith was the ringleader of the local communists. He soon learned the communists and a few socialists were planning a move to gain control of the Board of Directors of the Coop. They were trying to get each of their comrades to transfer their shares to their children and wives, thereby increasing the numbers of communist votes in the annual meeting. They would elect only hard-core socialists and communists to the new board.

According to the by-laws of the Farmers' Cooperative Trading Company, shares could not be transferred without the

Board of Directors' approval. It was to be a gradual move so as not to attract attention. The board would be unaware of the goal behind the seemingly uncoordinated transfers. The "Christian" passed the word to the other board members and urged them not to approve any share transfers to communists, but only those transfers to church people. He then traveled around the community persuading the church members to spread their shares throughout their respective families. At the meeting, the communist candidates were outvoted. After the election, the Farmers' Cooperative Trading Company lost its communist stigma, and more of the church people began patronizing it.

Outside Finn River the Finnish Workers' Federation never did become very enthusiastic about communism and only 18% of the membership joined the American Communist Party. Finns resented the iron discipline of the party, the abandonment of their language at party meetings, the loss of democratic freedom, and more importantly the party's insistence upon only serious proletarian struggle and condemnation of "hall socialism." Socialists were like the other members of the F.W.W. insofar as the most exciting thing about their brand of socialism were the dances, Finnish songs and cultural activities held in the halls.

Two factors eventually led the cooperative store into a practice of making "gains" on purchases for the farmers. As more members joined the rolls, volume increased to the point that a manager, clerks and various

personnel were needed to cope with the growing administrative work. As the organization grew in size, it assumed the characteristics of a bureaucratic structure, which added organizational support costs to the financial picture. A certain amount of gain from the wholesale to retail transfer of goods went for paying administrative overhead.

Secondly, wholesale prices vary according to large volume supply and demand fluctuations. Instances occurred where farmers paid different prices for the same volume of feed due to the difference in wholesale prices at the time of the purchase. In the very dense community, news of cost inequities traveled quickly, and heated arguments developed rather frequently. The manager simply bought at the best prevailing wholesale price, charged a margin to cover administrative overhead and sold it to the individual farmer at that resulting price. Arguments between angry farmers and the manager were carried into the meetings, and charges of "favoritism" were thrown at the managers and board members. Finally they decided upon a price standardization system to avoid further inequities. To avoid problems in paying wholesalers and covering administrative costs, standards were necessarily set by the highest wholesale price levels. Afterwards if farmers received goods purchased at the cheaper wholesale prices, it was not reflected in the retail transfer, and the Cooperative store was making a profit.

Other forms of adaptation to the economic setting involving the internal social organization of exchange

patterns did not involve a joint purchase of fixed capital, but merely the collective mobilization of labor for the benefit of either the entire community, a subgroup of Finn River residents, or a nuclear family unit. As one walks down the farm roads of Finn River one is struck by the physical outcomes of these communal labor rituals. Six neighborhood one-room schoolhouses, three churches, a cooperative store, a post office, most of the barns, a multitude of saunas, and many of the farmhouses stand as a testimony to the force of Finn River communal labor.

A family just moving into the community was introduced to the collective exchange system in a very powerful way. During the course of visiting with the neighbors, the new man might mention his desire to have a barn built. Socialized into perceiving the needs of others, the neighbor might offer to get some of his neighbors and a portable sawmill over as soon as the newcomer skidded a sufficient pile of logs to the proposed building site. One day the neighbors assembled to saw all the lumber necessary for the barn.

After allowing the lumber enough time to dry, they assembled on a Sunday after church to build the barn. The farm women came to help with the cooking, and the children played with one another. The atmosphere was festive, and everyone appeared to have fun and enjoy the company of one another. The following Sunday the new barn was finished, and everyone stood around and admired the fruits of their collective labor.

The receiving family was usually overwhelmed with gratitude. People they did not even know came to help them. Several people have actually cried while telling me about the feelings they had for the people who pitched in to help them. Overwhelmed by an emotional sense of gratitude, the newcomers concluded that Finn River was a good place to start their new life. They vowed to do whatever was in their power to help their neighbors when in need. The next time a barn raising event occurred in Finn River, the recent receivers of help did their share of the work.

The event functions as an initiation ritual into the community exchange system. A new family receiving the outcome of the communal labor ritual felt as though they owed an unpayable debt to their neighbors and the entire community.

When fire destroyed a home, the community assembled to immediately build a new house. Furniture destroyed in the fire was replaced with the extra chairs and tables of their friends. Quilts stored in the attics for extra company were given to the unfortunate family, along with clothes and food. A local belief and practice in social responsibility was the only form of insurance the poor farmers had to help them through these disasters.

Other cost minimization exchange transactions flowed between individual farmers rather than between a family and the larger community. Several farmers jointly purchased land. They all loaned each other their limited

supply of equipment and tools. While clearing land, farmers loaned their neighbors their only horse to make for a more powerful team to pull stumps. Everyone felt free to borrow everything from chains to a cup of sugar. They learned to minimize monetary expenses for fixed capital by sharing. As the new farm machinery was adopted throughout the local countryside, Finn River residents shared their equipment with neighbors to cut monetary expenses. One neighbor might own a plow, another one a disc, and by sharing equipment they cut expenses significantly.

Since money was so scarce, neighbors exchanged labor without transacting actual currency. Farmers calculated the amount of work they either gave or received in terms of the very loose unit of "a day's work." Each farmer remembered the number of days he owed his neighbor, and they worked it out in such a way that at the end of the year it would be even. If by the end of the year a farmer owed his neighbor a few days work, then the following year that small balance might shift in the other direction. Guiding neighborly labor exchanges was a norm of virtual unconditional social responsibility. Whenever a neighbor needed help, a man would drop almost anything he was doing to aid him. Each farmer relied upon his neighbors and kinsmen to borrow technology and receive labor in a long-lasting exchange bond guided by the unspoken rule, "thou shall not expect money in return." A network of personal exchange alliances helped

the pioneers survive under the pressures of the external cash economic system.

Costs of medical insurance and hospital care were eliminated by the hard work and skill of the women. Home remedies passed down through generations were used when the doctor was unavailable. Midwives delivered most of the second generation Finn River babies. When a neighbor woman was sick and bedridden, her neighbor lady would come over to perform her duties, and care for her. Very often an oldest daughter would go to a neighbor's farm to stay with a family while the mother was bedridden. If a man were bedridden, the men of the neighborhood would see to it that the man's work was "done and done right."

As we have seen, one approach the Finn River pioneers adopted in coping with insufficient monetary resources was to organize collective exchange processes so that they minimized their need for cash. Their old country cultural traditions and the socialist emphasis on the importance of yhteishyvä (the common good) provided ideological guidance for the community's adaptation through the reorganization of collective exchange. Cost-minimization communal exchange rituals provided security for the individual nuclear family unit. By relying upon the outcomes of the communal activities, each family was insured of grain for flour and animal feed, and cooking and heating fuel for the winter. The Finn River historical patterns of the collective exchange behaviors was not oriented only toward minimization of

costs, but also toward the maximization of profits in economic transactions with the outside world.

To the local socialists yhteishyvä referred only to the local people. One heard no objections to making profits at the expense of outsiders. The outside world was evil, greedy, and predatory, and it was not immoral to make a profit in intercommunity transactions.

Finn River farmers decided very early that price fixing arrangements would enable each family farm unit to maximize their monetary return when they exchanged products with the external economy. It was considered immoral for the local merchants to make a profit and to conspire to avoid competition at the expense of their neighbors. Yet in transactions with outsiders price-fixing actions were acceptable. Ideological legitimation was linguistically achieved by calling such activities "cooperative marketing."

Just as they pooled their meager monetary resources to minimize costs by making larger joint purchases, Finn River residents pooled their products to minimize interfamily competition within the community. This gave them a measure of control over the supply conditions faced by wholesalers, and allowed them to circumvent wholesalers whenever possible. Just as the repeated joint purchases evolved into a permanent exchange channel circumventing local merchants, repeated collective selling ventures led to the establishment of lasting cooperative marketing associations circumventing wholesale brokers.

In the first few years of dairy farming the producing family consumed virtually all of their products. Farming was oriented toward minimization of monetary expenditures for food. As pastures gradually expanded and herds increased to four and five cows, surplus cream was often shipped to the Bridgemen Russell Dairy in Hancock, and several years later to the Lake Superior Dairy in Houghton. Local merchants acted as small scale wholesale brokers of butter and eggs between farm women and mining town grocery stores. Women could never transport their small quantities of butter all the way to a nearby town, so they exchanged it for "credit." When the local merchant accumulated enough butter to make a wholesale shipment, he sent it by railroad to a grocery store in town.

The farmers began looking for a way to make money from their herds. They decided to organize a creamery to make their own butter on a large scale and ship it to the nearby mining towns themselves. By accumulating all of the community's cream and churning it into butter, larger volume wholesale transactions were feasible. Once again the local merchant could be circumvented. Organizational meetings were held and members decided to sell stock for $10 a share. They hired four men to pasteurize and churn the cream, and a professional butter maker from Minnesota, a German.

Dairies in Houghton and Hancock gave the cooperative creamery more competition than it could withstand. At times it was a more attractive option for local farmers to

sell their five gallon cans of cream to outside dairies because they could get a little more money. The train often went right next to some farmers' land and spurs (stopping points) were closer than the creamery in the village area of Finn River. Some farmers could save half a work day by shipping the cream out to dairies in nearby towns. The little creamery did not have enough sales volume to allow them to pay the farmers more. It became very evident that economic cooperation worked only when it appeared to be the most profitable alternative. When the local creamery went bankrupt in 1921, the outside competitors lowered their prices for cream, and the local farmers suffered.

Several local men thought a local creamery could make money if an effective butter storage system regulated the supply of their butter to offset seasonal fluctuations. During the summer months while herds fed on the highly nutritious green grass, butterfat content in the milk was increased. Almost twice as much butter was made from summer milk than winter milk from the less nutritious hay. Four local men and the butter maker talked over their problems and came to a solution: the butter maker knew some people in Minnesota who would store frozen butter during the summer months of over-supply and flooded markets. They began shipping butter in large vats to Minnesota where it was frozen, stored, and then shipped back in the winter for reprocessing. Persons storing the butter kept a certain portion and sold

it in Minnesota. This arrangement allowed the local creamery to make higher profits.

For a few years business went well for the privately owned creamery, until several local farmers felt that something productive should be done with the vast quantities of milk wasted as a by-product of the butter-making operation. Members on the Board of Directors of the Farmers' Cooperative Trading Company decided to start a cheese factory. In 1931-32 they built the factory and hired a German cheesemaker. The cooperative cheese factory gained wide support from the farmers because it was a cooperative and because they provided higher monetary return since now for the first time farmers could sell their milk rather than just the cream. So Finn River farmers sold their milk to the cheese factory, which resold the whey to the private creamery after making cheese. Within two years many more of the farmers shifted their business to the cooperative cheese factory, and the private creamery was in trouble. Then the cheesemaker talked the Board of Directors into making their own butter rather than sell cream to the private creamery. In a last attempt to survive, the private creamery diversified into selling pasteurized bottled milk in the nearby sawmill towns. However, they could not "make a go of it" because local farmers illegally undersold them with unpasteurized raw milk. In 1934 the private creamery collapsed.

For 20 years the cooperative cheese factory did well in Finn River. Local farmers increased the size of their

herds because dairy agriculture was becoming a profitable business. Most had logged out their lands and the nearby forests were stripped of the virgin hardwood. Rather than travel further away to work in the lumber camps, they began to farm as a full-time operation.

In 1937 bulldozers were introduced to the area, making possible a comparatively rapid clearing of land for pasturage. Then herd sizes really increased. For $15 an acre a farmer could hire a local land clearing enterpreneur to increase pasture area.

Working in the cheese factory was very uncomfortable in the summer, when the big vats were kept at 180 degrees for effective pasteurization. Water was always boiling for the sterilization of utensils and equipment, and nearby open drainage stank. When it was 80 degrees outside it was unbearable inside the Finn River Cooperative Cheese Factory.

Nine men were paid one dollar a day for a 10 hour shift. They wanted $2 a day, a 100% increase. At this time, during the Great Depression, times were hard for the Coop. Many farmers could not pay their bills, and the Coop was still extending them credit. The new manager was afraid that if he submitted to the demands of the cheese factory workers, other Coop employees would likewise demand wage increases. He refused. The cheese factory employees then organized a union and threatened to strike. The manager told them to return to their jobs or he would close

the cheese factory. Unheeding, the workers struck. The following day the Coop cheese factory closed down, never to reopen.

It was not only the labor costs which terminated local cheese and butter production, but the growing competition from other cheese producers. The Copper Country Dairy in Dollar Bay, and cheese producers in Iron River, Ironwood, Bruce Crossing, and Marquette made big inroads on the declining mining town markets.

Federal and state inspectors were giving the cheese factory a hard time, and it seemed to the Finn River farmers they intentionally tried to find fault with the operation. It was rumored that one of the state milk inspectors owned a substantial amount of stock in a Marquette cheese producing outfit and he was trying deliberately to put the Finn River Cooperative cheese factory out of business. Every time he inspected, more faults were discovered. The Board of Directors of the Coop were being forced to either close operations or reinvest substantial sums into new stainless steel equipment required by governmental sanitary specifications.

Profit maximizing distribution strategies were not limited to the sphere of dairy agriculture, but also spread into the spheres of cabbage and potato production. In the Cabbage Road area of Finn River cabbage grows very quickly into blue ribbon sizes. "They grow 'em like basketballs in that swamp soil," grinned a second generation son of an

early cabbage farmer. During the course of the year composted materials on the forest ground accumulates, and as snow melts, it gradually washes into the creeks and ultimately into the river which floods Cabbage Road fields every spring. For centuries this process has enriched Cabbage Road soil.

In the copper mining towns, first generation Hungarian, Austrian, German, Yugoslavian and Croatian miners ate saurkraut as a basic part of their diet. In the fall miners' wives made saurkraut in 25 gallon barrels, and canned it for the coming year. Some families ordered over a ton of cabbage just for their own needs.

Beyond clearing enough land to provide for a subsistence dairy herd, Cabbage Road farmers began clearing land faster than the other farmers in Finn River because they were the only ones in a position to make money by selling cabbage. Cabbages grew elsewhere in Finn River, but in no other neighborhoods were they as sweet and huge as the Cabbage Road area. Saurkraut makers preferred Cabbage Road cabbages for the sweeter taste, and because there was less waste and more usable cabbage to a Cabbage Road head.

In 1906 and 1907 cabbage growing gained a foothold in Cabbage Road. It was not long before the consumers in the towns began asking their grocers for Cabbage Road cabbage. Some would even drive the 30 miles to Cabbage Road in the summer to order early from the coming fall harvest.

In the very early years the price of cabbage was $10 a ton, and in a few years climbed to an average of $12. Prices reached their peak from 1917 to 1925 when a Cabbage Road farmer might earn $15 a ton for a railroad car load. Cabbage Road soil produced an average of 11 tons of cabbage to the acre, giving the Cabbage Road farmers a very good living compared to the other neighborhoods in Finn River.

It became apparent to some of the farmers that they were hurting themselves economically through pricing competition. As an old cabbage farmer told me,

> Well, I'll tell you what it was like back then. There were some years then the farmers were so afraid that they would have too much cabbage that they would flood the market. They would panic and every individual farmer would run to the stores and wholesalers who would play one farmer off against another. The wholesalers were the worst ones because they picked up over 60% of the crop. But the grocery store owners had a pretty good pinch on the grower. Once he hauled the stuff into town he had to dump it somewhere. Usually neighbors would see each other peddling cabbage in town and try to get the jump on the other. It started getting pretty bad and everyone was taking a cut in profits so my dad, my uncle, and a couple others organized an association of cabbage producers.

One man who knew many of the wholesalers and had a knack for dealing with them was chosen to negotiate on behalf of the association. Every now and then a farmer broke from the association to sell at a profit, and there were sometimes some "hard feelings" between the neighbors in Cabbage Road. But over the years the cabbage association was somewhat successful and it lasted until 1939.

In the late 1930s Green Bay and Seymour, Wisconsin canneries, began to cut into the mining town markets.

During the Great Depression years the first generation cabbage lovers began to die off, and the second generation never continued their traditional food consumption pattern. The second generation ate cabbage occasionally, but in far smaller quantities, and the small canned product from Wisconsin met their needs. By 1940 almost no farmer in Cabbage Road was producing cabbage for a monetary market. It remained that way for 19 years until one Cabbage Road farmer began truck farming to local grocery stores.

Figure 21 illustrates the cabbage cooperative marketing association. Approximately 10 farmers grew commercial cabbage and sold it to any one of three wholesalers. Grocery stores sold cabbage to the immigrant miners.

Within the sphere of the cabbage economy, few transactions occurred between individual growers. Planting, harvesting and transportation were individually performed functions. The only bond holding together the association was the agreement to not compete with one another and to hold out for the association's sales negotiations with wholesalers and store owners.

The association suffered at times because of the narrow exchange ties between members and the presence of many opportunities for individual profiting. Wholesalers and grocers tried to bust the organization by tempting individual members into selling at high profits and spreading the word of his sale to the other growers. At

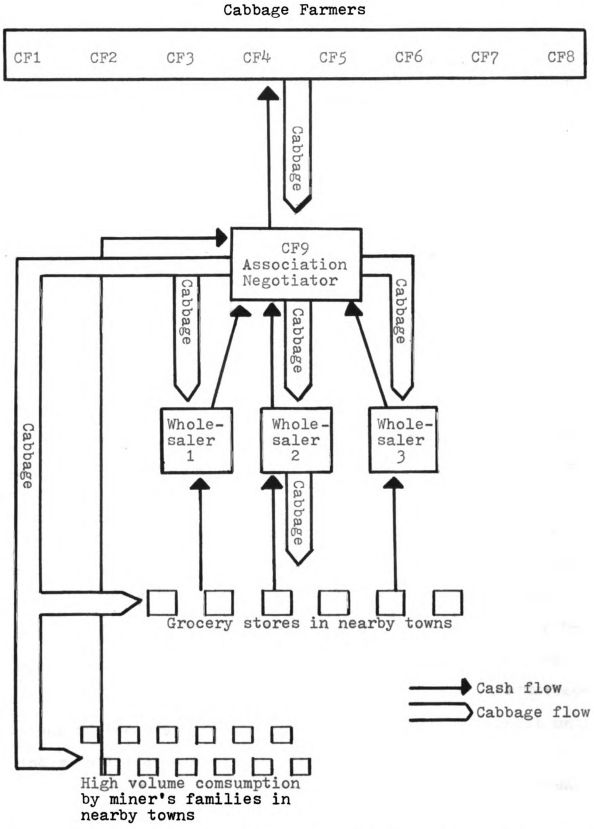

Figure 21. Adaptive Cabbage Distribution Network, 1910-1939.

times wholesalers spread false rumors of individual members selling outside of the association for handsome profits.

Members were continually presented with individual sale opportunities, by a miner and his family traveling out to the farm in search of saurkraut cabbage; grocers who knew them personally and may have done business with him in the recent past; and wholesalers who came into Cabbage Road bearing gifts of fruit and bottles of whiskey. In such a neighborhood every traveler going down the road was seen by virtually everyone who lived there. And if a traveler happened to be carrying a load of cabbage back to his home in a mining town, the news spread like a March forest fire. Everyone knew the wholesalers and recognized them immediately as they passed by on their way to the neighbor's farm.

With the many opportunities for sales by individual members and the sheer impossibility of keeping it quiet, the cabbage marketing association was hampered frequently by squabbles between the members. As the news of one illegal sale spread through the neighborhood, the next time a buyer came by, a farmer thought to himself that if his neighbor sold independently, why shouldn't he? Even though the cabbage marketing association endured and helped the members, eventually it was beset by frequent collapses as the perceptions of inequity prompted individual members to profit on individual transactions.

Intra-community pooling for coordinated collective sales also occurred in the local potato industry. Growers

collectively harvested, pooled their crops, and coordinated the storage, sale, and transportation of their potatoes. In most neighborhoods in Finn River, farmers grew potatoes commercially from 1906 until 1936.

Potatoes are far less perishable than cabbage and are capable of being stored, under proper conditions, for seven months. In order to avoid flooding the market in the fall and losing the winter potato market to the larger scale growers in Idaho and Maine, Finn River growers once again got together. They formed a cooperative marketing association, raised money by selling shares, and built large potato warehouses next to the Mineral Range Railroad tracks. In the early 1920s this one was built next to the tracks running between Cabbage Road and Hemlock Siding, and during the depression of the thirties another was built right in the central village area of Finn River. The latter one was partially financed through Roosevelt's W.P.A. funds and partially from the individual members in the association.

A member rented several bins in the heated warehouse to store his crop during the winter and spring. To facilitate loading the railroad cars, a spur ran right next to the warehouse. Rental monies were used to cover the construction costs and the potato grading machine. Potato growers collectively made the firewood to heat the warehouse, and to cut labor costs took turns working in the warehouse. Two men were needed to watch the furnace, grade and sack potatoes, and load them onto the railroad cars. They also

ran a constant quality control check to eliminate defective spuds.

Potato growers also organized their own potato harvesting company similar to the threshing companies discussed earlier. Members chipped in and jointly purchased a new potato digging machine. The machine and a crew traveled up and down the road as did the thresher and firewood sawing crews. The roving potato digging crew, however, was not a community-sweeping event because not everyone grew potatoes. It was confined mainly to the Hemlock Siding and Mill Road areas where the potato growers were concentrated.

An orientation toward the common good transcended individual growers' perceptions of inequity. Many of the potato growers were the socialists who earlier organized the Farmers' Cooperative Trading Company, and they knew very well the economic advantages of pooling their resources. The son of such a grower said to me,

> We all got a good deal out of it. Usually there were kids working alongside the men. We walked behind the potato digger and picked up potatoes off the surface of the ground and bagged them. It was fun going down the road and having dinner with the other farmers. It didn't make any difference if you had a half acre of potatoes or an acre and a half. Nobody complained about it. It just didn't make any difference to us because it was all the same.

Almost every week and at least every other week a railroad car load of potatoes left Finn River on its way to the western Upper Peninsula towns where the Finn River growers soon became a major and regular supplier. As a

result of very poor coordination with wholesale brokers, every time they tried selling in a large urban market far away, they lost money. Distance was certainly a factor, and the irregular shipments often arrived when the Chicago, Milwaukee, and Detroit markets were already flooded. Several times they did not even make enough to pay for their freight costs. It was in these urban markets that the Finn River growers came into direct competition with the larger volume, better organized growers from Idaho, Maine and Minnesota who had well established communication lines with wholesalers in the cities.

Potato farming began when the railroad entered Finn River in 1900 and ended abruptly when the Mineral Range picked up their tracks in 1936. After that there were simply no economically feasible means of transportation available to the farmers. Many were so hard pressed after the Great Depression that they left Finn River, seeking work in the automobile factories in Detroit. The cooperative marketing association collapsed as their basic means of transportation vanished, and the potato warehouses have not since seen another potato. Today not one single Finn River farmer grows potatoes for the market.

Figure 22 illustrates the distribution network for the potato production sphere of the local economy between 1906 and 1936. This network was far more effective in maximizing monetary returns than was the one for the cabbage growers. Many more exchange ties connected the potato

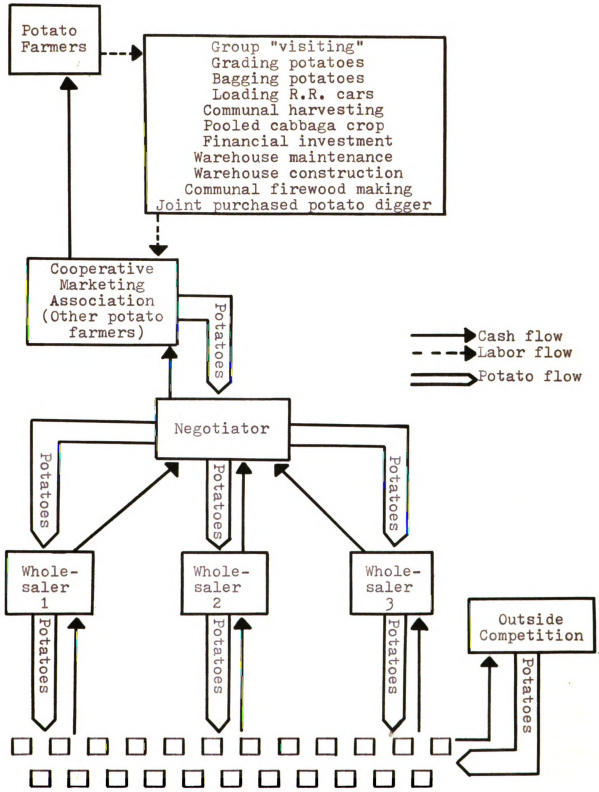

Figure 22. Adaptive Potato Distribution Network, 1906-1936.

growers. In addition to the pivotal exchange of potatoes in return for money, there was a sharing of monetary investment through the initial purchasing of stock; joint purchasing of a potato digger by some members; and the communal harvesting ritual in some neighborhoods. Members also took turns working with one another in building the warehouse, maintaining it properly, making the firewood for heating, grading, bagging, and loading potatoes onto railroad cars. During the winter men visited in the warehouse. Because of the wider scope of their organization, potato growers assembled together more often than the cabbage growers.

The external market structure of the potato industry was more conducive to cooperative marketing because fewer sale opportunities confronted the individual farmers. The mining town market was already saturated by growers closer to them. Only one farmer peddled his potatoes in nearby sawmill towns. The major consumers were too far away for individual farmers to reach through their own efforts, or for the consumers to reach by driving to the Finn River farmers.

Another important feature of the market structure differentiating potato and cabbage farming was the degree of competition. The sale of potatoes was more competitive than the sale of any other agricultural product. Since the potato is more durable than either cabbage, eggs or dairy products, it can be shipped greater distances. Hence, the

outside competition can reach markets very far away from the actual growing site. High competition made marketing cooperation very essential in the potato industry, but this was not so for the cabbage growers.

APPENDIX B

THE UPPER PENINSULA REGIONAL SETTING

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Michigan's Upper Peninsula is separated from the rest of the state by Lake Michigan, a six mile voyage at its narrowest point. It is geographically a peninsular extension of Wisconsin, and became commercially and culturally linked to Wisconsin during the first 115 years of statehood, before it was connected to the Lower Peninsula by the Mackinac Bridge. Before Michigan was admitted to the Union in 1837, the U.P. was actually a part of Wisconsin Territory. In Washington, D.C., Ohio senators refused Michigan admission to the Union unless it ceded the "Toledo Strip" to Ohio. Michiganders balked and came close to fighting a war with Ohio. As the national guard from each state were mobilized and facing each other near the Toledo area, influential Ohio politicians offered an alternative. The Ohio senators proposed giving the peninsular portion of Wisconsin, not yet a state, in return for the Toledo area. Michigan was not satisfied with her bargain land, but begrudgingly accepted, in order to gain acceptance into the Union. What emerged from this deal was the most peculiarly shaped state in the nation. A look at the map gives one the immediate impression that the "U.P." should never have been part of Michigan.

Since the Upper Peninsula had been virtually isolated from the Lower Peninsula until the Mackinac Bridge was constructed in 1957, it is culturally oriented more toward Wisconsin than the downstate region of Michigan. U.P. residents root for the Green Bay Packers more than the Detroit Lions, and they travel to Wisconsin on vacations and week-end shopping trips. Commercial linkages between the U.P. and Wisconsin are stronger than between the U.P. and the Lower Peninsula. Due to the easier transportational access, most of the chain stores and gasoline stations have administrative headquarters in Wisconsin. With the exception of their own station in Marquette, when U.P. people watch television, their stations are broadcasted from Wisconsin.

Since 1957 many Lower Peninsulans have vacationed in the U.P. and have purchased cottages there. Every year an increasing number of downstate urbanites cross the Mackinac Bridge for the fall deer hunting seasons and summer months. The tourist industry has mushroomed since its opening. But the increasing flood of outsiders seems to make U.P. residents more aware of their separate identity. Resentment toward Lower Peninsulans seems to be growing, and every now and then one hears a grass roots suggestion of separate statehood for the Upper Peninsula.

Over a century of geographical isolation from the Lower Peninsula's industrial centers gave the U.P. a cultural uniqueness. Travelers sense by the rugged wilderness, the peculiar accents, the slow-paced life style and casual

down-to-earth friendliness, that the U.P. has a quality of life substantially different from the Lower Peninsula. So striking is the contrast that several writers have mentioned a sense of being in a different country after crossing the Mackinac Bridge.

To the Lower Peninsula urbanite a distinguishing feature of a U.P. person is the unmistakable accent and use of odd-sounding phrases. Most of the so-called peculiar U.P. accent is the result of speaking English words with a Finnish and occasionally Swedish pronunciation.

Lower Peninsulans stereotype the Upper Peninsulan as dumb, backward, and unfashionable. Yet downstate urbanites are touched by what they consider to be naive trust Upper Peninsulans have for other people and their friendliness and willingness to help a stranger in trouble.

U.P. people resent Lower Peninsula bureaucrats and tourists for conveying feelings of status superiority. This resentment is growing, and some U.P. people are adopting negative labels for Lower Peninsula urbanites such as "berrypickers," "rockpickers," and "tourists," terms conveying distain for the ignorant, smart-aleck, snobbish outsiders.

Historically the entire U.P. has been ravaged by extractive industries. Copper, iron ore and both pine and hardwood forests have been removed from the U.P. in enormous quantities to satisfy the needs of large urban industrial centers. Many tons of Lake Trout were shipped to Chicago

until the State of Michigan Department of Natural Resources banned commercial Lake Trout fishing in response to outraged local sportsmen. Thousands of deer have been killed by hunters from other states and from the Lower Peninsula. Upper Peninsula sportsmen are especially outraged over what they regard as a plundering of their deer herds by outsiders. Now the mineral resources are approaching depletion. The economy is stifled, and since the 1930's the region has lost human resources through the outmigration of its youth.

In 1840 Douglas Houghton was appointed state geologist and directed to survey and explore the northwestern region of the Upper Peninsula for valuable metals. He discovered deposits of copper and iron. In 1843 the Federal Government, stimulated by the prospect of tapping these resources, purchased from the Chippewas over 25,000 acres of their ancestral lands. Chippewa elders knew nothing of the cash economic value of the metal, and immediately large tracts of land were quickly claimed as companies began staking out prospective mines.

The Copper Country, as the two counties in the northwestern tip were soon called, was the scene of America's first boom mining towns. From 1807 until 1915 the Copper Country experienced growth in economic leaps and bounds. In 1870 the Copper Country cornered 87% of the nation's copper market, and it soon became the most populous region in the state. Some prominent citizens even pressed to have the capital established there (Murdock, 1943).

But by 1900 western copper mines in Arizona and Montana were beginning to encroach upon the market. In that year only 26% of the nation's production came from the Copper Country, as companies were forced to go deeper into the earth to find copper. After the 1913 Copper Country Strike, copper production in the U.P. suffered a steady decline. By 1920 its share of the market slipped to 18%, and by 1925 it fell to 11%. As a consequence of the Great Depression in 1935 it collapsed to less than 4% (Meeks, 1964: 143).

During the early stages of World War II the Copper Country experienced a slight revival, but by 1940 production again slid downward, constituting a mere 3.5% of national production during the 1950 recession. Since then production has fluctuated up and down with a slight increase due to the 1955 opening of the White Pine Mining Company.

Since 1968 there has been no copper production in Houghton and Keweenaw counties. Today the only active copper mining site is in White Pine, in Ontonagon County. In 1972 the White Pine mine produced 131,937,378 pounds of copper valued at $84,579,000.[5] To the reader it may sound like a considerable volume of ore, but it has only managed to match the level produced in 1890 when the Finnish emigrants were contemplating their journey to the new land.

The opening of the Soo Canal in 1855 and the Civil War stimulated the expansion of the U.P.'s iron mining industry. In 1860 U.P. iron production was 150,000 tons of

ore and 5,000 tons of pig iron, and by 1864 it swelled to 248,000 of ore and 12,950 tons of pig iron (Mason, 1961). There are three iron ranges in the Upper Peninsula. Between 1845 and 1850 iron mining began in what is now Marquette and Dickinson Counties in Negaunee and Ishpeming. This was the mining site supplying the needs of the Union Army. The Menominee Range opened in 1877 providing economic growth in the area of Iron Mountain, Crystal Falls, and Iron River. The third major iron range in the area opened in 1884 in the area of Ironwood, Wakefield, and Bessemer. During the latter part of the nineteenth century the U.P. was the nation'a leading producer of iron ore. By the early 1960's its contribution to the national iron ore production declined to 20%.[6]

In 1967 Peterson Mine, the last company in the Gogebic Range, closed its operations. In Marquette and Dickinson Counties there are currently five active iron sites operated by the Tilden Mining Company, by far the largest employer in the area. Only one mine is still active in the Menominee Range.

Iron ore production in the Upper Peninsula has been on the decline since 1967 when 14,130,000 tons of iron ore were mined. In 1973 the tonnage declined to 12,000,000, having a value of $176,449,000. The iron mining industry is clearly on the downhill slump. In 1957 there were 6,311 persons listed on iron mining company payrolls, and by 1972 the number declined to only 2,226 persons.[7]

Even though the combined value of the U.P.'s copper and iron production in 1973 was about $261 million, the reader must bear in mind that production levels of extractive industries are not accurate indicators of general economic growth. Ore is extracted and transported to steel mills in Minnesota; Gary, Indiana; and Detroit, where it is processed. Urban populations benefit from the value-added operations of separating the ore, smelting, making steel and the other products fashioned from steel. Additional added value is not recycled back into the Upper Peninsula economy because finished product transportation costs to geographically distant markets would be prohibitive. The U.P. remains a stagnant economy with its natural treasures constantly being reduced.

Throughout the Upper Peninsula heavy logging activity paralleled the mining boom. From 1850 to 1900 lumberjacks cut down virgin stands of White Pine to build downstate urban centers. Between 1900 and the late 1930's the virgin hardwood forests were exploited. During those years the Upper Peninsula was one of the leading lumber producers in the nation.

Although the virgin forests were depleted, second and third growth forests have returned. Today 89% of the Upper Peninsula can be classified as forested. However the current crop of second and third growth timber cannot approach the quality of the nineteenth and early twentieth century virgin crop. Adapting to this fundamental change

in the quality of timber resources, the U.P. forest industry has generally converted from timber and lumber production to the production of fabricated board, paper and pulpwood. Forest products industries are the largest employers in the region.

Agriculture in the U.P. has historically been tied to the prosperity of mining towns (Meeks, 1964: 78). The U.P. is so far removed from major population centers that its farmers have depended primarily upon nearby mining town markets. Long range decline in mining activity and its collapse in the early 1930's have undermined the farmers' markets. Most of the ex-miners have migrated to Detroit and are now working in automobile factories.

When farming proliferated in the U.P. it was initially a subsistance activity. In spite of short growing seasons, infertile acidic soils with low moisture-holding capacity, and abundant areas of swamps and rocky terrain, dairy farming has somehow persisted. Today less than 6% of all land is harvested cropland.[8]

Now there are far fewer active farmers (about 1300), but U.P. milk production levels have remained constant as the size and quality of average dairy herds have increased. The doubling of the average Upper Peninsula dairy farmer's net income from $6,805 in 1966 to $13,749 in 1972 reflects this trend. The price farmers have received for milk has doubled during those same years.[9]

Today the typical second generation U.P. farmer is approximately fifty years old. One out of five works off the farm and farms only on a part-time basis. He rarely has more than an eighth grade, one-room schoolhouse education, and is unaware of the latest tax loopholes, or recent farming technological innovations. His children are employed in downstate factories, and are generally unwilling to take over the farm after he retires. He is milking less than 25 cows, has no intentions of expanding his herd, and will sell his herd as soon as he is 65 and can collect social security. He is hanging on.

A minority of dairy farmers are of the third generation, have high school educations, supplemented perhaps by one or two years of specialized training in dairy farm management. His herd consists of 50 or more cows, and he wants to increase its size. He visits his retiring neighbor and talks about buying his farm. He is aware of the latest tax loopholes, keeps up with the latest farm technology, and is optimistic about the future of the dairy industry. He does not hesitate to borrow huge loans to expand his operations. To the third generation farmer dairy farming is regarded as a good business in contrast to the second generation farmer for whom it is a way of life.

In spite of the exploitive after-effects of large scale extractive industries, some people are committed to "make a go of it" in the U.P. In 1972 there were 318,700 persons living in the Upper Peninsula. Out-migration

continues because the declining extractive industries are still stifling diversified economic development so that jobs are scarce. In the decade between 1950 and 1960, 31,889 persons left the U.P., and between 1960 and 1970, 26,058 persons left the region.[10] Most of the migrants are high school graduates seeking employment.

Out migration is slowing down as young people reassess the value of living in a relatively pollution-free, crime-free environment. The general deterioration of the central cities, especially Detroit, have made the prospect of urban life unattractive to an increasing number of U.P. people. Young males are now passing up the higher wages in the city and are beginning to take lower paying jobs in small non-unionized shops near their own communities.

As compared to urban areas, the cash incomes in the U.P. are low. the 1969 median income was $7647 as compared to $11,351 for the Detroit area.[11] In U.P. towns 12.3% of the families have incomes below the U.S. Census poverty level. In the farming areas 13% are in poverty. Severe winters shut down construction jobs, and spring thaws halt the logging activity, giving the U.P. high rates of seasonal unemployment. The 1970 nonworker to worker ratio was 1.94 as compared to 1.48 in the Detroit area.[12]

Life is particularly difficult for the many senior citizens in the area. Because many younger people have been moving out of the U.P. since the 1930's, the region is left with a relatively high proportion of elderly

persons as compared to urban areas. In 1970 11.2% of the people were 65 years or older compared with 7.7% in the Detroit area.[13] The availability of health care services for the elderly is becoming a major social problem in the Upper Peninsula. Local facilities are nowhere near the capacity to accomodate such an increasing number of older people. The problem gets worse every year as an increasing number of former residents plan to retire in the Upper Peninsula they left three or four decades ago.

Somehow the monetary picture is misleading. The poverty is not visible. U.P. residents have adapted their lifestyles toward nonmaterial pursuits, and I would judge them to be happier than many prosperous urbanites. Outdoor sports, clean air and water and friendly, helpful neighbors who are actually concerned about one another make life easier. It is my impression that many U.P. people scoff at the prospect of moving to the city. Their intense eco-patriotism reconciles a lower cash income.

A large portion of the U.P. eco-patriots are Finnish. When you ask a Lower Peninsula person to define an Upper Peninsula resident, the most frequent characteristic mentioned is the Finnish ethnicity. Figure 23 illustrates the proportion of Finns in the Upper Peninsula counties. Notice the heavy concentration of Finns in the four northernmost counties.

Since virtually all Finn River residents are Finns, they share a common ethnic identity with many persons

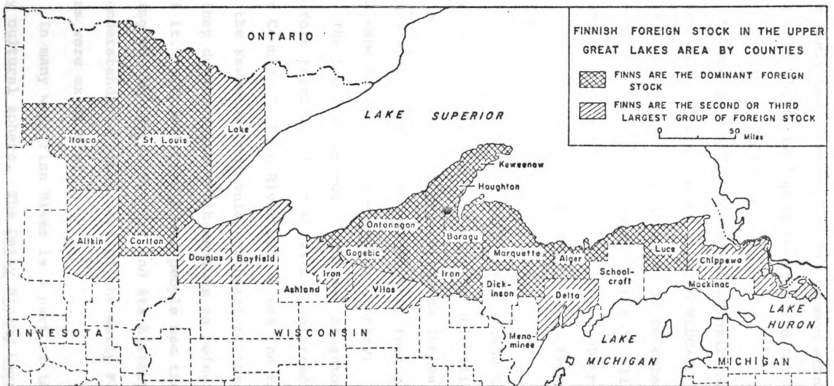

Figure 23. Finnish Foreign Stock in the Upper Great Lakes Area by Counties.*

*Source: Norman Moline, "Finnish Settlement in Upper Michigan" (Unpublished M.A. thesis, University of Chicago, 1966), p. 48.

outside their own community. This common ethnic bond extends throughout the Copper Country and the northern part of the Upper Peninsula.

Second generation Finns speak their native language with age peers. Every Sunday morning WLUC-TV in Marquette broadcasts a two-hour Finnish cultural celebration of the only local station. Suomi Kutso (Finland Calling) is broadcasted to an estimated 26,000 to 30,000 persons. It is the only Finnish language broadcast on television outside of Finland.

As Finn River residents drive around the Copper Country and the U.P. they feel comfortable with the surroundings. Noticing Finnish names on the mailboxes and hearing strangers speaking their language, they feel close to home. This is especially so in the Copper Country.

The two northernmost counties, Houghton and Keweenaw, form a folk territorial entity warmly referred to as the "Copper Country." Finn River people use the term when speaking of the Keweenaw Peninsula northeast of the Portage Canal. Hence they do not think of themselves as being an integral part of it. Yet most Finn River people see themselves as belonging to the Copper Country and its history. This is quite understandable since most of the early Finn River pioneers were ex-miners.

In many ways Finn River is a part of the Copper Country cultural sphere. The Daily Mining Gazette published in Houghton since 1865 and distributing 12,000 copies a day

is an undeniable Copper Country institution. Folks from Finn River and throughout Baraga County regularly read the paper. "Wimple" (WMPL), the local radio station in Hancock, labels itself "The Spirit of the Copper Country." Its daily broadcasting range extends beyond the four northern-most counties and is tuned in regularly in Finn River. The Finn River Cooperative Store advertises regularly through the station. Programming is tailored to local interests, community events, meetings, local area athletic contests, open air discussion of local issues and gossip. These two forms of public communication, and two radio stations of lesser importance, define common issues and daily concerns of Copper Country people and Finn River people alike. Finn River residents have relatives living in the Copper Country and stop to visit them while shopping in town.

So Finn River is not a self-contained community amidst alien surroundings. Ethnic bonding, common local media, and a common history integrate Finn River into the immediately surrounding area. The entire Copper Country is spotted with small Finnish farming communities like Finn River and all are commercially oriented to nearby small towns like Mass, Lake Linden, Laurium, Calumet, Houghton, Hancock, Baraga and L'Anse.

Now that we have discussed the nature of the regional context surrounding the community of Finn River, we will turn to the internal ecological characteristics of the community.

APPENDIX C

FINN RIVER'S MICRO-ECOLOGICAL SETTING

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Finn River's terrain is spotted with clearings that pioneer farmers carved out of a vast forest. In the center of these clearings is a village area, where Finn River residents conduct their economic transactions and pause to exchange local gossip.

Figure 24 is an aerial view of the central village and the proximate area. This frame looks eastward and captures virtually all of the village area.

On the left, which would be the north edge of the village, are five new ranch style homes which are the first in the community with aluminum siding. Four of these were built in the past three years. The two homes east of the road, sitting slightly back from the street and surrounded by a street, represents a new development: The very first attempt at consciously developing Finn River. A Finn River earth-moving contractor had his brother-in-law build them, one for his newly married son and the other for his wife's ailing uncle. Until these homes were built, the village area seemed to expand along the main road. In the future

Figure 24. Finn River and the Immediately Surrounding Area.

Figure 25. Aerial View of Finn River Countryside.

one can expect the village expansion pattern to shift direction more to the east and west (up and down in the photograph), since this particular contractor has a "development" orientation and a vision of a growing Finn River.

In this photo an equal distribution of cleared and forested land appears, but the viewer must remember that the frame focuses selectively on just the central area. Baraga County, which includes the community of Finn River, is still over 90% forested.

In the lower part of Figure 24 and slightly toward the right is an old abandoned farm. Observe carefully and you will see the old barn in the midst of an abandoned field now being overgrown with brush. If you study the photo you can see these are not large trees filling in the clearing, but scrub brush. It seems peculiar that land so recently reclaimed, and with such strenuously hard labor, is now allowed to lie idle and grow into brush wasteland.

Notice the river flowing through the community of Finn River. Down this river floated the pine and hemlock of Finn River's golden pine era. In spring and after heavy rains it is ferocious, and often floods just beyond the upper left corner of the photo.

In Figure 25 the viewer can get a feel for the spatial composition of the landscape beyond the village area. Notice how fields are distinctly bounded by a wall of forest. A Finn River farm has a special peace and tranquility resulting from the privacy of the trees: Recall

the escapist themes in the back to the land movement, intoxicating the disenchanted immigrants after the mining town experiences.

I talked with four male Finn River residents who traveled across the nation separately and at different times. Two lived in Arizona, one in Texas and one in Montana; and not one liked the desert or prairie environs. Without elicitation on my part, during the course of mutual conversation all said one thing they missed and were grateful to see upon returning was the green "bush." (Bush is the local woodsman's term meaning forest.) All complained about feeling uncomfortable in those wide open areas without a treeline blocking out the horizon. One young man said, "Nope. They'll never get me to leave again. Not for the big bucks (high wages) or nothing. I don't even like it in the Lower Peninsula. It's too wide open. I guess once you're a bush-rat, you're always a bush-rat."

The next photo, Figure 26 is an aerial view of the central village, looking toward the northwest. The main road runs true north and south. To give the reader a sense of the physical layout of Finn River's village area I shall refer specifically to this photograph while describing it. The description will move from left (south) to right (north) first above the roadline (west) and then below it (east). West of the road on the left-hand side (south) of the first building is the Finn River Post Office. The postmaster is the informal community leader. The Post Office is a regular

Figure 26. Aerial View of Finn River's Village Area, Looking Northwest.

visiting place and the site for the initiation of volunteristic community action.

Immediately to the right, back 20 yards from the road is the old Standard Oil building, now a garage for the Finn River Coop trucks. Now it is painted a brilliant red with white trim. The big white building immediately to its right is the original Farmers Trading Company Store founded in 1917; it is now used for storing appliances and other large merchandise by the Coop which moved directly across the street. To the right of the old Farmer's Coop is the original Finn River Creamery which until last year was used as the Finn River Fire Hall, and is now used by the Finn River Coop for storing merchandise.

To the right of the old creamery is a house. The big white house to the right was the first residence of this researcher. It was built on the site of Finn River's first general store in 1917. For many years this building housed both a store and the Finn River Post Office. It was one of the earlier community visiting centers. Now it is the private home of a man who bought it last year from his aging parents. The parents have moved into a little retirement cottage you see in the back of the lot. It is a custom for the parents to turn over their house to a son and move to a little house in the back where they are both far enough out of the way to allow for a certain degree of non-interference in their son's family and to give them a measure of privacy. Yet they are close enough for their

son and his wife to help them as they are increasingly unable to help themselves.

To the right of the home, peeking out from behind a wall of evergreens is Urho's Mobile Station, an important community hang-out for older men.

Further to the right in one lot are two white buildings. Again here a couple lived in the larger white house closer to the road, while their aging parents lived in the little retirement cottage in the back of the lot.

Two doors down across an empty lot and to the right is a lengthy ranch-style house. It is the parsonage, built two years ago to meet the expected living standards of a suburban middle class pastor assigned to administer the Finn River and two neighboring community parishes. The central location allows the community to keep their pastor under constant social surveillance.

Next to the parsonage and to the right is the post-master's home, a small house he built in order to care for his dying mother. He often cuts the lawn at the parsonage while doing his own. Next door is a much larger ranch-style house built last summer for a retiree. It is packed with the latest modern conveniences: automatic washer and dryer, a self-defrosting refrigerator, heated garage, and even a lighted doorbell--the only doorbell in Finn River.

To the right and behind this new home is the Finn River Parish Center, the pastor's working office. It was converted last summer because the pastor did not like his office in his home.

To the right is a small retirement home lived in by an elderly couple from Detroit. She has a brother and sister living in Finn River, and she wanted to be near them in her old age. They spend a great portion of their day sitting on a wooden swing, enjoying the lack of commotion on the main street. To them the inactivity is not boring, but very tranquil.

Returning now to the left side of the photo (southern edge of the village) back of the main street behind a clump of trees is the old Finn River Cheese Factory. To its right further back from the road one can see the roof of a rather long building, which was the old potato warehouse.

Back on the main street, the first structure on the lower left is the service station managed by the Finn River Cooperative Store. It is a hang-out for young males.

The three large tanks behind the gas station are the Coop Feed Mill grain storage bins. The big building immediately to the right of the gas station is the Finn River Cooperative Store. One can discern a dividing line on the roof, reflecting the separate parts of the store. The left (south) side is the farmers' Feed Mill. One can see four large tanks containing various nutrient supplements for dairy cattle feed. Farmers can request to have their oats and corn picked up at their farm, ground at the Finn River Feed Mill, have nutritious additives mixed in, and have the final product hauled back to their barns, ready for the

cattle. Many farmers beyond the Finn River area pay the Feed Mill $25 for this service.

Beneath the Feed Mill is the farm machinery repair shop where farmers bring the machinery they cannot repair by themselves. The labor cost is about $7.00 per hour, the parts are very expensive, and the delay is sometimes long.

The other half of the Coop to the right of the Feed Mill is the General Store. It supplies a vast array of groceries, low-cost fresh meats, beer and wine, hardware, sporting goods, household supplies, clothing, shoes, tobacco, candy, and cattle supplies. The main store area is one of the most lively visiting centers in the community, especially for women.

The rather large white house immediately to the right of the Coop is the old railroad section house where foremen of the Mineral Range Railroad repair crews and their families lived. Descendents of a railroad crew foreman have lived here for three generations.

The large grayish building to the right of the old section house was once a general store. Currently it is leased by the Coop for a building supplies retail outlet. It is a hang-out for older males, and a good place to hear the masculine gossip about the community. Folks come for many miles to purchase building supplies from the Coop Building Supplies Center because the prices are very reasonable, and they are quite well stocked.

To the right is a small wooden house which was the site of a recent tragedy which mobilized the entire community. Last winter the wife-mother, a 40-year old woman, died suddenly, leaving 10 children in the home. The tragedy swept the entire community like a giant wave and many women pitched in for months to help run the household. That occasion was one of Finn River's finest hours.

A widow lives two doors to the right. She is well over 80 years old but still bakes her own bread and nisua and cares for herself. Her son lives two houses down the street, and does the heavier work around the house, keeps it well repaired, chops and carries her firewood, and heats her sauna. His wife does her shopping, and they both take her to the doctor and church.

Between the widow and her son's homes is a vacant building the younger generation knows nothing about. Old rusted "Orange Crush" and "Peerless" chewing tobacco signs decorate its walls. It was the blacksmith shop, the meeting place of the local communists during the twenties and early thirties. It is now owned by a local retired electrician who uses it occasionally as a work shop.

Next to the old blacksmith shop sits another widow's home. She is referred to as "Mother," the grand matriach, and one of the first generation settlers. She is 92 and still very sharp. She bakes her own bread and nisua, and even beats and pounds on the loom to make the traditional and ubiquitous rag rugs to earn a little extra money. Her

son lives across the road, and both he and his wife care for the widow. The wife helps with all the major housework and takes her shopping. The son keeps the house repaired, firewood split and the woodbox filled.

Another widow lives in a little cottage next to "Mother" and the two of them have coffee and visit several times each day. Visitors come from many miles to see these old women and to hear them talk about the old days when the main street was but a logging trail.

To the right of "Mother's" house is an Apostolic Lutheran Church which was remodeled into an apartment building. Last year a carpenter from Baraga purchased it and during the winter remodeled it. It has four separate living units. Last summer Finn River was buzzing with the news of a California bank robber who was staying in one of the apartments. He learned that the Michigan State Police had discovered his hideout, and he left in the middle of the night, after having paid a month's rent in advance.

A Detroit retiree has a home between and just to the left of the very long building you see in the photo. He and his wife are only seasonal residents splitting the year between Florida and Finn River. He grew up in Finn River, worked his entire adult life in Detroit, saved his money, and now owns this retirement home in his home town. Every year it seems there are more Detroit retirees returning to Finn River to spend their last years in solitude. Throughout the Copper Country, post-retirement is occurring in such

proportions that there is a major social problem due to the overwhelming demand for services and facilities for the elderly.

The very long prominent building on the far right side of the aerial photo is the Fair Building. The cars in front belong to the fair board members who are inside planning the biggest social event of the year. The building is a garage for the schoolbus, one part is the new Finn River Fire Hall, another section is a meeting room for the Fair Board, and the back is a spacious dirt floor area for judging animals during the fair, and used as a skating rink in the winter.

The large building to the right of the Fair Building is the Finn River elementary school. Built in 1932, it has been one of the focal points of the community. Grades one through six are taught here. Eight years ago the school board, controlled by nearby sawmill village people, eliminiated the seventh and eighth grades at Finn River and transferred students in these grades to the village school. The past year a new, progressive superintendent was hired and he decided to have the Finn River kindergarteners bussed to the village. Alarmed parents, fearing the eventual close of their school, stormed a meeting with the superintendent, protesting the change, but his decision was final. Within a few years the Finn River school may handle both village and Finn River students in only certain grades. If local fears

are realized, and the school closes, a vital source of community identification will have perished.

The tiny white speck two doors down is the home of a butcher. For many years he worked at the Coop. Finn River residents loved to see him behind the counter because he always gave them good cuts of meat, very well trimmed. He owned a four-wheel drive jeep with a snowplow attachment on it. Every now and then one of his neighbors woke up in the morning, surprised to see their driveway cleared of snow. They knew immediately who had stopped to plow their drive on his way to work. Now he works long hours in a town several miles away and folks seldom see him. He "just doesn't seem to find the time to help folks and visit like he used to." As people get jobs outside Finn River, they lose touch with their neighbors.

Monday through Saturday from 8:00 A.M. until 5:00 P.M. the Finn River service area is buzzing with activity. It is over nine miles away from the nearest store, so to some extent the Cooperative Store enjoys a captive market. But this general store also offers a wide range of merchandise at reasonable prices, so customers are attracted from beyond the Finn River community.

Figure 27 shows the south end of the central area during a summer day. A Baraga County Road Commission road gang is going back to the garage for lunch. The building behind the truck is the old Coop, the original Farmers' Trading Company Store, now a warehouse. Right behind it is

Figure 27. South End of Finn River's Service Center.

Figure 28. North End of Finn River's Service Center.

the old Finn River Creamery. The photo was taken at 2:00 P.M. and the number of cars indicates economic transactions taking place. Seven more cars are parked on the right, hidden from view by the panel truck.

Farm tractors are conspicuously displayed in front of the Coop Gas Station. Every now and then one can see farmers stop their trucks to study them. The size and newness of a farmer's equipment are important status cues. Above the corner of the Finn River Coop Gas Station roof is a tall tower-like elevator. The various tubes attached to the upper part are connected to grain and nutrient bins on the ground. A grain truck drives underneath the tall elevator and a man inside the Feed Mill regulates the quantity of each type of grain and nutrient to be fed into the elevator which will mix as it is loaded into the truck.

Figure 28 shows the north edge of the service center in Finn River. To the right is Urho's Mobile Station now receiving a gasoline supply. To the immediate left is the Coop Building Supplies Center, and right behind it is an old gas station. It has been closed for 15 years and is now a community blight.

To someone in Finn River culture this scene provides an entirely different set of cues than to a cultural alien. In a very small community (420 persons) people having lived here for a while get to know friend's and relative's cars, working hours and visiting places.

Figure 29 gives a view of the Finn River Cooperative Store in April after most of the snow has melted. The right side of the building is the farmer's Feed Mill. One can see a grain nutrient shipment has just arrived from Wisconsin. A pick-up truck is backed up to the unloading dock; evidently picking up a load of cattle feed. Farmers generally hang out in the Feed Mill and talk farming with one another. This photo was taken at 9:00 A.M. Finn River residents wake up very early, and it is not unusual to have a crowd in the store before 9:00 A.M. Here is a far better view of the grain mixing and storage elevators.

As you can see in Figure 30 after dinner the central service area seems as desolate as a ghost town. The sharp contrast between the beehive atmosphere of the work day and this forsaken image is very noticable to the outsider, but taken for granted by residents who believe one ought to stay home with the family in the evening. When bachelor lumberjacks populated the village 60 years ago there were three bars and no churches in Finn River. Now there are three churches and no bars; a clear victory for the devout. Since there are no bars or restaurants in Finn River, there is a conspicuous absence of night life in the "downtown" area. On Friday nights, when the Coop stays open until 9:00 P.M., one can see young men hanging out at the Coop Gas Station, "shootin' the bull."

Finn River farm neighborhoods were critical social units from 1890-1940. In the absence of modern communications

Figure 29. Finn River Cooperative Store.

Figure 30. Finn River Service Area in the Evening.

and transportational facilities, social interaction and help exchange was largely confined within neighborhoods. Kinship networks overlapped with neighbor relations.

To the children, schoolmates were always the neighbor playmates. Almost every neighborhood had its own one-room school. After the farm chores, young boys built neighborhood hockey rinks and played baseball in summer. Keen rivalries developed between the different neighborhood teams. Sometimes the whole neighborhood came to root for their children.

Early "cottage services" (informal worship services) were held in each neighborhood, taking turns at different households. When the Church Road Parish was completed in 1917, once every month a different neighborhood was required to organize and present a Sunday service. When the neighbors had to organize for a common purpose they met in their little school houses.

Rotating collective grain and potato harvest rituals and even the woodcutting bees depended upon the reliability of the neighborhood exchange network. As the crew moved up and down the roads, a man joined the crew to work at his neighbors' farms. Such an alternating crew had the effect of requiring each farmer to work with and for his neighbors. As the communal labor event moved further away from his neighborhood, a farmer dropped out and another took his place as the crew entered the next man's neighborhood.

Physical survival required each farmer to be on good terms with his neighbors. They were always needing one another to give a hand because early farm work was truly labor-intensive. Since monetary resources were scarce, they were also forced to share tools. If someone were injured or bedridden, the neighbors often made the difference between life and death.

As the roads improved, and the innovations of the automobile and telephone spread through Finn River, interaction spread beyond the neighborhood structure. Folks began to visit friends and kinsmen further away. New machinery made farm work less laborious, and neighbors simply did not need one another as much as before.

At the same time (1932) the one-room school houses were closed in the name of bureaucratic efficiency and all the children were thereafter required to attend the Finn River elementary school in the central village area. Because new snow-removal technology kept the roads cleared it was then possible for school children to travel to central Finn River in the winter. It seemed that many things happened at about the same time, which had the effect of opening up the segmented, rather self-contained neighborhoods. But some of the old patterns remained. Today the neighbor relation is still a vital component in Finn River's social structure. This is especially the case with retirees and farmers who do not leave their homes to work.

APPENDIX D

CHARACTERISTICS OF FINN RIVER POPULATION

CHARACTERISTICS OF FINN RIVER POPULATION

Finn River is a rather small community with only 420 persons, 228 males and 192 females living in 158 households.[14] Since the territorial community covers about 25 square miles the population density is about 6.3 households per square mile, or 16.7 persons per square mile. Compare this to 4,407.9 persons per square mile in the Detroit area.[15]

Age Distribution

First, a look at the age distribution of the Finn River population. Table 45, on the next page, illustrates the distribution of Finn River by sex and age and contrasts this with the population distribution for both urban and rural areas in Michigan, based upon the 1970 census.[16] The contrast is to provide a baseline by which to consider the more dramatic features of the Finn River population.

Finn River has a relatively high proportion of senior citizens. Both the median age of 38.7 for males and 35.2 for females are far higher than their Michigan urban or rural counterparts: 25.4 for urban males; 25.6 for rural

Table 45. Comparison of Finn River Age Distribution to 1970 Michigan Urban and Rural Areas.*

		Percent of Male Population				Percent of Female Population		
Age Category	Finn River Freq.	Finn River	Urban Mich.	Rural Mich.	Finn River Freq.	Finn River	Urban Mich.	Rural Mich.
1-4	17	7.5	9.5	9.4	16	8.3	8.6	9.0
5-9	17	7.5	10.6	11.6	19	9.9	9.6	11.1
10-14	22	9.6	11.2	12.2	17	8.9	10.2	11.7
15-19	17	7.5	10.1	9.8	15	7.8	9.7	9.5
20-24	7	3.1	8.1	6.1	6	3.1	8.8	6.8
25-29	11	4.8	6.9	6.2	10	5.2	6.6	6.5
30-34	9	3.9	5.4	5.8	9	4.7	5.4	5.9
35-39	6	2.6	5.2	5.5	9	4.7	5.3	5.6
40-44	14	6.1	6.0	5.8	7	3.6	6.0	5.8
45-49	5	2.2	6.1	5.5	11	5.7	6.1	5.6
50-54	20	8.8	5.4	5.1	17	8.9	5.5	5.2
55-59	22	9.6	4.6	4.6	18	9.4	4.7	4.5
60-64	33	14.5	3.7	3.9	16	8.3	3.9	3.8
65-69	14	6.1	2.7	3.1	15	7.8	3.1	3.0
70-74	8	3.5	2.0	2.2	5	2.6	2.6	2.3
75 on	6	2.6	2.5	2.9	2	1.0	3.8	3.6
Total	228	100%	100%	100%	192	100%	100%	100%
Median age		38.7	25.4	25.6		35.2	27.3	26.5
% under 18		28.9	37.4	39.9		31.8	34.2	38.2
% 65 on		12.3	7.3	8.2		11.5	9.9	8.9

*Michigan Statistical Abstract, 1974. Finn River data were collected by the author in 1973.

males; 27.3 for urban females; and 26.5 for rural females. This is also reflected in the percentage of the population 65 or older. For the Finn River males it is 12.2% compared to 7.2% for urban males and 8.2% for rural males. Similarly, 11.4% of Finn River females are 65 or older in contrast to 9.5% of urban females and 8.9% of rural females. The higher proportion of persons 50 years and older indicates that the second generation sons and daughters, born between 1900 and 1920, are approaching retirement. In addition, former Finn River residents who migrated to Detroit during the 1930's and 1940's are now returning to live out their retirement years.

Since the 1930's young people have been leaving Finn River to work in Detroit. Notice the sharp percentage differences between Finn River and urban areas in the 20-24 and 25-29 age categories. The outmigration tendencies of Finn River are quite strong even with respect to all of the other rural areas in Michigan. Young Finn River adults between 20 and 24 years are about twice as likely to leave their community as rural youth throughout the state.

Outmigration of young adults contributes to the strikingly high percentage of older persons in the population, and is also reflected in the smaller percentages of children compared with both urban and rural areas of the state. Many of Finn River's younger adults are making their families in the cities of downstate Michigan. The percentage of male children under 18 years of age is 28.9% in

Finn River as compared with 39.9% for all the other rural areas of Michigan; and for Finn River females it is 31.8% in contrast to 38.2% for the other Michigan rural areas.

Sexual composition

It is also apparent that in Finn River there are far more males than females. Table 46 compares Finn River sex ratios with Baraga County, urban Michigan, rural Michigan and the nation. The 118.8 Finn River sex ratio is far higher than other rural areas of Michigan. Although their numbers are significantly smaller than Finn River's, the Baraga County sex ratio is also dramatically higher than the rest of rural Michigan.

A surprising difference exists between the Finn River sex ratio for those persons under 18 years of age, and the corresponding scores for the other aggregates. Most of this is due to peculiar quirks involving the birth of many males in a few Finn River families, especially between 1960 and 1964. One family has eight boys and no girls and two others have four boys and no girls. Obviously the Finn River population is such a small sample that this trend would disappear during a longer period.

We do notice, however, that in Baraga County the sex ratio is higher than in the other rural areas of Michigan. It may be the result of difficult circumstances for many small scale dairy operators. This is an especially intense predicament for U.P. farmers since due to their

Table 46. Sex Ratio Comparisons Between Finn River and 1970 National, State and County Data.*

Age Category	Finn River	Baraga County	Urban Mich.	Rural Mich.	U.S.
All ages	118.8	109.3	94.3	93.2	94.8
Under 18	108.2	105.9	103.3	105.5	104.2
65 on	127.3	106.1	69.6	93.2	72.2

*Sex ratio refers to the number of males per 100 females. Finn River data was collected in 1973 by the author. U.S. and Michigan Data are from Michigan Statistical Abstract, 1974.

relative geographical isolation from urban markets, high competition exists for the local market. Since the 1950's many persons have opted out of dairy farming. Many were faced with the decision of either increasing their capital investment and expanding the scope of their operations or quitting the dairy farming business. If the farm family had one or more sons who might take over the business after the parents retire this provides an additional incentive to invest in fixed capital which would have long range payoffs. Whereas a family not having any sons might decide not to make the long range financial commitment because they would be retiring in a few years, with no one to take over the operation. Hence many farmers may choose to stay in the area because they have sons who will eventually benefit from their investment. Farm families without sons may be more likely to decide to sell their farms and move into another area near employment opportunities.

By far the greatest difference between Finn River sex ratios and those of other aggregates lies in the 65 and over category. The 65 and over Finn River sex ratio is 127.3 as compared with 93.2 in rural Michigan. Generally sex ratios of the aged are far lower since females in industrial societies outlive males. This is simply not the case in Finn River where the sex ratio of the elderly is far higher than for all ages combined.

Several trends can account for this discrepancy. As widows get older, they move out of Finn River in higher

rates than their male age counterparts. A good deal of heavy work, culturally defined as male labor, is involved in daily life. Many people must chop their own firewood for either primary or supplemental cooking and heating fuel. Shoveling snow is a strenuous and never-ending task in the winter. Automobiles are difficult to start during the cold winter temperatures and require constant maintenance which is in an entirely alien activity sphere for the Finn River female. Traveling to shop or to see a doctor is a problem because few older Finn River females have learned to drive cars. Hence, most widows find old age especially difficult because the culturally defined sexual division of labor has oriented their entire lives away from the daily physical tasks they must confront when they live alone.

Finn River culture has had a strong masculine flavor. The initial Finnish immigration was heavily skewed in favor of males. Landless males roaming throughout Finland working wherever seasons permitted constituted the largest portion of the immigrants (Hoglund, 1974: 11). Finnish females could rather easily find work as domestic servants working in return for room and board and a small allowance. During the period between 1893 and 1902, 53,098 of the Finnish immigrants were males and only 30,172 were females. The sex ratio of Finnish immigrants was 175 males per 100 females (Wargelin, 1924).

The heavy male bias in the initial immigration coupled with the rugged bachelor-lumberjack life style

created a local cultural tradition oriented toward masculine styles of life. A strong masculine bachelor subculture makes Finn River a psychologically comfortable setting for unmarried males and widowers. Most older males want to stick it out in Finn River with their age peers, rather than live in a nursing home. Aged widows seem far less reluctant to move into a town or nursing facility.

The large proportion of male bachelors is illustrated in Tables 47 and 48 on the next pages containing a comparison of the distribution of Finn River males and females across household role combinations. Twenty-two bachelor males constitute 23.5% of the adult male population, whereas bachelor women account for only 4.6% of the adult female population. The bachelor sex ratio is 633.[17] Male bachelors have a .58 probability of living alone. All of the widowers were able to cope with daily life alone, whereas one out of two Finn River widows move into a house with another brother or sister.

Geographical stability

The vast majority of all adult Finn River residents live their lives within familiar cultural scenes. As summarized in Table 49 crossclassifying the adults by sex, birthplace, and childhood residence, among the adult males 60.5% are natives, whereas only 39.7% of the adult females are so classified. Even among the non-natives most grew up within 30 miles of Finn River; 39% of the non-native males

Table 47. Distribution of Finn River Males by Household Role Combinations.

Household Role Combinations	Frequency	Percent
Husband (living only with wife)	52	22.8
Husband-Father (living with wife and one or more children)	55	24.1
Bachelor-Brother (living with brother and/or sister)	16	7.0
Bachelor (living alone)	22	9.7
Widower (living alone)	7	3.1
Son (only child living with one or both parents)	14	6.2
Son-Brother (living with one or both parents and one or more brothers and/or sisters)	55	24.1
Father (widower living with one or more children)	2	.9
Husband-Father-Son (living with wife, one or more children and father or mother)	1	.4
Husband-Father-Brother (living with wife, one or more children, and brother or sister)	1	.4
Husband-Brother-in-law (living with wife and her brother or sister)	2	.9
Uncle (living with niece and her husband)	1	.4
Total	228	100%

Table 48. Distribution of Finn River Females by Household Role Combinations.

Household Role Combinations	Frequency	Percent
Wife (living with husband)	52	27.1
Wife-Mother (living with husband and one or more children)	55	28.7
Bachelor-Sister (living with brother or sister)	6	3.1
Widow (living alone)	7	3.6
Daughter (only child living with one or both parents)	7	3.6
Daughter-Sister (living with one or both parents and one or more brothers and/or sisters)	54	28.1
Mother (widow living with child)	2	1.0
Wife-Mother-Daughter-in-law (living with husband, children and husband's mother)	1	.5
Wife-Mother-Sister-in-law (living with husband, children and husband's brother or sister)	1	.5
Wife-Sister (living with husband and brother or sister)	2	1.0
Wife-Niece (living with husband and uncle)	1	.5
Widow-Sister (living with brother or sister)	4	2.1
Total	192	100%

Table 49. Finn River Adult Population by Sex, Birthplace and Childhood Residence.

	Adult Males		Adult Females	
Birthplace	Frequency	Percent	Frequency	Percent
Finn River native	98	60.5	52	39.7
Non-native	64	39.5	79	61.3
Total	162	100%	131	100%
Childhood Residence of Non-natives				
Within 15 miles of Finn River	16	25.0	23	29.1
16-30 miles	9	14.1	18	22.7
31-50 miles	4	6.3	5	6.3
Upper Peninsula over 50 miles	7	10.9	4	5.1
Lower Peninsula rural area	2	3.2	6	7.6
Lower Peninsula urban area	3	4.7	8	10.1
Rural area outside of Michigan	3	4.7	2	2.5
Urban area outside of Michigan	6	9.4	7	8.9
Finland	1	1.6	4	5.1
Missing data	13	20.3	3	3.7
Total	64	100%	79	100%

and 51% of the non-native females. Hence, roughly 80% of all the adults were socialized within or intensively exposed to Upper Peninsula Finnish culture.

Most Finn River residents have lived in the community for their entire lives. Males and females were asked to calculate the total number of years they have lived there, discounting those years in which they lived elsewhere. The mean number of years lived in the community for males is 34 years and for females 27 years.

Table 50 illustrates the relation between the total number of years lived in the community and the current adult population distribution. Within the last five years there has been a noticeable migration into the community. These new arrivals include both retired returning migrants and young couples seeking to escape the stresses of urban life. Most of these people work in nearby towns.

A good many males and females living in Finn River from 36 to 50 years have ages about five to seven years higher than the number of years they lived in the community. Most of these people moved to Detroit during the post World War II economic boom, and moved back to Finn River as they were laid off during the late 1950s.

The data indicate that most of Finn River's adult population have grown up in or very near the community, and have lived in Finn River for a substantial portion of their lives. Cultural homogeneity is the by-product of such population stability. Let us consider this ethnic cultural dimension.

Table 50. Total Years Lived in Finn River by Sex and Mean Age.

Total Years in Finn River	Males			Females		
	Frequency	Percent	Mean Age	Frequency	Percent	Mean Age
0-5	22	13.6	40	23	17.7	33
6-10	7	4.3	48	8	6.2	46
11-15	5	3.1	40	6	4.6	36
16-20	13	8.0	34	18	13.8	38
21-25	16	9.9	46	9	6.9	51
26-30	10	6.2	48	15	11.5	52
31-35	5	3.1	41	13	10.0	52
36-40	5	3.1	45	4	3.1	53
41-45	11	6.8	51	6	4.6	61
46-50	11	6.8	56	7	5.4	57
51-55	22	13.6	58	12	9.2	60
56-60	19	11.6	60	4	3.1	61
61 on	16	9.9	66	5	3.9	65
Total	162	100%	50	130	100%	48

Ethnic cultural homogeneity

In Finn River approximately 85% of the males and 79% of the females consider themselves to be Finnish. Swedish and French-Canadian people each make up about 3%, and the remaining 11% are of mixed ethnic backgrounds.

Table 51 on the next page illustrates the distribution of language skills by age and sex categories. One frequently hears Finnish spoken amongst the second generation. Sixty-seven percent of the adult males and 61% of adult females are bilingual, speaking both English and Finnish. Only about 2% of the adult population speaks only Finnish, and about the same portion is bilingual speaking both Swedish and English. There are no traces of the French language left in Finn River.

In the 18-28 age category none of the males and 15.8% of the females speak Finnish. (Perhaps a few more females in the younger age categories still speak Finnish because sex role confinement to the home increased their interaction with aging grandparents for whom their parents were caring.) The third generation has lost its ethnic linguistic heritage. In the adult education programs offered by the local school system, for the past three years there have been at least two beginning Finnish courses offered. Young and middle-aged people actually feel a sense of loss over their vanishing linguistic heritage, but the investment in time and energy required to learn the Finnish language appears to outweigh their desire to recapture it.

Table 51. Language Skill by Age and Sex.

Age Category		Monolingual English		Monolingual Finnish		Bilingual English-Finnish		Bilingual English-Swedish		Marginal Totals	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
18-28											
	Count	20	17	0	0	1	3	0	0	21	20
	Row Pct	95.2	85.0	0.0	0.0	4.8	15.0	0.0	0.0	100.0	100.0
	Col Pct	41.7	37.0	0.0	0.0	.9	3.8	0.0	0.0	13.0	15.4
29-39											
	Count	11	14	0	0	6	5	0	0	17	19
	Row Pct	64.7	73.7	0.0	0.0	35.3	26.3	0.0	0.0	100.0	100.0
	Col Pct	22.9	30.4	0.0	0.0	5.5	6.4	0.0	0.0	10.5	14.6
40-50											
	Count	7	8	0	0	14	12	0	0	21	20
	Row Pct	3.3	40.0	0.0	0.0	66.7	60.0	0.0	0.0	100.0	100.0
	Col Pct	14.6	17.4	0.0	0.0	12.8	15.4	0.0	0.0	13	15.4
51-61											
	Count	7	7	0	0	50	30	0	0	57	37
	Row Pct	12.3	18.9	0.0	0.0	87.7	81.1	0.0	0.0	100.0	100.0
	Col Pct	14.6	15.2	0.0	0.0	45.9	38.5	0.0	0.0	35.2	28.5
62 on											
	Count	3	0	3	3	38	28	2	3	46	34
	Row Pct	6.5	0.0	8.8	8.8	82.6	73.6	4.3	8.8	100.0	100.0
	Col Pct	6.2	0.0	100.0	100.0	34.9	35.9	100.0	100.0	28.3	26.1
Total		48	46	3	3	109	78	2	3	162	130
		29.6	35.4	1.9	2.3	67.3	60.0	1.2	2.3	100.0	100.0
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In the 29-39 age category, 38.9% of the males and 25% of the females are bilingual. In the 40-50 age group the linguistic factor begins to assume a greater significance as 65% of the males and 63.2% of the females are bilingual. The trend continues as 84.7% of the males and 81.1% of the females are bilingual in the 51-61 age category. And finally 83% of the males and females 62 years or older are bilingual.

The strong association of the ability to speak Finnish with age has important consequences for the social organization of the community. The fact that linguistic skill coincides with age reinforces the age group structure of the community. When persons over 40 visit one another they generally speak Finnish unless a monolingual conversational participant is present. However, even if a non-Finnish speaking person is present, jokes and humorous stories almost always provide the occasion to shift into the Finnish language. The younger person is left not understanding the joke or story. Most often a translation is provided for the monolingual English speaker, out of courtesy, but the humor seems to vanish in the translation process.

When bilinguals are in the company of English-speaking monolinguals and they are searching for a word to describe their thoughts they are likely to suddenly shift into Finnish. Perhaps they will ask a bilingual for the English translation of the Finnish word or phrase.

Since the Finn River Evangelical Lutheran Church was established in 1905, the church had maintained the old country linguistic heritage. Most of the second generation can both read and write Finnish because it was required for their Sunday School lessons and confirmation school. Even as late as the mid 1950s sermons were still delivered in Finnish. Many Finn River church members resisted the switch to English out of concern for the aging first generation of monolingual Finnish speakers, and because even the second generation experienced a loss of spiritual meaning during English sermons.

Among the second generation and the few Finnish speaking bilinguals of the third generation, the Finnish language is not just an antiquated cultural feature, but an integral component of the culture. Only 26% of the Finnish-English bilinguals restrict their usage of Finnish merely to conversational interaction with native age peers. Thirty-six percent of the male bilinguals and 24% of the female bilinguals go beyond strictly conversational use and listen to Finnish radio and television broadcasts. And 37.5% of the male bilinguals and 49.3% of the female bilinguals extend their involvement in their native language beyond either the personally and electronically transmitted spoken language by reading Finnish language newspapers, and magazines and maintaining correspondence with relatives in Finland.

Within another generation one will seldom hear Finnish spoken in Finn River. Young monolingual English-speaking males may still occasionally enjoy the delights of cursing in Finnish as they do today because of the remarkably pleasant melodious quality of Finnish swear words. The end of the Finnish language began in the public schools where after 1900 one could hear Finnish, French and Swedish only behind the school during recess when the teacher was not around to insist upon using the English language. Children learned to speak English while at school and reverted back to Finnish while at home.

Education

As far as formal education is concerned, Finn River residents rank relatively lower than Michigan's caucasion population. The average Finn River male has completed 9.6 grades of education as compared with 12.2 years for the average Michigan white male in 1970.[18] The Finn River adult female is comparatively more educated with a mean of 10.6 years as compared to 12.2 years for the average Michigan white female. The educational picture is the same throughout the immediately surrounding area. In Baraga County 37.7% of the males and 48.1% of the females 25 or older have completed high school whereas in the Detroit metropolitan area the corresponding figures are 46.4% and 48.5% respectively for 1970.

Table 52 illustrates the distribution of years of formal education by the percent of the adult male population and by the percent of the adult female population. The first children born between 1900-1905 were not expected to actively pursue an education because even one-room school houses were so few and far between, and children were kept close to home. Children born between 1906-1920 were expected to complete an eighth grade education in the nearby one-room school houses. By the early 1920s, as better roads were constructed, it was possible for some children to continue their high school education in a nearby village. This was especially true for those children born after 1925.

In the latter 1920s most Finn River adolescents were confronted with a critical choice in their lives. Should one travel to the village and live there to continue one's high school education or should one quit to enter the adult work world? Far more females continued their education beyond the eighth grade, whereas the males quit school to work on the farms and in the woods for cash income.

Here we find a reversal of an earlier trend. Among children born between 1900 and the late 1920s, educational achievement was higher for the males than for females. Among those children born after 1927 females had higher educational achievement levels. This is shown in higher numbers of females completing high school. Finn River residents have told me that the young males were desperately needed to help clear land for the family farm and to work

Table 52. Adult Educational Achievement by Sex and Mean Age.

	Males			Females		
Years of Education	Frequency	Percent	Mean Age	Frequency	Percent	Mean Age
0-3	7	4.8	66	1	.8	88
4-6	15	9.2	62	6	4.6	68
7-9	72	43.5	58	34	26.2	58
10-12	52	32.0	41	64	49.1	43
13-15	6	3.7	28	14	10.8	37
16-18	5	3.1	29	10	7.7	44
19 on	6	3.7	28	1	.8	26
	162	100.0	49.7	130	100.0	47.7

in the woods to help pay for the land. Many younger males worked as woodsmen and handed their paychecks to their fathers. Younger female labor was slightly more expendable, given the requirements of the pioneer household work organization, and the fact that few job opportunities were open to women. Many were allowed to continue their educations. Most lived with village people and did domestic work in return for room and board.

In the remote backwoods setting the adult male role models capturing a young man's attention were often the lumberjacks. Some of these had become local legends, and as the young men heard the other jacks talking about these folk heroes, they hoped someday to become a lumberjack. The masculine lumberjack bachelor culture attracted young Finn River males away from the school books and into the woods.

Participation in the cash economy

Most Finn River adults are perfect illustrations of how persons are driven to work by an ethic closely tied to religious beliefs. As the original emigrants were leaving Finland, a pietistic religious movement was sweeping through the country. One had to work hard almost to the point of exhaustion so there would be no energy left for the devil to use for evil. To not work hard is to sin.

Both male and female Finn River folks in visiting conversation inject information to convince the listener of

their conformity to the work ethic. A subtle contest is always going on to see who woke up the earliest. The early riser jokingly casts shame upon the lazy late sleeper. Finn River adults always tell their friends how hard they have worked and how very busy they have been since they last met.

There is little industry near Finn River so the supply of unskilled labor exceeds the demand, and workers are forced to accept lower wages than they would make doing comparable work in urban areas. Many males adapt to this situation by "keeping several irons in the fire," that is, by working at a second and in some cases even a third part-time job, to make a higher income. Table 53 illustrates the scope of the adult male's participation in the cash economy. Notice the large number of males working two or more jobs. Of the active work force, 18.5% of the workers work two jobs, and 6.8% work three jobs. These second and third jobs are generally part-time activities such as dairy farming on a limited scale, raising beef cattle for the market, perhaps trapping muskrats and beaver, or making pulpwood in spare time.

Notice the large number of retired persons living in Finn River. One out of every four adult males is retired.

Table 54 illustrates the types of employers for whom Finn River residents work. The forestry industry is the source of most jobs in the Finn River area. Twenty-four

Table 53. Scope of Adult Male Participation in Cash Economy.

Scope of Committment	Frequency	Percent
Works one basic job for cash income	69	42.6
Works two jobs for cash income (includes part time work)	30	18.5
Works three jobs for cash income (including part time work)	11	6.8
Cash income from pension and/or Social Security and/or savings	41	25.3
Cash income from Welfare payments	11	6.8
	162	100.0

Table 54. Types of Employers of Finn River Adult Population.

Employer Categories	Males	Percent	Females	Percent
Forestry Products				
Sawmill	9	5.6	0	0.0
Logging contractor	6	3.7	0	0.0
Compressed board manufacturer	9	5.6	1	.8
Lumber retail outlet	2	1.2	0	0.0
Mining				
Copper	2	1.2	0	0.0
Iron	3	1.9	0	0.0
Dairy Farming	24	14.8	8	6.2
Self-employed				
Non-farming (full and part-time)	12	7.4	6	4.6
Government Services				
Federal	6	3.8	2	1.6
State	3	1.9	2	1.6
County	4	2.4	0	0.0
Township schools	5	3.1	4	3.1
Retail Services				
Finn River Cooperative Store	3	1.9	7	5.4
Restaurant	0	0.0	5	3.8
Fuel distributor	2	1.2	1	.8
Machine Shops	10	6.2	0	0.0
Construction	9	5.6	0	0.0
Hospital	0	0.0	3	2.4
Miscellaneous Private Services	1	.6	6	4.6
Not Employed				
Retired, Welfare or dependent on another wage earner	52	31.9	85	65.1
Total	162	100%	130	100%

percent of the adult male active work force are employed in sawmills, as woodsmen, in the Celotex factory making the compressed board, or in a lumber yard.

Very few of the female members of the work force are employed in the forestry industry. One woman works in the Celotex plant as an inspector on the assembly line.

Twenty-two percent of the male workers and 18% of the female workers work on dairy farms. The eight women I have classified as dairy farm workers are those who regularly work in the barn. Virtually all farm wives pitch in during an emergency, but two out of three refrain from regularly doing the farm chores. This marks an interesting reversal in sex roles. Among the first generation Finnish pioneer farmers, women were expected to milk the cows and men worked the fields. Today, very few teenage girls and younger women will even go into the barn. The older women think nothing of it and simply regard barn chores as a part of the regular work day.

Only five men are employed in the mining industry. They drive up to 80 miles to work at the Tilden Mining Company in Ishpeming or the White Pine Copper Mine in White Pine. All men are members of car pools and they have formed friendships by spending four hours a day in the same car. For all of these men, Finn River has become almost solely a bedroom community. They all have very limited contact with other members of the community. The increasing cost

of gasoline and possible rationing may pose severe difficulties upon their ability to get to work.

Slightly over 16% of the male work force and about 18% of the female wage earners are government employees. The Finn River Post Office, county road commission, and the township schools account for most of the male employees. The female government employees are essentially clerks and secretaries for the State of Michigan Department of Natural Resources, or school employees.

Male workers in the self-employed category are independent carpenters, an electrician, a tool builder, a machinist working out of his own shop, a cabinet-maker and several odd-job laborers who seem to be steadily employed and working wherever they are needed.

The employment picture is especially bad for women. Thirty-nine percent of the adult women said they had some specialized occupational training, but less than 16% are currently full-time wage earners, and 13% are part-time wage earners. There are simply very few employment opportunities available for women, and some of the service jobs are seasonal and fluctuate with the tourist trade.

Some women I have classified as self-employed because they engage in very modest money-making activities in their own home. These activities include making rag rugs for sale, making home-made cheese, or doing seamstress work.

Thirteen percent of Finn River women are engaged in this kind of activity.

Finn River retains a sense of community because the people spend a great deal of their lives within the territorial boundaries of the community. Thirty-two percent of the adult male population is not on the active work force. Sixty-five percent of the women do not work for outside employers and are also limited to activity within the community setting for most of their lives.

Even among the members of the active work force, as shown on Table 55 on the next page, 34.5% of the males and 51.1% of the females work within the community. Males working within the community are mainly farmers, Finn River Post Office employees, employees of the Finn River Cooperative Store, mechanics at the two local gas stations, and several self-employed and odd-job laborers who spend most of their time within the community. Among the females working within the community, the bulk are workers on family dairy farms, employees of the Finn River Cooperative Store and women working on various handicraft activities as a part-time activity within their homes.

Counting both the workers within the community and the economically inactive (non-wage earners), 55.5% of the adult males and 83.1% of the adult females have their daily activity channeled essentially within the community. This results in a relatively high intracommunity to intercommunity

Table 55. Distance Traveled to Work by Sex.

Distance in Miles from Finn River to Work Location	Males		Females	
	Frequency	Percent	Frequency	Percent
Work within Finn River community	38	34.5	23	51.1
1-5	4	3.6	1	2.3
6-10	16	14.7	13	28.9
11-15	21	19.1	6	13.3
16-20	0	0.0	0	0.0
21-25	3	2.7	0	0.0
26-30	7	6.4	2	4.4
31-35	3	2.7	0	0.0
36-40	0	0.0	0	0.0
41-45	2	1.8	0	0.0
46-50	2	1.8	0	0.0
51-55	0	0.0	0	0.0
56-60	3	2.7	0	0.0
61-65	0	0.0	0	0.0
66-70	4	3.6	0	0.0
71 on	7	6.4	0	0.0
Total	110*	100%	45	100%

*Total members in the active work force.

ratio of social interaction which contributes to the sense of community.

The six through ten mile category includes essentially those persons working in the nearby village. Notice that 14.7% of the males and 28.9% of the females on the active work force work right in or on the outskirts of the village. Most of the males are employed in a factory making heavy duty materials-handling equipment, or they work in one of the several small machine shops who sub-contract jobs from it. The female employees working there are employed by the school system, by the restaurants open for summer tourist trade, or by the State of Michigan Department of Natural Resources. Most of the people who work in the village tend to lose social contact with their neighbors and friends in Finn River. Most of the males in the work distance category of 11 through 15 miles are employed by the corporation which manufactures a fabricated board widely used in the construction industry. The rest of the males in this category work in small sawmills. Females in this category work in the town hospital and as clerks and waitresses in the town commercial service facilities.

A small modal point exists at the 26 through 30 category which includes those persons working in the retail stores in either Houghton or Hancock. These twin cities lie adjacent to one another. Most of these persons have begun to lose social contact with their Finn River friends and neighbors.

Notice that 16.4% of the male members of the active work force must drive over 40 miles (one way) to work. Ten percent of the males drive over 66 miles to work. Because of the many hours spent driving and working, these men are really losing touch with the community. A 60-mile drive in the winter is likely to take two hours. Counting the return trip, this amounts to spending about four hours a day on the road during the winter months. Naturally at times the driving conditions are better and a person would spend only two and a half hours a day on the way to and from work. Even then, this does not leave very much time for socializing with one's friends and neighbors. Many of these people feel uncomfortable about always driving past their neighbors' homes but not having time to stop and visit. As people are continually opting out of the dairy farming business and are forced to work many miles from their home, Finn River is rapidly becoming a bedroom community.

Household income distribution

Based upon cash economic criteria, it is clear that Finn River people are not as well off as the mainstream urban population. The 1974 median family income for Finn River residents was only $6500, whereas the national median for the same year was $11,547. Without getting bogged down into a consideration of the most appropriate statistical definition of the poverty line in a northern Michigan

community, we may simply note that slightly over 27% of the households earn an income of less than $4,000.[19]

Table 56 shows the family income distribution for Finn River in 1974. The extraordinarily high frequency of persons with incomes ranging from $3,000 to $3,999 is due to the 25.3% of the adult population that is retired and collecting social security payments. Most of these persons are ex-farmers and do not have the comfortable pensions enjoyed by unionized urban workers. Urban retirees move into the area, build new homes and exhibit consumption lifestyles which are beyond the economic means of the ex-farmer retirees. This circumstance tends to increase the sense of relative deprivation on the part of local retirees.

Subsistence economy

Along with most of the Upper Peninsula residents, Finn River people have learned to adapt to the relative scarcity of monetary resources by diversifying their skills in the subsistence sphere of the local economy. Slightly over 89% of the Finn River residents regularly cultivate a household garden.

Subsistence agriculture is an important ingredient in the Finn River way of life. In the summer visitors are almost always given a tour through the family garden and generally leave with a bag of vegetables if they happen to

Table 56. 1974 Estimated Finn River Family Income Distribution.*

Family Income	Frequency	Percent
$0-1,999	4	2.5
2,000-2,999	6	3.8
3,000-3,999	33	20.9
4,000-4,999	17	10.8
5,000-5,999	13	8.2
6,000-6,999	21	13.3
7,000-7,999	13	8.2
8,000-8,999	8	5.1
9,000-9,999	9	5.7
10,000-10,999	5	3.2
11,000-11,999	4	2.5
12,000-12,999	5	3.2
13,000-13,999	3	1.9
14,000-14,999	5	3.2
15,000-15,999	2	1.3
16,000-16,999	2	1.3
17,000-17,999	1	.6
18,000-18,999	1	.6
19,000-19,999	1	.6
20,000-20,999	1	.6
21,000-21,999	0	0.0
22,000 and over	4	2.5
Total	158	100%

*Estimates are based on 1974 Baraga County mean incomes for occupational categories.

not have a garden of their own, or if a particular vegetable did not grow well for them that year. The state of the garden and the consequences and likelihood of summer frosts are dominant conversational topics throughout the summer.

Among retirees there is even a subtle competition to see who can grow the biggest and best vegetables. In spite of the short growing season, Finn River residents have devised a wide range of techniques for growing vegetables generally not suited for cool temperatures. Figure 31 shows a Finn River retiree who uses a heavy gauge plastic sheet to cover his cucumber plants to protect them from frosts and the cold spring easterly winds. He props the plastic cover up over the plant with a short stick because the leaves touching the plastic freeze during frosts. The cover is left on the plants during very cold days in early spring to create a greenhouse effect. On warmer days the cover must be opened slightly on the side opposite the wind to allow for a little air circulation to prevent wilting under hot temperatures.

Figure 32 shows a typical Finn River basement food cellar. Notice the shelves are very wide and hold four rows of quart jars. This contribution to the household budget is of course quite substantial.

Finn River women do virtually all of the canning. Teenage daughters often help the mother with this work, but I have never seen nor heard of a man helping with this task, except for the gathering phase of it. Women can

Figure 31. Finn River Gardener's Protective Device for Warm Weather Plants.

Figure 32. Typical Basement Food Cellar.

Figure 33. Finn River Gardener Harvesting Potatoes.

vegetables, juice and berries and make jams and jellies. Some even can fish when their freezer is too full for it.

Women buy few convenience foods, and bake their own breads, cakes, cookies and pies. Some knit their family's sweaters, socks and mittens; and some women make a good portion of their own and their children's clothes. Some women make rag rugs for their floors and a few women make colorful homemade quilts. They buy many things when they are on sale, and cut all sorts of corners to make their small budgets meet the family needs.

Figure 33 shows a Finn River man working in his garden. Notice he is wearing an insulated jacket and a hat. It is the second week in September and this man is harvesting his winter potatoes, the basic staple in Finn River people's diet. Generally root, rather than leafy vegetables, which are less vulnerable to killing summer frosts, account for most of the gardening effort. This includes potatoes, rutabagas, turnips, carrots, onions, beets, and radishes.

Working in the garden is experienced in a way unlike work in a factory. The subsistence agricultural motives are a complex mixture of economic cost minimization and intrinsic pleasure. Finn River people find gardening very enjoyable, and many claim they do it for the sheer pleasure of getting their hands into the soil and watching the plants grow. Confronted with such a harsh winter climate, the Finn River residents have learned to appreciate their short growing season in a way that persons living in warmer climates take

for granted. And everything seems to grow in a rush as if it knew that it had only a little time left before the return of cold weather. Actually things grow quickly in Finn River because since they are so far north, the sun shines longer during summer days than in most sections of the nation.

Finn River men and women have learned a surprisingly vast range of skills to help them cope with a harsh environment with very limited monetary reserves. Men take pride in being a "jack of all trades." They are unlike middle class urbanites insofar as they insist upon understanding the inner mechanisms of their regularly used technological facilities. If they drive cars they know what goes on under the hood. A sense of discomfort pervades a Finn River man if he has simply a push-button knowledge of a technological apparatus.

When males visit with one another they discuss common techno-environmental topics like accelerator jets, vacuum advances, thermostats, furnaces, and virtually everything encountered in their immediate environment. One tells the other about a problem he was working on and they exchange information about appropriate solutions and cost consideration. If one man buys a new car and visits a friend, they examine it thoroughly. They lift up the hood and study the engine. Rather than feeling the texture of the upholstery, they will remove the air cleaner and examine the carburetor or even crawl under the car to look at the suspension system.

Leaf strings and shock absorbers command more attention than arm rests and bucket seats. It is not uncommon for a Finn River male to completely disassemble something he has purchased to study the logic of the inner mechanisms.

Finn River people are creative improvisers in problem situations. Often they not only do the job themselves, but actually design and construct the tools with which to do it. They are aware of this creative improvisation tendency among their people and are proud of it. When asking about such matters, I have seen old men squint their eyes and while staring directly into me with a self-confidence approaching arrogance, and say, "A cat will find its claws when there is need." Finnish folk wisdom is often clothed in such a naturalistic analog.

Spare parts are stored in every conceivable place and the male of the household seems to know where everything is, in what often appears to be a junk pile. Figure 34 illustrates beautifully how Finn River people hesitate to throw things away because they anticipate the use of spare parts in future repair situstions. Notice the cluttered appearance of this outside wall and look closely at the different types of salvaged technology. Old vacuum cleaner hoses are good for channeling auto exhaust fumes out of the garage when you work on the car. Hoses can always be cut to fit a radiator. Inner tubes should always be saved to make snowshoe bindings, gaskets, and various cushions. Old dish drainers are useful for holding auto parts when you

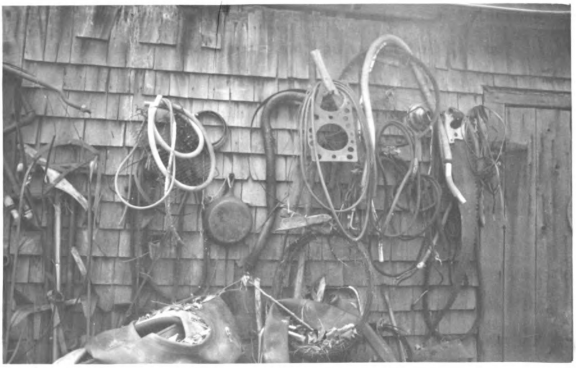

Figure 34. Junk Salvaged for Spare Parts.

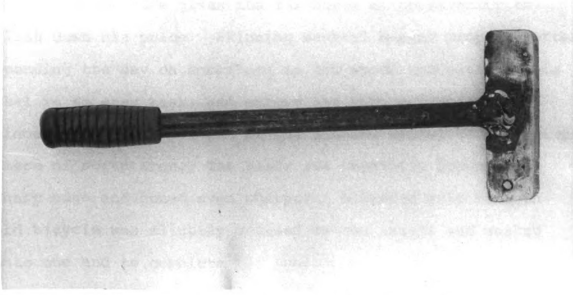

Figure 35. Tool Designed and Made by a Finn River Man.

dipping them into kerosene or gasoline cleaning solutions. Wire should always be saved, and you would be wise to always carry a little roll in your car in case something happens on the road. This man saves old sled runners and all sorts of metal parts because he does his own welding. Cylinder head gaskets, old axe handles and pieces of pipe should never be thrown away because "you never know when you might need it."

In Figure 35 just beneath the outdoor spare parts warehouse is a modest example of adaptive skill guided by an economic cost minimization coping strategy. A trapper designed and made this tool for skinning beaver. He did not like the commercial skinning knives already on the market because he could not apply enough pressure against the hide while skinning the animal without careful effort, and it is very easy to slip and accidently cut the hide. The slightest damage to the hide gives the fur buyer an opportunity to slash down his price. Skinning several beaver properly after spending the day on snowshoes in the woods and eating a big meal is no easy task, and errors are very expensive. A piece of pipe was crimped at one end and welded to a tempered piece of scrap iron. The blade was carefully ground to a sharp edge and honed even sharper. A handle grip from an old bicycle was slightly greased on the inside and worked onto one end to complete the tool.

This is a very modest innovation performed in this case because there was no product available on the market.

But it illustrates the decisions Finn River people often make when confronted by a problem in their daily work routine. A typical urban middle class person probably would not think of making a tool to use in the course of a manual work project. Finn River residents first try to make their tool, and if they do not have the parts or necessary equipment they will borrow a tool from a neighbor.

While in Finn River I observed several work projects of greater complexity. One tobacco chewing jack-of-all-trades built a hydraulic firewood splitting machine because his shoulders were beginning to give him a little trouble when he chopped wood. Another man and his friend built a custom camper top for a pickup truck. It was built with a 3/16" angle iron frame, covered with aluminum sheeting, and had sliding glass windows installed. It looked like something that may cost several hundred dollars if commercially manufactured. The men are always shifting motors from one car into another and taking parts from wrecked cars and installing them into newer cars. They have learned to do many of the things that urban people pay others to do.

Figure 36 on the next page and Figure 37 just beneath it shows Finn River men in a work situation outside of conventional occupations. Men spend hours in their cluttered workshops doing their own repair jobs and making the things they need. Notice the many different parts hanging on the walls and on the window sill. This is a very typical work setting, and the kind of places where males

Figure 36. Farmer Sharpening an Axe in His Workshop.

Figure 37. Farmer Watching Buyer Grade Pelts.

like to retreat for man-to-man conversations. The farmer is sharpening his axe. He uses it in a wide variety of situations and must keep a keen edge on it.

In Figure 37 directly below, a trapper has taken a coyote pelt to the local fur buyer. He is watching intently as the buyer examines it closely. If he can spot even the slightest cut into the hide he will give the trapper far less than it is worth. Local trappers are at the mercy of the fur buyers, and there is a great deal of resentment over their price-fixing practices.

Several Finn River men try to earn a few extra dollars in the spring and fall by trapping muskrats, beaver, mink, foxes and coyotes. It is the hardest way that I have ever seen to make spare cash. But to the men it is much more than simply an economic activity. The experience of working a trapline involves a communion with nature that the anti-trapping, anti-hunting, urban ecologist will never comprehend.

The female work world centers around food preparation and cleaning. Women do virtually all of the grocery shopping, usually in the Finn River Cooperative Store. Figure 38 shows this phase of a woman's work routine. When the Coop introduced the shopping cart, males were reluctant to use them because it seemed very similar to pushing a baby buggy or stroller. Since this is solidly defined by the culture as part of a woman's role, to be seen pushing

Figure 38. Women Shopping in Finn River Coop.

Figure 39. Laundry Hanging to Dry.

the shopping cart was experienced as a threat to the masculine sexual identity.

Figure 39 directly below shows a segment of the woman's cleaning work role. Most women hang their laundry outside even during the winter. A subtle competition goes on in the community among the women regarding the clothes washing activity. It is important for a woman to get her clothes washed and hanging out on the line very early in the morning. Others passing by will see her drying clothes as cultural evidence of successful role performance. Modern clothes dryers prevent women from communicating their enthusiasm for work to the larger community.

Figure 40 and Figure 41 on the next page show Finn River women in their food preparation work role. Figure 40 at the top of the page shows a woman who is the cook in the Finn River school. She is reputed to be one of the best cooks in the area. When the women do perform work for outside employers, it usually involves food preparation activity such as in restaurants and school cafeterias.

Figure 41 shows an older Finn River woman preparing food on a wood stove. Only a few families still use wood as the primary cooking fuel.

There is also a subtle competition among the women concerning who is the best cook. This competition is a very real phenomenon, although it is regularly denied by the women. Everyone knows the competition exists, and everyone plays the game of denying its reality. Occasionally men rib

Figure 40. Cook in Finn River School Kitchen.

Figure 41. Finn River Woman Cooking on Her Wood Stove.

their wives about it, but recognizing her touchiness over this competition, they do not push the issue very far.

Finn River people have adapted very well to their harsh environment by diversifying their work skills. They do not need as much money as the typical urban middle class occupational specialist who must pay another specialist to solve most of his technological problems. A certain generalized competance is recognized by both males and females, and prestige is rendered accordingly. The people live in a diversified, labor-intensive mode of cultural adaptation designed to minimize economic costs. They seem to have done quite well, and to live satisfactorily in spite of their relatively low cash incomes.

Perceived security of income source

Finn River people perceive their sources of monetary income to be relatively secure and certain to continue. Figure 42 on the next page is a histogram detailing the perceptions of the certainty and reliability of the family's source of monetary income by age categories and sex. "Five" on the scale was defined as "being as secure and reliable as the average family's source of income."

Even though the forestry industry has two to three weeks of unemployment in the spring, the unemployment benefits given through the Michigan Employment Security Commission cover the laid-off workers during this period. Unemployment is regarded by Finn River males as both

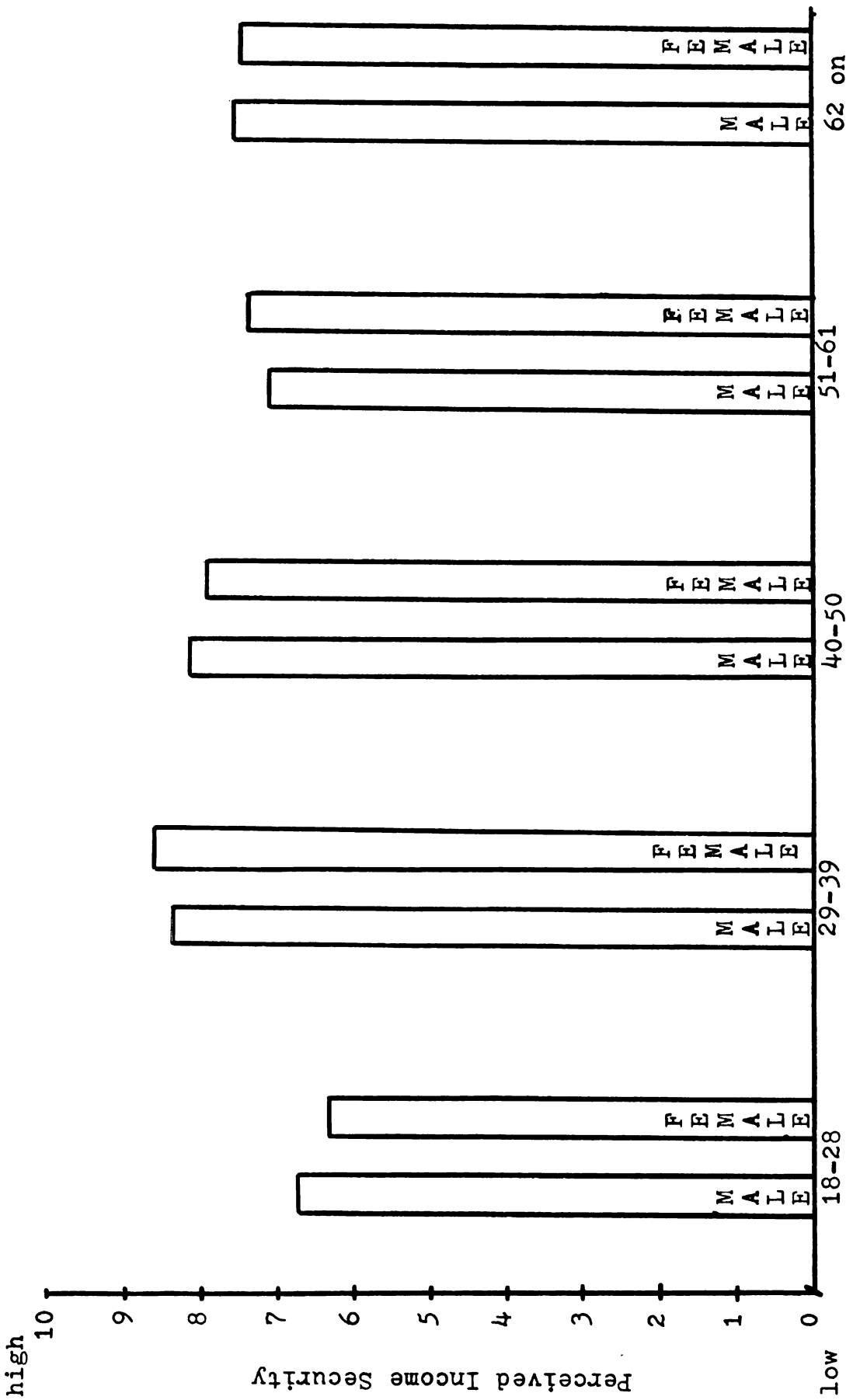

Figure 42. Perceived Income Security by Age and Sex.

a short vacation and an opportunity to do some work around the home.

Persons in the 18 through 25 age category see their monetary sources as being less secure than persons in other age categories. Males in this group have the least seniority and are the first to be laid off when production schedules slide. Many of these males work in small machine shops that sub-contract jobs.

Persons in the 29 through 39 age category have the highest sense of income security. Finn River residents over 39 years old tend to see their income sources as being less stable. These are the people who experienced the Great Depression in the 1930s as an unforgettable episode in their lives, and not as an event encountered in a history book. Such persons claim that young folks take their current affluence for granted. Many have told me, "Just wait. These young folks all think the good times are going to last forever, but one day they'll be surprised. What they need is a depression to teach them what it means to have a dollar."

Perceived quality of life

Finn River residents are generally satisfied with their life. They enjoy living in an environment free from the fear of crime, and away from the noise and pollution of the cities. Figure 43 on the next page is a histogram

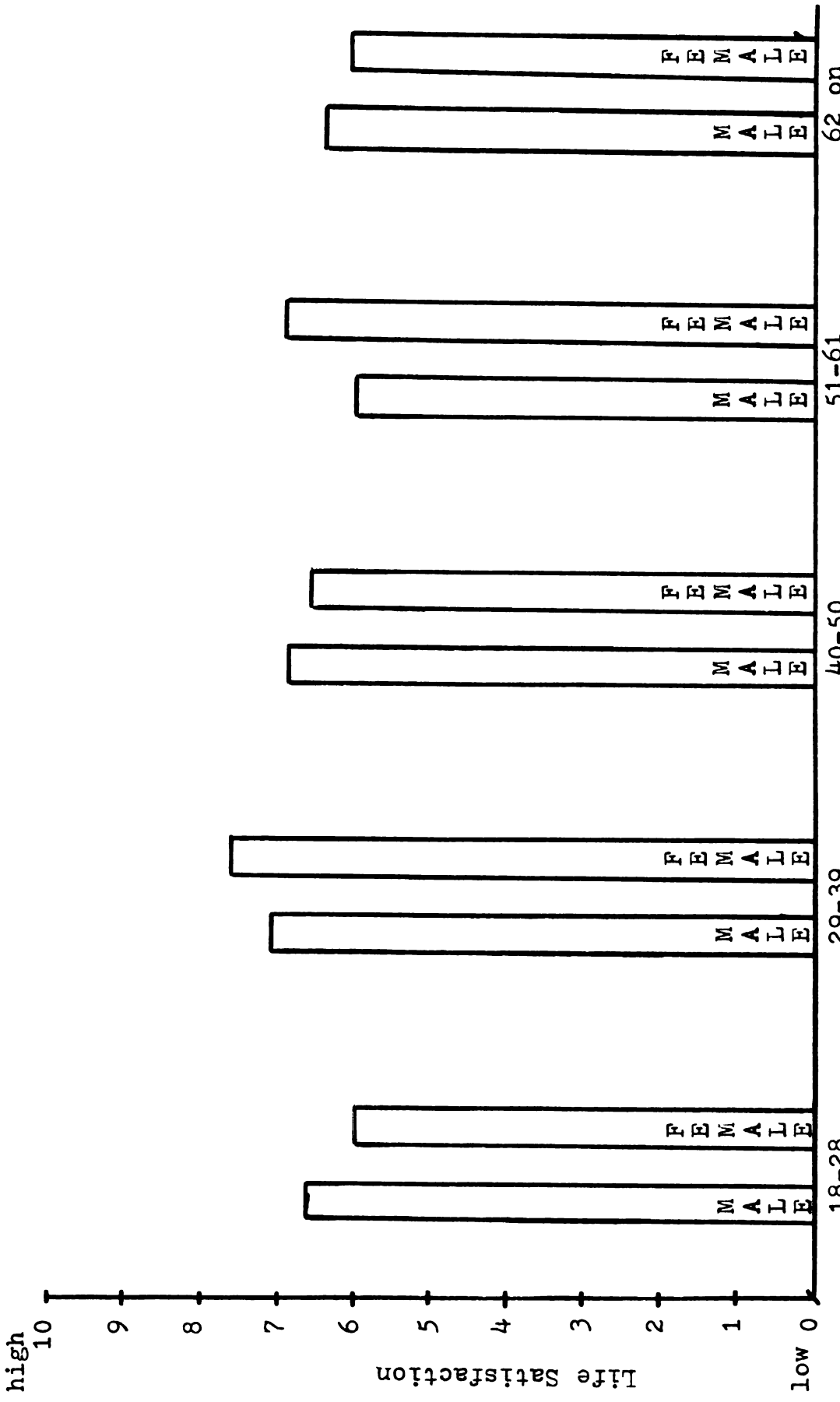

Figure 43. Perceived Life Satisfaction by Age and Sex.

illustrating the levels of perceived life satisfaction within different categories of age and sex.

Once again on a scale of 10 ranks, the fifth rank was verbally defined to the respondent as "living under what you regard as the average conditions of life." "Conditions of life" was elaborated to include all possible criteria as a generalized measure of how satisfied one is with one's life.

The least satisfied persons are in the 18-28 age category. This is the same age group having the weakest sense of income security. Also in this category the life satisfaction scores coincide closer with perceived income security than in the other age categories. It is also in this age group that the women experience the least satisfaction with life. I suspect this is because the children are young, and given the cultural rules specifying sexual division of work, the woman is responsible for almost all the domestic work. The low satisfaction, it seems, can be attributed to the sheer volume of work she is faced with in this period of her life.

Those persons in the 29-39 age category are the most satisfied with their lives. This group was also highest in perceived income security. In this age category the women are slightly more satisfied with their lives than are the men.

The lowest level of life satisfaction for males is in the 51-61 age category, and it increases slightly after

62 years of age. I suspect that in the labor-intensive work culture a male reaches a crisis stage in his life when he realizes that his physical strength is no longer what it used to be. During the course of sexual segregated male to male conversation, quite a few Finn River males have talked to me about this realization. Urban males working essentially non-physical jobs may not experience this crisis point over stamina dissipation.

Male life in this rugged logging and farming community still is permeated with the lumberjack ethos. A man is measured according to the extent to which he can perform strenuous physical labor. A life of struggle in the far north woods has molded a culture of toughness and a people who value themselves in terms of it.

APPENDIX E

DATA COLLECTION METHODS

DATA COLLECTION METHODS

Considerations in selecting the fieldsite

The best fieldsite for this study was believed to be a community. In order to get an adequate measure of the range of exchange content, the social context should be one in which the people have numerous occasions to interact with one another. A rural community in which people interact as neighbors, kinsmen, co-parishoners, co-workers, visitors, and leisure partners seemed to be one of the best places to find adequate variation in the range of exchange content variable.

The people should be accustomed to helping one another in a side variety of situations. Relative isolation of the community from urban commercial services was expected to facilitate interhousehold helping behavior. The assumption was that people rely upon one another more frequently when other alternatives are not available. It was important to select a fieldsite where the people have developed a tradition of helping one another. Hopefully it would be a setting where labor was exchanged for labor and cash was a

part of some but not all transactions, because at a future date I wanted to examine how the external cash economy intervenes in non-monetary local exchange systems.

The concept of density refers to one aspect of the ways in which the personal networks of different actors interlock with one another. In this study visiting common structural density is an important variable. In future analysis I wish to delineate various clique structures and assess the effects of different properties of cliques upon exchange behaviors. When working with properties of the interconnection of personal networks as a variable, it is necessary to capture, as close as possible, the entire community network structure. At the practical level of data collection this amounts to getting all of the residents to agree to be interviewed.

In order to get residents to consent to what is at times a threatening interview, a researcher must cultivate friendship relations with the people and earn their trust. This requires a great deal of time and energy inputs into casual conversation about daily concerns. While talking to the researcher the people assess his trustworthiness. A researcher, because of time and energy limitations, cannot earn the trust of everyone. Therefore, the community size should be small enough for the researcher to be able to develop friendships with practically all of the people.

A community of 100 to 150 households was believed to be the maximum community size in which I could have a reasonable chance of getting universal consent to the interview.

For the purposes of obtaining an adequate measure of density there had to be a sufficient amount of interaction between members of the different households. A field setting that was strictly a "bedroom community" would not be suitable. I believed there should be some economic activity within the community so the adults do not go their separate ways during the working days.

Since I wanted to collect additional data in a random, follow-up sample, the community had to be large enough to permit the selection of a decent sample size. A community of less than fifty households was believed to be too small for this purpose. In future analyses I wanted to see what effects persons at different stages in a life cycle have upon the nature and scope of participation in the community social network. The community had to be large enough to permit the inclusion of a sufficient number of people at different life cycle stages. With respect to these considerations a community of at least one hundred people was believed to be the appropriate size.

Initial method of mapping a community exchange network

The research method follows directly from the P-centric metatheoretical orientation and the definition of exchange content as that which the transactors themselves

perceive to be given and/or received during a transaction. It was necessary to live in the community to discover the cultural repertoire of exchange content regularly transacted between individuals. In this particular geographical setting it was necessary to remain in the community for over a year to discover those kinds of transactions executed during all stages of the seasonal cycle.

It was also necessary to invest a great deal of time living in the community in order to gain the trust of as many of the people as possible. The people of Finn River at times seemed worried when a stranger asked them to mention the names and residential locations of their close friends and kinsmen. Some people were worried about implicating their friends into something toward which they were at times suspicious.

I believe social network research requires more trust and far more rapport on the part of interviewees than does other kinds of survey research. This is especially true if one is engaged in holistic network research; that is, if one is trying to delineate an entire network without missing many of the actors. The problem is not as serious if one were doing random sample interviews of unconnected personal networks, and not looking at how these personal networks form a structure. If one is concerned with the larger network structure, then the refusal of a few key actors in the network can significantly alter the picture.

Comprehensive holistic exchange network data, it seems, can only be successfully gathered if the researcher is willing to invest a great deal of time intensively participating in the exchange life of the network. It is especially important that the researcher systematically distribute his participation in several zones of the network to prevent becoming encapsulated within a particular zone. The universal tendency is for a fieldworker engaged in participant observation to develop intense bonds with a few informants and to rely on them for psychological support and information and thereby become welded into a certain zone of the structure. The damaging consequences of this are twofold: first, the fieldworker fails to develop trust with most of the members of the network and is therefore limited to perhaps an unrepresentative sample of the major structure; and second, his perceptions of the kinds of exchange behaviors, exchanged contents, and forms of social interaction are limited and therefore likely not representative of the larger structure.

The problem of avoiding social structural confinement was solved by living within three different neighborhoods. By interacting as a neighbor, this fieldworker received neighborly hospitality from many more people than would have been the case if he were encapsulated within a particular zone of the larger network. Shifting residential locations was one of the main factors establishing the bonds of trust between me and a wide range of people in the community.

Intimate social interaction was achieved by this researcher because he was of the same ethnic background as that of virtually all of the members of the community. I was liked by the people of the community because they perceived me as "a nice Finnish boy."

Similarity of marital status was a factor partially determining the scope of my visiting network. Bachelor males visit other bachelor males and married couples jointly visit other married couples. If a married man visits a bachelor male he goes without his spouse; and the same is true if a married woman visits either a widow or an unmarried woman. During the course of my field work, I was able to develop a large visiting network as a consequence of having two marital statuses.

Initially I entered the field and spent six months without my wife. As a bachelor I was able to enter the bachelor exchange networks and interact on the basis of similar marital status with the many single men and widowers. When my wife joined me in the field, we visited as a married couple. This dual status gave me the opportunity to visit with more people and to thereby earn their trust.

The community is characterized by extreme sexual segregation, relative to university community interaction patterns. My wife was able to participate in the feminine exchange networks and win the trust of the women and thereby observe the forms of female social relationships, and transaction patterns. In this way she could discover the cultural

repertoire of exchange contents transacted between the women. Given the sexual segregation patterns, I could never have charted the feminine side of the exchange system, were it not for my wife, a graduate student in social anthropology, participating in the womens' exchange sphere.

While in the field, we kept notes documenting the kinds of exchange contents we observed persons transacting with one another. The list of regularly exchanged contents includes twenty-four different categories of help; six categories of loaning and borrowing; two kinds of ceremonial gift exchange; and eleven categories of informal gifting. In addition, there were 70 episodes of voluntary group labor.

After one and a half years in the field, the field-worker developed a lengthy (89 page) questionnaire based upon the list of exchange content categories discovered during the course of fieldwork. Respondents were asked to consider each kind of exchange content category and report with whom they gave or received the particular kind of exchange content, within the past year. Since many of the people had not received emergency help within a year, I asked them to report hypothetically to indicate whom they would ask for help if they needed it; and whom the respon-dents would ask to give general, non-emergency assistance if they were suddenly bedridden.

The kinds of exchange content were collapsed into three categories: help (also referred to as "giving a hand"); loaning and borrowing; and gift giving.

The help category items included: emergency sickness or injury assistance; general non-emergency help when bedridden; giving a ride; troubles while on the road; auto repairs while not on the road; running errands; shoveling or plowing snow; painting; roof repairs; various tasks involving cement work; masonry work; lifting and moving; hauling a load for someone; making firewood, well repairs; electrical repairs; plumbing work; carpentry work; hay harvesting work; general assistance in the cowbarn; babysitting; keeping one's eyes open for a good buy on a product; furnace repairs; gardening work; and helping someone fill out their income tax forms.

The kinds of exchange content items loaned and borrowed fit in the general categories of hand tools; reading material; kitchen utensils; sports equipment; larger equipment and vehicles; and household items.

The kinds of gifting transactions included were divided into two categories: ceremonial gifting and informal gifting. Ceremonial gifting included birthday and Christmas gifts. Wedding and high school graduation gifts were omitted because some of the respondents would have to furnish extremely long lists. Most of the wedding and high school graduation gifts were included as informal gifts falling into the category of household items.

Informal gifting transactions included such exchange content categories as plants and seedlings; recipes of any kind; meat from small game; venison; all types of furniture and household supplies and equipment; preserves of all kinds; used clothing; berries; apples and other fruit; fresh garden vegetables; and baked goods of all kinds.

Also included in the questionnaire for each respondent were twenty-five items referring to individual background characteristics such as age, sex, education and other information. For the purposes of future analysis I asked respondents to specify: the voluntary associations of which they were participating members, who recruited them and whom they recruited; persons in work networks, recreation and leisure networks; the kinds of social roles connecting them with each person they mentioned in the questionnaire; and the residential locations of the mentioned Others.

The community exchange network sample

Within the perceived boundaries of the community are 158 households. (See Appendix D for characteristics of the Finn River population.) Twelve percent of these households were not included in the exchange network survey for various reasons. Six households all living in one neighborhood thought the project "smelled of communism," and refused to be interviewed.

In the 1920s local communists and socialists urged the farmers to unite and "cooperate" with one another. The title of the questionnaire was "The Cooperation Patterns Survey." Several of these more conservative people associated my title with the slogans they heard forty years ago and came to the conclusion that the "communists are behind it."

The data from these six households was not lost because their transactions with Others of the community will be reported on the Others' questionnaires. As it turns out they were only mentioned on a few occasions.

The remaining households omitted on the exchange network survey besides those refusing the interview were judged by the researcher as not sufficiently a part of the community. Four homes were vacant when we collected the data because the inhabitants were marginal residents living in the community only during their summer vacation or part of November during the deer hunting season. Four families were in the process of moving into the community, so they were not yet sufficiently a part of it. Two more families were in the process of moving out of their rented homes to live in a nearby town. Three other families were complete social outcasts in the community, having no contact with the rest of the people. And finally, in two households persons were critically ill, and in one of these a person died during the data collection period. Even though these

households were intentionally excluded, transactions they have performed with any of the other members of the community have been reported on the other members' questionnaires, so the data are not lost.

Of those the researcher judged to be of the community (as opposed to merely living within the geographical boundary), 96.2% agreed to complete the questionnaire. I believe we have succeeded in collecting the data necessary to reconstruct as complete a community exchange network as can reasonably be expected.

The interviewer gave each respondent the questionnaire, verbally instructed them how to fill it out, and demonstrated how to answer each type of question. Respondents were then left to fill out the questionnaire by themselves. The interviewer and respondent later checked through the entire questionnaire to correct any errors and fill in missing information.

The data were coded while the researcher was teaching at a small university twenty-seven miles away from the fieldsite. During the coding process errors, omissions and ambiguous responses were doublechecked by telephoning the respondents and clarifying the information.

Each questionnaire was coded and manually verified for accuracy. Four separate computer programs were written to detect possible coding errors through internal consistency cross-checking procedures. The computer-detected errors were corrected.

Follow-up sampling from the respondents included in the exchange network

From the exchange network questionnaire I could operationalize two variables; the range of exchange content, and visiting common structural density. A simple count of the number of different exchange content categories within which Person and Other transacted would serve as the indicator of range of exchange content. Visiting common structural density could be calculated with the computer by comparing Person and Other's visiting networks and counting the number of times the same visitor appears in each.

Additional data were needed to construct indicators of historical concern, self-maximizing orientation, and interpersonal attraction. The original strategy was to select a random sample from the set of Persons who completed the exchange network questionnaire, and ask them to make judgments on the Others previously reported in their exchange network. Such judgments concerned hypothetical situations which on the basis of field observations this researcher believes touched on the above mentioned variables.

However, after having worked for five to six hours to fill out a questionnaire which asked for a reporting of all their transactions for the past year; and, after this enduring an additional hour going through each question with the interviewer to make sure there were no errors or omissions; and, in spite of this to have to answer questions over the telephone concerning ambiguities the interviewer

discovered while coding the questionnaire, it was clear to this researcher that the good people of the community (who were in many cases threatened by such personal questions requiring them to mention their friends' names) were becoming reluctant to answer further questions. The good will of the respondents had quite understandably reached a limit. This researcher plans to remain in touch with the community and to at some future date carry on more research and was therefore unwilling to demand more from the people at that time.

For this final phase a random sample was initially selected by shuffling cards with all the respondents' names written on them, and selecting forty (17%) of the population. After living almost three years in the community, administering, collecting and correcting errors this researcher knew the people well enough to determine which ones would not agree to undergo another two and a half hours of interviewing. The follow-up interview was even more threatening because it required the respondent to go on record, specifying in quantitative terms just how much they liked, trusted, perceived as being good-hearted and expected to exchange with in the future those close friends and neighbors earlier reported on the questionnaire.

Those persons encountered in the random sample who refused to be interviewed were excluded from the sample. Ten out of the forty randomly selected individuals were excluded from the follow-up interview. These excluded

persons were replaced by individuals the researcher believed were representative of the community and would be likely to consent to the follow-up interview.

Given this state of the field conditions the researcher settled for a quasi-random sample of forty persons (17 percent of the population) which was slightly biased in the direction of selecting persons who would be likely to agree to be further interviewed. Strictly speaking, the follow-up interview was administered to a sample of respondents who previously completed the exchange network questionnaire, 12.5 percent of which was randomly selected, and 4.2 percent was selected according to their representativeness and their reasonable likelihood of consenting to the interview. However, in any sample described as being random some persons were selected because others refused to be interviewed. The refusal rate in many cases is quite high, so one could argue that all random sample surveys are biased by factors determining the potential respondents' choice of consenting or rejecting the interviewer's request. This is simply one of the conditions survey research must live with and work around wherever possible.

Method used on the follow-up interview

In the follow-up interview each Other in a respondent's personal network was represented by a card bearing his or her name. The researcher built a wooden collating

board divided into ten partitions. One partition was labeled with a question mark, and the other partitions were numbered from one through nine.

The board was explained to each respondent as a measuring scale similar to a ruler. The scale was verbally described as a ratio scale by suggesting that if one person were rated two, and another rated four, then the second would have twice as much of the characteristic at issue. Obviously respondents could not make such precise distinctions, but the scale was described this way to give it an aura of precision. In fact, pains were taken to make the physical appearance of the board give the impression of precision. Partitions were equally spaced and the numbers identifying each were carefully drawn and centered perfectly under each partition. Such efforts paid off because the respondents were amused by the appearance of such a strange looking apparatus, and this image of precision lent the interview a quality of importance it would otherwise have not possessed. Subjects were asked to judge Other by dropping their cards into numerically identified partitions. Dropping the cards involved the respondents in the task and made it more interesting to them.

Respondents were asked to make judgments of Others by rating each according to a specific exchange behavior attribute that was introduced by the interviewer. Since sexually segregated interaction is the culturally dominant mode of interpersonal communication, in order to provide a

more relaxed atmosphere, the fieldworker interviewed the males and his wife interviewed the females. Respondents were urged to make careful, well-considered judgments.

The same procedure was used in each interview. Each exchange behavior attribute was presented to the respondents, in random order. Randomizing the order prevented a systematic response set. The order of Others to be judged was also randomized to prevent the possibility of a response set determined by the respondents comparing the same sets of Others while making their judgments. That is, if Harry were always judged between Alice and Louie, Harry's rating could very well be effected by Alice's, and Louie's rating could be effected by Harry's. Name cards were shuffled after each trial to prevent this tendency.

Respondents were isolated from the other members of the household both so they could concentrate effectively and so they would be free to make their own judgments independent of the social pressures arising from surveillance of other family members. It was believed that a person might hesitate to give an Other a low judgment in a situation where other members of the family might disagree. Respondents were assured of the confidentiality of their judgments. The interviewer pleaded with the respondents to make the most accurate and honest judgments possible, and it is my impression they followed the instructions.

The exchange behavior attribute was carefully explained to each respondent to make sure the interviewer

and respondent shared the same meaning of the criterion. The relation of the attribute to the scale was carefully explained and to make sure the respondent properly and consistently followed the same meaning of the scale throughout the trial, cards were attached to the upper back part of the scale at both ends and in the middle to semantically define the scale. Observe Figure 44 which illustrates the procedure by which respondents rate the Others in their personal networks.

Figure 44 illustrates the procedure for measuring historical concern. Respondents were read the following paragraph:

> Some people we know keep track very closely of who owes them and whom they owe favors, help, or perhaps even money. Other people do not seem to think so much about who does what and they pay very little attention to such matters and keep track very little or perhaps not at all. Suppose each of these persons has helped you, loaned stuff to you, and given you certain things just to be nice; and suppose you have done the same for them. Rate each person by dropping their card in the appropriate slot to indicate your estimate of how closely he or she would keep track of how much he (she) has done for you and how much you have done for him (her). In other words, rate them according to how concerned they are for keeping track of the daily give-and-take in life.

The interviewer then placed cards onto the top of the scale to give it exact and consistent meaning related to the particular exchange behavior attribute. The scale was explained to the respondent. Slot number one was reserved for those persons he believed to not keep track at all. Slot number five, the middle slot was for those who "keep

Figure 44. Procedure Respondents Followed in Rating Exchange Behavioral Tendencies of Their Exchange Partners.

track about as much as anyone else." The middle slot was described as the "average," the "halfway point," and as being reserved "for those who keep track the normal amount." The number nine slot was reserved for those who "keep track very closely." Number eight was verbally defined as appropriate for those Others who "keep track very closely but not quite as much as those in number nine." Partitions between the ends and middle were verbally described as being reserved for those persons who keep track just a little more than persons in the partition immediately before it. Respondents were told the question mark on the extreme left hand edge of the scale was to be used when they believed they could not make a particular judgment on a person because they lacked the informational basis for making the decision. Respondents were urged to make judgments whenever reasonably possible. Since most of the respondents interact with Others they have known for many years, there were very few instances where no judgment could be made. (See Appendix D describing the distribution of lengths of residence in Finn River.)

Before starting each trial, respondents were asked if they understood how to make the judgments. They were reminded to use the entire scale, when it was necessary to make precise distinctions in their judgments. The interviewer made a few hypothetical judgments at different ranges of the scale to make sure the respondents understood the need for maximum precision.

The interviewer shuffled the name cards of Others thoroughly and the respondent began to make judgments by dropping the name cards into the numerically identified partitions. While the respondent was making judgments, the interviewer recorded each Other's rating onto a separate alphabetized namelist.

After the respondent rated all Others with regard to a particular exchange behavior attribute, the name cards were once again shuffled thoroughly, and a new randomly selected attribute was explained to the respondent. New cards were attached to the top of the scale to redefine it, consistent with the new attribute. Let us consider the exchange behavior attributes used to operationalize interpersonal attraction and self-maximizing orientation variables.

The following instructions were used to explain how to rate the interpersonal attraction variable:

> Some people we know we simply like more than others. There is something about them which makes it especially enjoyable to be in their company. Other people we do not like as much, even though they may be very good people. There is simply something which makes us like them less. And some people we do not like at all. Rate each of these persons as closely as you can by dropping their card into the partition indicating the extent to which you like them.

The statement was carefully worded to let the respondent select the reasons for liking or disliking a person by using the abstract, open-ended phrase "there is something about them" and "there is something which makes us . . ."

remove any inhibitions respondents might have in rating a particular person low, I suggested that it could be the case that non-liked people are still good people, even if we do not like them. The scale was defined using the same procedure of attaching cards bearing the messages: "do not like at all;" "like about as much as anyone else;" and "like very much."

The basic dependent variable in the study, self-maximizing orientation (SMO), was operationalized somewhat differently. During the course of my fieldwork, on many occasions I overheard people complaining about the excessive self-maximizing intentions of others. Several times I heard another person criticize the complainer for talking negatively about a person behind his (her) back. It occurred to me that persons are often expected to suppress the desire to report excessive self-maximizing orientations in the presence of persons who may like the target of the report. Hence, I could not expect to ask respondents to estimate the extent to which well-liked Others and close kinsmen are "all out for themselves." In some cases they would feel as though they would be breaking norms that prohibit speaking badly about liked Others. I decided to use the opposite criterion of "good-heartedness" in the rating procedure and to afterwards invert the scale to produce an indicator of self-maximizing orientation.

Finn River residents use the term "good-hearted" to describe persons who <u>emphasize giving</u> and <u>downplay receiving</u>

in their transactions. Such persons give without thinking of getting something in return, but give out of the goodness of their heart. While in the field, I overheard a man speaking about two brothers while contrasting their exchange strategies; one was described as "greedy" and "watching out only for himself" while the other was "just the other way around" for he was good-hearted. I asked several informants to define good-hearted and the regular answers were "unselfish," "generous," "considerate" and "loving."

The local cultural meaning of good-heartedness seemed appropriate for measuring my concept of self-maximizing orientation defined as the extent to which a person transacts for the purpose of producing desirable consequences for himself. The good-hearted person as seen through the cultural meaning system is a person without thoughts of gain, who does things for others for the intrinsic pleasure of the action. The attribute was stated:

> Some people we know are simply more good-hearted than others. Others, though we may like them, are simply not as good-hearted. Estimate, by dropping the cards into the partitions, the extent to which you believe this person is good-hearted.

Once again the scale was semantically defined appropriately for the self-maximizing orientation attribute. At the low end of the scale was the phrase "not good-hearted at all" and the middle "as good-hearted as anyone else," and at the upper end of the scale, "very good-hearted."

APPENDIX F

STATISTICAL TABLES

Table 1 • Self-Maximizing Orientation by Range of Exchange Content (Zero Order).

Self-Maximizing Orientation	Range of Exchange Content 0	1	2	3+	ROW TOTAL
3	19	69	63	121	292
	6.5	30.5	21.6	41.4	17.2
	7.6	13.2	17.5	33.9	
	1.1	5.2	3.7	7.1	
4	35	101	77	73	286
	12.2	35.	26.9	25.5	16.8
	13.9	18.6	21.3	20.4	
	2.1	5.9	4.5	4.3	
5	41	111	81	69	282
	14.5	39.4	21.6	24.5	16.6
	16.3	15.2	16.9	19.3	
	2.4	6.5	3.6	4.1	
6	39	92	50	30	215
	16.3	42.8	27.6	14.0	12.6
	13.9	12.6	16.1	8.4	
	2.1	5.4	3.4	1.8	
7	71	237	62	49	385
	18.4	53.8	16.1	11.7	22.5
	28.3	28.3	17.2	12.6	
	4.2	12.2	3.6	2.5	
8	27	56	19	10	122
	22.1	44.1	15.6	8.2	7.2
	10.6	9.0	5.3	2.8	
	1.6	3.9	1.1	.6	
9	23	65	21	9	118
	19.5	55.1	17.8	7.6	6.9
	9.2	8.9	5.8	2.5	
	1.4	3.8	1.2	.5	
COLUMN TOTAL	291	731	361	357	1700
	14.8	43.0	21.2	21.0	100.0

RAW CHI SQUARE = 175.27876 WITH 24 DEGREES OF FREEDOM, SIGNIFICANCE = .0000
CRAMER'S V = .1019
CONTINGENCY COEFFICIENT = .3044
LAMDA (SYMMETRIC) = .04920 WITH SMD DEPENDENT, = .03302 WITH MREC DEPENDENT
LAMDA (SYMMETRIC) = .0330
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .02761 WITH SMD DEPENDENT, = .03926 WITH MREC DEPENDENT
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .03257
KENDALL'S TAU B = -.23480, SIGNIFICANCE = 0
KENDALL'S TAU C = -.24039, SIGNIFICANCE = 0
GAMMA = -.34371
SOMER'S D (ASYMMETRIC) = -.25606 WITH SMD DEPENDENT, = -.21530 WITH MREC DEPENDENT
SOMER'S D (SYMMETRIC) = -.23392
ETA = .28518 WITH SMD DEPENDENT, = .28454 WITH MREC DEPENDENT.

Table 2. Self-Maximizing Orientation by Attraction (Zero Order).

KEY: CELL ROW PCT COL PCT TOT PCT	ATTRACTION 1	2	3	4	5	6	ROW TOTAL	ATRN MEANS
SELF-MAXIMIZING ORIENTATION 3	4	9	7	23	52	203	298	
	1.3	3.0	2.3	7.7	17.4	68.1	17.1	4.91
	2.1	3.2	2.9	7.4	15.3	53.7		
	.2	.5	.4	1.3	3.0	11.7		
4	5	13	19	49	109	96	291	
	1.7	4.5	6.5	16.8	37.5	33.0	16.7	4.83
	2.6	4.6	7.9	15.8	32.2	25.4		
	.3	.7	1.1	2.8	6.3	5.5		
5	5	35	47	92	74	37	290	
	1.7	12.1	16.2	31.7	25.5	12.8	16.7	4.06
	2.6	12.4	19.6	29.7	21.8	9.9		
	.3	2.0	2.7	5.3	4.3	2.1		
6	15	34	43	70	43	14	219	
	6.8	15.5	19.6	32.0	19.6	6.4	12.6	3.61
	7.9	12.1	17.9	22.6	12.7	3.7		
	.9	2.0	2.5	4.0	2.5	.8		
7	48	126	85	56	55	24	394	
	12.2	32.0	21.6	14.2	14.0	6.1	22.6	3.04
	25.1	44.7	35.4	18.1	16.2	6.3		
	2.8	7.2	4.9	3.2	3.2	1.4		
8	38	40	24	16	3	3	124	
	30.6	32.3	19.4	12.9	2.4	2.4	7.1	2.22
	19.9	14.2	10.0	5.2	.9	.8		
	2.2	2.3	1.4	.9	.2	.2		
9	76	25	15	6	3	1	124	
	61.3	20.2	12.1	4.8	2.4	.8	7.1	1.68
	39.8	8.9	6.3	1.9	.9	.3		
	4.4	1.4	.9	.3	.2	.1		
COLUMN	191	282	240	310	339	378	1740	
TOTAL	11.0	16.2	13.8	17.8	19.5	21.7	100.0	
SMO MEANS	7.7	6.8	6.3	5.5	4.9	3.8		

RAW CHI SQUARE = 1239.25465 WITH 30 DEGREES OF FREEDOM, SIGNIFICANCE = 0

CRAMER'S V = .37742

CONTINGENCY COEFFICIENT = .64435

LAMDA (ASYMMETRIC) = .2206[illegible] WITH SMO DEPENDENT, = .24616 WITH ATRN DEPENDENT,

LAMDA (SYMMETRIC) = .23449

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .16270 WITH SMO DEPENDENT, = .17990 WITH ATRN DEPENDENT

UNCERTAINTY COEFFICIENT (SYMMETRIC) = .17461

KENDALL'S TAU B = -.55750, SIGNIFICANCE = 0

KENDALL'S TAU C = -.55639, SIGNIFICANCE = 0

GAMMA = -.65328

SOMER'S D (ASYMMETRIC) = -.56149 WITH SMO DEPENDENT, = -.55353 WITH ATRN DEPENDENT

SOMER'S D (SYMMETRIC) = -.55748

ETA = .44651 WITH SMO DEPENDENT, = .44091 WITH ATRN DEPENDENT,

Table 3. Self-Maximizing Orientation by Range of Exchange Content under Condition of Low Attraction.

Self-Maximizing Orientation	Range of Exchange Content 0	1	2	3+	ROW TOTAL
3	2	9	6	3	20
	10.0	45.0	30.0	15.0	2.9
	1.4	2.6	4.6	4.3	
	.3	1.3	.9	.4	
4	8	19	7	6	36
	22.2	52.8	8.3	16.7	5.2
	5.6	5.4	2.3	8.7	
	1.2	2.7	.4	.9	
5	18	28	23	15	84
	21.4	33.3	27.4	17.9	12.1
	12.7	8.0	17.7	21.7	
	2.6	4.0	3.3	2.2	
6	20	39	21	10	90
	22.2	43.3	23.3	11.1	13.0
	14.1	11.1	16.2	14.5	
	2.9	5.6	3.0	1.4	
7	50	141	41	20	252
	19.8	56.0	16.3	7.9	36.4
	35.2	40.2	31.5	29.0	
	7.2	20.4	5.9	2.9	
8	22	55	16	7	100
	22.0	55.0	16.0	7.0	14.5
	15.5	15.7	12.3	10.1	
	3.2	7.9	2.3	1.0	
9	22	50	20	8	110
	20.0	54.5	18.2	7.3	15.9
	15.5	17.1	15.4	11.6	
	3.2	8.7	2.9	1.2	
COLUMN TOTAL	142 20.5	351 50.7	133 19.2	69 10.0	692 100.0

RAW CHI SQUARE = 28.86739 WITH 18 DEGREES OF FREEDOM, SIGNIFICANCE = .0500
CRAMER'S V = .11792
CONTINGENCY COEFFICIENT = .20011
LAMDA (ASYMMETRIC) = 0 WITH SMO DEPENDENT, = 0 WITH MREC DEPENDENT,
LAMDA (SYMMETRIC) = 0
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .01205 WITH SMO DEPENDENT, = .01706 WITH MREC DEPENDENT
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .01413
KENDALL'S TAU B = -.07408, SIGNIFICANCE = .0018
KENDALL'S TAU C = -.07090, SIGNIFICANCE = .0026
GAMMA = -.10220
SOMER'S D (ASYMMETRIC) = -.08113 WITH SMO DEPENDENT, = -.06764 WITH MREC DEPENDENT
SOMER'S D (SYMMETRIC) = -.07378
ETA = .03759 WITH SMO DEPENDENT, = .01740 WITH MREC DEPENDENT,

Table 4. Self-Maximizing Orientation by Range of Exchange Content under Condition of High Attraction.

Self-Maximizing Orientation	Range of Exchange Content: 0	1	2	4+	ROW TOTAL
3	17	80	57	118	272
	6.3	29.4	21.0	43.4	27.0
	15.6	21.1	24.7	41.0	
	1.7	7.9	5.7	11.7	
4	27	82	74	67	250
	10.8	32.8	29.6	26.8	24.8
	24.8	21.6	32.0	23.3	
	2.7	8.1	7.3	6.6	
5	23	83	38	54	198
	11.6	41.9	19.2	27.3	19.6
	21.1	21.8	16.5	18.8	
	2.3	8.2	3.8	5.4	
6	15	53	37	20	125
	12.0	42.4	29.6	16.0	12.4
	13.8	13.9	16.0	6.9	
	1.5	5.3	3.7	2.0	
7	21	66	21	25	133
	15.8	49.6	15.8	18.8	13.2
	19.3	17.4	9.1	8.7	
	2.1	6.5	2.1	2.5	
8	5	11	3	3	22
	22.7	50.0	13.6	13.6	2.2
	4.6	2.9	1.3	1.0	
	.5	1.1	.3	.3	
9	1	5	1	1	8
	12.5	62.5	12.5	12.5	.8
	.9	1.3	.4	.3	
	.1	.5	.1	.1	
COLUMN TOTAL	109	390	231	288	1008
	10.8	37.7	22.9	28.6	100.0

RAW CHI SQUARE = 75.08677 WITH 18 DEGREES OF FREEDOM, SIGNIFICANCE = .0000
CRAMER'S V = .19758
CONTINGENCY COEFFICIENT = .28330
LAMDA (ASYMMETRIC) = .04074 WITH SMD DEPENDENT, = .06051 WITH MREC DEPENDENT,
LAMDA (SYMMETRIC) = .04345
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .02711 WITH SMD DEPENDENT, = .02827 WITH MREC DEPENDENT
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .02762
KENDALL'S TAU B = -.19262, SIGNIFICANCE = .0000
KENDALL'S TAU C = -.19308, SIGNIFICANCE = .0000
GAMMA = -.25463
SOMER'S D (ASYMMETRIC) = -.20337 WITH SMD DEPENDENT, = -.18243 WITH MREC DEPENDENT
SOMER'S D (SYMMETRIC) = -.19234
ETA = .25625 WITH SMD DEPENDENT, = .25448 WITH MREC DEPENDENT,

Table 5. Historical Concern by Range of Exchange Content (Zero Order).

KEY: Count
Row Pct
Col Pct
Tot Pct

Range of Exchange Content

Historical Concern	0	1	2	3	4	5	6	7	8	9 cont.
2	26 12.7 10.4 1.5	84 41.0 11.5 4.9	18 8.8 7.8 1.1	22 10.7 16.8 1.3	11 5.4 12.1 .6	7 3.4 11.9 .4	6 2.9 20.0 .4	7 3.4 29.2 .4	3 1.5 12.5 .2	3 1.5 14.3 .2
3	24 14.0 9.6 1.4	66 38.4 9.0 3.9	23 13.4 10.0 1.4	13 7.6 9.9 .8	14 8.1 15.4 .8	9 5.2 15.3 .5	4 2.3 13.3 .2	1 .6 4.2 .1	4 2.3 16.7 .2	3 1.7 14.3 .2
4	31 20.4 12.4 1.8	60 39.5 8.2 3.5	23 15.1 10.0 1.4	12 7.9 9.2 .7	9 5.9 9.9 .5	5 3.3 8.5 .3	2 1.3 6.7 .1	1 .7 4.2 .1	1 .7 4.2 .1	1 .7 4.8 .1
5	83 18.0 33.1 4.9	230 50.0 31.5 13.5	59 12.8 25.7 3.5	27 5.9 20.6 1.6	18 3.9 19.8 1.1	7 1.5 11.9 .4	4 .9 13.3 .2	4 .9 16.7 .2	5 1.1 20.8 .3	4 .9 19.0 .2
6	21 12.4 8.4 1.2	76 45.0 10.4 4.5	25 14.8 10.9 1.5	12 7.1 9.2 .7	12 7.1 13.2 .7	7 4.1 11.9 .4	4 2.4 13.3 .2	1 .6 4.2 .1	1 .6 4.2 .1	1 .6 4.8 .1
7	37 17.3 14.7 2.2	89 41.6 12.2 5.2	33 15.4 14.3 1.9	10 4.7 7.6 .6	13 6.1 14.3 .8	8 3.7 13.6 .5	5 2.3 16.7 .3	5 2.3 20.8 .3	4 1.9 16.7 .2	1 .5 4.8 .1
8	15 8.6 6.0 .9	74 42.5 10.1 4.4	27 15.5 11.7 1.6	18 10.3 13.7 1.1	7 4.0 7.7 .4	8 4.6 13.6 .5	2 1.1 6.7 .1	1 .6 4.2 .1	1 .6 4.2 .1	5 2.9 23.8 .3
9	14 9.1 5.5 .8	52 33.8 7.1 3.1	22 14.3 9.6 1.3	17 11.0 13.0 1.0	7 4.5 7.7 .4	8 5.2 13.6 .5	3 1.9 10.0 .2	4 2.6 16.7 .2	5 3.2 20.8 .3	3 1.9 14.3 .2
Col Total	251	731	230	131	91	59	30	24	24	21
Percent	14.8	43.0	13.5	7.7	5.4	3.5	1.8	1.4	1.4	1.2
HSTCN Means	5.16	5.33	5.60	5.38	5.19	5.59	5.13	5.25	5.58	5.66

Table 5. Historical Concern By Range of Exchange Content (Zero Order) (Continued).

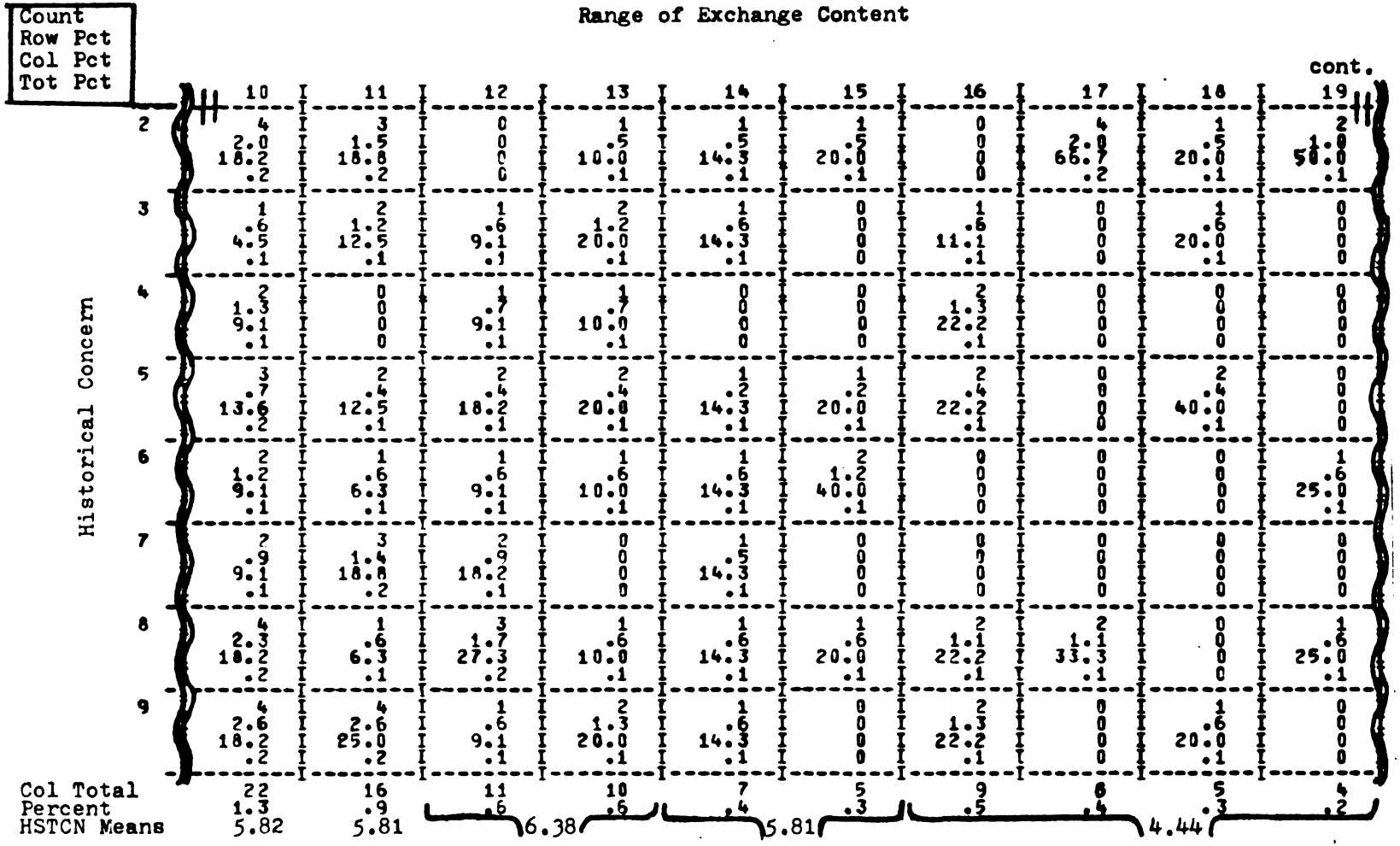

Table 5. Historical Concern By Range of Exchange Content (Zero Order) (Continued).

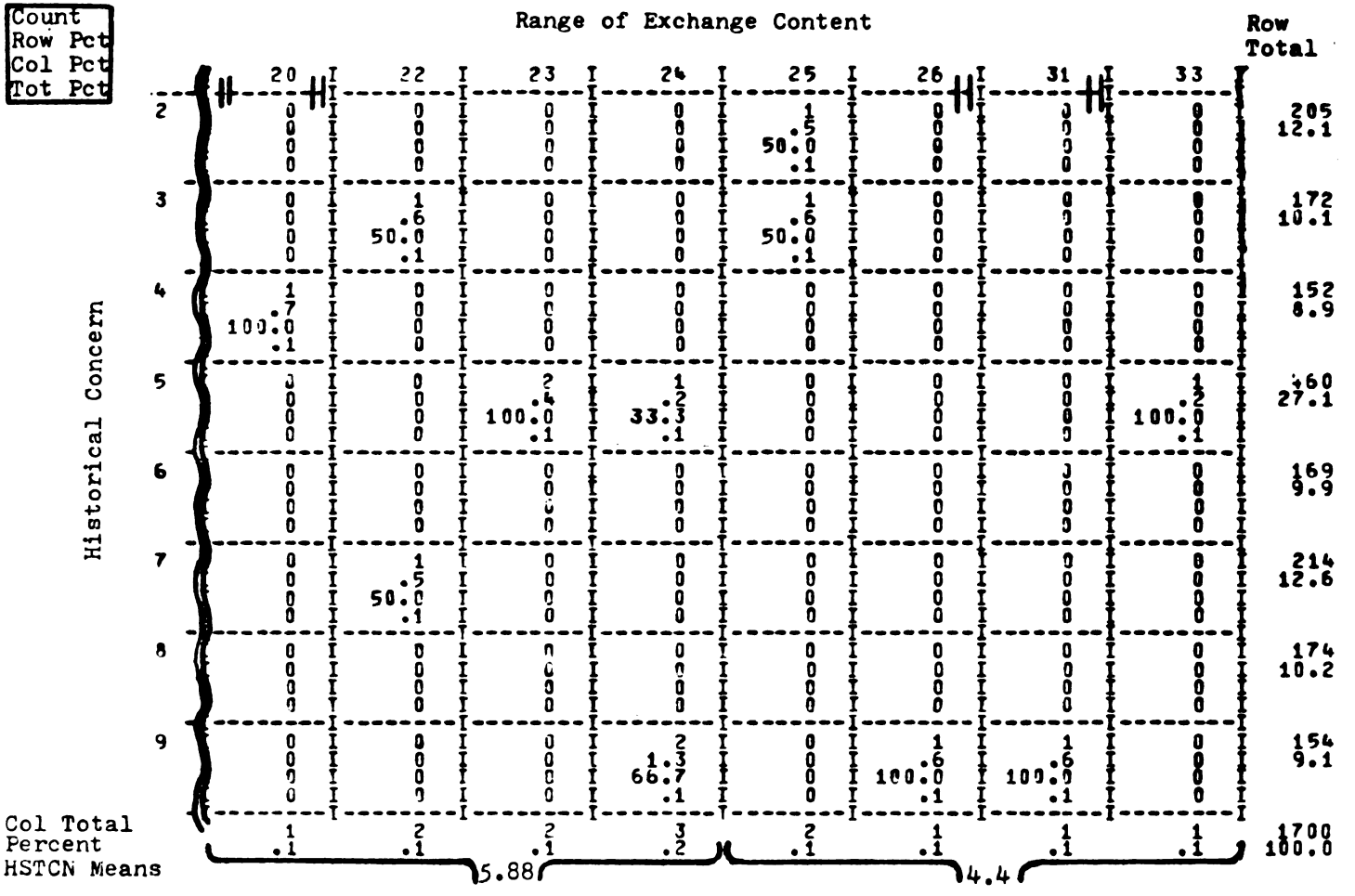

Table 6 . Self-Maximizing Orientation by Historical Concern (Zero Order).

Count / Row Pct / Col Pct / Tot Pct	HISTORICAL CONCERN 2	3	4	5	6	7	8	9	Row Total
Self-Maximizing Orientation 3	79 26.5 38.2 4.5	33 11.1 18.9 1.9	12 4.0 7.7 .7	39 13.1 8.2 2.2	12 4.0 6.9 .7	27 9.1 12.2 1.6	28 9.4 15.9 1.6	68 22.8 42.5 3.9	298 17.1
4	37 12.7 17.9 2.1	48 16.5 27.4 2.8	21 7.2 13.5 1.2	61 21.0 12.9 3.5	19 6.5 11.0 1.1	43 14.8 19.5 2.5	37 12.7 21.0 2.1	25 8.6 15.6 1.4	291 16.7
5	35 12.1 16.9 2.0	39 13.4 22.3 2.2	44 15.2 28.4 2.5	55 19.0 11.6 3.2	32 11.0 18.5 1.8	43 14.8 19.5 2.5	31 10.7 17.6 1.8	11 3.8 6.9 .6	290 16.7
6	16 7.3 7.7 .9	21 9.6 12.0 1.2	29 13.2 18.7 1.7	54 24.7 11.4 3.1	36 16.4 20.8 2.1	32 14.6 14.5 1.8	23 10.5 13.1 1.3	8 3.7 5.0 .5	219 12.6
7	23 5.8 11.1 1.3	16 4.1 9.1 .9	31 7.9 20.0 1.8	201 51.0 42.5 11.6	41 10.4 23.7 2.4	39 9.9 17.6 2.2	27 6.9 15.3 1.6	16 4.1 10.0 .9	394 22.6
8	3 2.4 1.4 .2	10 8.1 5.7 .6	10 8.1 6.5 .6	40 32.3 8.5 2.3	21 16.9 12.1 1.2	18 14.5 8.1 1.0	15 12.1 8.5 .9	7 5.6 4.4 .4	124 7.1
9	14 11.3 6.8 .8	8 6.5 4.6 .5	8 6.5 5.2 .5	23 18.5 4.9 1.3	12 9.7 6.9 .7	19 15.3 8.6 1.1	15 12.1 8.5 .9	25 20.2 15.6 1.4	124 7.1
Col Total	207	175	155	473	173	221	176	160	1740
Percent	11.9	10.1	8.9	27.2	9.9	12.7	10.1	9.2	100.0
SMO Means	4.7	5.0	5.7	6.1	6.1	5.6	5.5	5.0	

Table 7. Self-Maximizing Orientation by Historical Concern under Condition of Low Attraction.

Count
Row Pct
Col Pct
Tot Pct

Self-Maximizing Orientation	HISTORICAL CONCERN 2	3	4	5	6	7	8	9	Row Total
3	4 20.0 8.2 .6	1 5.0 2.0 .1	0 0.0 0.0 0.0	5 25.0 1.9 .7	2 10.0 2.6 .3	0 0.0 0.0 0.0	3 15.0 5.2 .4	5 25.0 9.6 .7	20 2.8
4	2 5.4 4.1 .3	7 18.9 14.3 1.0	3 8.1 4.2 .4	5 13.5 1.9 .7	2 5.4 2.6 .3	9 24.3 9.2 1.3	6 16.2 10.3 .8	3 8.1 5.8 .4	37 5.2
5	6 6.9 12.2 .8	8 9.2 16.3 1.1	16 18.4 22.5 2.2	25 28.7 9.7 3.5	6 6.9 7.7 .8	13 14.9 13.3 1.8	6 6.9 10.3 .8	7 8.0 13.5 1.0	87 12.2
6	8 8.7 16.3 1.1	9 9.8 18.4 1.3	11 12.0 15.5 1.5	23 25.0 8.9 3.2	14 15.2 17.9 2.0	16 17.4 16.3 2.2	7 7.6 12.1 1.0	4 4.3 7.7 .6	92 12.9
7	12 4.6 24.5 1.7	9 3.5 18.4 1.3	25 9.7 35.2 3.5	141 54.4 54.7 19.8	25 9.7 32.1 3.5	29 11.2 29.6 4.1	12 4.6 20.7 1.7	6 2.3 11.5 .8	259 36.3
8	3 2.9 6.1 .4	7 6.9 14.3 1.0	8 7.8 11.3 1.1	36 35.3 14.0 5.0	18 17.6 23.1 2.5	13 12.7 13.3 1.8	11 10.8 19.0 1.5	6 5.9 11.5 .8	102 14.3
9	14 12.1 28.6 2.0	8 6.9 16.3 1.1	8 6.9 11.3 1.1	23 19.8 8.9 3.2	11 9.5 14.1 1.5	18 15.5 18.4 2.5	13 11.2 22.4 1.8	21 18.1 40.4 2.9	116 16.3
Col Total	49	49	71	258	78	98	58	52	713
Percent	6.9	6.9	10.0	36.2	10.9	13.7	8.1	7.3	100.0
SMO Means	6.8	6.4	6.6	6.9	7.0	6.8	6.8	7.0	

Table 8 . Self-Maximizing Orientation by Historical Concern under Condition of High Attraction.

Count / Row Pct / Col Pct / Tot Pct	HISTORICAL CONCERN 2	3	4	5	6	7	8	9	Row Total
Self-Maximizing Orientation 3	75 27.0 47.5 7.3	32 11.5 25.4 3.1	12 4.3 14.3 1.2	34 12.2 15.8 3.3	10 3.6 10.5 1.0	27 9.7 22.0 2.6	25 9.0 21.2 2.4	63 22.7 58.3 6.1	278 27.1
4	35 13.8 22.2 3.4	41 16.1 32.5 4.0	18 7.1 21.4 1.8	56 22.0 26.0 5.5	17 6.7 17.9 1.7	34 13.4 27.6 3.3	31 12.2 26.3 3.0	22 8.7 20.4 2.1	254 24.7
5	29 14.3 18.4 2.8	31 15.3 24.6 3.0	28 13.8 33.3 2.7	30 14.8 14.0 2.9	26 12.8 27.4 2.5	30 14.8 24.4 2.9	25 12.3 21.2 2.4	4 2.0 3.7 .4	203 19.8
6	8 6.3 5.1 .8	12 9.4 9.5 1.2	18 14.2 21.4 1.8	31 24.4 14.4 3.0	22 17.3 23.2 2.1	16 12.6 13.0 1.6	16 12.6 13.6 1.6	4 3.1 3.7 .4	127 12.4
7	11 8.1 7.0 1.1	7 5.2 5.6 .7	6 4.4 7.1 .6	60 44.4 27.9 5.8	16 11.9 16.8 1.6	10 7.4 8.1 1.0	15 11.1 12.7 1.5	10 7.4 9.3 1.0	135 13.1
8	[illegible] [illegible] [illegible]	3 13.6 2.4 .3	2 9.1 2.4 .2	4 18.2 1.9 .4	3 13.6 3.2 .3	5 22.7 4.1 .5	4 18.2 3.4 .4	1 4.5 .9 .1	22 2.1
9	0 0 0	0 0 0	0 0 0	0 0 0	1 12.5 1.1 .1	1 12.5 .8 .1	2 25.0 1.7 .2	4 50.0 3.7 .4	8 .8
Col Total	158	126	84	215	95	123	118	108	1027
Percent	15.4	12.3	8.2	20.9	9.3	12.0	11.5	10.5	100.0
SMO Means	4.0	4.4	4.9	5.2	5.3	4.7	4.9	4.0	

Table 11. Self-Maximizing Orientation by Attraction under Condition of Low Historical Concern.

KEY: COUNT / ROW PCT / COL PCT / TOT PCT	ATTRACTION 1	2	3	4	5	6	ROW TOTAL	ATRN MEANS
SELF-MAXIMIZING ORIENTATION 3	1	2	2	13	18	89	124	
	.8	1.6	1.6	10.5	14.5	71.0	23.1	5.49
	2.3	2.9	3.4	14.0	15.9	54.3		
	.2	.4	.4	2.4	3.4	16.4		
4	2	5	6	14	42	38	106	
	1.9	3.8	5.7	13.2	39.6	35.8	19.7	4.92
	4.7	5.9	10.3	15.1	37.2	23.5		
	.4	.7	1.1	2.6	7.8	7.1		
5	0	14	16	29	37	22	118	
	0	11.9	13.6	24.6	31.4	18.6	22.0	4.32
	0	20.6	27.6	31.2	32.7	13.6		
	0	2.6	3.0	5.4	6.9	4.1		
6	4	13	11	21	10	7	66	
	6.1	19.7	16.7	31.8	15.2	10.6	12.3	3.62
	9.3	19.1	19.0	22.6	8.8	4.3		
	.7	2.4	2.0	3.9	1.9	1.3		
7	10	20	16	13	5	6	70	
	14.3	28.6	22.9	18.6	7.1	8.6	13.0	2.72
	23.3	29.4	27.6	14.0	4.4	3.7		
	1.9	3.7	3.0	2.4	.9	1.1		
8	9	7	2	3	1	1	23	
	39.1	30.4	8.7	13.0	4.3	4.3	4.3	2.3
	20.9	10.3	3.4	3.2	.9	.6		
	1.7	1.3	.4	.6	.2	.2		
9	17	8	5	0	0	0	30	
	56.7	26.7	16.7	0	0	0	5.6	1.6
	39.5	11.8	8.6	0	0	0		
	3.2	1.5	.9	0	0	0		
COLUMN TOTAL	43	68	58	93	113	162	537	
	8.0	12.7	10.8	17.3	21.0	30.2	100.0	
SMO MEANS	7.7	6.4	6.0	5.2	4.5	3.8		

RAW CHI SQUARE = 346.19863 WITH 30 DEGREES OF FREEDOM, SIGNIFICANCE = 0

CRAMER'S V = .47939

CONTINGENCY COEFFICIENT = .64693

LAMDA (ASYMMETRIC) = .21701 WITH SMO DEPENDENT, = .19200 WITH ATRN DEPENDENT,

LAMDA (SYMMETRIC) = .19395

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .18923 WITH SMO DEPENDENT, = .19444 WITH ATRN DEPENDENT

UNCERTAINTY COEFFICIENT (SYMMETRIC) = .18814

KENDALL'S TAU B = -.56146, SIGNIFICANCE = 0

KENDALL'S TAU C = -.54669, SIGNIFICANCE = 0

GAMMA = -.60719

SOMER'S D (ASYMMETRIC) = -.56904 WITH SMO DEPENDENT, = -.55397 WITH ATRN DEPENDENT,

SOMER'S D (SYMMETRIC) = -.56141

ETA = .40741 WITH SMO DEPENDENT, = .40152 WITH ATRN DEPENDENT,

Table 12. Self-Maximizing Orientation by Attraction under Condition of Medium Historical Concern.

KEY: COUNT / ROW PCT / COL PCT / TOT PCT	ATTRACTION 1	2	3	4	5	6	ROW TOTAL	ATRN MEANS
SELF-MAXIMIZING ORIENTATION 8	1	4	0	1	10	23	39	
	2.6	10.3	0	2.6	25.6	59.0	8.2	5.15
	1.9	2.9	0	1.4	12.5	37.7		
	.2	.8	0	.2	2.1	4.9		
4	0	2	3	12	23	21	61	
	0	3.3	4.9	19.7	37.7	34.4	12.9	4.75
	0	1.5	4.3	16.2	28.7	34.4		
	0	.4	.6	2.5	4.9	4.4		
5	1	13	11	18	7	5	55	
	1.8	23.6	20.0	32.7	12.7	9.1	11.6	3.58
	1.9	9.6	15.7	24.3	8.7	8.2		
	.2	2.7	2.3	3.8	1.5	1.1		
6	3	11	9	18	11	2	54	
	5.6	20.4	16.7	33.3	20.4	3.7	11.4	3.54
	5.8	8.1	12.9	24.3	13.7	3.3		
	.6	2.3	1.9	3.8	2.3	.4		
7	17	97	37	22	29	9	201	
	8.5	43.3	18.4	10.9	14.4	4.5	42.5	2.93
	32.7	64.0	52.9	29.7	36.2	14.8		
	3.6	18.4	7.8	4.7	6.1	1.9		
8	13	14	9	3	0	1	40	
	32.5	35.0	22.5	7.5	0	2.5	8.5	2.15
	25.0	11.3	12.9	4.1	0	1.6		
	2.7	3.0	1.9	.6	0	.2		
9	17	5	1	0	0	0	23	
	73.9	21.7	4.3	0	0	0	4.9	1.30
	32.7	3.7	1.4	0	0	0		
	3.6	1.1	.2	0	0	0		
COLUMN TOTAL	52	136	70	74	80	61	473	
	11.0	28.8	14.8	15.6	16.9	12.9	100.0	
SMO MEANS	7.7	6.7	6.6	5.8	5.3	4.3		

RAW CHI SQUARE = 339.17292 WITH 30 DEGREES OF FREEDOM, SIGNIFICANCE = 0
CRAMER'S V = .37264
CONTINGENCY COEFFICIENT = .64617
LAMDA (ASYMMETRIC) = .05147 WITH SMO DEPENDENT, = .18991 WITH ATRN DEPENDENT,
LAMDA (SYMMETRIC) = .12808
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .18762 WITH SMO DEPENDENT, = .17820 WITH ATRN DEPENDENT
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .18007
KENDALL'S TAU B = -.50687, SIGNIFICANCE = 0
KENDALL'S TAU C = -.47828, SIGNIFICANCE = 0
GAMMA = -.62434
SOMER'S D (ASYMMETRIC) = -.48986 WITH SMO DEPENDENT, = -.52448 WITH ATRN DEPENDENT
SOMER'S D (SYMMETRIC) = -.50658
ETA = .36777 WITH SMO DEPENDENT, = .39677 WITH ATRN DEPENDENT.

Table 13. Self-Maximizing Orientation by Attraction under Condition of High Historical Concern.

KEY: COUNT / ROW PCT / COL PCT / TOT PCT	ATTRACTION 1	2	3	4	5	6	ROW TOTAL	ATRN MEANS
SELF-MAXIMIZING ORIENTATION 3	2	5	5	9	24	92	135	
	1.5	2.2	3.7	6.7	17.8	68.1	18.5	5.4
	2.1	3.9	4.5	6.3	16.4	59.4		
	.3	.4	.7	1.2	3.3	12.6		
4	3	7	10	23	44	37	124	
	2.4	5.6	8.1	18.5	35.5	29.8	17.0	4.69
	3.1	9.0	8.9	16.1	30.1	23.9		
	.4	1.0	1.4	3.2	6.0	5.1		
5	4	8	20	45	30	10	117	
	3.4	6.8	17.1	38.5	25.6	8.5	16.0	4.0
	4.2	10.3	17.9	31.5	20.5	6.5		
	.5	1.1	2.7	6.2	4.1	1.4		
6	8	10	23	31	22	5	99	
	8.1	10.1	23.2	31.3	22.2	5.1	13.6	3.65
	8.3	12.8	20.5	21.7	15.1	3.2		
	1.1	1.4	3.2	4.2	3.0	.7		
7	21	19	32	21	21	9	123	
	17.1	15.4	26.0	17.1	17.1	7.3	16.8	2.97
	21.9	24.4	28.6	14.7	14.4	5.8		
	2.9	2.6	4.4	2.9	2.9	1.2		
8	16	19	13	10	2	1	61	
	26.2	31.1	21.3	16.4	3.3	1.6	8.4	2.4
	16.7	24.4	11.6	7.0	1.4	.6		
	2.2	2.6	1.8	1.4	.3	.1		
9	42	12	9	4	3	1	71	
	59.2	16.9	12.7	5.6	4.2	1.4	9.7	1.8
	43.8	15.4	8.0	2.8	2.1	.6		
	5.8	2.6	1.2	.5	.4	.1		
COLUMN TOTAL	96	78	112	143	146	155	730	
	13.2	10.7	15.3	19.6	20.0	21.2	100.0	
SMD MEANS	7.7	6.8	6.3	5.5	4.9	3.8		

RAW CHI SQUARE = 516.39570 WITH 30 DEGREES OF FREEDOM, SIGNIFICANCE = 0

CRAMER'S V = .37416

CONTINGENCY COEFFICIENT = .64337

LAMDA (ASYMMETRIC) = .23360 WITH SMD DEPENDENT, = .26087 WITH ATRN DEPENDENT,

LAMDA (SYMMETRIC) = .24701

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .16402 WITH SMD DEPENDENT, = .17996 WITH ATRN DEPENDENT

UNCERTAINTY COEFFICIENT (SYMMETRIC) = .17271

KENDALL'S TAU B = -.54832, SIGNIFICANCE = 0

KENDALL'S TAU C = -.55015, SIGNIFICANCE = 0

GAMMA = -.64370

SOMER'S D (ASYMMETRIC) = -.55614 WITH SMD DEPENDENT, = -.54059 WITH ATRN DEPENDENT

SOMER'S D (SYMMETRIC) = -.54826

ETA = .47261 WITH SMD DEPENDENT, = .45191 WITH ATRN DEPENDENT,

Table 14. Attraction by Historical Concern (Zero Order).

Historical Concern		ATTRACTION 1	2	3	4	5	6	Row Total	ATRN Means
Low	2	15	22	12	27	40	91	207	
		7.2	10.6	5.8	13.0	19.3	44.0	11.9	4.58
		7.8	7.8	5.0	8.7	11.8	24.1		
		.9	1.3	.7	1.6	2.3	5.2		
	3	16	16	17	34	41	51	175	
		9.1	9.1	9.7	19.4	23.4	29.1	10.1	4.26
		8.3	5.7	7.1	11.0	12.1	13.5		
		.9	.9	1.0	2.0	2.4	2.9		
	4	12	30	29	32	32	20	155	
		7.7	19.4	18.7	20.6	20.6	12.9	8.9	3.65
		6.3	10.6	12.1	10.3	9.4	5.3		
		.7	1.7	1.7	1.8	1.8	1.1		
	5	52	136	70	74	80	61	473	
		11.0	28.8	14.8	15.6	16.9	12.9	27.2	3.37
		27.1	48.2	29.2	23.9	23.6	16.1		
		3.0	7.8	4.0	4.3	4.6	3.5		
	6	21	22	35	50	28	17	173	
		12.1	12.7	20.2	28.9	16.2	9.8	9.9	3.53
		10.9	7.8	14.6	16.1	8.3	4.5		
		1.2	1.3	2.0	2.9	1.6	1.0		
	7	31	28	39	49	45	29	221	
		14.0	12.7	17.6	22.2	20.4	13.1	12.7	3.61
		16.1	9.9	16.2	15.8	13.3	7.7		
		1.8	1.6	2.2	2.8	2.6	1.7		
	8	24	12	23	33	47	38	177	
		13.6	6.8	13.0	18.6	26.6	21.5	10.2	4.02
		12.5	4.3	9.6	10.6	13.9	10.1		
		1.4	.7	1.4	1.9	2.7	2.2		
High	9	21	16	15	11	26	71	160	
		13.1	10.0	9.4	6.9	16.2	44.4	9.2	4.36
		10.9	5.7	6.3	3.5	7.7	18.8		
		1.2	.9	.9	.6	1.5	4.1		
Col Total		192	282	240	310	339	378	1741	
Percent		11.0	16.2	13.8	17.8	19.5	21.7	100.0	
HSTCN Means		5.78	5.17	5.59	5.35	5.38	5.2		

Table 18. Self-Maximizing Orientation by Other's Giving and Receiving under Low and High Historical Concern.

Low Historical Concern

Count / Row Pct / Col Pct		Other's Giving Frequency	Other's Receiving Frequency	
Self-Maximizing Orientation	Low	290 75.1 51.2	96 24.9 45.7	386 100% 49.7
	High	276 70.7 48.8	114 29.3 54.3	390 100% 50.3
		566 72.9 100%	210 27.1 100%	776 100% 100%

High Historical Concern

Count / Row Pct / Col Pct		Other's Giving Frequency	Other's Receiving Frequency	
Self-Maximizing Orientation	Low	686 72.3 61.1	263 27.7 53.1	949 100% 58.7
	High	437 65.3 38.9	232 34.7 46.9	669 100% 41.3
		1123 69.4 100%	495 30.6 100%	1618 100% 100%

Table 19. Attraction by Visiting Common Structural Density (Zero Order).

Attraction			Visiting Common Structural Density 0	1	2	3	4	5	6	Total
	Low	Count	118	69	69	22	2	0	0	280
		Row Pct	42.1	24.6	24.6	7.9	.7	0.0	0.0	100%
		Col Pct	44.5	27.8	30.5	12.4	4.7			27.6
	High	Count	147	179	157	155	41	51	3	733
		Row Pct	20.1	24.4	21.4	21.1	5.6	7.0	.4	100%
		Col Pct	55.5	72.2	69.5	87.6	95.3	100.0	100.0	72.4
	Col Total		265	248	226	177	43	51	3	1013
	Percent		26.2	24.5	22.4	17.5	4.2	5.1	.3	100%
										100%

Gamma=.447
Kendall's Tau_b=.251
Kendall's Tau_c=.281
Somer's d_{yx}=.179

Table 20. Self-Maximizing Orientation by Historical Concern under Conditions of Low Attraction with Low Visiting Common Structural Density.

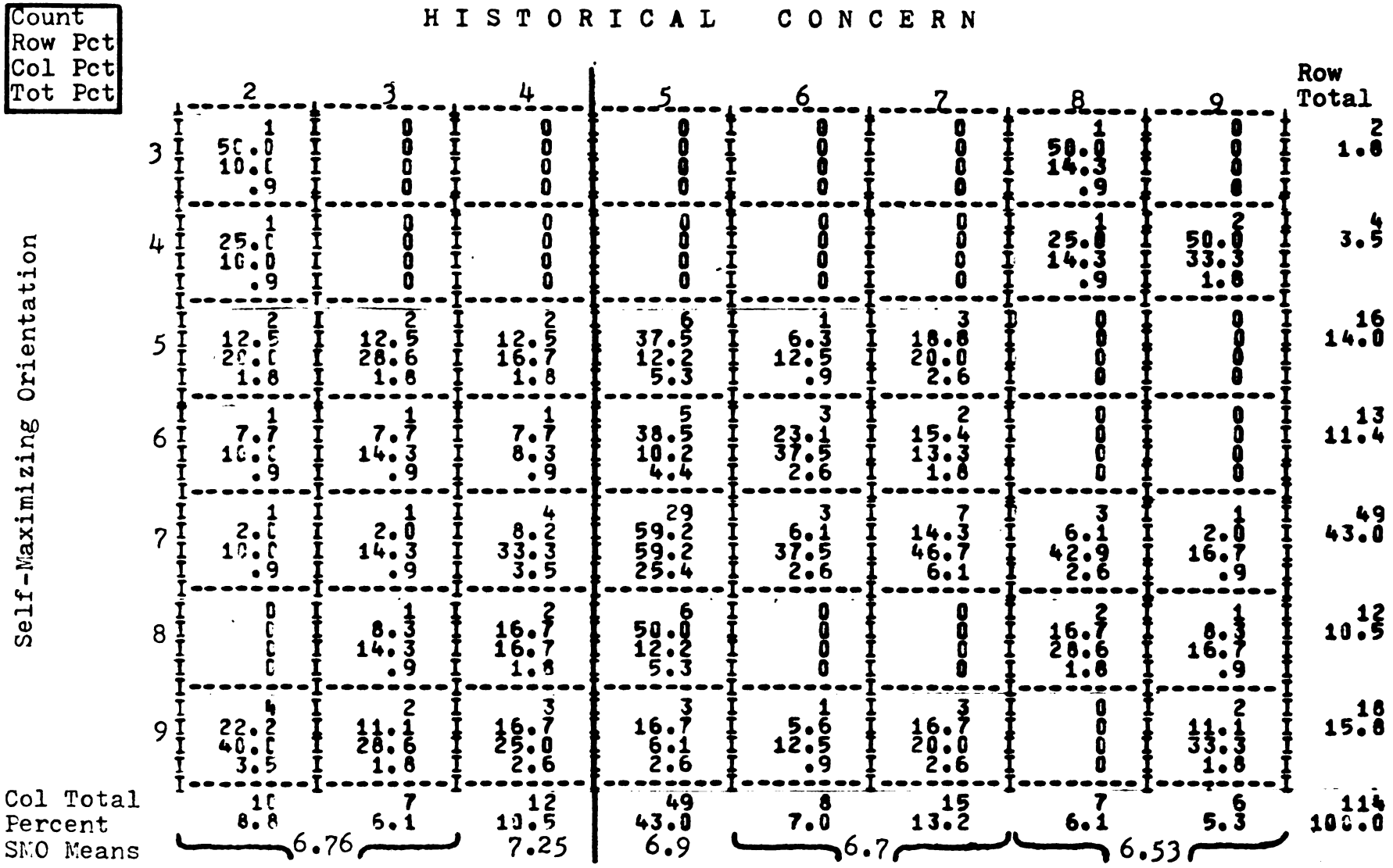

Table 21. Self-Maximizing Orientation by Historical Concern under Conditions of Low Attraction with High Visiting Common Structural Density.

Count
Row Pct
Col Pct
Tot Pct

Self-Maximizing Orientation	HISTORICAL CONCERN 2	3	4	5	6	7	8	9	Row Total
3	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 50.0 9.1 1.9	1 25.0 6.7 1.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 25.0 9.1 1.0	4 3.9
4	0 0.0 0.0 0.0	1 100.0 10.0 1.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 1.0
5	1 5.3 50.0 1.0	3 15.8 30.0 2.9	6 31.6 54.5 5.8	2 10.5 9.1 1.9	0 0.0 0.0 0.0	5 26.3 20.8 4.9	0 0.0 0.0 0.0	2 10.5 18.2 1.9	19 18.4
6	0 0.0 0.0 0.0	1 5.6 10.0 1.0	2 11.1 18.2 1.9	3 16.7 13.6 2.9	2 11.1 13.3 1.9	7 38.9 29.2 6.8	2 11.1 25.0 1.9	1 5.6 9.1 1.0	18 17.5
7	1 3.3 50.0 1.0	2 6.7 20.0 1.9	1 3.3 9.1 1.0	9 30.0 40.9 8.7	8 26.7 53.3 7.8	5 16.7 20.8 4.9	2 6.7 25.0 1.9	2 6.7 18.2 1.9	30 29.1
8	0 0.0 0.0 0.0	2 15.4 20.0 1.9	1 7.7 9.1 1.0	3 23.1 13.6 2.9	3 23.1 20.0 2.9	3 23.1 12.5 2.9	1 7.7 12.5 1.0	0 0.0 0.0 0.0	13 12.6
9	0 0.0 0.0 0.0	1 5.6 10.0 1.0	1 5.6 9.1 1.0	3 16.7 13.6 2.9	1 5.6 6.7 1.0	4 22.2 16.7 3.9	3 16.7 37.5 2.9	5 27.8 45.5 4.9	18 17.5
Col Total	2	10	11	22	15	24	8	11	103
Percent	1.9	9.7	10.7	21.4	14.6	23.3	7.8	10.7	100.0
SMO Means	6.3		6.0	6.72	6.9	6.75	7.63	7.09	

Table 24. Self-Maximizing Orientation by Historical Concern under Conditions of High Attraction with Low Visiting Common Structural Density.

Count / Row Pct / Col Pct / Tot Pct	HISTORICAL CONCERN 2	3	4	5	6	7	8	9	Row Total
Self-Maximizing Orientation 3	13 34.2 72.2 11.3	2 5.3 25.0 1.7	2 5.3 25.0 1.7	2 5.3 7.7 1.7	4 10.5 25.0 3.5	4 10.5 30.8 3.5	4 10.5 25.0 3.5	7 18.4 70.0 6.1	38 33.0
4	4 22.2 22.2 3.5	2 11.1 25.0 1.7	1 5.6 12.5 .9	4 22.2 15.4 3.5	2 11.1 12.5 1.7	1 5.6 7.7 .9	2 11.1 12.5 1.7	2 11.1 20.0 1.7	18 15.7
5	0 0.0 0.0 0.0	1 8.3 12.5 .9	2 16.7 25.0 1.7	4 33.3 15.4 3.5	1 8.3 6.3 .9	3 25.0 23.1 2.6	1 8.3 6.3 .9	0 0.0 0.0 0.0	12 10.4
6	0 0.0 0.0 0.0	2 8.3 25.0 1.7	2 8.3 25.0 1.7	6 25.0 23.1 5.2	5 20.8 31.3 4.3	1 4.2 7.7 .9	7 29.2 43.8 6.1	1 4.2 10.0 .9	24 20.9
7	1 5.0 5.6 .9	1 5.0 12.5 .9	0 0.0 0.0 0.0	10 50.0 38.5 8.7	4 20.0 25.0 3.5	2 10.0 15.4 1.7	2 10.0 12.5 1.7	0 0.0 0.0 0.0	20 17.4
8	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 33.3 12.5 .9	0 0.0 0.0 0.0	0 0.0 0.0 0.0	2 66.7 15.4 1.7	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 2.6
Col Total	18	8	8	26	16	13	16	10	115
Percent	15.7	7.0	7.0	22.6	13.9	11.3	13.9	8.7	100.0
SMO Means	3.44	4.75	5.0	5.69	5.18	5.15	5.06	3.5	

Table 25. Self-Maximizing Orientation by Historical Concern under Conditions of High Attraction with High Visiting Common Structural Density.

Count
Row Pct
Col Pct
Tot Pct

HISTORICAL CONCERN

Self-Maximizing Orientation	2	3	4	5	6	7	8	9	Row Total
3	14 19.7 46.7 6.1	9 12.7 30.0 3.9	3 4.2 20.0 1.3	6 8.5 14.3 2.6	2 2.8 10.0 .9	11 15.5 34.4 4.8	3 4.2 11.5 1.3	23 32.4 63.9 10.0	71 30.7
4	7 10.4 23.3 3.0	9 13.4 30.0 3.9	3 4.5 20.0 1.3	15 22.4 35.7 6.5	5 7.5 25.0 2.2	9 13.4 28.1 3.9	8 11.9 30.8 3.5	11 16.4 30.6 4.8	67 29.0
5	5 11.4 16.7 2.2	8 18.2 26.7 3.5	6 13.6 40.0 2.6	9 20.5 21.4 3.9	4 9.1 20.0 1.7	5 11.4 15.6 2.2	5 11.4 19.2 2.2	2 4.5 5.6 .9	44 19.0
6	2 10.0 6.7 .9	2 10.0 6.7 .9	1 5.0 6.7 .4	5 25.0 11.9 2.2	2 10.0 10.0 .9	4 20.0 12.5 1.7	4 20.0 15.4 1.7	0 0.0 0.0 0.0	20 8.7
7	2 8.0 6.7 .9	1 4.0 3.3 .4	2 8.0 13.3 .9	6 24.0 14.3 2.6	7 28.0 35.0 3.0	1 4.0 3.1 .4	6 24.0 23.1 2.6	0 0.0 0.0 0.0	25 10.8
8	0 0.0 0.0 0.0	1 33.3 3.3 .4	0 0.0 0.0 0.0	1 33.3 2.4 .4	0 0.0 0.0 0.0	1 33.3 3.1 .4	0 0.0 0.0 0.0	0 0.0 0.0 0.0	3 1.3
9	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 100.0 3.1 .4	0 0.0 0.0 0.0	0 0.0 0.0 0.0	1 .4
Col Total	30	30	15	42	20	32	26	36	231
Percent	13.0	13.0	6.5	18.2	8.7	13.9	11.3	15.6	100.0
SMO Means	4.03	4.33	4.73	4.83	5.35	4.43	5.07	3.41	

Table 29. Self-Maximizing Orientation by Visiting Common Structural Density (Zero Order).

KEY: Count / Row Pct / Col Pct / Tot Pct

Self - Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	5	6	Row Total	VCSD Means
3	40 34.8 17.5 7.1	38 33.0 22.2 6.7	22 19.1 25.9 3.9	11 9.6 17.7 2.0	2 1.7 16.7 .4	2 1.7 66.7 .4	0 0 0 0	115 20.4	1.16
4	22 24.4 9.6 3.9	31 34.4 18.1 5.5	17 18.9 20.0 3.0	18 20.0 29.0 3.2	2 2.2 16.7 .4	0 0 0 0	0 0 0 0	90 16.0	1.41
5	28 30.8 12.2 5.0	28 30.8 16.4 5.0	17 18.7 20.0 3.0	15 16.5 24.2 2.7	2 2.2 16.7 .4	0 0 0 0	1 1.1 100.0 .2	91 16.2	1.33
6	37 49.3 16.2 6.6	19 25.3 11.1 3.4	13 17.3 15.3 2.3	3 4.0 4.8 .5	3 4.0 25.0 .5	0 0 0 0	0 0 0 0	75 13.3	.88
7	69 55.6 30.1 12.3	35 28.2 20.5 6.2	10 8.1 11.8 1.8	8 6.5 12.9 1.4	1 .8 8.3 .2	1 .8 33.3 .2	0 0 0 0	124 22.0	.71
8	15 48.4 6.6 2.7	11 35.5 6.4 2.0	2 6.5 2.4 .4	3 9.7 4.9 .5	0 0 0 0	0 0 0 0	0 0 0 0	31 5.5	.77
9	18 48.6 7.9 3.2	9 24.3 5.3 1.6	4 10.8 4.7 .7	4 10.8 6.5 .7	2 5.4 16.7 .4	0 0 0 0	0 0 0 0	37 6.6	1.0
Col Total	229	171	85	62	12	3	1	563	
Percent	40.7	30.4	15.1	11.0	2.1	.5	.2	100.0	
SMO Means	5.83	5.30	4.93	5.1	5.31				

Table 30. Self-Maximizing Orientation by Visiting Common Structural Density under the Condition of Low Attraction.

KEY: Count / Row Pct / Col Pct / Tot Pct	Visiting Common Structural Density 0	1	2	3	4	Row Total	VCSD Means
Self - Maximizing Orientation 3	2 33.3 1.8 .9	2 33.3 3.2 .9	2 33.3 8.7 .9	0 0 0 0	0 0 0 0	6 2.8	
4	4 80.0 3.5 1.8	1 20.0 1.6 .5	0 0 0 0	0 0 0 0	0 0 0 0	5 2.3	.93
5	16 45.7 14.0 7.4	8 22.9 12.9 3.7	6 17.1 26.1 2.8	4 11.4 28.6 1.8	1 2.9 25.0 .5	35 16.1	
6	13 41.9 11.4 6.0	13 41.9 21.0 6.0	4 12.9 17.4 1.8	0 0 0 0	1 3.2 25.0 .5	31 14.3	.81
7	49 62.0 43.0 22.6	22 27.8 35.5 10.1	5 6.3 21.7 2.3	3 3.8 21.4 1.4	0 0 0 0	79 36.4	.52
8	12 48.0 10.5 5.5	8 32.0 12.9 3.7	2 8.0 8.7 .9	3 12.0 21.4 1.4	0 0 0 0	25 11.5	.84
9	18 50.0 15.8 8.3	8 22.2 12.9 3.7	4 11.1 17.4 1.8	4 11.1 28.6 1.8	2 5.6 50.0 .9	36 16.6	1.00
Col Total	114	62	23	14	4	217	
Percent	52.5	28.6	10.6	6.5	1.8	100.0	
SMO Means	6.85	6.74	6.39	7.22			

Table 31. Self-Maximizing Orientation by Visiting Common Structural Density under the Condition of High Attraction.

KEY: Count / Row Pct / Col Pct / Tot Pct	Visiting Common Structural Density 0	1	2	3	4	5	6	Row Total	VCSD Means
Self-Maximizing Orientation 3	38	36	20	11	2	2	0	109	
	34.9	33.0	18.3	10.1	1.8	1.8	0	31.5	1.17
	33.0	33.0	32.3	22.9	25.0	66.7	0		
	11.0	10.4	5.8	3.2	.6	.6	0		
4	18	30	17	18	2	0	0	85	
	21.2	35.3	20.0	21.2	2.4	0	0	24.6	1.48
	15.7	27.5	27.4	37.5	25.0	0	0		
	5.2	8.7	4.9	5.2	.6	0	0		
5	12	20	11	11	1	0	1	56	
	21.4	35.7	19.6	19.6	1.8	0	1.8	16.2	1.52
	10.4	18.3	17.7	22.9	12.5	0	100.0		
	3.5	5.8	3.2	3.2	.3	0	.3		
6	24	6	9	3	2	0	0	44	
	54.5	13.6	20.5	6.8	4.5	0	0	12.7	0.93
	20.9	5.5	14.5	6.3	25.0	0	0		
	6.9	1.7	2.6	.9	.6	0	0		
7	20	13	5	5	1	1	0	45	
	44.4	28.9	11.1	11.1	2.2	2.2	0	13.0	1.04
	17.4	11.9	8.1	10.4	12.5	33.3	0		
	5.8	3.8	1.4	1.4	.3	.3	0		
8	3	3	0	0	0	0	0	6	
	50.0	50.0	0	0	0	0	0	1.7	0.50
	2.6	2.8	0	0	0	0	0		
	.9	.9	0	0	0	0	0		
9	0	1	0	0	0	0	0	1	
	0	100.0	0	0	0	0	0	.3	1.0
	0	.9	0	0	0	0	0		
	0	.3	0	0	0	0	0		
Col Total	115	109	62	48	8	3	1	346	
Percent	33.2	31.5	17.9	13.9	2.3	.9	.3	100.0	
SMO Means	4.81	4.48	4.38	4.44	4.67				

Table 3 3. Self-Maximizing Orientation by Attraction under Condition of Low Visiting Common Structural Density.

KEY: COUNT / ROW PCT / COL PCT / TOT PCT	ATTRACTION 1	2	3	4	5	6	ROW TOTAL	ATRN MEANS
SELF-MAXIMIZING ORIENTATION 3	1	1	0	3	11	24	40	
	2.5	2.5	0	7.5	27.5	60.0	17.5	5.35
	3.3	1.9	0	8.1	26.2	66.7		
	.4	.4	0	1.3	4.8	10.5		
4	1	1	2	1	11	6	22	
	4.5	4.5	9.1	4.5	50.0	27.3	9.6	4.73
	3.3	1.9	6.7	2.7	26.2	16.7		
	.4	.4	.9	.4	4.8	2.6		
5	2	8	6	2	6	4	28	
	7.1	28.6	21.4	7.1	21.4	14.3	12.2	3.5
	6.7	14.8	20.0	5.4	14.3	11.1		
	.9	3.5	2.6	.9	2.6	1.7		
6	3	5	5	17	6	1	37	
	8.1	13.5	13.5	45.9	16.2	2.7	16.2	3.56
	10.0	9.3	16.7	45.9	14.3	2.8		
	1.3	2.2	2.2	7.4	2.6	.4		
7	10	25	14	11	8	1	69	
	14.5	36.2	20.3	15.9	11.6	1.4	30.1	2.78
	33.3	46.3	46.7	29.7	19.0	2.8		
	4.4	10.9	6.1	4.8	3.5	.4		
8	4	6	2	3	0	0	15	
	26.7	40.0	13.3	20.0	0	0	6.5	2.27
	13.3	11.1	6.7	8.1	0	0		
	1.7	2.6	.9	1.3	0	0		
9	9	8	1	0	0	0	18	
	50.0	44.4	5.6	0	0	0	7.9	1.67
	30.0	14.8	3.3	0	0	0		
	3.9	3.5	.4	0	0	0		
COLUMN TOTAL	30	54	30	37	42	36	229	
	13.1	23.6	13.1	16.2	18.3	15.7	100.0	
SMO MEANS	7.3	6.9	6.4	6.1	4.7	3.6		

RAW CHI SQUARE = 190.20819 WITH 30 DEGREES OF FREEDOM, SIGNIFICANCE = .0000
CRAMER'S V = .39487
CONTINGENCY COEFFICIENT = .66371
LAMDA (ASYMMETRIC) = .20000 WITH SMO DEPENDENT, = .26286 WITH ATRN DEPENDENT,
LAMDA (SYMMETRIC) = .23284
UNCERTAINTY COEFFICIENT (ASYMETRIC) = .21113 WITH SMO DEPENDENT, = .21728 WITH ATRN DEPENDENT
UNCERTAINTY COEFFICIENT (SYMETRIC) = .21416
KENDALL'S TAU B = -.54838, SIGNIFICANCE = .0000
KENDALL'S TAU C = -.54077, SIGNIFICANCE = .0000
GAMMA = -.64774
SOMER'S D (ASYMMETRIC) = -.54562 WITH SMO DEPENDENT, = -.55094 WITH ATRN DEPENDENT
SOMER'S D (SYMMETRIC) = -.54837
ETA = .481 5 WITH SMO DEPENDENT, = .45955 WITH ATRN DEPENDENT,

Table 34 Self-Maximizing Orientation by Attraction under Condition of High Visiting Common Structural Density.

SELF-MAXIMIZING ORIENTATION	ATTRACTION 1	2	3	4	5	6	ROW TOTAL	ATRN MEANS
3	1	2	1	8	18	45	75	
	1.3	2.7	1.3	10.7	24.0	60.0	22.5	5.3
	2.8	7.7	2.4	12.1	20.0	60.0		
	.3	.6	.3	2.4	5.4	13.5		
4	1	0	0	17	30	20	68	
	1.5	0	0	25.0	44.1	29.4	20.4	5.0
	2.8	0	0	25.8	33.3	26.7		
	.3	0	0	5.1	9.0	6.0		
5	1	6	12	23	16	5	63	
	1.6	9.5	19.0	36.5	25.6	4.8	18.9	4.0
	2.8	23.1	29.3	34.8	20.0	4.0		
	.3	1.8	3.6	6.9	5.4	1.5		
6	5	5	8	7	9	4	38	
	13.2	13.2	21.1	18.4	23.7	10.5	11.4	3.4
	13.9	19.2	19.5	10.6	10.0	5.3		
	1.5	1.5	2.4	2.1	2.7	1.2		
7	10	7	13	7	15	3	55	
	18.2	12.7	23.6	12.7	27.3	5.5	16.5	3.3
	27.8	26.9	31.7	10.6	16.7	4.0		
	3.0	2.1	3.9	2.1	4.5	.9		
8	5	4	4	3	0	0	16	
	31.3	25.0	25.0	18.8	0	0	4.8	2.3
	13.9	15.4	9.8	4.5	0	0		
	1.5	1.2	1.2	.9	0	0		
9	15	2	3	1	0	0	19	
	78.4	10.5	15.8	5.3	0	0	5.7	1.6
	36.1	7.7	7.3	1.5	0	0		
	3.9	.6	.9	.3	0	0		
COLUMN TOTAL	36	26	41	66	90	75	334	
	10.8	7.8	12.3	19.8	26.9	22.5	100.0	
SMO MEANS	7.4	6.3	6.4	5.0	4.7	3.7		

RAW CHI SQUARE = 258.27776 WITH 30 DEGREES OF FREEDOM, SIGNIFICANCE = 0
CRAMER'S V = .37813
CONTINGENCY COEFFICIENT = .64570
LAMDA (ASYMMETRIC) = .21422 WITH SMO DEPENDENT, = .20492 WITH ATRN DEPENDENT,
LAMDA (SYMMETRIC) = .21076
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = .19349 WITH SMO DEPENDENT, = .20728 WITH ATRN DEPENDENT
UNCERTAINTY COEFFICIENT (SYMMETRIC) = .20015
KENDALL'S TAU B = -.54559, SIGNIFICANCE = 0
KENDALL'S TAU C = -.53423, SIGNIFICANCE = 0
GAMMA = -.64768
SOMER'S D (ASYMMETRIC) = -.55292 WITH SMO DEPENDENT, = -.53635 WITH ATRN DEPENDENT
SOMER'S D (SYMMETRIC) = -.54554
ETA = .44713 WITH SMO DEPENDENT, = .44727 WITH ATRN DEPENDENT,

Table 36. Self-Maximizing Orientation by Visiting Common Structural Density under Condition of Low Historical Concern.

KEY: Count / Row Pct / Col Pct / Tot Pct

Self - Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	Row Total	VCSD Means
3	18 40.9 28.6 11.2	9 20.5 17.3 5.6	9 20.5 37.5 5.6	7 15.9 36.8 4.3	1 2.3 33.3 .6	44 27.3	1.18
4	8 28.6 12.7 5.0	10 35.7 19.2 6.2	5 17.9 20.8 3.1	4 14.3 21.1 2.5	1 3.6 33.3 .6	28 17.4	1.29
5	9 23.7 14.3 5.6	16 42.1 30.8 9.9	5 13.2 20.8 3.1	7 18.4 36.8 4.3	1 2.6 33.3 .6	38 23.6	1.34
6	7 46.7 11.1 4.3	5 33.3 9.6 3.1	3 20.0 12.5 1.9	0 0 0 0	0 0 0 0	15 9.3	.73
7	8 47.1 12.7 5.0	7 41.2 13.5 4.3	2 11.8 8.3 1.2	0 0 0 0	0 0 0 0	17 10.6	.65
8	4 50.0 6.3 2.5	4 50.0 7.7 2.5	0 0 0 0	0 0 0 0	0 0 0 0	8 5.0	.50
9	9 81.8 14.3 5.6	1 9.1 1.9 .6	0 0 0 0	1 9.1 5.3 .6	0 0 0 0	11 6.8	.09
Col Total	63	52	24	19	3	161	
Percent	39.1	32.3	14.9	11.8	1.9	100.0	
SMO Means	5.4	5.2	4.3	4.2			

Table 37. Self-Maximizing Orientation by Visiting Common Structural Density under Condition of High Historical Concern.

KEY: Count
Row Pct
Col Pct
Tot Pct

Self - Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	5	6	Row Total	VCSD Means
3	20	26	10	3	1	1	0	61	
	32.8	42.6	16.4	4.9	1.6	1.6	0	23.2	1.05
	22.0	29.5	21.3	10.7	16.7	50.0	0		
	7.6	9.9	3.8	1.1	.4	.4	0		
4	10	17	7	9	0	0	0	43	
	23.3	39.5	16.3	20.9	0	0	0	16.3	1.35
	11.0	19.3	14.9	32.1	0	0	0		
	3.8	6.5	2.7	3.4	0	0	0		
5	9	8	9	5	0	0	1	32	
	28.1	25.0	28.1	15.6	0	0	3.1	12.2	1.47
	9.9	9.1	19.1	17.9	0	0	100.0		
	3.4	3.0	3.4	1.9	0	0	.4		
6	19	10	8	2	2	0	0	41	
	46.3	24.4	19.5	4.9	4.9	0	0	15.6	.98
	20.9	11.4	17.0	7.1	33.3	0	0		
	7.2	3.8	3.0	.8	.8	0	0		
7	22	18	7	4	1	1	0	53	
	41.5	34.0	13.2	7.5	1.9	1.9	0	20.2	1.00
	24.2	20.5	14.9	14.3	16.7	50.0	0		
	8.4	6.8	2.7	1.5	.4	.4	0		
8	5	3	2	3	0	0	0	13	
	38.5	23.1	15.4	23.1	0	0	0	4.9	1.23
	5.5	3.4	4.3	10.7	0	0	0		
	1.9	1.1	.8	1.1	0	0	0		
9	6	6	4	2	2	0	0	20	
	30.0	30.0	20.0	10.0	10.0	0	0	7.6	1.40
	6.6	6.8	8.5	7.1	33.3	0	0		
	2.3	2.3	1.5	.8	.8	0	0		
Col Total	91	88	47	28	6	2	1	263	
Percent	34.6	33.5	17.9	10.6	2.3	.8	.4	100.0	
SMO Means	5.6	5.1	5.4	5.5	6.1				

Table 38. Self-Maximizing Orientation by Visiting Common Structural Density under Joint Conditions of Low Attraction with Low Historical Concern.

KEY: Count / Row Pct / Col Pct / Tot Pct

Self-Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	Row Total	VCSD Means
3	1 100.0 3.4 1.9	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 1.9	0.0
4	1 50.0 3.4 1.9	1 50.0 6.3 1.9	0 0 0 0	0 0 0 0	0 0 0 0	2 3.8	0.50
5	6 37.5 20.7 11.5	5 31.3 31.3 9.6	2 12.5 66.7 3.8	2 12.5 66.7 3.8	1 6.3 100.0 1.9	16 30.8	1.19
6	3 50.0 10.3 5.8	2 33.3 12.5 3.8	1 16.7 33.3 1.9	0 0 0 0	0 0 0 0	6 11.5	0.67
7	6 60.0 20.7 11.5	4 40.0 25.0 7.7	0 0 0 0	0 0 0 0	0 0 0 0	10 19.2	0.40
8	3 50.0 10.3 5.8	3 50.0 18.8 5.8	0 0 0 0	0 0 0 0	0 0 0 0	6 11.5	0.50
9	9 81.8 31.0 17.3	1 9.1 6.3 1.9	0 0 0 0	1 9.1 33.3 1.9	0 0 0 0	11 21.2	0.36
Col Total	29	16	3	3	1	52	
Percent	55.8	30.8	5.8	5.8	1.9	100.0	
SMO Means	7.0	6.4		5.7			

Table 39. Self-Maximizing Orientation by Visiting Structural Density under Conditions of Low Attraction with High Historical Concern.

KEY: Count / Row Pct / Col Pct / Tot Pct

Self-Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	Row Total	VCSD Means
3	1 33.3 2.8 1.1	1 33.3 3.3 1.1	1 33.3 5.6 1.1	0 0 0 0	0 0 0 0	3 3.2	1.0
4	3 100.0 8.3 3.2	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	3 3.2	0.0
5	4 36.4 11.1 4.3	2 18.2 6.7 2.1	4 36.4 22.2 4.3	1 9.1 14.3 1.1	0 0 0 0	11 11.7	1.18
6	5 29.4 13.9 5.3	8 47.1 26.7 8.5	3 17.6 16.7 3.2	0 0 0 0	1 5.9 33.3 1.1	17 18.1	1.06
7	14 45.2 38.9 14.9	12 38.7 40.0 12.8	4 12.9 22.2 4.3	1 3.2 14.3 1.1	0 0 0 0	31 33.0	.74
8	3 30.0 8.3 3.2	2 20.0 6.7 2.1	2 20.0 11.1 2.1	3 30.0 42.9 3.2	0 0 0 0	10 10.6	1.50
9	6 31.6 16.7 6.4	5 26.3 16.7 5.3	4 21.1 22.2 4.3	2 10.5 28.6 2.1	2 10.5 66.7 2.1	19 20.2	1.42
Col Total	36	30	18	7	3	94	
Percent	38.3	31.9	19.1	7.4	3.2	100.0	
SMO Means	6.7	6.9	6.7	7.8			

Table 40. Self-Maximizing Orientation by Visiting Common Structural Density under Joint Conditions of High Attraction with Low Historical Concern.

KEY: Count / Row Pct / Col Pct / Tot Pct

Self-Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	Row Total	VCSD Means
3	17	9	9	7	1	43	
	39.5	20.9	20.9	16.3	2.3	39.4	
	50.0	25.0	42.9	43.8	50.0		1.21
	15.6	8.3	8.3	6.4	.9		
4	7	9	5	4	1	26	
	26.9	34.6	19.2	15.4	3.8	23.9	
	20.6	25.0	23.8	25.0	50.0		1.35
	6.4	8.3	4.6	3.7	.9		
5	3	11	3	5	0	22	
	13.6	50.0	13.6	22.7	0	20.2	1.45
	8.8	30.6	14.3	31.3	0		
	2.8	10.1	2.8	4.6	0		
6	4	3	2	0	0	9	
	44.4	33.3	22.2	0	0	8.3	.78
	11.8	8.3	9.5	0	0		
	3.7	2.8	1.8	0	0		
7	2	3	2	0	0	7	
	28.6	42.9	28.6	0	0	6.4	1.0
	5.9	8.3	9.5	0	0		
	1.8	2.8	1.8	0	0		
8	1	1	0	0	0	2	
	50.0	50.0	0	0	0	1.8	.5
	2.9	2.8	0	0	0		
	.9	.9	0	0	0		
Col Total	34	36	21	16	2	109	
Percent	31.2	33.0	19.3	14.7	1.8	100.0	
SMO Means	4.11	4.59	4.2	3.8			

Table 41. Self-Maximizing Orientation by Visiting Common Structural Density under Joint Conditions of High Attraction with High Historical Concern.

KEY: Count / Row Pct / Col Pct / Tot Pct

Self-Maximizing Orientation	Visiting Common Structural Density 0	1	2	3	4	5	6	Row Total	VCSD Means
3	19	25	9	3	1	1	0	58	
	32.8	43.1	15.5	5.2	1.7	1.7	0	34.3	1.05
	34.5	43.1	31.0	14.3	33.3	50.0	0		
	11.2	14.8	5.3	1.8	.6	.6	0		
4	7	17	7	9	0	0	0	40	
	17.5	42.5	17.5	22.5	0	0	0	23.7	1.45
	12.7	29.3	24.1	42.9	0	0	0		
	4.1	10.1	4.1	5.3	0	0	0		
5	5	6	5	4	0	0	1	21	
	23.8	28.6	23.8	19.0	0	0	4.8	12.4	1.62
	9.1	10.3	17.2	19.0	0	0	100.0		
	3.0	3.6	3.0	2.4	0	0	.6		
6	14	2	5	2	1	0	0	24	
	58.3	8.3	20.8	8.3	4.2	0	0	14.2	.92
	25.5	3.4	17.2	9.5	33.3	0	0		
	8.3	1.2	3.0	1.2	.6	0	0		
7	8	6	3	3	1	1	0	22	
	36.4	27.3	13.6	13.6	4.5	4.5	0	13.0	
	14.5	10.3	10.3	14.3	33.3	50.0	0		
	4.7	3.6	1.8	1.8	.6	.6	0		
8	2	1	0	0	0	0	0	3	
	66.7	33.3	0	0	0	0	0	1.8	1.23
	3.6	1.7	0	0	0	0	0		
	1.2	.6	0	0	0	0	0		
9	0	1	0	0	0	0	0	1	
	0	100.0	0	0	0	0	0	.6	
	0	1.7	0	0	0	0	0		
	0	.6	0	0	0	0	0		
Col Total	55	58	29	21	3	2	1	169	
Percent	32.5	34.3	17.2	12.4	1.8	1.2	.6	100.0	
SMO Means	4.8	4.2	4.5	4.7		5.2			

Key: Count / Row Pct / Col Pct	ATTRACTION Low	ATTRACTION High	
Person and Other Exchange Visits: No	135 44.9 62.2	166 55.1 48.0	301 100% 53.5
Person and Other Exchange Visits: Yes	82 31.3 37.8	180 68.7 52.0	262 100% 46.5
	217 38.5 100%	346 61.5 100%	563 100% 100%

Table 42. The Exchange of Visits by Attraction.

APPENDIX G

FOOTNOTES FOR TEXT

FOOTNOTES FOR TEXT

[1]Currently, Knut Hansen is collecting exchange network data in a fishing village located on the coast of Denmark. When Knut is finished with his fieldwork, and these data are processed, there will be an opportunity to assess the general character of these findings.

[2]Commercial potato farming began in 1900 and cabbage farming in 1910. See Figure 21 on page 188 and Figure 22 on page 193 for illustrations of the distribution networks of potato and cabbage farmers.

[3]Corduroy roads consisted of logs laid parallel and next to one another at an angle perpendicular to the direction of the road. They were laid something like railroad ties, but were round and spaced against one another.

[4]As early as 1157 King Eric IX of Sweden led a crusade to Finland, conquered the pagan tribes and introduced Christianity. Many Swedes settled along the western and southern coasts of Finland and a diffusion of Swedish civilization resulted in the areas of heavy immigration. In 1528 King Gustavus I introduced the reformation upon Finland and in 1556 John III made it a grand duchy. Sweden ruled Finland until 1809 when King Gustavus IV was compelled to cede Finland to Russia.

Thus, for about 650 years Sweden ruled Finland. Swedish government officials collected taxes from the Finns, and passed edicts proclaiming Swedish the official language to be used in all governmental proceedings, thereby excluding for many years all Finns from participating in their own nation's political structure. One can well imagine the resentment and hatred that would develop over the many years of economic and cultural imperialism. The Swedish ruling class believed themselves superior to the Finns, and the Finns reacted with hatred and jealousy.

[5]Michigan Statistical Abstract, 10th ed. (Division of Research, Graduate School of Business Administration, Michigan State University, 1974), p. 359.

[6]Norman Moline, "Finnish Settlement in Upper Michigan) (unpublished M.A. thesis, University of Chicago, 1966).

[7]Michigan Statistical Abstract, p. 360.

[8]Ibid., pp. 329-31.

[9]Ibid., p. 332.

[10]Ibid., p. 41.

[11]Ibid., p. 229.

[12]Ibid., p. 197.

[13]Ibid., p. 60.

[14]Data collected by author in 1973.

[15]Michigan Statistical Abstract, p. 60. Finn River data were collected by the author in 1973.

[16]Ibid., p. 40.

[17]The attractiveness of the cultural setting for bachelor males is again reflected in a comparison between the number of only child sons and daughters. (Only child does not mean the only child in the family, but the only one who has remained at home with the parents.) Eight of the males in this category are young adults, and only three of the daughters are young adults. Adult males are more likely to stay in the Finn River area and try to "make a go of it" than adult females. Although this trend is present in all rural areas, it seems especially prominent in Finn River, given the sex ratio, historical circumstances and their cultural consequences.

[18]Michigan Statistical Abstract, p. 177.

[19]According to the 1970 Census, 25.2% of the families in Baraga County live beneath the official poverty level. The low median family income is affected by the high proportion of retirees.

APPENDIX H

FOOTNOTES FOR APPENDIX

FOOTNOTES

[1]Scholars who use the self-maximization model can always find a way to make almost everything look like self-maximizing exchange. But there is something fundamentally wrong with the way Homans and Blau can always salvage a self-maximizing model of exchange. For instance, the good of others enters into exchange calculations, but Homans and Blau twist this around to claim that it enters in terms of egoistic gratification. Persons, they would say, are interested in the good of others because "sooner or later" they will gain from it, and if they are not, they will "sooner or later" suffer deprivation. Homans and Blau claim that other-oriented exchange is really only a way to maximize one's own benefits in the long run. But that does not fit very well with our understanding of the many situations of exchange behavior in which persons are actually interested in the welfare of others without at that point in time thinking about or expecting gain for themselves.

It may very well be the case that if scholars insist on upholding the self-maximization model, there are always semantically plausible ways of doing it; one can always postulate a self-serving utility to be realized at some future time, and it is operationally difficult to distinguish between those situations when someone is interested in the welfare of others for self-serving purposes, and when he is interested as an end in itself.

By insisting upon the universal validity of the self-maximization hypothesis, we are going to overlook something that we should ask questions about. It would appear to be a much more fruitful approach to accept the fact that sometimes people are self-maximizing, and in other situations they are interested in the welfare of others, so that we can analyze precisely when and where this occurs.

[2]I shall use the convention of capitalizing Person and Other when speaking abstractly of a diadic exchange process. The distinction parallels the ego and alters Freudian concepts. The terms include no hidden assumptions

about personality structures, but do assume that sociological theories can progress through P-centric formulations as the work on balance theories has demonstrated. Throughout this study I have tried to be sensitive to how transactors perceive the exchange process.

[3]Given the community setting and the fieldworker's relationship it was not possible to directly ask Person to rate close friends and relatives according to how "selfish" or "greedy" they are in exchanges. The term "good-hearted" is used by Finn River residents to refer to Others emphasizing giving and down-playing receiving in their day-to-day exchanges. See Appendix E, for a detailed description of the operationalization procedure.

In this study it is assumed that Person's judgements of Other are accurate and they are treated as Other's actual exchange tendencies. In most cases Person has known Other for many years. Finn River residents are good folk sociologists because they spend a great deal of time simply talking to one another. The pace of life is slower than in most urban settings and Finn River residents actually make time in their schedules for relating to people.

[4]I am assuming that Person's assessments of the extent to which Other keeps track of exchanges is accurate. See Appendix E for a detailed description of the measurement procedures.

[5]The ideal type of a folk society has been defined as "a small community containing no more people in it than can know each other well" (Redfield, 1953). The assumption has been that everyone knows everyone else in small rural communities. Urban sociologists have bemoaned the loss of the familiar, well-integrated personal community and confused the spatial separateness and specificity of urban social ties with their absence (see Wirth, 1938; Nisbet, 1953; Stein, 1960).

[6]The information exchange sphere is activated in behavior Finn River residents call "visiting." Visiting can be considered to be a separate exchange sphere because there are rules unique to this domain, and a visit can only be exchanged for another visit. Visiting is done according to a quid-pro-quo transaction logic. People feel they ought to visit one of their friends because they were visited last by them. If they wait too long, the other party will wonder if they are sick and will check to see, or they may suspect that "something has come between us."

Such a compulsion to return visits within a certain period of time has important social structural consequences. Each family or person is imbedded with a visiting network

with a limited set of others. If they try to expand their visiting network to include a new family or person this will put a strain on the time sequence pattern of their established visiting contacts. In Finn River people are welded into a visiting network that they have been participating in for many years. It is not uncommon to find visiting patterns so regularized that on a certain time, on a certain day, a family will expect a particular person(s) to drop in. Kinsmen appear to dominate the visiting network if they are within reasonable driving distance.

The visiting process is very ritualized in this community. It begins when a married couple (or a person) decides that it is time to pay a visit to someone. If they have been visiting these people for a considerable length of time, they will know their daily schedules, and will simply drop in without calling or waiting to be invited. If the others are not within the center of their visiting network, but on the periphery, they will call and ask "What are you doing tonight?" This is a well-known marker meaning: "We would like to visit you tonight, if it's alright with you." Or they will tell them of their plans. If the parties are highly regular visitors, they will even expect to be visited by these persons, and will have arranged their living schedule to accomodate them.

The second phase of married couple visits is the entrance into the home of the visitees. The people will stop right in the doorway and will converse standing up with their coats still on. At this stage, both the men and the women will talk to each other. If they are older people (over 40) they will usually speak the Finnish language. They will shift to English if someone is present who does not speak Finnish, but the initial greetings are usually in Finnish.

After this preliminary conversation, coats are hung up on hooks next to the door. Then the sexual segregation stage will begin. The men will direct conversation to each other and the women will do the same. The men will go to the living room, the basement, or if the weather permits, they will walk around the yard, or sit on benches in the garage or workshop. Women sit around the kitchen table and talk, often gossiping; and the men do likewise, with most of their conversation focusing upon hunting, fishing and their work projects.

The usual sequence of conversation begins with reporting events that have happened to each person since the last time they saw each other. This includes work, recreation, and visits by other people. Then the conversation will shift to the persons' plans for the near future, including both work projects and recreation. This often is

used to distribute need information. The women will talk about baking and cleaning projects, and the men will discuss automechanics, farm tasks, and repairing activities. Sexually segregated conversation will continue for one to two hours.

The sexual organization of visiting will terminate when the hostess calls the men into the kitchen for coffee, baked rolls, and cake. The women take a great deal of pride in their baking, and compliments are expected from their guests.

During the coffee-baked goods consumption ritual the sexual limits to conversation usually break down. One person will usually speak while the rest listen, and wait their turn. Often the exchange of information will shift back momentarily to the single-sex channels with two sexually segregated conversations going on at the same time, but it usually seems to return to the bisexual flow pattern. The relatively open exchange of information continues at the kitchen table until the coffee ceremony terminates. Then the men will return to their quarters, and women will clean the table and wash the dishes. The men and women will chat separately for a while. When it is time to leave, the man usually announces "We should be going now." All of the people will meet at the doorway and chat briefly while the visitors put on their coats. The entire length of the visit will range from one-and-a-half to three hours, not counting preparation and traveling time.

One of the important characteristics of the visiting exchange sphere is the wide range of information communicated between the transactors. The participants report their recent histories, current activities, and future plans, and do the same for all the persons they mutually know. Visiting provides the people with the opportunity to distribute and assimilate information pertaining to the exchange behavior of the other people in the community. An important social feature of this information transmission is the implications for social control. They are making each other aware of who is conforming to or violating the exchange norms.

[7]Psychologists researching in the field of human learning have attributed the failure of memory to interference processes. It is accepted by <u>virtually all</u> psychologists studying memory phenomena that interference is caused both by the <u>variety</u> and <u>frequency</u> of stimuli at levels surpassing the information processing capacity of humans. (For a review of the literature concerning this issue see Saltz, 1971: Chapter 7.)

[8]A more detailed examination of the data using as control variables specific types and combinations of social roles will be done in the future.

A computer program now almost completed will compare Person and Other's questionnaires to match their perceptions of the state of the exchange record and to tabulate exchange memory errors. For instance, if Person mentioned in the exchange network survey that he helped Other fix his automobile, Other may very well have forgotten this transaction and failed to mention it on his questionnaire. The program would detect this error of omission and the particular exchange flow direction in which it occurred. The ratio of the number of forgotten transactions to the actual number of transactions would serve as an indicator of historical concern. The assumption is that those who are more concerned with remembering the exchange record will make less errors. By using this indicator of historical concern, I will have access to a larger sample of data: all the respondents (240) in the exchange network who mentioned one another.

This program also has an editing sub-routine designed to correct for memory errors by instructing the computer to rewrite a respondent's questionnaire to include the forgotten transaction.

[9]These data appear as if Person has a preference for transacting with Others who are prone to give far more than they expect to receive. This may be the result of several factors mixed in with the data as it appears in Table 16. If Person pays Other money for helping him it does not appear in the Other's Receiving Frequency row. The occurrence and extent of monetary reciprocation was indicated in the exchange network questionnaire, and in the near future I shall attempt to develop an operational definition of a balanced account. Two hypothetical help situations appear in the "giving" direction but not in the "receiving" direction because there was no way to ask a person, "who would you help in an emergency situation if the occasion should arise?" They would help whoever needed help. These data fail to take into consideration the value or magnitude of any transaction but simply reveal the frequency with which Other appears in either exchange flow direction according to Person's questionnaire.

But there is a phenomenal basis for the skewed responses. There is in this community a genuine norm of social responsibility (Berkowitz, 1969) where people believe one ought to help persons needing help simply because it is morally right to do so. This is the major reason behind the researcher's success in collecting the exchange network data. Person is expected to downplay the number of times he helps Other and to express gratitude for the help he receives. By so doing, Person demonstrates that he (she)

is giving to Others because it is morally right to do so, and not because he (she) expects something in return. Braggarts emphasizing how much they have done for Others lose prestige in the community. One is supposed to give but not to draw attention to his acts. After hearing Other express gratitude for receiving Person's help (or whatever) Person will say, "It was nothing," "It does not deserve to be mentioned," or "forget it."

Given this normative expectation, respondents may very well have felt normatively constrained to mention the occasions where they have received (Other has given) but to modestly avoid mentioning when they have given (Other has received). It is my belief that people in this community actually tend to forget those situations where they have given. That is, they have internalized the norm and act it out not because they decide it is the best way to appear, but because they genuinely behave this way.

When the previously mentioned computer program is completed Person's questionnaire will be rewritten to include forgotten transactions that Other reported. If exchange memory in this community is skewed according to the direction of exchange flows as is suggested, a greater proportion of omitted transactions would occur when Person was asked to report what he (she) has given to Other. The data can be corrected for the set of respondents completing the exchange network questionnaire for those who mentioned each other during the context of a transaction.

[10]The data from which Other's giving/receiving ratios were calculated are included in Table 18 of Appendix F.

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