

Thus an analysis of the leadership pattern in Indian villages becomes imperative in the understanding of the communication of ideas between external systems and the ordinary villager. Studies done in American communities have pointed out the importance of informal opinion leadership in this communication process. Does the same situation occur in Indian villages or are opinion leaders identical with formal leaders? These and several other questions need to be studied carefully and answered so that the results may make a meaningful contribution to a theoretical understanding of the process of change and to the practical solution of the problems of development in Indian villages.

Studies done elsewhere cannot answer our questions; but they can help us ask the right ones. One needs a starting point, a conceptual framework to begin an investigation. If our study of opinion leadership in India comes up with results different from those observed elsewhere, we will then have empirical justification to modify the conceptual framework and bring it in line with actual reality. This refinement will help future researchers to start with better concepts and better theoretical models.¹¹

MAIN ISSUES IN OPINION LEADERSHIP RESEARCH: A REVIEW OF PAST STUDIES

In the 1940s, a survey was conducted in the United States by Lazarsfeld, Berelson and Gaudet to study the voting behaviour of the American public.¹² They found that the major influence on the voting behaviour of the individual came not from mass media but from other people—friends, relatives and fellow workers. An investigation of the people thus named revealed that these opinion leaders were very similar in education, social and economic status, age and other characteristics to those they influenced. The only notable difference was that these people made more use of the mass media than did the rest.

This was the beginning of the "two-step flow" theory of communication which was further developed by the authors of this survey and others.¹³ According to this theory, mass media messages have rarely had a direct effect on the listening and reading public. Instead, the message is mediated by

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12- P. F. Lazarsfeld, B. Berelson and H. Gaudet, *op. cit.*

13- See, for example, Robert Merton, "Patterns of Influence: A Study of Interpersonal Influence and Communication Behavior in a Social Community", in P. F. Lazarsfeld and F. N. Stanton, *Communication Research: 1948-49*, New York: Harper and Bros., 1949; E. Katz and P. F. Lazarsfeld, *op. cit.*; J. S. Coleman, E. Katz, H. Menzel, *Medical Innovation: A Diffusion Study*, Bobbs-Merrill, 1966; E. Katz, "The Two-Step Flow of Communication: An up-to-date Report on a Hypothesis", *Gazette*, 10: 237-250, 1964.

opinion leaders, who influence others by discussing the content of the message and providing their own judgment of issues to the followers.

In a study of the adoption of a new drug by doctors in four mid-Western communities in the United States, Coleman, Katz and Menzel found that opinion leaders were also early adopters.¹⁴ This was confirmed in other studies also.¹⁵ The study of the doctors also revealed that opinion leaders made more use of relevant outside sources of information such as professional journals, out-of-town research centres and professional meetings. On the basis of their findings, Coleman, Katz and Menzel suggested that a multi-step rather than a two-step model of communication is a more realistic description of the communication process.

Studies done in India confirm greater mass media use by opinion leaders than by non-leaders.¹⁶ This suggests the validity of the two- or multi-step model of communication in the Indian situation also. With respect to social characteristics, however, opinion leaders in Indian villages are markedly different from their followers. Studies done by Barnabas, Thorat, Rahudkar, Narang and Singh, among others, clearly indicate that leaders, as compared with non-leaders, have higher social status, own more land and are more educated.¹⁷ In a nation-wide survey reported in 1967, Sen and Roy confirmed these findings and added that leaders were also more innovative and cosmopolite, more in contact with extension agents, made more use of mass media and were more secularly oriented than non-leaders.¹⁸

Some studies have concentrated on the influence of community norms on the adoption behaviour of the opinion leaders. Homans hypothesized that leaders remain leaders because they provide rare and valuable services to the followers.¹⁹ One of these services is to maintain the integration of the group by conforming to group norms. In a community where norms resist change, leaders should not only resist new ideas but are expected to be as conservative, if not more, as their followers. On the other hand, in communities

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ABSTRACT

A part of a larger study on "Diffusion of Innovations in Rural Societies" conducted in Brazil, Nigeria, and India during 1966-1968, this particular study is based on opinion leadership provided by 680 farmers in 8 Indian villages. In these villages, opinion leaders comprise the primary source of basic information and play a very significant role in the day-to-day life of the ordinary villager. Personal characteristics of opinion leaders and nonleaders are compared. Leaders were found to be more progressive and more in contact with the outside world. It was found that opinion leaders have a higher caste status and a higher level of living than nonleaders. In the 8 sample villages, formal leadership and opinion leadership were found to overlap. It was also found that opinion leadership in Indian villages is polymorphic. Leaders in more modern villages were found to be more innovative than leaders in more traditional villages. It is concluded that communication flows vertically from leaders at the top of the village power hierarchy to the lower strata. The importance of opinion leaders as key communicators, particularly where the availability and use of mass media are limited, is revealed in this study. (SW)

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OPINION LEADERSHIP IN INDIA

A Study of Interpersonal Communication in Eight Villages

LALIT K. SEN

Research Report 22

PROJECT ON THE DIFFUSION OF INNOVATIONS IN
RURAL SOCIETIES

Co-operating Institutions :

National Institute of Community Development
Department of Communication, Michigan State University
Ministry of Food, Agriculture, Community Development and
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PREFACE

The research reported in this monograph is part of a larger study entitled "Diffusion of Innovations in Rural Societies" directed by Everett M. Rogers of the department of Communication, Michigan State University, under contract with the United States Agency for International Development, and has included three countries : Brazil, Nigeria and India.

For the India part of the study, an agreement was drawn and signed early in 1966 by the department of Communication, Michigan State University, the National Institute of Community Development, the United States Agency for International Development and the Ministry of Food, Agriculture, Community Development and Co-operation, Government of India. The actual operation of the research Project was conducted jointly by the staff members of the National Institute of Community Development and the department of Communication, Michigan State University. The Project terminated in June, 1968.

The present monograph is the last in the series of reports which came out of the India part of the Project. Other published reports on India data are:

1. F. C. Fliegel, P. Roy, L. K. Sen and J. E. Kivlin, *Agricultural Innovations in Indian Villages* ;
2. P. Roy, F. C. Fliegel, J. E. Kivlin and L. K. Sen, *Agricultural Innovation among Indian Farmers* ;
3. J. E. Kivlin, P. Roy, F. C. Fliegel and L. K. Sen, *Communication in India : Experiments in Introducing Change* ;
4. P. Roy and J. E. Kivlin, *Health Innovation and Family Planning : A Study in Eight Indian Villages* ;
5. S. K. Reddy and J. E. Kivlin, *Adoption of High Yielding Varieties in Three Indian Villages* ;
6. A. K. Danda and D. G. Danda, *Development and Change in a Bengal Village* ;
7. D. N. Trivedi, *Opinion Leaders and their Role in Social Change* ;
8. S. S. Thorat and F. C. Fliegel, "Some Aspects of Adoption of Health and Family Planning Practices in India," *Behavioural Sciences and Community Development*, March 1968 ;

9. S. S. Thorat, "Some Salient Characteristics of Sarpanchas and the Success or Failure of Agricultural Innovations in India's Villages," *Behavioural Sciences and Community Development*, March, 1968.

10. L. K. Sen, "Social Psychological Correlates of Adoption of Agricultural Innovations," *Behavioural Sciences and Community Development*, March, 1968.

Several other unpublished papers based on the India "Diffusion" data were also presented by the members of the Diffusion Project staff at several conferences.

Aside from the contribution it made to the knowledge of the diffusion of new ideas and techniques in Indian villages, the research project on "Diffusion of Innovations" is an example of a highly successful collaborative venture of international social scientists. This was a meeting of minds in the true sense of the term and, in the process, concepts and methods of study applicable to a country like India were developed or refined.

It is my hope that the present monograph authored by an Indian member of the international team will also go a long way toward a better understanding of the diffusion process in Indian villages.

National Institute of Community Development
Hyderabad
October 1968

GEORGE JACOB
Dean

ACKNOWLEDGMENTS

This research monograph is part of a larger study on "Diffusion of Innovations in Rural Societies" conducted in Brazil, Nigeria and India during 1966-1968. The Project, under the overall directorship of Everett M. Rogers, was sponsored by the department of Communication, Michigan State University under contract with the United States Agency for International Development.

The India part of the Project was jointly carried out by the National Institute of Community Development at Hyderabad and the department of Communication, Michigan State University. The directors of the research team were Frederick C. Fliegel, Prodipto Roy, Joseph E. Kivlin, Lalit K. Sen and James P. Bebermeyer. The field teams were supervised by Sanat K. Reddy, Sudhakar S. Thorat and Ajit K. Danda and consisted of D. K. Bhowmik, S. Rudra, J. Sahabhowmik, P. K. Chatterjee, K.S.S. Raju, J. M. Rao, G. Subharatnam, J. V. R. Rao, B. R. Patil, P. M. Shingi, V. K. Surkar and S. K. Shelar.

Data analyses for this report were done in East Lansing with the help of the Computer Center at Michigan State University. The author acknowledges the help of A. P. Saxena, J. M. Kapoor, D. K. Bhowmik and Joseph Ascroft, all graduate assistants in the department of Communication, Michigan State University, in the computation of data.

Thanks are due to David Berlo, chairman, and Everett Rogers, professor, department of Communication, Michigan State University for providing facilities for writing this monograph.

The author also wishes to thank Frederick Fliegel, Joseph Kivlin and Everett Rogers for helpful comments on an earlier draft of this monograph.

*Michigan State University
East Lansing
October, 1968*

LALIT K. SEN

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1. INTRODUCTION

The importance of opinion leaders as key communicators was first revealed in Lazarsfeld, Berelson and Gaudet's classic survey of the voting behaviour of the American public.¹ Several studies have followed this early survey and have thrown more light on the process of communication in a mass society.² There are clearly two dimensions of message diffusion—the spread of information, and making decisions on the basis of this information. Mass media bring the news or information directly to the public in a “hypodermic” fashion.³ But decision-making is a different matter. Mass media seem to have little effect on the decision-making of an individual regarding a specific issue. Even in a mass society such as the United States, people seek out friends, relatives and co-workers to talk things over and to be influenced by them.⁴

In India, where the availability and the use of mass media are still limited, opinion leaders assume a far more important role than they do in the United States. During the past couple of decades, India's political leaders have attempted to spread new and better ideas about agriculture and other aspects of village life in some 500,000 villages. The community development administration which is responsible for the task has recognized the importance of leaders in communicating ideas. The emphasis, however, is on formal leaders

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1. P. F. Lazarsfeld, B. Berelson and H. Gaudet, *The People's Choice*, New York : Columbia University Press, 1948.
 2. See section on “Main Issues in Opinion Leadership Research” in this chapter.
 3. See, for example, P. J. Deutschman and W. A. Danielson, “Diffusion of Knowledge of the Major News Story”, *Journalism Quarterly*, 37 : 345-355, 1960 ; and B. S. Greenberg, “Dimensions of Information Communications”, in *Paul J. Deutschman Memorial Papers in Mass Communication Research*, Cincinnati : Scripps Howard, 1963.
 4. For summaries of research findings on the influence of interpersonal communication on decision-making, see E. M. Rogers, *The Diffusion of Innovations*, New York : Free Press, 1962 ; E. Katz and P. F. Lazarsfeld, *Personal Influence: The Part Played by People in the Flow of Mass Communication*, New York : Free Press, 1964, (Third printing, paperback edition); J. T. Klapper, *The Effects of Mass Communication*, New York : Free Press, 1960; and B. Berelson, and G. A. Steiner, *Human Behaviour : An Inventory of Scientific Findings*, New York : Harcourt, Brace and World, Inc., 1964.

who are elected by the village people.⁵ This is undoubtedly a step forward in bringing scientific ideas close to the village societies but, in the long run, we do not know how successful the formal leaders will be in influencing the decision-making of the ordinary villager in adopting improved ideas and techniques. We do not know whether in India, villages, the formal leaders are actually the opinion leaders or not. Only a careful study of the leadership patterns in Indian villages can answer this question.

OPINION LEADERS

Studies done in other countries point out that there is indeed a latent but influential dimension of community leadership which is informal in nature. For advice on problems accruing from day-to-day life people seek out others and are influenced by them.⁶ These seeker-sought relationships are based on trust; otherwise no advice will be sought. Yet, because of the informal nature of these relationships, there is very little awareness of the existence of this dimension of leadership either among the seekers or the sought. Only a systematic study reveals its existence and the patterns it follows. It is quite likely that the social background of these leaders will be little different from their followers, if they are to remain fully integrated in their groups.⁷ On the other hand, they must have some unique characteristics which make them the sought-after. Following the usual practice in other studies, we shall call these leaders "opinion leaders."

In order to get some idea of what characteristics of opinion leaders to look for, we shall present a very brief review of selected studies done in other countries and in India. This review will help us formulate a few questions which we shall attempt to answer in chapters to follow.

But before doing this, we feel, a word is necessary regarding the use of studies done in other countries. Our review of opinion leadership research done in other countries actually includes only American studies. The main reason for this is that a very large proportion of all such studies have been done in the United States and the most outstanding ones happen to be American. In using these studies as our guidelines, there is always a danger of either using

⁵ See, for example, B. Mukerji, *Community Development in India*, Calcutta : Orient Longmans, 1961 ; and G. Jacob (ed.), *Readings on Panchayati Raj*, Hyderabad, India : National Institute of Community Development, 1967.

⁶ A sample of such studies : P. F. Lazarsfeld, B. Berelson, and H. Gaudet, *op. cit.* ; E. A. Wilkening, "Informal Leaders and Innovators in Farm Practices", *Rural Sociology*, 17 : 272-275, 1952 ; D. Sheppard, *A Survey among Grassland Farmers*, London: Central Office of Information Social Survey, 1960 ; H. F. Lionberger, "Some Characteristics of Farm Operators Sought as Sources of Farm Information in a Missouri Community", *Rural Sociology*, 18 : 327-338, 1953 ; and Robert Merton, *Social Theory and Social Structure*, New York : The Free Press, 1957, ch. 10.

⁷ See, for example, P. F. Lazarsfeld, B. Berelson and H. Gaudet, *op. cit.*

concepts which do not apply to the Indian village situation or of getting involved in issues which are irrelevant under Indian conditions.

Research on a subject like this should necessarily be guided by its relevance and usefulness in the society under investigation, in the present case, India. But how does one go about selecting such areas of research interest? Our present problem, for example, is to locate the most important channel of communication in contemporary Indian villages. We know that the literacy level is extremely low and this virtually excludes the print media. We know that there are not enough radios to make a real impact. Television has not been introduced into the villages yet. There are not enough motion picture facilities in proportion to the population.⁸

Until mass media are used more extensively, one has no choice but to fall back upon the existing communication links to get important messages across to the ordinary farmers.⁹ The existing communication links in Indian villages are predominantly interpersonal. One can clearly distinguish at least three levels of such interpersonal communication. First, horizontal channels of communication connect castes and kin groups across village boundaries. Second, trade centres connect a number of villages in mutual communication. Third, change agencies direct the flow of messages into the village. The message which is diffused along all three channels is by word of mouth and for this very reason needs to be mediated by a legitimizing agent before it is taken seriously. The legitimizing agent is usually a village leader who has a well-defined position of authority in the village. It is not difficult to understand why the question of legitimacy and the village leaders' role in it are so important amid an illiterate and highly parochial rural population. In a real sense, leaders in Indian villages are *gatekeepers* of communication emanating from other systems.¹⁰

- 8- The Unesco in a 1964 publication suggested a basic minimum of mass media use for developing countries. This standard along with the actual mass media use in India (1960) for every 100 persons are shown below :

| | <i>Suggested Facilities</i> | | <i>Actual Facilities</i> |
|------------|-----------------------------|-------------|--------------------------|
| Newspapers | .. | 10 copies | 1.1 copies |
| Radio | .. | 5 receivers | 0.5 receivers |
| Cinema | .. | 2 seats | 0.6 seats |
| Television | .. | 2 receivers | 0.0 receivers |

Source : Unesco, *World Communications : Press, Radio, Television, Film*, New York : The Unesco Publications Center, 1964, p. 214.

- 9- The use of mass media cannot be increased suddenly due to obvious reasons. Technologically speaking, India can produce the number of newspapers, radio and television sets and movie halls suggested by the Unesco but in an open market system the demand for these has to come first. The cost will be prohibitive for any agency including the state to subsidize such production.
- 10- For a definition of the term *gatekeeper*, see Kurt Lewin, "Group Decisions and Social Change" in Maccoby, Newcomb and Hartley (eds), *Reading in Social Psychology*, New York : Holt, Rinehart and Winston, Inc., 1958.

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where norms favour change, leaders should be ahead of others in adopting new ideas. Studies done by Wilkening, Lionberger, Marsh and Coleman, and Rogers and Burdge in American communities support this hypothesis.²⁰

In a nation-wide survey done by the National Institute of Community Development covering 365 villages in India, Sen and Roy found that opinion leaders are, in general, better adopters than non-leaders. The sample of villages included in this study represented a wide range of resistance or favourableness of norms to change. The study did not, however, compare the levels of adoption among leaders and non-leaders in relation to community norms in individual villages.²¹

Another dimension of opinion leadership, specialization, has also been examined in several studies. Merton found that people go to different opinion leaders for different services. He called this specialization monomorphic, i.e., one leader for one subject matter.²² Others have suggested that opinion leadership in traditional societies is more polymorphic than monomorphic, i.e., one leader advising on several subject matters.²³ This argument is based on the idea that interpersonal relations in traditional societies are more multidimensional than unidimensional. In other words, social relations in traditional societies are not specialized and people interact in their total personalities rather than in specialized or segmental roles.²⁴ Rogers and van Es in their study of five Colombian communities, two of which they considered less traditional than the others, did not find a significant difference in polymorphic leadership in the two sets of communities.²⁵ To the present writer's knowledge, no significant study has been done in India on this aspect of opinion leadership.

Research on opinion leadership has focussed recently on the degree of *homophily* or *heterophily* between leaders and followers. The terms were first introduced by Robert Merton in the late Fifties and have gained currency since then.²⁶ Homophily between leaders and followers, i.e., similarity in social background, economic status, values, attitudes, etc. is supposed to increase interaction. Conversely, heterophily should reduce interaction.

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20. E. A. Wilkening, *op. cit.*; H. F. Lionberger, *op. cit.*; P. Marsh, and L. Coleman, "Farmers' Practice—Adoption Rates in Relation to Adoption Rates of Leaders", *Rural Sociology*, 19: 180-181, 1954; E. M. Rogers, and R. Burdge, *Community Norms, Opinion Leadership and Innovativeness among Truck Growers*, Research Bulletin 912, Ohio Agricultural Experiment Station, Wooster, Ohio, June, 1962.
21. Lalit K. Sen, and P. Roy, *op. cit.*
22. Robert Merton, *op. cit.*, p. 415.
23. E. M. Rogers, and J. C. van Es, *Opinion Leadership in Traditional and Modern Colombian Peasant Communities*, Diffusion of Innovations Research Report No. 2, Deptt. of Communication, Michigan State University, 1964, p. 19.
24. E. M. Rogers, and J. C. van Es, *ibid.*, and Robert Merton, *op. cit.*
25. E. M. Rogers, and J. C. van Es, *op. cit.*
26. E. Katz and P. F. Lazarsfeld, *op. cit.*, pp. 59-61.

Logically speaking, the choice of an opinion leader should be based on at least two criteria. He must be in a position to offer better advice than the follower himself. Second, the follower must place a certain amount of trust and credibility in the advice. Having more knowledge to offer, better advice does not necessarily make a person more credible in the eyes of the potential advice-seeker.²⁷ An opinion leader must, therefore, have both these characteristics. Assuming for the time being that an opinion leader has the technical knowledge to offer better advice, the question boils down to the credibility of the opinion leader in the estimation of the followers.

Does homophily between leaders and followers increase credibility of the leaders? If so, then, exactly how homophilic the leaders should be to their followers? Also, in what characteristics should this homophily be expected? It must be pointed out, however, that a certain amount of heterophily is implied in the leader-follower relationship. An opinion leader offering advice on the technical aspects of a new farming method has, by definition, better knowledge than the follower seeking such advice.²⁸ Should he, however, be near enough to the follower in other characteristics so that the follower can trust him?

Precker, in an important study on friendship, found that a high degree of homophily increased *mutual* choices but had very little effect on *unilateral* choice.²⁹ Precker's definition of friendship was based on mutual choices while opinion leadership is often based on unilateral choice.³⁰ Thus, a high degree of homophily between members of a group may lead to friendship ties but not to opinion leadership. Familiarity, as in the case of friendship, may increase communication, but this communication may be unrelated to technical advice or a new method. Even if such an advice is forthcoming within friendship groups, familiarity may not increase the credibility of advice given by a friend to another. On important matters such as farming, marketing or health, homophily and credibility may be inversely related up to a point.

27. Innovators, for example, are more receptive to new ideas and are the first to put them into practice. However, because they break with tradition too soon for the rest of the community, they are often not taken seriously. See E. M. Rogers, *op. cit.*; and H. F. Lionberger, *Adoption of New Ideas and Practices*, Ames: Iowa University Press, 1960.

28. Everett Rogers in a recent article has this to say: "One of the most distinctive problems that characterizes the diffusion of innovations is that the source is usually quite heterophilous to the receiver. An extension agent, for example, is much more technically competent than his clients. In fact, when source and receiver are identical regarding their technical grasp of an innovation, no diffusion can occur. So the very nature of diffusion demands that at least some degree of heterophily is present between source and receiver." See E. M. Rogers, "Diffusion Strategies for Extension Change Agents in Developing Nations", in *Report on a Seminar on the Process of Social and Technical Innovation in Rural Development*, Berlin: German Foundation for Developing Countries, 1968.

29. Joseph A. Precker, "Similarity of Valueings as a Factor in Selection of Peers and Near-Authority Figures", *Journal of Abnormal and Social Psychology*, 47: 406-414, 1952.

30. See chapter VI of this monograph.

For conclusive evidence on this issue, detailed analyses of leadership choice with respect to several types of homophily—heterophily (status, friendship, values and so on) needs to be done. On a modest scale, we have attempted such an analysis later in this monograph.

In the Indian village situation, it is also quite important to know the power position of opinion leaders in relation to that of non-leaders. The American studies we have reviewed above quite clearly indicate that opinion leaders have hardly any power advantage over their followers. Their leadership is predominantly based on informal advice-seeking and different people are sought for different purposes. In their social background, opinion leaders are hardly different from their followers except for their greater mass media use.³¹ In Indian villages, on the other hand, we have seen that opinion leaders are more likely to belong to upper socio-economic strata than non-leaders. The element of caste is perhaps most crucial in the status difference between leaders and non-leaders.

The question we would like to pose here is, does the traditional and formal authority pattern in Indian villages based on caste also determine opinion leadership, or is opinion leadership limited to close-knit informal primary groups such as cliques? We have looked at this problem in two ways. First, we have investigated whether opinion leaders are also formal community leaders or not. Sen and Roy report that since the introduction of democratic local self-government in Indian villages, a new generation of leaders has emerged.³² Although the present leadership is hardly identical with the traditional leadership which wielded power before the elections, the social background of the present leaders is very similar to that of the traditional leaders. Higher caste status and higher level of living are two such common characteristics. When the dust cleared after the elections, it became clear that caste still determined the authority pattern in the villages although the sanction for this was no longer exclusively the domain of the caste system itself. Popular election and holding secular office now legitimized the position of leaders whose social characteristics were basically ascribed. In other words, in Indian villages there is no clear-cut distinction between traditional leadership based on ascription and secular leadership based on achievement. At the present time both seem to legitimize each other. Our first concern, therefore, was not only to look at the caste position of opinion leaders but also their formal and secular positions in the community.

31. Not all American studies agree with this finding, however. Lionberger and Coughenour, for example, found that opinion leaders have higher socio-economic status than their followers. See H. F. Lionberger and C. M. Coughenour, *Social Structure and the Diffusion of Farm Information*, Missouri Agri. Experimental Station Research Bulletin 631, Columbia, 1957. A discussion on this point is provided in the next chapter.

32. Lalit K. Sen, and P. Roy, *op. cit.* The new democratic local self-government referred to here is locally known as the *Panchayati Raj*.

Our second approach was to determine the extent to which opinion leader-follower patterns overlap clique patterns based on friendship ties. The question which we are really asking here is whether any kind of power relationship is involved in opinion leadership or not. Is legitimacy sanctioned either by traditional or by secular authority patterns more important than friendship ties ?

Studies on this particular question are lacking in India and elsewhere. We have, nevertheless, examined this question with our own data from a sample of eight villages.

RESEARCH PROBLEMS

This very brief review of selected studies on opinion leadership helps us in narrowing down our topics of investigation into a number of meaningful research problems. We do not propose to test any theoretical model of opinion leadership, neither do we intend to test any specific hypotheses in the strict sense of the definition. We have raised questions in each problem area and have tried directly to answer them with the help of first-hand data. We have made one assumption, however, which is implied in our data analysis. We have assumed that opinion leadership in Indian villages is a function of the village society as a whole with its systems of stratification, authority, legitimacy and so on and also of its level of modernization. The research problems which we have studied in this monograph are :

1. The socio-demographic, economic, system linkage and social psychological characteristics of opinion leaders and how they differ in these respects from non-leaders.
2. The most essential correlates which will help us predict opinion leadership.
3. The degree of specialization (or monomorphism) of opinion leadership in Indian villages. Is there a shift from polymorphic leadership to monomorphic leadership as one moves from more traditional villages to more modern villages ?
4. The role played by village norms in the level of acceptance of new ideas by opinion leaders.
5. The structural location of opinion leaders in the village power system and sub-systems and the degree of homophily between opinion leaders and followers in personal characteristics, friendship ties and power positions.

II. METHODOLOGY

BACKGROUND OF THE STUDY

The study reported in the following pages is part of a larger research project on the diffusion of innovations in Indian villages.¹ The project was phased into three parts. In the first phase, 108 villages in three states: Andhra Pradesh, Maharashtra, and West Bengal were selected with a combination of purposive and random selection methods for a village-level study of diffusion of agricultural innovations.² In the second phase, the focus was on the individual farmer, and eight villages were selected from the original 108 which provided a sample of 680 farmers.³ The present study is based on the information provided by these 680 farmers on opinion leadership in the villages.

The names of the villages with their sample sizes are listed here:

TABLE 1: DESCRIPTION OF THE EIGHT SAMPLE VILLAGES

| Village | State | No. of Respondents |
|---------------------|----------------|--------------------|
| Manchili | Andhra Pradesh | 78 |
| Kanchumarru | | 33 |
| Polamuru | | 99 |
| Pophali | Maharashtra | 100 |
| Mulawa | | 146 |
| Amdole | West Bengal | 103 |
| Harishpur | | 59 |
| Laxmidanga | | 62 |
| | Total.. | 680 |

1. The larger study was directed by E. M. Rogers of the department of Communication, Michigan State University under contract with U.S. Agency for International Development. The project, entitled "Diffusion of Innovations in Rural Societies," was conducted in Brazil, Nigeria and India. The Indian part of the study was led by F. C. Fliegel, P. Roy, L. K. Sen and J. E. Kivlin in collaboration with the National Institute of Community Development, Hyderabad, India. Data presented in this report were collected during March-May 1967.
2. F. C. Fliegel, P. Roy, L. K. Sen and J. E. Kivlin, *Agricultural Innovations in Indian Villages*, Hyderabad: National Institute of Community Development, 1968.
3. P. Roy, F. C. Fliegel, J. E. Kivlin and L. K. Sen, *Agricultural Innovation among Indian Farmers*, Hyderabad: National Institute of Community Development, 1968.

The sample was purposively chosen for the larger study on agricultural innovations and was thus restricted to only farmers who operated a farm of at least 2.5 acres and were 50 years of age or less.⁴ For a study on opinion leadership this sample is somewhat restrictive because it excluded older people who, one may assume, were also respected. The sample also excluded poorer farmers. In any case, the proportion of our respondents in the population of each village was quite high, two-thirds of all heads of households in most cases. This provides us with a fair representation of villages studied.

SELECTION OF OPINION LEADERS

Opinion leaders were selected on the basis of four sociometric questions which were put to all respondents. Each question referred to a specific area of problem-solving or decision-making. Respondents were asked to name one person whom they sought first for advice and information on each of these problems. They could name different persons for different problems if that was their preference. The questions were: If you needed advice on problems regarding the following matters, who is the one person in this village you seek advice from *first*? (If respondent mentions an extension agent, e.g., village level worker, then ask again)

- (1) technical problems associated with farming;
- (2) obtaining credit ;
- (3) health; and
- (4) how to get the maximum return for your products.

Respondents were discouraged from naming agricultural extension agents or public health agents because we already had information on their contact with these agents. We needed additional data on their own interpersonal sources of information. A large number of respondents named persons who lived in neighbouring villages. These names had to be dropped since they were not part of the sample. It pointed up one interesting fact about inter-village communication at least, that opinion leadership choices cut across village boundaries. Although we could not study leader-follower relationships across villages due to several limitations, this is an important research problem and needs to be studied thoroughly.

INDEX OF OPINION LEADERSHIP

Within each village sample, respondents were given scores based on the number of nominations received from other respondents on any of the four questions. Nominations were unit-weighted. For one part of our analysis in which we have compared characteristics of opinion leaders and non-leaders,⁵

⁴ For a complete description of the sampling procedure, see P. Roy, *et al.*, *ibid.*

⁵ See chapter 3 of this monograph.

opinion leaders were defined as those who received at least one nomination. A village-wise distribution of opinion leaders based on this criterion is shown in Table 2.

TABLE 2 : PROPORTION OF OPINION LEADERS IN VILLAGE SAMPLES

| Village | Sample Size | Opinion Leaders (Percentage of Village Sample Size) |
|---------------------|-------------|---|
| Manchili | 78 | 38 |
| Kanchumarru | 33 | 36 |
| Polamuru | 99 | 39 |
| Pophali | 100 | 30 |
| Mulawa | 146 | 40 |
| Amdole | 103 | 30 |
| Harishpur | 59 | 37 |
| Laxmidanga | 62 | 38 |

For the remaining part of our analysis we have measured opinion leadership as a continuous variable instead of dichotomizing it into leaders and non-leaders. This measure has permitted us to use the total sample (leaders and non-leaders combined).

The index of the degree of opinion leadership was calculated first by counting the total number of nominations received across the four sociometric items. This gave us the total raw score. This score was then standardized for the differences in village sample size with the help of the formula:

$$\frac{\times - \bar{\times}}{\sigma}$$

where \times = the raw total of all nominations received by an individual,

$\bar{\times}$ = average of the raw total nominations for the village,

σ = standard deviation of the raw total for the village.

For an internal consistency check, we correlated this index with the individual sociometric items. The results are shown in Table 3.

TABLE 3 : CORRELATION OF FOUR OPINION LEADERSHIP ITEMS WITH SUMMARY STANDARDIZED OPINION LEADERSHIP SCORE

| Sociometric Items | | | | | |
|---------------------------------------|----|----|----|----|------|
| Farm information and advice | .. | .. | .. | .. | .20* |
| Credit information and advice | .. | .. | .. | .. | .19* |
| Health information and advice | .. | .. | .. | .. | .15* |
| Market information and advice | .. | .. | .. | .. | .20* |

* Significant at .01 level.

Although the correlation coefficients are not very high, they are all significant at .01 level. This shows the internal consistency of our index of opinion leadership.

III OPINION LEADERS AND THEIR CHARACTERISTICS

We have indicated earlier that opinion leaders were selected with the help of sociometric questions. Individuals seek advice from others before making a decision on a certain issue. We have information on the persons whom others seek for such advice. Although we do not know whether the advice received did in fact influence the seekers' decision or not, we can at least describe the pattern of interpersonal communication in a village. Since this communication is mostly unidirectional,¹ we could suggest the nature of influence that might be exerted by opinion leaders on the follower's decision-making by studying their characteristics.

We are also interested in knowing the characteristic differences between leaders and non-leaders. Lazarsfeld, Berelson and Gaudet first posited the idea of "molecular" leaders who are practically undistinguishable from their followers except for their links with external systems.² In a later study, Katz and Lazarsfeld reported identical findings.³ In Merton's terminology, this high degree of homophily between leaders and followers makes it easier for leaders to perform as key communicators and influencers.⁴ We have noticed in our review of literature in chapter I that there are different opinion leaders for different subject areas. Thus, leaders who influenced the voting decisions of their followers in Erie county were not necessarily the same as those who advised on farm matters. Van den Ban⁵ points out that this may be the reason why Lionberger and Coughenour⁶ disagreed with Katz and Lazarsfeld⁷

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- 1- See discussion on sociograms of leadership choice in chapter VI.
 - 2- P. F. Lazarsfeld, B. Berelson and H. Gaudet, *The People's Choice*, New York : Columbia University Press, 1948.
 - 3- E. Katz and P. F. Lazarsfeld, *Personal Influence : The Part Played by People in the Flow of Mass Communication*, New York : Free Press, 1960.
 - 4- E. Katz and P. F. Lazarsfeld, *ibid*, pp. 59-61.
 - 5- A. W. Van den Ban, "The Role of Interpersonal Communication and Opinion Leadership in the Diffusion of Agricultural Innovations", paper presented at the Second World Congress of Rural Sociology, Enschede, Netherlands, 1968.
 - 6- H. F. Lionberger and C. M. Coughenour, "Social Structure and the Diffusion of Farm Operators", *Missouri Agricultural Experiment Station Research Bulletin 631*, Columbia, 1957.
 - 7- E. Katz and P. F. Lazarsfeld, *op. cit.*

regarding homophily between leaders and followers. According to Van den Ban, advice on farming is much more important and urgent than advice on movies. For the first, one is inclined to go to a competent person, a better farmer who also has a higher socio-economic status. For the second, a close friend's advice is quite adequate.⁸ Roger's comment⁹ that some amount of heterophily is inherent in the diffusion process, also supports Van den Ban's argument.

In this chapter we have compared the characteristics of opinion leaders and their followers in terms of their socio-demographic background, economic characteristics, systemic linkage and mass media use, and social-psychological characteristics. The indices and, whenever necessary, the conceptual meanings of these characteristics are described here.

SOCIO-DEMOGRAPHIC CHARACTERISTICS

1. *Age.* Age was computed on the basis of actual age reported by the respondents.

2. *Family type.* Families were classified into nuclear and extended types depending on the composition of the family. A nuclear family was defined as husband, wife and their unmarried children. An extended family was reported when two or more of such nuclei lived together, sharing the same kitchen. All vertical (more than one generation) and horizontal (same generation) combinations were considered extended types for purposes of this study.

3. *Caste.* The relative ranks of castes within villages were first determined with the help of judges from each village. During pre-testing of the questionnaire, a complete list of castes in each village was made. Photographs of people engaged in these caste occupations were shown during the interviewing to judges who were selected from among the respondents. The judges were asked to rank the pictures from high to low. The majority opinion of the judges was used to score the caste ranks in each village from high to low. For inter-village indices, castes ranked in this way were compared across six villages,¹⁰ and four broad categories were agreed upon. There were a few differences in the positions of individual castes across villages but the four broad categories solved this problem.

4. *Level of living.* In the absence of reliable data on income, level of living was measured by the ownership of different personal effects and types

8. A. W. Van den Ban, *op. cit.*

9. E. M. Rogers, "Diffusion Strategies for Extension Change Agents in Developing Nations, in *Report on the Seminar on the Process of Social and Technical Innovation in Rural Development*, Berlin: German Foundation for Developing Countries, 1968.

10. Two villages in West Bengal, Harishpur and Laxmidanga, were almost 100 per cent Moslem. No caste ranking could be done in these villages.

of housing. The personal effects included in our measures were selected from a longer list which was pre-tested. Only items which showed reasonable distributions were retained. Items thus selected were: (1) good dress, (2) shoes, (3) gold jewellery, (4) wrist-watch or clock, (5) torch (flash) light, (6) wooden or metal furniture, (7) mosquito nets, and (8) bicycle. Items in regard to housing were: (1) brick or stone walls, (2) shuttered windows, (3) cement or stone floor, (4) tiled/tin/asbestos/cement roof, (5) separate sitting room, (6) drinking water well, (7) bathroom and/or latrine, and (8) number of rooms.

A score of one was given for ownership of each of these items and the total score was used as the index for level of living.

5. *Literacy.* Respondents were asked whether they could read newspapers. This measure was used to separate literates from illiterates regardless of the literates' formal education.

6. *Education.* Formal education of respondents was measured by the number of years in school and formal degrees obtained.

7. *Education of children.* In order to have a composite index for children's education, the total number of years in school of all children was calculated. This figure was divided by the total age of all children under 22 years. The first three years of the age of each child was subtracted. Mentally ill or defective children were excluded from this calculation.

8. *Tenure status.* The index for tenure status measured the gradual progression from full tenancy to full ownership of the farm. Thus a farmer who rented 100 per cent of his farm land was given the lowest score and a farmer who had complete ownership of his farm scored highest. People who were in-between were scored according to their positions on this scale.

9. *Number of offices held.* The number of offices held in formal organizations were summed for an index of this variable.

ECONOMIC CHARACTERISTICS

10. *Size of farm.* Farm size was measured by the number of acres actually cultivated by the respondent.

11. *Farm specialization.* Farm specialization was measured by the number of different crops sold. Sale of only one crop was taken to mean a high degree of specialization, and so on.

12. *Farm commercialization.* The measure for commercialization was obtained by dividing the value of products sold by value of total products raised.

13. *Farm labour efficiency.* Labour efficiency was measured by dividing value of agricultural products raised by days of labour input. Because of the differences in the required labour input for the different crops in our sample villages, the efficiency measure was standardized for village differences.

14,15,16. *Knowledge, trial, and adoption of agricultural innovations.* Ten improved agricultural practices were selected with the help of Guttman scaling and factor analysis. These ten items are: (1) ammonium sulphate, (2) superphosphate, (2) mixed fertilizer, (4) green manure, (5) cattle inoculation, (6) improved cattle, (7) insecticides, (9) rat poison, (8) high-yielding variety of seeds, and (10) steel plough. A unit score was given for knowledge, trial and adoption of each of these items. The index for each is a summation of these scores.¹¹ The questions used for knowledge, trial and adoption were:

Knowledge : Do you know anything about (improved practice)?

Trial : Have you ever used (improved practice) ?

Adoption : Are you still using (improved practice) ?

SYSTEMIC LINKAGE

17. *Urban contact.* The index for urban contact was calculated by summing the number of visits made by respondents to towns and cities during the past year.

18. *Radio listening.* The question "Do you listen to radio?" was used to measure this variable.

19. *Exposure to movie.* Exposure to movie was measured by a similar question, "Did you see any cinemas (only commercial movies) during the past year?"

20. *Exposure to newspaper.* Exposure to newspaper was not only measured by self-reading but also by others reading newspapers to the respondent. The question used was "Did you read (or had read to by others) any newspapers in the past week?"

21. *Change agency contact.* The index was developed by summing the number of times a respondent talked with the various extension agents, and number of times he had observed agency-organized demonstrations and educational movies on agriculture during the past year.

SOCIAL-PSYCHOLOGICAL CHARACTERISTICS

22. *Credit orientation.* In a subsistence-level agricultural economy, it is difficult to break through the vicious circle of traditional methods of agriculture, low production and shortage of capital.¹² For the average cultivator, this circle may be broken if new capital is introduced in the form of credit.

11. For a complete description of this index, see P. Roy, F. C. Fliegel, J. E. Kivlin and L. K. Sen, *Agricultural Innovation among Indian Farmers*, Hyderabad : National Institute of Community Development, 1968, pp. 13-23.

12. This is the central theme of some of the most incisive analyses of the problems of traditional agriculture. See, for example, T. W. Schultz, *Transforming Traditional Agriculture*, New Haven : Yale University Press, 1964 ; W. W. Rostow, *The Stages of Economic Growth*, Cambridge, England : Cambridge University Press, 1960 ; and M. F. Milikan and D. Hapgood, *No Easy Harvest*, Boston, Little, Brown and Company, 1967.

Borrowing credit for commercial purposes presupposes an ability to view the future with confidence. The investment may or may not be justified in the light of actual production, but the willingness to take the risk is important and should come first.

Credit orientation was measured by responses given to the questions "Did you use any credit for farm purposes, last year?" and "Would you have used (some/some more) if it had been available at reasonable interest?"

23. *Planning orientation.* The wish to plan for the future indicates an awareness of possibilities other than the given set of circumstances at present. It also reflects a recognition of the fact that environmental conditions are manipulable. Planning also reflects a rational approach toward life by weighing assets against liabilities and taking various factors into consideration over a period of time.

Our measure of planning orientation was based upon responses to the question: "Are you planning any changes on your farm in the next few years, changes in the crops for example?"

24. *Self-reliance.* Self-reliance is conceptually related to credit orientation and planning orientation. Borrowing capital for introducing changes in farming and making the changes in a planned way presupposes confidence in oneself along with the realization that all environmental factors are not inscrutable supernatural forces beyond one's control.

The question used to measure self-reliance (as opposed to fatalism) was: "How much of your future depends on yourself? Out of a rupee, would you say 16 annas, 8 annas, 4 annas or none?"

25. *Deferred gratification.* Deferred gratification is an important element in rational thinking.¹³ Planning for the future involves some amount of sacrifice for the present. This makes the difference between using up capital for immediate needs and saving it or investing it in a long-term project.

Deferred gratification was measured by the open-ended question, "Suppose that your cash returns from the farm last year had been twice your actual income; what would you do with extra money?" The responses were scored in terms of the nature of gratification indicated. The response categories used for scoring from low to high, were: (0) family expenses for consumption of food, clothes, furniture, jewellery, repairs or additions to home; (1) social obligations such as wedding, birth-rite, feast, pilgrimage; (2) pay off debts; (3) save without qualification; (4) purchase or save to purchase land; (5) purchase or save money to purchase agricultural inputs; (6) invest or save money to invest in non-agricultural business; (7) education.

26. *Secular orientation.* Secular (non-traditional) orientation for purposes of this study was measured by a set of questions with only two alternative

13. See, for example, L. Schneider and S. Lysgaard, "The Deferred Gratification Pattern", *American Sociological Review*, April, 1953.

answers, one favouring traditionalism and the other, secularism. Originally, ten such questions were asked and the responses were subjected to scaling techniques. The scale retained eight of these questions,¹⁴ which are: (1) should *Harijans* (untouchables) be allowed to draw water from all common wells in the village ; (2) should *Harijans* and other children take meals together in schools ; (3) can evil eye cause disease ; (4) do you think *Harijans* should be allowed to enter and worship in all temples of the village ; (5) what do you do with bullocks who are too old to work ; (6) should non-Hindus be allowed to eat beef ; (7) if your son wanted to marry a lower caste girl, would you allow it ; (8) in your opinion, is an illiterate village Brahmin superior to a lower caste college graduate ?

The items retained by the secular orientation scale refer to two most important elements of the village society, the caste system and the norms surrounding the cow. Responses that deviated from the traditional norms regarding these two subjects were scored as secular.

27. *Income aspiration.* A lack of ambition among Indian farmers has been the subject of many learned treatises.¹⁵ The absence of a profit motive and aspiration for a high income among our farmers have been mentioned as important reasons for the backwardness of agriculture. On the other hand, we hear about the rising expectations and the resultant frustrations due to an inability to meet these expectations. In order to examine the influence of income aspiration on agricultural adoption, the variable was operationalized by an open-ended question, "How much money does your family need per month to live comfortably in this village ?"

28. *Achievement motivation.* Achievement motivation has been defined as the desire to excel regardless of social rewards.¹⁶ It has been suggested that this motivation is the mainspring of Western civilization and its economic prosperity.¹⁷ For testing the hypothetical influence of achievement motivation on leaders' modernity, the variable was operationalized with the help of a set of statements with which the respondents were asked either to agree or to disagree. The statements are : (1) work should come first, even if one cannot get proper rest ; (2) one should succeed in his occupation even if one has been neglectful of his family ; (3) one should have determination and driving ambition even if these qualities make one unpopular.

29. *Educational aspiration for children.* Individual aspirations can be frustrated by practical circumstances. Thus one's own educational aspira-

14. A Guttman scale was used with a scalability of 90 per cent.

15. See, for example, E. Roosevelt, *India and the Awakening East*, New York : Harper & Bros., 1953, pp. 196-202.

16. D. C. McClelland, "The Achievement Motive in Economic Growth" in B. F. Hoselitz and W. E. Moore (eds), *Industrialization and Society*, Unesco-Mouton, 1966.

17. D. C. McClelland, *The Achieving Society*, Princeton, New Jersey : D. Van Nostrand Co. Inc., 1961, p. 59 ff.

tions may remain unattained for various reasons. It is expected, however, that one who has understood the significance of education will try to project this aspiration to the next generation. Our measure for educational aspiration for children, therefore, refers to one's acceptance of education as significant method of improving one's condition. This acceptance should be seen in light of the sacrifices that one has to make in order to send children to school. Education is a long-term investment and in the Indian village situation may look like a dubious venture for parents, as education cuts down on the availability of family labour and is most often associated with outmigration to cities. High educational aspiration for children, therefore, reflects the conviction that education is important regardless of the sacrifices.

Educational aspiration for children was measured by the number of years of education the respondents wished for their children.

30. *Empathy*. Empathy has been defined as the ability to take other roles.¹⁸ It is a psychological pre-condition for successful behavioural links with other systems. Empathy helps people to be flexible and adjustable in a situation of change by making them aware of alternative norms and roles. It is expected that highly empathic persons will be more amenable to change than others and will also be more willing to adopt new ideas and practices.

Empathy was measured by a set of questions in the form : "If you were (a role) then what would you do to (solve a relevant problem)?" The roles suggested were those of the district administrative officer, the block development officer, village *panchayat* president and a day labourer.

31. *Political knowledge*. An awareness of the political events and personalities at the local and national levels represents another dimension of the psychic link of an individual with other systems. Although this awareness does not in any way indicate how integrated the individual is with the larger society, it does reflect sensitivity to the happenings outside of the village and an ability to see oneself and one's own community in a broader perspective. Political knowledge was measured by an informal knowledge test, asking the respondent to identify by names : (1) the prime minister of India ; (2) the chief minister of the state ; and (3) the elected representative of the state legislature from that area.

The comparative characteristics of leaders and non-leaders are presented in Tables 4 to 7 which follow. Figures presented in these Tables are average scores computed separately for leaders and non-leaders for all eight villages.

SOCIO-DEMOGRAPHIC CHARACTERISTICS

Except for family types, opinion leaders are ahead of non-leaders in all

¹⁸. D. Lerner, *The Passing of Traditional Society*. New York : The Free Press, Paperback edition, 1964, p. 49.

TABLE 4: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF OPINION LEADERS AND FOLLOWERS

| Characteristics | Mean Scores | | Range of Scores |
|---|-------------|-------------|-----------------|
| | Leaders | Non-Leaders | |
| Age | 38.84 | 35.50 | 17-50 |
| Family types (nuclear or extended) | .40 | .40 | 0-1 |
| Caste rank | 3.01 | 2.61 | 0-4 |
| Level of living | 8.83 | 6.36 | 0-16 |
| Literacy | 1.59 | 1.05 | 0-2 |
| Education | 1.89 | 1.38 | 0-7 |
| Education of children | 39.46 | 30.73 | 0-99 |
| Tenure status | 4.30 | 3.91 | 0-5 |
| Number of offices held | .34 | .03 | 0-8 |

other socio-demographic characteristics studied here. Nuclear families were scored zero while extended families were scored one. The mean scores for leaders and non-leaders on family types are the same which show that family types are not a discriminating characteristic of opinion leaders.

Our data further show that leaders are slightly older than non-leaders. They also have higher caste ranks, higher level or living, more education for themselves and for their children, higher tenure status, are more literate and hold more offices than non-leaders.

The mean scores for number of offices held do not present the complete picture. The official positions available in each village were, on the average, ten. Out of 80 such positions, 68 were held by opinion leaders and only 12 by non-leaders. In terms of percentages, 25 per cent of all opinion leaders had at least one official position, whereas only three per cent of non-leaders were in such formal positions. These percentages were restricted, especially in the case of opinion leaders, by the number of official positions available in each village. The conclusion is obvious, therefore, that formal leaders in Indian villages are also opinion leaders.

ECONOMIC CHARACTERISTICS

TABLE 5: ECONOMIC CHARACTERISTICS OF OPINION LEADERS AND FOLLOWERS

| Characteristics | Mean Scores | | Range of Scores |
|----------------------------------|-------------|-------------|-----------------|
| | Leaders | Non-Leaders | |
| Size of farm | 11.98 | 8.46 | 0-33 |
| Farm specialization | 1.52 | 1.11 | 0-8 |
| Farm commercialization | 42.70 | 36.05 | 0-98 |
| Farm labour efficiency | 50.69 | 48.61 | 0-98 |
| Knowledge of innovations | 8.51 | 7.73 | 0-10 |
| Trial of innovations | 5.28 | 3.96 | 0-10 |
| Adoption of innovations | 3.70 | 2.67 | 0-10 |

In economic characteristics again, we observe the same pattern of differences between leaders and non-leaders. The leaders operate larger size farms which are more specialized and commercialized than those of non-leaders. In the use of farm labour in relation to farm output, leaders are also more efficient, and their scores on knowledge, trial and adoption of improved agricultural practices are higher than those of non-leaders.

SYSTEMIC LINKAGE AND MASS MEDIA USE

TABLE 6 : SYSTEMIC LINKAGE AND MASS MEDIA CHARACTERISTICS OF OPINION LEADERS AND FOLLOWERS

| Characteristics | Mean Scores | | Range of Score |
|-------------------------------|-------------|-------------|----------------|
| | Leaders | Non-Leaders | |
| Urban contact | 27.41 | 20.89 | 0-88 |
| Radio listening | 1.65 | 1.45 | 0-2 |
| Exposure to movie | 1.44 | 1.27 | 0-2 |
| Exposure to newspaper | 0.95 | 0.42 | 0-2 |
| Change agency contact | 4.45 | 2.69 | 0-10 |

Opinion leaders also make more use of mass media such as radio, movies and newspapers than non-leaders. Their contact with change agents and trips to urban centres are also greater.

SOCIAL-PSYCHOLOGICAL CHARACTERISTICS

TABLE 7 : SOCIAL-PSYCHOLOGICAL CHARACTERISTICS OF OPINION LEADERS AND FOLLOWERS

| Characteristics | Mean Scores | | Range of Score |
|---|-------------|-------------|----------------|
| | Leaders | Non-Leaders | |
| Credit orientation | 1.08 | 1.33 | 0-2 |
| Planning orientation | 3.11 | 2.97 | 0-6 |
| Self-reliance | 2.68 | 2.45 | 0-4 |
| Deferred gratification | 3.90 | 3.64 | 0-7 |
| Secular orientation | 4.23 | 4.33 | 0-8 |
| Income aspiration | 39.21 | 25.34 | 0-50 |
| Achievement motivation | 1.62 | 1.77 | 0-3 |
| Educational aspiration | 5.19 | 4.06 | 0-8 |
| Educational aspiration for children | 5.19 | 4.06 | 0-8 |
| Empathy | 2.38 | 1.89 | 0-3 |
| Political knowledge | 2.34 | 1.66 | 0-3 |

In attitudes, opinion leaders score higher than non-leaders in seven out of ten attitude dimensions we have studied. As we have indicated before, these attitudes are generally considered to be related to change-proneness. On the basis of the findings presented in Tables 4 to 6, which indicate a greater acceptance on the part of the leaders of new ideas and new methods of agriculture, we had expected that leaders would also get higher scores on "modern" attitudes. Generally speaking, our data confirmed this expectation.

The three attitude variables on which leaders score less than non-leaders are: credit orientation, secular orientation and achievement motivation. A higher level of living probably explains the low credit consciousness of the leaders. When capital is available they are not willing to borrow any more. On the contrary, they prefer to save or make long-term investment as indicated by their higher scores on deferred gratification and planning orientation.

With respect to secular orientation, it may be recalled that our measure revolved around two major themes that still dominate the rural ethos in India—the caste system and the sacredness of cattle. Secular orientation was measured by the degree of deviation, expressed in terms of attitudes, from the norms regarding these two themes. Data presented in Table 7 show that leaders deviate less from these norms than their followers. In other words, leaders are slightly more conservative as regards the caste system and the sacredness of cattle than their followers.

One measure of achievement motivation is based on McClelland's definition of the concept.¹⁹ According to McClelland, achievement motive or *n* Ach is a desire to excel regardless of any possible social rewards and this work ethic is the mainspring of Western civilization and its economic prosperity. Our measure was based on three questions setting this work ethic against three major social rewards in the village situation—leisure, family and popularity. Our data show that leaders were less willing than their followers to emphasize this work ethic at the cost of social rewards.

In summary, opinion leaders as compared with their followers in the eight villages have a higher socio-economic status, are more literate and educated and hold more formal positions. Their unit of farming is larger with a higher level of specialization, commercialization and labour efficiency. They also use more improved farm practices than their followers. In urban contact, change agency contact and mass media, they are much ahead of their followers. In attitudes, they are also more modern except when it comes to deviating from norms which contribute to their higher status. Leaders have higher caste status and they are less willing to deviate from caste norms and norms surrounding cattle than their followers. Their higher level

19. D. C. McClelland, *The Achieving Society*, *op. cit.*

of living can be seen as an explanation for their lesser credit-orientation. They are also less willing to forego social rewards for unrewarded work ethic.

CORRELATES OF OPINION LEADERSHIP

This portrait of opinion leaders does not tell us which characteristics are most important. In other words, information presented in Tables 4 to 7 does not help us predict opinion leadership. In an effort to isolate the most essential characteristics which will help us locate such leaders we have used correlational analyses. Table 8 below presents correlation coefficients between opinion leadership scores and other characteristics. For this Table, we have used the standardized total opinion leadership score received by the respondents on the four sociometric questions.

Leadership scores and other characteristics were treated to three correlational analyses in the above Table. The results of the zero-order analysis are listed in the first column. In the second column are shown results of the highest-order partial correlation in which the relation between each characteristic of the respondent and his opinion leadership score was examined holding all of the remaining characteristics constant. Finally, with the help of the least square delete programme, the highest order partial correlation was repeated by eliminating all variables that explained a variance of less than .05. The results are listed in the last column.

The total variance explained by the 30 variables is low (33 per cent). Since the reliability and the validity of our independent variables have been satisfactorily tested before,²⁰ our concern in this study should be aimed at the measure of the dependent variable. We have no doubts about the validity of our measure of opinion leadership as it is based on sociometric inquiry. We have also checked the internal consistency of the measure and found it satisfactory.²¹ The only explanation we can offer is that our selection of independent variables is incomplete. As can be seen from the characteristics listed in Table 5, our independent variables cover a wide range of characteristics, yet we must have left out a few crucial variables that are directly relevant to an analysis of opinion leadership in Indian villages.

Since the survey has already been completed, we are left with the data in hand and will proceed with our analysis with the knowledge that we are only partially explaining characteristics that discriminate between opinion leaders and their followers.

Among the socio-demographic characteristics, age, caste, literacy and the number of formal positions held were the most essential attributes of opinion leaders. Education was included in the zero-order analysis, but was

²⁰. P. Roy, *et al.*, *Agricultural Innovation among Indian Farmers*, *op. cit.*

²¹. See chapter II.

TABLE 8 : CORRELATION BETWEEN RESPONDENTS' OPINION LEADER NOMINATION SCORES AND OTHER CHARACTERISTICS (N=680)

| Characteristics | Zero-Order Correlation | Highest-Order Partial Correlation | Highest-Order Partial Correlation after Removing Non-significant Variables |
|---|------------------------|-----------------------------------|--|
| <i>Socio-Demographic</i> | | | |
| Age | .15* | .04 | .10** |
| Family type | -.00 | -.07 | |
| Caste | .15* | .14* | .16* |
| Level of living | 0.04 | 0.01 | |
| Literacy | .14* | .09** | .13* |
| Education | .11* | .05 | |
| Education of children | .02 | .00 | |
| Tenure status | .02 | .00 | |
| No. of offices held | .25* | .28* | .28* |
| <i>Economic</i> | | | |
| Size of farm | .08** | .02 | |
| Farm specialization | .08** | .07 | .08** |
| Farm commercialization | .06 | .02 | |
| Farm labour efficiency | .35* | .31* | .31* |
| Trial of ag. innovations*** (innovativeness) | .06 | .03 | |
| <i>Systemic Linkage</i> | | | |
| Urban contact | .07 | .06 | |
| Radio listening | .01 | .03 | |
| Exposure to movie | .08** | .04 | |
| Exposure to newspaper | .14* | .14* | .16* |
| Change agency contact | .00 | .08** | |
| <i>Social-Psychological</i> | | | |
| Credit orientation | -.08** | -.03 | |
| Planning orientation | .00 | .00 | |
| Self-reliance | .07 | .04 | |
| Deferred gratification | .04 | .03 | |
| Secular orientation | -.13* | -.10** | -.13* |
| Income aspiration | .01 | .00 | |
| Achievement motivation | -.14* | -.11* | -.11* |
| Educational aspiration for children | .03 | .01 | |
| Empathy | .12* | .05 | |
| Political knowledge | .07 | .09** | .10** |
| | | R ² = .33 | R ² = .31 |

* Significant at .01 level of confidence.

** Significant at .05 level of confidence.

*** Knowledge and adoption of agricultural innovations were eliminated from this analysis because of extreme skewness of distribution. Knowledge was skewed at higher end and adoption at the lower end.

eliminated in the highest order partial correlation.

In economic characteristics, farm labour efficiency and farm specialization remained significant. Farm labour efficiency explained more variance than any other characteristic. It is interesting to note that trial of agricultural innovations was not related to opinion leadership scores either at the zero-order level or at the highest order partial level. Our measure for trial of agricultural innovations (innovativeness) was based on the number of innovations ever used. It is clear, therefore, that opinion leaders were not necessarily high adopters and, according to our definition, not necessarily innovators. Labour efficiency measured by labour used per unit of return indicates rational use of resources. In the Indian village situation, or for that matter anywhere, adopting a great number of innovations regardless of one's investment potential and of the profitability of the innovations may not always be rational in a given set of circumstances.²²

Mass media use, links with external systems, exposure to newspaper and change agency contact, were significantly related to opinion leadership scores. Exposure to movie was related at the zero-order level but was eliminated later. Urban contact and radio listening were in the positive direction but insignificant. We have found before that literacy was a crucial factor in opinion leadership. Exposure to newspaper is contingent upon literacy but has remained significant even when literacy along with other variables was held constant. Our measure of exposure to newspaper not only included self-reading, but also exposure through others.

Among the social-psychological characteristics included in this study, only political knowledge was significant and in the positive direction. Secular orientation and achievement motivation were significantly related to opinion leadership scores but the relationships in both cases were in the negative direction. This supports our earlier observations on these two variables that leaders are more conservative about the caste system and the sacredness of cattle than their followers. Also, when they have to choose between work ethic on the one hand, and family, leisure and popularity on the other, they choose the latter.

CONCLUDING REMARKS

At the beginning of this chapter, we proposed to find answers to two questions: (1) can we suggest the nature of influence that opinion leaders might exert on their followers; and (2) with respect to each other, how homophilic or heterophilic are they? The first question is actually contingent upon the second because a knowledge of the degree of homophily—hetero-

22. See, for example, S. P. Bose, "Socio-cultural Factors in Farm Efficiency", *The Indian Journal of Extension Education*, 1: 192-199, 1965.

phily between leaders and followers will also give us a clue about the direction and nature of influence.

Our data indicate that several dimensions of homophily—heterophily exist between leaders and followers. In socio-demographic characteristics, leaders have higher status than their followers. This higher status is both ascribed (due to high caste positions) and achieved (number of formal positions held). We have already referred to a study done by Sen and Roy²³ in 365 Indian villages in which they show that the present generation of leaders belongs to the upper castes as did its traditional predecessors. However, this ascribed status of the present leaders does not automatically lead to a position of influence but needs to be strengthened by secular status also. Whatever the reason, formal leadership and high caste position are clearly related, and as we have seen from our data, opinion leaders in Indian villages are also formal leaders.

The direction of influence from leaders to followers is then vertical, from high to low strata of the village society. Opinion leaders in Indian villages are not the “molecular” leaders of Lazarsfeld, Berelson and Gaudet, but the power-holders of the community. They are also older than their followers. This adds to the authority of these people as age is traditionally respected. We have discussed the question of legitimacy before as an important element in effective communication. Our data show that in Indian villages, legitimacy is important and that communication is most effective when it flows from legitimate leaders at the top to the bottom strata of the village society. Vertical communication is by no means the only manner in which messages flow. We have evidence of horizontal communication also. The role played by such communication will be discussed in a later chapter where we have studied the relative importance of both vertical and horizontal communication.

Among other important differences between leaders and followers, literacy, exposure to newspaper, change agency contact, and political knowledge are significant. Leaders are without doubt in contact with the larger society through several links. Modernity has been defined as greater participation in the nation, higher receptivity to new ideas and mental flexibility.²⁴ Only contact with external systems can produce such mental traits. Our leaders are exposed to external systems to a much greater degree than their followers. It is not too wrong to suggest, therefore, that their influence on followers will also be along such lines.

In actual achievement, we find that leaders have higher farm labour

23. L. K. Sen and P. Roy, *Awareness of Community Development in Village India*, *op. cit.*

24. D. Lerner, *The Passing of Traditional Society*, *op. cit.*

efficiency and operate more specialized farms. The rational use of resources, as indicated by these characteristics, also points to the nature of influence which the leaders exert on their followers by example. It is understandable why followers will go to them for advice and information on farming, credit and marketing rather than to their own peers.

With respect to the remaining characteristics, the leaders are not much different from their followers, as shown in Table 8. There are differences (Tables 4 to 7) but they are obviously not crucial. In these remaining characteristics, opinion leaders are homophilic with respect to their followers. The most interesting similarities are in innovativeness (trial of improved agricultural practices) and in the social-psychological characteristics. Our data confirm findings reported in earlier studies that opinion leaders are not necessarily innovators.

On most social-psychological characteristics, leaders and followers are not much different. However, leaders are more conservative on important community norms such as caste rules, cattle protection and conventional social rewards.

The picture we now have of opinion leaders in Indian villages is this :

1. They are fully integrated into the village society as shown by their conformity to village norms.
2. They are recognized power-holders in the community and maintain their status by conventional means;
3. They are sought by followers as opinion leaders because of their authority and competence.
4. They are not innovators.
5. They maintain links with extra-village systems.

IV. LEADERSHIP SPECIALIZATION

Robert Merton first suggested the existence of specialists and generalists among opinion leaders. The terms he used to describe these two levels of leadership were "monomorphic" and "polymorphic."¹ Monomorphic leaders are the sources of information and advice for one subject area whereas the polymorphic leaders provide information and advice on many subjects. Empirical studies done on leader-specialization show that opinion leadership is highly specialized. Ryan and Gross in 1943,² Katz and Lazarsfeld in 1955,³ and Emery and Oeser in 1958,⁴ showed in three separate studies that opinion leadership does not overlap. In other words, people seek different leaders for information and advice on different matters.

In one of the very few studies done on leader-specialization in underdeveloped countries, Rogers and van Es reported in the Colombia study that opinion leadership in Colombian rural communities is predominantly polymorphic.⁵ The differences in findings in the U.S. and in Colombia suggest the hypothesis that in traditional rural societies opinion leadership will be polymorphic. One should also expect a transition from polymorphic to monomorphic leadership as the communities become more modern.

In this chapter, we have tested these two hypotheses with data from our sample of eight Indian villages.

MEASURE OF POLYMORPHIC LEADERSHIP

We have already indicated in chapter II that our measure of opinion leadership is based on four sociometric questions regarding information and

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1. Robert Merton, *Social Theory and Social Structure*, New York : Free Press, 1957, p. 415.
 2. Bryce Ryan and N. Gross, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities", *Rural Sociology*, 8 : 15-24, 1943.
 3. E. Katz and P. F. Lazarsfeld, *Personal Influence : The Part Played by People in the Flow of Mass Communication*, New York : Free Press, 1960.
 4. F. E. Emery and O. A. Oeser, *Information, Decision and Action*, New York : Cambridge University Press, 1958.
 5. E. M. Rogers and J. C. van Es, *Opinion Leadership in Traditional and Modern Colombia Peasant Communities*, Diffusion of Innovations Research Report No. 2, Deptt of Communication, Michigan State University, 1964.

advice on (1) farming, (2) credit, (3) marketing, and (4) health. In order to increase the range of our measure of polymorphic leadership we have added two more sociometric items. Respondents were first asked to nominate individuals who would be able to contact officials and manage financial and administrative matters regarding a hypothetical major construction project in the village. Respondents were also asked to nominate people who would be able to supervise the project locally. These six items provided the range of subject areas for this study.

The index for polymorphism was developed by counting the number of times a nomination was received across the six items. In other words, a nomination received for only one item was scored one, for two items, two and so on. As the actual frequency of nominations received for each item was ignored, no standardization for communities was necessary.

INCIDENCE OF POLYMORPHIC LEADERSHIP

Table 9 presents the distribution of polymorphic scores in percentages among opinion leaders across six items.

TABLE 9 : PERCENTAGE DISTRIBUTION OF POLYMORPHIC SCORES AMONG OPINION LEADERS

| Villages | Polymorphic Scores | | | | | | Total |
|-------------------|--------------------|-------|-------|-------|-------|-------|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| Manchili | 37.93 | 17.24 | 17.24 | 20.69 | 3.45 | 3.45 | 100.00 |
| Kanchumarru | 28.55 | 14.29 | 14.29 | 14.29 | 14.29 | 14.29 | 100.00 |
| Polamuru | 36.84 | 28.95 | 7.89 | 10.53 | 10.53 | 5.26 | 100.00 |
| Pophali | 24.14 | 17.24 | 13.79 | 20.69 | 10.34 | 13.79 | 100.00 |
| Mulawa | 33.33 | 20.00 | 10.00 | 15.00 | 10.00 | 11.67 | 100.00 |
| Amdole | 35.48 | 6.45 | 16.13 | 22.58 | 3.23 | 16.13 | 100.00 |
| Harishpur | 19.04 | 28.57 | 14.29 | 14.29 | 19.05 | 4.76 | 100.00 |
| Laxmidanga | 28.56 | 28.57 | 14.29 | 00.00 | 14.29 | 14.29 | 100.00 |

A quick look at the above Table will suggest that in our sample of eight villages drawn from three widely separated states in India, both monomorphic and polymorphic leadership exist side by side. Leaders who received nominations only on one item, indicating monomorphism, form the single largest group except for villages Harishpur and Laxmidanga. However, if we dichotomize the scores into monomorphic (score of 1) and polymorphic (2 to 6) leadership, then it becomes obvious that polymorphic leadership is the more dominant of the two. Our general conclusion, therefore, is that in the eight Indian villages, polymorphic leadership is the predominant type although there is an appreciable incidence of monomorphic leadership also. This confirms the findings of Rogers and van Es in their Colombia study.⁶

6. Rogers and van Es, *ibid.*

Our next attempt was to interpret these findings in terms of a trend or a direction. We suggested in our second hypothesis that the degree of polymorphic leadership will be higher in more traditional villages than in more modern villages. In order to test this hypothesis, we needed to rank the eight villages on a modernization scale. We used the Guttman technique of scaling on 30 variables and developed a scale consisting of 15 items with 98 per cent scalability. The scaling operation is described in detail in the next chapter. In this chapter, we shall only use the rank order of the eight villages as indicated by the scale. The rank order of the villages can be seen in Table 10.

TABLE 10 : RANK ORDER OF EIGHT VILLAGES ON MODERNIZATION SCALE

| Rank (From least to most modern) | Village | State |
|-------------------------------------|-------------|----------------|
| 1 | Laxmidanga | West Bengal |
| 2 | Harishpur | |
| 3 | Amdole | |
| 4 | Manchili | Andhra Pradesh |
| 5 | Pophali | Maharashtra |
| 6 | Mulawa | |
| 7 | Polamuru | Andhra Pradesh |
| 8 | Kanchumarru | |

Next, we needed a single index for polymorphic (or monomorphic) leadership for each village. This was done, first, by dichotomizing the score categories into monomorphic (score of 1) and polymorphic (score of 2 and above) leadership. The percentages under score categories 2 to 6 were then summed to include all polymorphic leaders. We have used this total percentage figure of polymorphic leaders as an indication of the degree of polymorphism in opinion leadership in each village. The percentage for each village is shown in Table 11.

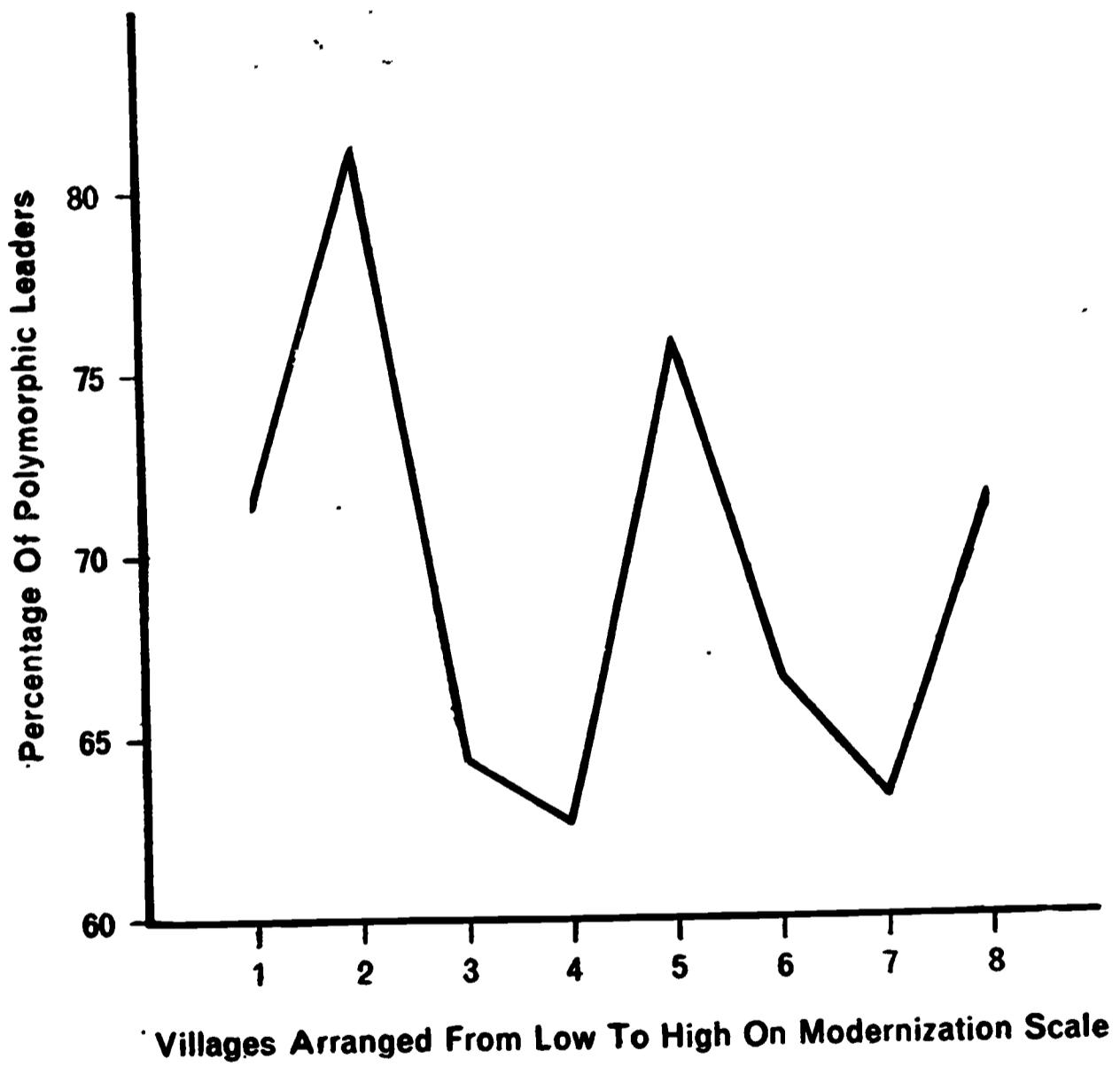
TABLE 11 : POLYMORPHIC LEADERSHIP AS RELATED TO VILLAGE MODERNIZATION

| Villages (Ranked from least to most modern) | Percentage of Polymorphic Leaders |
|--|--------------------------------------|
| Laxmidanga | 71.44 |
| Harishpur | 80.96 |
| Amdole | 64.52 |
| Manchili | 62.07 |
| Pophali | 75.86 |
| Mulawa | 66.67 |
| Polamuru | 63.17 |
| Kanchumarru | 71.45 |

The figures in the second column of the above Table were then plotted against the rank order of the villages, the resulting distribution can be seen in chart I.

CHART I

Polymorphic Leadership As Related
To Village Modernization



Irrespective of the fluctuations in the curve, the downward slope of the curve is quite distinct. This means that polymorphism in more modern villages is relatively less important than in the more traditional villages. Conversely, as we move from traditional communities to modern communities, monomorphism becomes relatively more important than at the traditional end of the scale. It must be noted, however, that regardless of this trend, all eight villages show a dominance of polymorphism over monomorphism. This is shown by the higher polymorphism score in each village. We are only suggesting on the basis of the evidence presented that leaders in more modern villages tend to be a little more monomorphic than those in the more traditional villages.

This suggests a negative relationship between village modernization and polymorphic leadership, although a very weak one. The fact that polymorphism plays such an important role in all eight villages indicates, perhaps, the generally low level of modernization in our sample.

Our second attempt to explore the relationship between village modernization and polymorphic leadership was done by correlational analysis. The whole sample of 680 respondents was used for this purpose. The village modernization score (in accordance with the position of a village on the village modernization scale) was transferred to the individual respondents by giving each respondent in the village the same score. Thus all respondents in village Kanchumarru (the highest on the scale) were given the score of 8 (the highest score). Respondents in Polamuru, the next village on the scale, were given the score of 7 and so on. These scores were then correlated with the polymorphic leadership scores ranging from 0 to 6.⁷

The correlation coefficient was $-.008$. The magnitude of the coefficient is insignificant showing thereby that polymorphic leadership in all eight villages is all-pervasive. The negative direction of the relationship is suggestive however, and this confirms what we have already observed. Within the very small range of modernization provided by our sample, there is a suggestion that polymorphic leadership and village modernization may be negatively related.

Given the range of modernization in the sample of eight villages (and this may not be too atypical of villages in India in general as the eight villages were selected carefully to include enough variations), we have no evidence of a statistically significant relationship between village modernization and monomorphic leadership. The intercorrelations among the scores on all six items of sociometric choice again, bring out the importance of polymor-

7. The procedure used here is for showing a direction among eight villages. Strictly speaking, the individual values in a village are not independent. The conclusions drawn here are for the villages and not for the sample of 680 respondents.

phism in our sample villages. These relationships are presented in Table 12.

TABLE 12 : CORRELATION MATRIX OF SIX ITEMS OF SOCIOMETRIC CHOICE
(N = 680)

| | I | II | III | IV | V | VI | VII |
|--|---|------|------|------|------|------|------|
| I Project management (External contact) | — | ·96* | ·68* | ·73* | ·56* | ·69* | ·53* |
| II Project management (Local) | | — | ·67* | ·70* | ·56* | ·67* | ·59* |
| III Farm advice .. | | | — | ·69* | ·53* | ·80* | ·57* |
| IV Credit advice .. | | | | — | ·59* | ·81* | ·48* |
| V Health advice .. | | | | | — | ·56* | ·49* |
| VI Marketing advice .. | | | | | | — | ·56* |
| VII Polymorphic score .. | | | | | | | — |

* Significant at ·01 level of confidence.

It can be seen from the above Table that not only are the six sociometric items highly correlated with the polymorphism score but the intercorrelations among themselves are also extremely high (the lowest is ·53 and the highest is ·96). These findings suggest only one conclusion : that all six items are practically unidimensional and that a great many leaders who received nomination on one item were also nominated on others.

Opinion leadership in our eight villages is thus polymorphic. We also have indications that within the range of modernity provided by this small number of villages, monomorphism seems to play a relatively more important role in the more modern villages than in the more traditional ones. Perhaps, with a much higher level of modernization, monomorphic leadership will replace polymorphic leadership as is the case in American communities. We do not know, however, about the particular level of modernization which will make this shift possible.

V. LEADER INNOVATIVENESS AND VILLAGE NORMS

Innovativeness has been defined by Rogers as the relative earliness of adoption of a new idea or practice.¹ The time element is crucial in this definition. During the pre-testing of our questionnaire, it was discovered that most of the farmers in the eight villages were not sure about the time of adoption of a new practice. Since a measure of innovativeness, for our purposes, had to be statistically treated, a reliable estimate of the time factor was essential. In the absence of such information we fell back on a simpler device. Farmers were asked whether they had ever tried a certain new practice. Trial in a sense is innovative behaviour and in this study we have used this variable as such. The measurement of this variable has been fully described in chapter II.

The main questions we have posed in the present chapter are how innovative leaders are and whether the village norm on innovativeness affects leaders' behaviour or not. The issue of norms as influencing factors in leaders' behaviour was first raised by Homans in an earlier hypothesis that leaders remain leaders in a group because they provide rare and valuable services to the group.² In terms of conformity to group norms, the earlier hypothesis was interpreted by researchers as indicative of the general conservatism of leaders. Wilkening, for example, found in his North Carolina community that leaders are lower adopters than their followers.³ Lionberger, on the contrary, found in his Missouri communities that leaders were better adopters than non-leaders.⁴ Marsh and Coleman, in another study, resolved this paradox by showing that the difference between leaders' adoption and non-leaders' adoption depended on the community norm on the adoption of new practices.⁵ They showed that in low adoption areas (indicating

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1. E. M. Rogers, *Diffusion of Innovations*, New York : Free Press, 1962, p. 193.
 2. G. C. Homans, *The Human Group*, New York : Harcourt, Brace and World, 1950.
 3. E. A. Wilkening, "Informal Leaders and Innovators in Farm Practices", *Rural Sociology*, 17 : 272-275, 1952.
 4. H. F. Lionberger, "Some Characteristics of Farm Operators Sought as Sources of Farm Information in a Missouri Community", *Rural Sociology*, 18 : 327-338, 1953.
 5. P. Marsh and L. Coleman, "Farmers' Practice—Adoption Rates in relation to Adoption Rates of Leaders", *Rural Sociology*, 19 : 180-181, 1954.

norms resistant to new practices) leaders were more conservative than their followers in their adoption behaviour. On the other hand, in high adoption areas (indicating norms favourable to new practices) leaders were better adopters than non-leaders. Homans in 1961 subsequently clarified the meaning of his earlier hypothesis by stating that this was essentially what he had intended to say.⁶ Leaders provided rare and valuable services to the group by conforming to the norms. In communities with conservative norms, leaders are expected to be more conservative than their followers and in communities with norms favourable toward change, leaders should stay ahead of their followers. In either case, leaders conform to group norms more religiously than non-leaders and this is how they provide rare and valuable services to the group—by setting an example with their own behaviour and thereby contributing to the integration and stability of the group.

In several studies following Marsh and Coleman's explanation and Homans' clarification, the influence of community norms on leaders' behaviour was recognized.⁷ In India, the influence of community norms on leaders' behaviour has not been studied along these lines. Studies done on leadership have only reported that leaders are almost invariably better adopters than non-leaders.⁸ Does this mean, according to Homans' hypothesis, that village norms in India are favourable to new ideas and practices and that leaders are conforming to these norms by being more innovative than their followers? Facts, however, show that this is not the case. The amount of adoption of improved agricultural practices in our sample of eight villages was very low. It was so low that we failed to construct a Guttman scale for adoption of improved agricultural practices.⁹ This only shows that the norms (measured by community averages) do not favour innovativeness.

From data presented in chapter III of this monograph, we have seen that leaders' mean score on trial of improved agricultural practices (innovative-

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6. G. C. Homans, *Social Behavior : Its Elementary Forms*, New York: Harcourt, Brace and World, 1961, ch. 16.
 7. See for example, E. M. Rogers, and R. Burdge "Community Norms, Opinion Leadership and Innovativeness among Truck Growers", *Research Bulletin 912*, Ohio Agricultural Experiment Station, Wooster, Ohio, 1962; and A. W. Van den Ban, "Locality Group Differences in the Adoption of New Farm Practices", *Rural Sociology*, 25 : 308-320.
 8. See, for example, L. K. Sen, and P. Roy, *Awareness of Community Development in Village India*, Hyderabad : National Institute of Community Development, 1967; A. P. Barnabas, "Who are the Village Leaders?", *Kurukshetra*, 1957; S. S. Thorat, *Certain Social Factors Associated with the Adoption of Recommended Agricultural Practices by Rural Local Leaders and Ordinary Farmers in India* (unpublished Ph.D. thesis), E. Lansing, Michigan State University, 1966; W. B. Rahudkar, "Local Leaders and the Adoption of Farm Practices", *Nagpur Agriculture College Magazine*, 34 : 1-13, 1960.
 9. P. Roy, F. C. Fliegel, J. E. Kivlin and L. K. Sen, *Agricultural Innovation among Indian Farmers*, Hyderabad : National Institute of Community Development, 1968, pp. 19-20.

ness) is higher than that of non-leaders'. This confirms results of other studies done in India. However, in our correlational analyses, there was no statistically significant relationship between innovativeness and opinion leadership score. This illustrates the problem we have just stated and raises questions about a consistent relationship between village norms and leader innovativeness.

It becomes obvious at this point that Homans' hypothesis and the supportive findings in U. S. rural communities do not explain the leader-follower differences in adoption behaviour in Indian villages. In an effort to understand the relationship between village norms and leader innovativeness we have studied leader-follower differences in each of our eight villages. We have examined these relationships in two ways. First, we have used the village mean score for innovativeness as the community norm and plotted the leader-follower difference (in their mean scores on innovativeness) against this norm. Secondly, we have used 30 variables to develop a general index for village modernization and have plotted the leader-follower differences against this village modernization scale. The results of both operations were almost identical as we shall explain shortly.

In chart II, village mean scores for innovativeness are arranged from low to high along the horizontal axis. The vertical axis represents the mean scores of leaders and followers.

Several interesting things can be seen in chart II. First, the leaders' scores show an upward slope until we arrive at the middle of the scale representing village favourability toward innovativeness. The curve takes a downward direction from that point and then goes up again. The followers' scores take a more or less steady upward direction and the difference between the leaders and the followers diminishes near the end of the curves. Regardless of the distance between the two curves at various points of the scale for village norm on innovativeness the leaders always are ahead of the followers.

The difference between the leaders' scores and the followers' scores are shown diagrammatically in chart III.

The curve plotted here demonstrates a curvilinear relationship between village norm on innovativeness and leader-follower differences. Unlike Marsh and Coleman's findings which showed a positive linear relationship between community norm and leader-follower differences, in our eight villages the leader-follower difference increases and decreases in a curvilinear fashion. The difference is greatest at the middle of the scale for village norm on innovativeness but then decreases. A discussion on the validity of this interpretation will be provided later in this chapter.

CHART II

Leaders' And Followers' Mean Scores On Innovativeness

As Related To Village Norms On Innovativeness

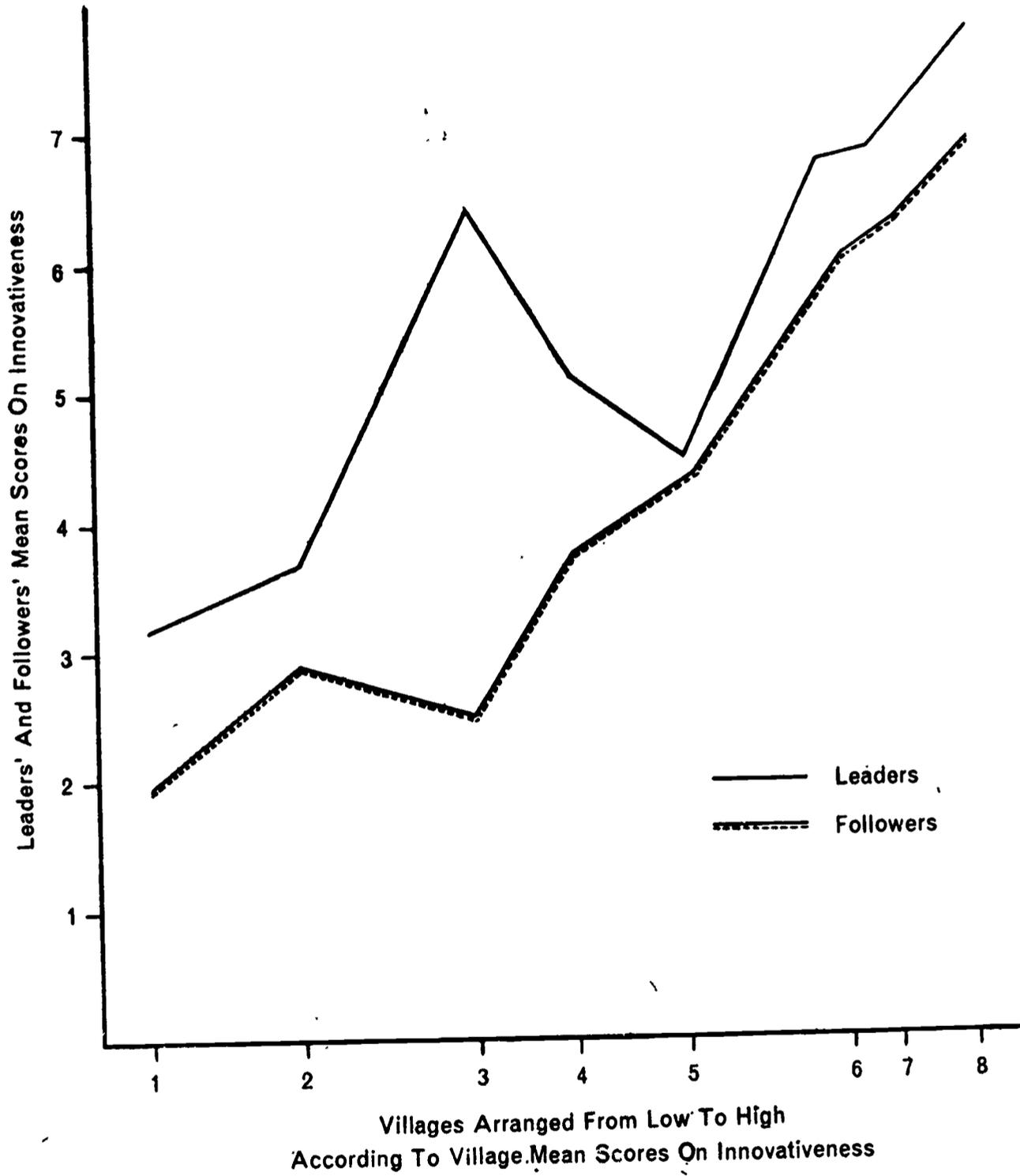
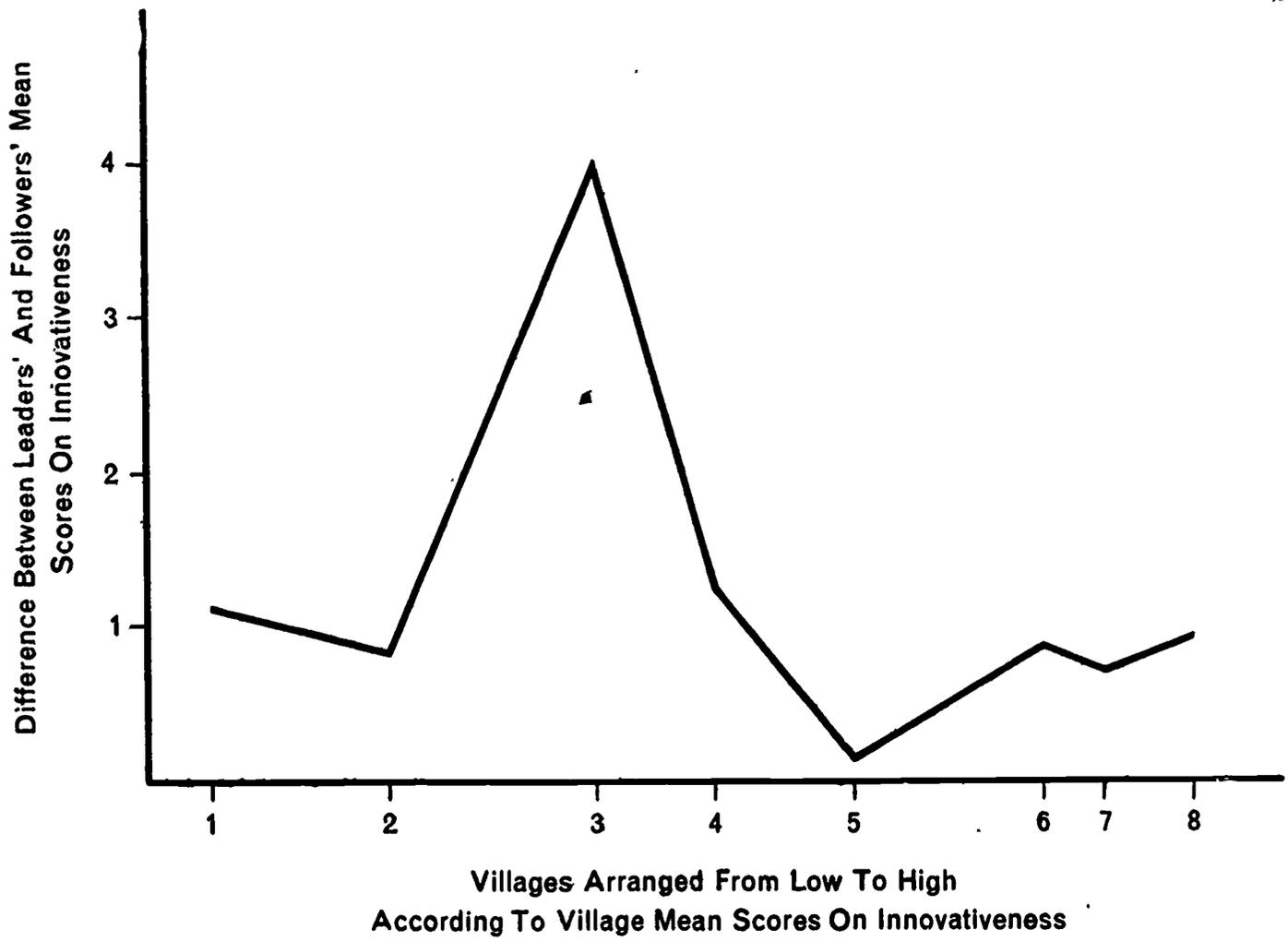


CHART III

Leader-Follower Differences In Innovativeness
As Related To Village Norms On Innovativeness



VILLAGE MODERNIZATION AND LEADER-FOLLOWER
DIFFERENCE IN INNOVATIVENESS

In an effort to develop a village modernization scale, we used the following 30 variables considered to be aspects of modernization in some form or other. Each variable was measured by the mean score for each village sample.

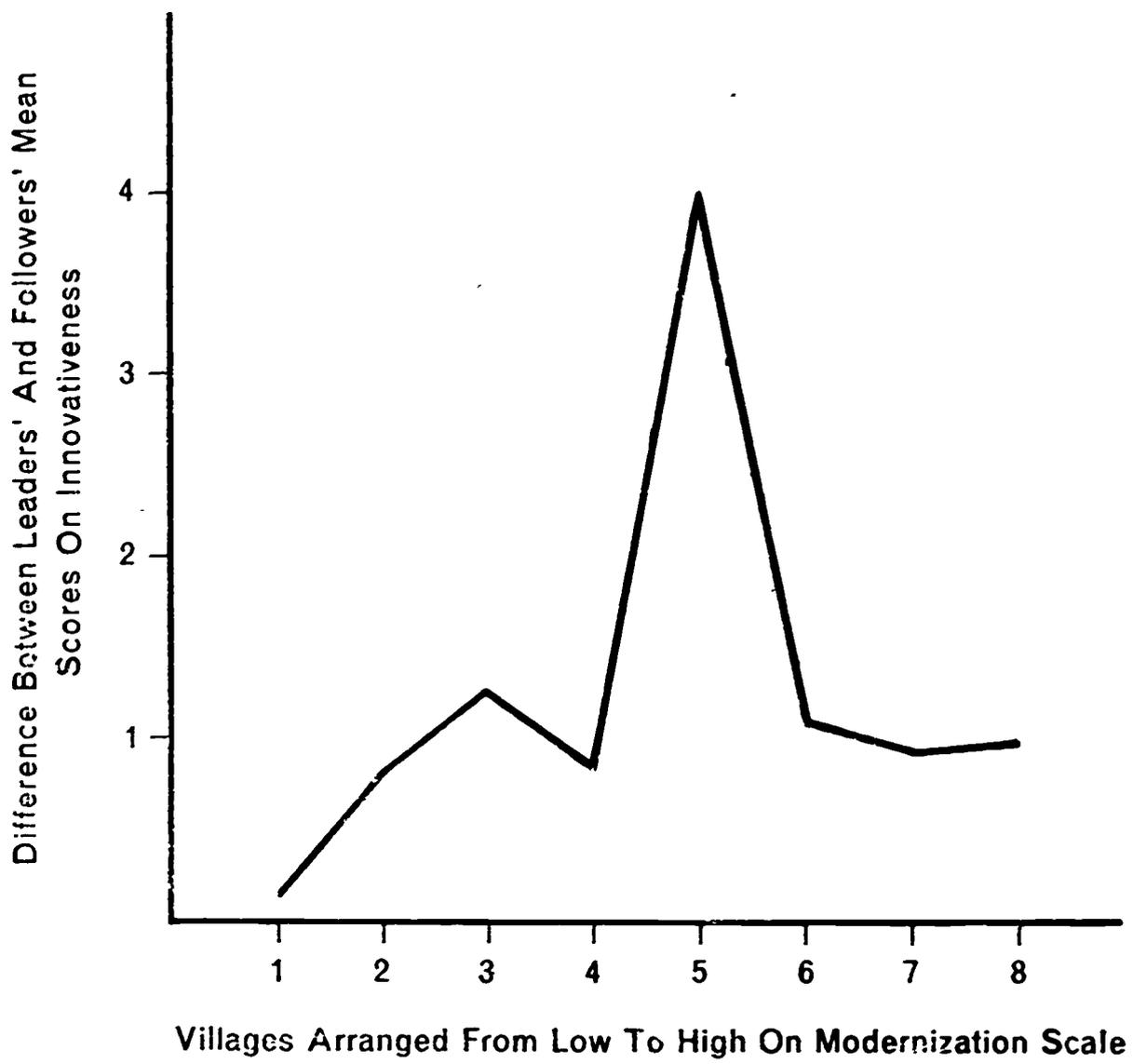
- | | |
|---------------------------------------|---------------------------------------|
| 1. Family type (nuclear or joint) | 16. Literacy |
| 2. Education | 17. Exposure to newspaper |
| 3. Education of children | 18. Change agency contact |
| 4. Farm specialization | 19. Credit orientation |
| 5. Tenure status | 20. Planning orientation |
| 6. No. of formal secular positions | 21. Non-authoritarianism |
| 7. Social participation | 22. Education aspiration for children |
| 8. Farm commercialization | 23. Self-reliance |
| 9. Farm size | 24. Deferred gratification |
| 10. Level of living | 25. Economic ambition |
| 11. Farm labour efficiency | 26. Achievement motive |
| 12. Trial of agricultural innovations | 27. Political knowledge |
| 13. Urban contact | 28. Secular orientation |
| 14. Radio listening | 29. Empathy |
| 15. Exposure to movie | 30. Interpersonal trust |

These 30 variables were treated to a Guttman scale analysis and 15 variables were retained by the scale with 99 per cent reproducibility. The variables which remained as scale items are listed below from high to low according to their positions on the scale.

1. Number of offices ; exposure to newspaper ; economic ambition ; interpersonal trust
2. Political knowledge ; farm commercialization
3. Literacy ; level of living, farm labour efficiency
4. Social participation
5. Radio listening ; non-authoritarianism
6. Education ; urban contact
7. Family type

There were in all seven scale positions and except in two cases more than one variable was placed in the same position. At the time of scoring, only one variable (chosen at random) was considered as scale item. In order to rank the eight villages on the modernization scale, these scale items were dichotomized. The villages were then ranked according to the dichotomous scores on the scale items and the position of the scale items. For example, village Kanchumarru got the highest rank because it showed a high score

CHART IV

Leader-Follower Differences In InnovativenessAs Related To Village Modernization

on the number of formal secular positions (bureaucratization) which was one of the highest ranked items on the modernization scale.

It is interesting to note that the positions of the villages along the scale for village norm on innovativeness in our first operation, are quite similar to their positions on the Guttman-style modernization scale. This resulted in basically the same curves in both operations. Chart IV shows the relationship between the village modernization scale and the leader-follower differences in innovativeness.

It should be noted that in charts III and IV the curvilinearity of the plotted curves is practically determined by one village. Our first reaction was to consider this village "deviant", and to draw the curves differently by ignoring it. However, the fact that our sample consists of only eight villages made us test the curvilinear relationship mathematically. The test we have used is designed to indicate whether the observed curvilinearity will also be valid if a larger sample were used.

As a first step, the relationships observed in charts III and IV were treated to the formulae for

1) linear regression : $Y = aX + b$; and

2) curvilinear regression : $Y = aX + cX^2 + b$

where, Y represents village-wise differences between opinion leaders and non-leaders on innovativeness, and X represents a scale of average village innovativeness (chart III), and a scale of village modernization (chart IV). The variance (R^2) explained by X in Y in the linear fit was then compared with the variance (Eta^2) explained in the curvilinear fit. The results obtained are as follows :

Chart III : $R^2 = 10.24$ per cent

$\text{Eta}^2 = 47.61$ per cent

Chart IV : $R^2 = 4.00$ per cent

$\text{Eta}^2 = 42.25$ per cent

The variance explained (Eta^2) by the curvilinear fit in both cases is much higher than the variance explained (R^2) by the linear fit. These results confirm our previous interpretation that leader-follower differences in innovativeness have a curvilinear relationship with village modernization. We must point out, however, that the curves presented in charts III and IV need to be confirmed by studies using larger samples of Indian villages. Until such studies are done, we have assumed for purposes of this study that the relationship between leader-follower differences in innovativeness and village modernization as discovered here, also holds true for other Indian villages.

The curvilinear slope of both curves indicates that favourable village norms influence leaders' innovativeness relative to the followers' innovativeness up to a point. Once this point is reached, the followers maintain a steady

pace while the leaders' lead over the followers decreases. In actual scores, however, leaders still maintain a lead but the difference between their scores and the followers' scores decreases. Our explanation for these relationships is this.

Group processes in Indian villages are determined to a great extent by the authoritarian power structure of the village society. We have already seen that opinion leaders belong to the upper socio-economic strata of the village society. A higher caste position provides security to the leaders which is based on ascribed status, customary sanction and ritualized acceptance by non-leaders. A higher level of living supports this exalted status by providing economic power over others. A further reinforcement is provided by the overlap of formal leadership and opinion leadership. With almost guaranteed security in their leadership status, opinion leaders are more free to deviate from group prescriptions than their followers. One could expect more of this in the traditional villages than in the modern villages. This may explain why leader-follower difference in innovativeness is less pronounced in the most modern villages. Our speculation suggests that as villages become more modern, the ascriptive basis of leadership is weakened. A look at the scale items of the modernization scale will indicate that in villages at the most modern end of the scale, both followers and leaders are much more aware of the outside world, the changing political climate in the nation and an alternative set of norms in cities and other places. A gradual erosion in the almost unquestioned superiority of the leaders is expected to occur under these conditions. This also affects the basis of leadership and leaders become more sensitive to the group's approval or disapproval. In other words, leadership may no longer be wholly based on ascribed status in the more modern villages and there may be a beginning of achievement-based leadership which is subject to the group's approval. In the eight villages, a higher caste position is still an important characteristic of opinion leaders. Whether this higher caste position of opinion leaders exerts the same kind of influence in all eight villages regardless of their level of modernization is, however, open to question. The fact that the deviation of opinion leaders from group norms is less pronounced in the most modern villages may indicate that in these villages, leaders are more sensitive to norms and public opinion and are hesitant to take their ascribed status for granted.

The curvilinear slope of the curves indicates that there is a cutting point in the modernization scale from where pressures on the traditional base of authority begins to be felt. Our sample consists of only eight villages and it is not possible to explore this question much further. A larger sample would permit a much more detailed analysis of the structural changes in the village societies located at different positions on a modernization scale and would provide more definite evidence on this subject.

This discussion suggests a reason why Homans' hypothesis has been verified in American communities but not in India. The basis of group leadership in these two cultures is different. Leadership in American communities is based mostly on achieved status and the group's sanction is an important factor in maintaining one's leadership position. Conformity to group norms under these circumstances becomes almost obligatory for leaders. In Indian villages, on the other hand, such conformity is not obligatory for leaders who are secure in their ascribed status and can deviate from norms to an extent. As the villages become more modern, the importance of such status as the basis of leadership is weakened and leaders tend to conform more to the village norms and are more sensitive to the group's judgment.

The range of modernization in Indian villages is still extremely limited and what we have observed in this chapter cannot really be compared with the situation in American communities. Implied in our scale of village modernization is the emergence of the elements of achievement-based leadership in an ascription-oriented society. A modernization scale for American communities will, perhaps, depict a different dimension. Theoretically speaking, if we could develop a modernization scale with a range wide enough to include Indian as well as American communities, we would perhaps have an interesting curve, curvilinear in the beginning but linear at the end.

VI. STRUCTURAL LOCATION OF OPINION LEADERS

Factions or cliques in Indian villages are as ubiquitous as caste divisions.¹ Like caste divisions, factions or cliques are also a part of the power-matrix of a village community. Unlike caste, however, which is more or less a vertical symbiosis of power groups ranging from high to low on a ritualized status hierarchy, factions quite often represent horizontal alignments across caste and sometimes across religious affiliations. We are not suggesting that disputes in villages which involve factions are not influenced by caste or religion. We are only looking at the power-matrix of village communities from a different angle. Caste disputes often rise to a formal level because caste divisions are formally recognized. Factions or cliques are informal in-groups and may be more inclusive than castes. Factional disputes present a different kind of communication problem.

Our definition of these informal in-groups is loose and we are using the terms faction and clique interchangeably. Factions or cliques are face to face primary groups and they are as much a part of the village society as are the family, kinship groups and caste. The boundaries of a faction are, however, more flexible than caste or family due to continuous changes in power alignments. The immediate reason for the emergence of a faction could be one of many possible reasons depending on circumstances. In our sample of eight villages, two major criteria emerged as the basis of factions—personal feuds and physical proximity. Field notes taken by our interviewers during the survey suggest that factions start with a personal quarrel between members of an extended family resulting in the break-up of the family or between members of the same caste over political or economic patronage.² Once

1. See, for example, A. R. Beals, *Gopalspur: A South Indian Village*, New York: Holt, Rinehart and Winston, 1963; S. C. Dube, *India's Changing Villages*, Ithaca: Cornell University Press, 1958; O. Lewis, *Village Life in Northern India*, Urbana: University of Illinois Press, 1958; H. S. Dhillon, *Leadership and Groups in a South Indian Village*, New Delhi: Programme Evaluation Organization, Planning Commission, Government of India, 1955; M. Marriot, (ed.), *Village India*, Chicago: University of Chicago Press, 1955; M. N. Srinivas, *India's Villages*, Bombay: Asia Publishing House, 1960.

2. Also see A. K. Danda and D. G. Danda, *Development and Change in a Bengal Village*, Hyderabad: National Institute of Community Development, 1968, pp. 106-117.

these nuclei are formed, other people align themselves with one or the other party. These new ties are usually based on physical proximity and very often cut across caste lines. In villages with multi-religious populations, factional alignments were observed to have cut across religious affiliations. In some villages, factions were limited to the same castes but this was mainly due to physical proximity. In no case, however, did we observe a ritualized hierarchization of different factions as was the case with castes.

We have raised two questions in this chapter about opinion leadership and the structural cleavage in the village society. We have just noted the existence of two such major structural cleavages—the caste hierarchy which divides the village society vertically into formally recognized high and low groups, and the cliques which are horizontal divisions of informally aligned in-groups. Our first question was about the location of opinion leaders in these two structural alignments. We were also interested to know whether these structural locations impeded the flow of communication in the village. Specifically, we wanted to know whether opinion leaders in the eight villages were also clique leaders or not. And if they were, then to what extent did these affiliations prevent a free flow of communication throughout the village.

We have already discussed in detail the location of opinion leaders in the caste hierarchy.³ We have found that for advice and information on important issues such as farming, credit, marketing and health, people would prefer to go to an upper caste person who is also a better farmer than to a caste peer. Caste division does not, therefore, prevent the choice of opinion leaders or the flow of communication across caste groups.

In this chapter we have explored the same question with respect to the clique divisions in the eight villages. Our first problem was methodological. How does one use survey data to delineate cliques? There are several anthropological methods of delineating factions, the most important of which is the actual observation of the dynamics of group relationships.⁴ In survey research, one depends more on information provided by the respondents themselves than on the interviewer's field notes. The method followed in this study was to ask the respondents about people in their own village whom they visited *most frequently*. On the basis of this information, sociograms of visits were plotted for each village. Although a multiple choice was allowed at this time of interviewing, only the person mentioned *first* was included in the sociograms for convenience. This procedure was followed throughout this analysis. Even then, the sociograms proved to be extremely complicated and unwieldy for systematic interpretation. A visual analysis of indirect relationships from these hand-plotted diagrams was practically impossible

3. See chapter III of this monograph.

4. See, for example, A. R. Beals, *op. cit.*, and O. Lewis, *Group Dynamics in a North Indian Village*, New Delhi: Planning Commission, Government of India, 1953.

in the larger villages. For illustration, we have reproduced the sociogram for the smallest village Kanchumarru ($N=33$) in chart V. These sociograms indicated the presence of cliques but it was difficult to draw firm boundaries around them. We were not only interested in direct connections but also in second step and third-step (and even further) connections. These, the sociograms failed to show.

Our next step was to use the method of matrix multiplication as developed by Festinger, Schachter and Back.⁵ Briefly, a matrix was prepared for each village with respondents arranged horizontally as well as vertically. Each nomination was recorded in the proper cell at the intersection of the row r of the visitor and the column c of the visited. The original matrix prepared in this fashion provided a scattergram of who visited whom, which was not too different from the hand-plotted sociograms. However, the advantage of the matrix was that it lent itself to further mathematical treatment. Each matrix was squared, cubed, quadrupled and so on. With the gradual rise in the power of multiplication, more and more indirect relationships could be brought into the picture. Thus, the squared matrix showed two-step connections, the cubed matrix showed three-step connections and so on. The idea was to include all direct and indirect visiting in order to isolate a non-overlapping clique.

Festinger, Schachter and Back describe the mechanics of matrix multiplication in the following way. For the squared matrix, to obtain the number which goes into the cell designated by column c and row r of the squared matrix, each cell in column c of the original matrix is multiplied by the corresponding cell of row r and these products are summed. The formula for the squared matrix is :

$$A^2_{rc} = A_{1c} A_{r1} + A_{2c} A_{r2} + A_{3c} A_{rc} + \dots \dots \dots A_{rc} A_{rn}$$

where, A^2_{rc} = the number in the cell of the squared matrix in the r row of the c column;

$A_{1c} A_{r1}$ = product of the number in the cell in the first row of the c column and the number in r row of the first column of the unsquared matrix, and so on.

Similarly, the equation for the cubed matrix is :

$$A^3_{rc} = A_{1c} A^2_{r2} + A_{2c} A^2_{r2} + A_{3c} A^2_{r3} + \dots \dots \dots + A_{nc} A^2_{rn}$$

5. L. Festinger, S. Schachter and K. Back, *Social Pressures in Informal Groups*, Stanford : University Press, Reprinted 1967, pp. 132-150.

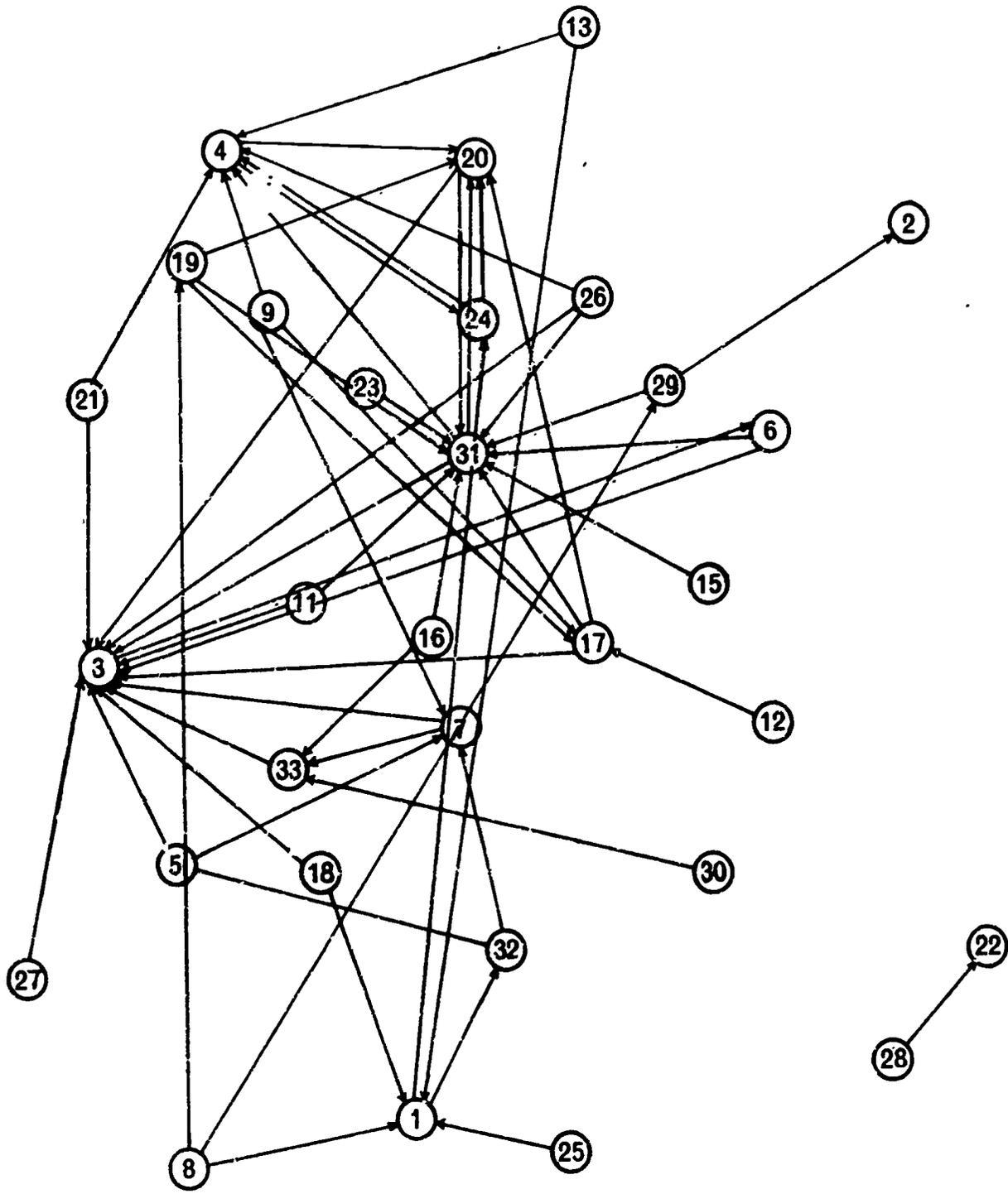


CHART V

Sociogram of Visiting Choices in Village Kanchumarru (N=33)

Each figure in the multiplied matrices represents the number of n step connections, direct and indirect, between two specific members of the group. The most important parts of the multiplied matrices are the diagonal of the matrix and the figures arranged along it. The figures indicate the number of n step connections that exist from a person back to himself, or, in other words, they indicate the number of mutual visits in which this person was involved. For clique identification, the readings along the diagonal of a multiplied matrix are most important. A comparison of the figures on the diagonal with the distribution of choices on the original matrix shows who belongs to which clique.

The original and the multiplied (to the fifth power) matrices of mutual visits were programmed and run by digital computer CDC 3600. It is not possible to reproduce these very large matrices for all eight villages here and we have only used the matrices for village Kanchumarru for illustration in the charts VI and VII.

Once the cliques were thus identified, we proceeded to delineate the leader choice patterns using the same procedures. First, hand-plotted sociograms were prepared for each village showing leader nominations. In order to avoid any more complications, we used only one item of leader nomination—advice and information on farming. This particular item was selected because it produced the least number of indeterminate responses (no answer or don't know). The sociogram for village Kanchumarru can be seen in chart VIII. It was observed that leader nominations were not confined to cliques. In other words, people belonging to one clique sought opinion leaders in other cliques when it came to seeking advice on farming. The same pattern was true for all eight villages.

The matrix multiplication method was then used with identical results. The original matrix and the *fifth-power* (multiplied to the fifth power) matrix for opinion leader choice for village Kanchumarru can be seen in charts IX and X. Again, the pattern was identical for all eight villages.

A combined scrutiny of the hand-plotted sociograms and multiplied matrices for both cliques and opinion leader choice for all eight villages showed that :

1. While visiting was predominantly mutual, opinion leader choice was almost completely unidirectional.
2. Opinion leadership choices were neither identical with clique nominations (visiting pattern) nor produced their own exclusive patterns independent of cliques. The hand-plotted sociograms for visiting and opinion leader choice were visibly different. The cells in the diagonals of the multiplied matrices are for opinion leadership choices.
3. Minor clique leaders with small visiting nominations were either ignored as opinion leaders even by their own clique members or were nominated by a negligible proportion of respondents.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 3 | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | 1 | |
| 4 | | | | | | 1 | | 1 | | | | | | | | | | | | 1 | | | | 1 | | | | | | | | | |
| 5 | | | 1 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | 1 | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| 7 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 8 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | |
| 9 | | | | 1 | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| 11 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 12 | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 13 | 1 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 17 | | | 1 | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| 18 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 19 | | | | | | | | | | | | | | | | | 1 | | | 1 | | | | | | | | | | | | 1 | |
| 20 | | | 1 | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| 21 | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | 1 | |
| 24 | | | 1 | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | 1 | |
| 25 | 1 | | | 1 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | |
| 26 | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 27 | | | 1 | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | 1 | |
| 29 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| 31 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 33 | | | 1 | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | |

CHART VI

Original Matrix of Mutual Visiting Choices in Village Kanchumarru

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | |
|----|---|---|----|----|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| 1 | 1 | | 14 | 9 | | 2 | | 1 | 2 | | | | | | | | 8 | | 1 | 17 | | | | 8 | | | | | 1 | | 9 | | | |
| 2 | | | 6 | 3 | | 2 | | | 2 | | | | | | | | 3 | | | 8 | | | | 5 | | | | | | | | 4 | | |
| 3 | | | 10 | 5 | | 3 | | | 3 | | | | | | | | 5 | | | 12 | | | | 9 | | | | | | | | 6 | | |
| 4 | | | 24 | 10 | | 7 | | | 7 | | | | | | | | 12 | | | 28 | | | | 19 | | | | | | | | 17 | | |
| 5 | | 1 | 10 | 5 | | 1 | | | 1 | | | | | | | | 4 | | | 11 | | | | 6 | | | | | | | 6 | 1 | | |
| 6 | | | 16 | 8 | | 3 | | | 3 | | | | | | | | 8 | | | 17 | | | | 11 | | | | | | | | 11 | | |
| 7 | | | 11 | 3 | 1 | 2 | 1 | | 2 | | | | | | | | 6 | | | 10 | | | | 7 | | | | | | | | 11 | | |
| 8 | | | 6 | 2 | | 3 | | 1 | 3 | | | | | | | | 4 | | 1 | 7 | | | | 5 | | | | | | | 5 | | 1 | |
| 9 | | | 15 | 9 | | 2 | | | 2 | | | | | | | | 8 | | | 16 | | | | 10 | | | | | | | | 10 | | |
| 10 | | | 7 | 5 | | | | | | | | | | | | | 4 | | | 9 | | | | 2 | | | | | | | | 6 | | |
| 11 | | | 11 | 6 | | 2 | | | 2 | | | | | | | | 6 | | | 14 | | | | 6 | | | | | | | | 9 | | |
| 12 | | | 4 | 2 | | 1 | | | 1 | | | | | | | | 2 | | | 4 | | | | 4 | | | | | | | | 2 | | |
| 13 | 1 | 1 | 23 | 14 | | 3 | | 1 | 3 | | | | | | | | 14 | | 1 | 28 | | | | 12 | | | | 1 | | 18 | 1 | 1 | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | 6 | 3 | | 2 | | | 2 | | | | | | | | 3 | | | 8 | | | | 5 | | | | | | | | 4 | | |
| 16 | | | 6 | | 1 | 2 | 1 | | 2 | | | | | | | | 3 | | | 4 | | | | 6 | | 1 | | | | | | 6 | | |
| 17 | | | 10 | 4 | | 2 | | | 2 | | | | | | | | 5 | | | 11 | | | | 6 | | | | | | | | 8 | | |
| 18 | 1 | | 12 | 8 | | 1 | | 1 | 1 | | | | | | | | 7 | | 1 | 16 | | | | 4 | | | | 1 | | | 9 | | | |
| 19 | | | 15 | 6 | | 5 | | | 5 | | | | | | | | 7 | | | 17 | | | | 14 | | | | | | | | 9 | | |
| 20 | | | 12 | 7 | | 1 | | | 1 | | | | | | | | 7 | | | 13 | | | | 6 | | | | | | | | 10 | | |
| 21 | | | 16 | 10 | | 1 | | | 1 | | | | | | | | 9 | | | 18 | | | | 7 | | | | | | | | 13 | | |
| 22 | | | 5 | 1 | | 2 | | | 2 | | | | | | | | 2 | | | 5 | | | | 5 | | | | | | | | 3 | | |
| 23 | | | 10 | 5 | | 3 | | | 3 | | | | | | | | 5 | | | 12 | | | | 9 | | | | | | | | 6 | | |
| 24 | | | 16 | 7 | | 4 | | | 4 | | | | | | | | 8 | | | 19 | | | | 11 | | | | | | | | 12 | | |
| 25 | | | 21 | 10 | | 5 | | 1 | 5 | | | | | | | | 12 | | 1 | 23 | | | | 14 | | | | | | | 16 | 1 | | |
| 26 | | | 22 | 13 | | 3 | | | 3 | | | | | | | | 12 | | | 28 | | | | 12 | | | | | | | | 17 | | |
| 27 | | | 9 | 5 | | 1 | | | 1 | | | | | | | | 5 | | | 10 | | | | 5 | | | | | | | | 7 | | |
| 28 | | 1 | 11 | 5 | | 3 | | 1 | 3 | | | | | | | | 6 | | 1 | 11 | | | | 10 | | | | | | | 6 | 1 | 1 | |
| 29 | | | 3 | 2 | | | | | | | | | | | | | 2 | | | 3 | | | | 1 | | | | | | | | 3 | | |
| 30 | | 1 | 17 | 5 | 1 | 5 | 1 | | 5 | | | | | | | | 7 | | | 17 | | | | 16 | | 1 | | | | | 11 | 1 | | |
| 31 | | | 16 | 8 | | 3 | | | 3 | | | | | | | | 8 | | | 17 | | | | 11 | | | | | | | | 11 | | |
| 32 | 1 | 1 | 17 | 6 | | 5 | | | 5 | | | | | | | | 9 | | | 18 | | | | 16 | | | | 1 | | | 11 | 1 | | |
| 33 | | | 16 | 11 | | | 1 | | | | | | | | | | 8 | | | 17 | | | | 4 | | | | | | | | 13 | 1 | |

CHART VII

Fifth-Power Multiplied Matrix Showing Fifth-Step Connections
of Mutual Visiting Choices in Village Kanchumarru

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | | |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|--|
| 1 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 9 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 24 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | |
| 31 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CHART IX

Original Matrix of Opinion Leader Choices in Village Kanchumarru

2

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | | | |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|
| 1 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

CHART X

Fifth-Power Multiplied Matrix Showing Fifth-Step Connections
of Opinion Leader Choices in Village Kanchumarru

4. Opinion leaders with the largest number of nominations were also important clique leaders as shown by their visiting nominations but their nominations as leaders also came from members of other cliques.
5. Further scrutiny showed that opinion leaders with the largest number of nominations also held the formal offices in the community, belonged to the upper castes, were economically prosperous and without exception better farmers.

It should be mentioned here again that for purposes of this chapter, the measure of opinion leadership was limited to only one item—advice-seeking on problems of farming. The fact that our respondents went for such advice to economically prosperous, better farmers and not just to people of their own cliques, was not entirely surprising. It is not unlikely that had we asked about matters relating to village politics or voting behaviour in local and national elections, we might have had obtained different results. As far as information on farming goes, the results of our investigation show that cliques and factions neither hinder nor help the flow of information. In an intensive anthropological study of one village in West Bengal, Danda and Danda observed the same pattern. Members of different "gossip groups" which were very similar to our visiting groups crossed the gossip lines to seek information on specialized matters from leaders of other "gossip groups". The authors noticed that this was especially true in regard to information on improved seeds and other agricultural innovations.⁶ It is also interesting in this connection to refer to an important finding reported in an earlier publication on the same data that village factionalism (measured by a factionalism rating scale) was not significantly related to the village level adoption of improved agricultural practices.⁷

6. A. K. Danda and D. G. Danda, *op. cit.* pp. 219-225.

7. F. C. Fliegel, P. Roy, L. K. Sen and J. E. Kivlin, *Agricultural Innovations in Indian Villages*, Hyderabad : National Institute of Community Development, 1968, p. 68.

VII. SUMMARY AND CONCLUSIONS

Our definition of opinion leadership is based on the respondents' source of information and advice regarding farming, credit, marketing and health. We do not have data to study whether the information and advice thus obtained actually influenced the decision-making of the respondents. Following the Erie county voter study of Lazarsfeld, Berelson and Gaudet,¹ we assumed that such interpersonal communication will have some impact on the individual respondent's decision-making. However, the Indian village situation of our study is patently different from that of the voting public in Erie county and other similar situations in regard to the access to and the availability of mass media. The respondents in the Erie county study obtained their basic information from mass media but depended on opinion leaders for forming judgments. In Indian villages, access to and the availability of mass media are limited. Opinion leaders are, therefore, also the primary source of basic information in Indian villages. It is obvious, therefore, that opinion leaders in Indian villages play a very significant role in the day-to-day life of the ordinary villager.

In our comparison of the personal characteristics of opinion leaders and non-leaders we have observed that leaders are much more in contact with the outside world through visits to urban centres, exposure to mass media, education and contacts with extension agents than non-leaders. Leaders are also more progressive than non-leaders in farming as indicated by their higher scores on adoption of improved agricultural practices, farm commercialization and farm labour efficiency. It is logical to conclude, therefore, that the information provided by the leaders to the ordinary farmers will be newer and more scientific than what the ordinary farmer already possessed. The impact made by the leaders on the decision-making of the non-leaders, therefore, will also be in the direction of better farming.

In the Indian village situation, the power relationship between the opinion leader and the ordinary farmer is crucial. Traditionally, the Indian farmer has always operated in a rigidly structured village society. The decision-

1. P. F. Lazarsfeld, B. Berelson and H. Gaudet, *The Peoples' Choice*, New York: Columbia University Press, 1948.

making on matters of farming and similar enterprises which are not strictly personal, has always been made in the context of complex power relationships such as landlord-tenant, upper caste-lower caste and even old and young generational relationship. When the information and advice emanate from a more powerful source, the impact on decision-making is likely to be greater. This observation is based on the writer's personal experience of Indian village society and has been confirmed by numerous anthropological studies referred to in preceding chapters. Looking at the problem from the standpoint of the ordinary farmer, one wonders what, if given a voluntary choice, he would do. Would the ordinary farmer seek an opinion leader who has about the same social background, same socio-economic status and so on, and feel secure in his advice?

Our data are quite clear on this point. The answer to this question is clearly "no". We have seen that opinion leaders have higher caste status and a higher level of living than non-leaders. Belonging to a higher caste immediately establishes a power advantage for the leader over the non-leader, an advantage which is ritualized and legitimized by custom. The higher level of living reflects the *de facto* power advantage of the opinion leaders over the non-leaders.

We have also seen that in the eight sample villages, formal leadership and opinion leadership overlap. The meaning of this in terms of power relationships is that the power advantage of the opinion leaders over non-leaders, sanctioned by custom is also reflected in their higher status in the secular power-hierarchy.

Another interesting finding of this study is that opinion leadership in Indian villages is polymorphic. Thus we have leaders who dominate not only the political life of the village but also other important spheres of village life. They are literally in control of practically the whole range of village life.

Opinion leaders have their own cliques but this does not prevent them from being sought by members of other cliques on matters of importance. Their influence on the village remains unhindered regardless of their clique affiliations.

The reason for this overwhelming influence of the leaders in Indian villages both as formal leaders and opinion leaders should be understood in terms of the social structure and the authority pattern of the village societies. Status and authority in Indian villages are still ascribed, and the fact is recognized and accepted by all. With changing times, the leaders have sought for other secular forms of power such as holding elective and nominated offices, but the overall effect of their position is the same as before.

Our analysis of the innovativeness of leaders in relation to village norms is most revealing from this point of view. We have found that leaders in more modern villages are more innovative than leaders in more traditional villages. However, leaders are further ahead of their followers in the relatively more

traditional villages than in the most modern ones. We explained this by saying that in traditional villages, leadership is even more ascribed than in modern villages and this is why their deviation from the village norms is also greater. In the curvilinear relationship between the leader-follower differences in innovativeness and village norms we have also noticed that the deviation of the leaders becomes less as the community norms become more progressive. In other words, in more modern communities, the ascriptive element in village leadership becomes relatively less important.

With respect to the direction of communication between leaders and followers, the conclusion seems obvious that communication flows vertically from leaders who are at the top of the village power hierarchy to the lower strata. These leaders are preferred for advice and information because of their authority and competence. Friendship ties with peers or clique affiliations do not interfere with the leader-follower relationships. It seems that status heterophily is the determinant factor in this communication process. However, this heterophily goes only as far as the community boundaries. The opinion leaders also need to be an integral part of the village social structure; they need to be "one of us" regardless of how different they are in personal characteristics from the followers.² We see here a combination of homophily and heterophily. Advice is sought from people who belong to the same system but are legitimized and sanctioned by custom to be different from those who seek advice.

Similar patterns have been observed in other traditional settings. In a classic study of the immigrant groups in Israel, Eisenstadt noticed the same pattern of communication flow between leaders and followers among the more traditional immigrant groups from the Middle East.³ He reported the existence of horizontal channels of communication between peers but they were definitely less effective and less important than the vertical channels between traditional leaders with ascribed status and their followers. Eisenstadt suggested that the effectiveness of this "institutionalized, semi-formal, but still personalized communications transmission" remains unhampered as long as the leaders can effectively relate their groups to a larger social system in such a way that the members understand and are satisfied with their places within that system. When the leaders fail to do this, there are hints that the horizontal channels of communication between peers become relatively more important.

In our study, we have found that leaders are much more in contact with the larger society through exposure to newspaper, change agency contact and

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2. A. K. Danda, and D. G. Danda, *Development and Change in a Bengal Village*, Hyderabad: National Institute of Community Development, 1968, p. 214.
 3. S. N. Eisenstadt, "Communication Processes among Immigrants in Israel", *Public Opinion Quarterly*, 16: 42-53, 1952; also see for comparison, J.M. Stycose, "Patterns of Communication in a Rural Greek Village", *Public Opinion Quarterly*, 16: 59-70, 1952.

higher political awareness of the national scene. This is probably a function of the formal positions they hold but it also provides them with the leverage they need to remain in dominant positions. Also they adapt with changing times as shown by their interest in secular activities. We also have found indications similar to Eisenstadt's findings that formal and institutionalized leadership very slowly give way to more informal and more achievement-oriented leadership which is more sensitive to the group's approval.

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6. Bibliography on the Diffusion of Innovations, 1967.
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24. Diffusion of Innovations in Brazil, India and Nigeria.***

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