

File Copy
Do Not Remove
4/15/75

'New' Social Sciences in the Brazilian Rural University

by

Archibald O. Haller

**Professor of Sociology and Anthropology
Michigan State University
East Lansing, Michigan**

**Fulbright Professor of Rural Sociology
Institute de Economia Rural
Universidade Rural do Brasil**

(1962-1963)

Published in

Sociologia

Volume XXIV Number 4

December, 1962

Translated From Portuguese

"NEW" SOCIAL SCIENCES IN THE BRAZILIAN RURAL UNIVERSITY

The Need for Social Science

Practically every Brazilian who knows the rural life of his country speaks of the need for change. Production is said to be low and much of the population is said to be in misery. We hear calls for economic development and for agricultural improvement on all sides. And to a certain extent the desired changes are taking place. But nearly everybody agrees that the rate of change must be accelerated. Yet apparently in many sectors of the society life proceeds almost as it did hundreds of years ago. The campones is said to be hungry, sick, illiterate, and poverty-stricken. The fazendeiro is apparently only a little better off. He wants a better life for himself and his children, but he does not know what to do to obtain it.

For years it was commonly held that the state of Brazilian agriculture was due to a lack of labor - falta de bracos. But Brazil's rural population grew rapidly and the problem remained. Then it became common to speak of the lack of technology. One man with a machine can do much more than many men without machines. But agricultural technology was developed and the problem remained. Then it became common to speak of the lack of capital. But by now it is obvious that even capital together with new technology cannot alone solve the problem. The fazendeiro and the campones have to know that the capital and the machines exist, they have to know how to use them, and they have to be willing to use them. But even this cannot solve all the problems of rural misery, though it might at least help feed the cities. The reduction of rural misery, however, requires knowledge about and willingness to use improvements in sanitation, medicine, nutrition, etc.

So beyond the provision of technological innovations and the capital to buy them, the improvement of rural life requires that the homem do campo know how to use and be willing to use a range of techniques in agriculture, sanitation, medicine, nutrition, etc., which he presently knows little about. Unfortunately, by now it is known that even if he knew about them he would probably reject them.

Why is this so? And what can we do to help the homem do campo improve his lot? It is to help answer these questions that the rural universities in their desire to serve the rural population, are beginning to turn to the social sciences. Already these disciplines have a body of knowledge which can help to provide the answers. Clearly, then, it is wise for the rural universities to develop good programs in these areas. Not that they will in themselves, be the solution to the problem. That is too much to expect. But they are one of several indispensable bodies of knowledge.

This paper will present a more or less ideal picture of the 'new' social sciences and their role in the rural university. We wish to stress that it is not necessarily wholly practicable here in Brazil. For one reason, it may be too large to put into practice in the rural universities. It may be that the Brazilian rural universities are not yet prepared to use a large program in an effective way. For another, it is based largely on our experience in the United States. Obviously, systems which work well in one country do not necessarily work well in another. As a matter of fact, systems which work well in one university do not necessarily work well in another, even in the same country. Even so, this should not be understood as a description of the ways North American agricultural colleges use the social sciences. This is an ideal picture, or better, one social scientist's notion of an ideal picture. It probably does not exist anywhere.

But what is the use of a program which doesn't exist anywhere and which may not even be completely possible? Simply this. I believe that the programs we put into action in the real world are better if we first discover what they would be like if we had all the resources we needed. Having such an ideal pattern in mind, we can cut and trim it to fit the realities of the world around us, eliminating the least important parts.

Clearly, then, this paper is not a plan for the social sciences in the rural university. Rather, it is a statement of what might be desirable and possible given sufficient resources. At most, together with other such statements, and with a clear understanding of the realities, it might help form the basis of a more realistic plan for the development of these disciplines.

The Social Sciences

What are the Social Sciences? Following in part a usage which has grown up since the turn of the century, but which is certainly not wholly accepted, we shall define the social sciences as those fields of knowledge which have as their objective the development of parsimonious and empirically valid concepts to describe and predict human action.

1/ This definition is not without difficulties. For one, it defines history as something other than social sciences. Even more important, the logical name for these sciences would be "action science." But the word "action" has popular connotations of political activity, social work, and the like. For this reason and because the word "social sciences" is much more widely known, we choose to use the latter term.

Action in turn is goal-directed behavior. All man's goal-directed behavior depends upon conceptualization of goals and means. Conceptualization is, in turn, dependent almost wholly on concepts carried by language, a social product. Most of what we call individual action is carried out in a context consisting largely of other persons and their actions. Hence, man's action is social. Moreover, man's social behavior consists in actions with respect to others. Hence, man's social behavior is action.

As defined above, the social sciences show the same objectives as do other sciences. Science consists in the always-incomplete attempt to formulate ever-more valid and parsimonious theory. It is this objective which defines a field as a science. The social sciences have this aim, and they use a methodology which can help achieve it. Nevertheless, there are differences among and within them in the degree to which this objective is realized. In some, the experimental method is used to considerable extent. This is especially true in social psychology. Sometimes, too, relatively rigorous approximations to the experimental method are used when true experiments are impossible because of society's objections. As a matter of fact, these sciences produced much of the work on which modern statistics is founded. As a recent case in point, multiple factor analysis was invented by Thurstone in the 1930's especially to solve problems in psychological theory. It has since been used in the physical and biological sciences. At the University of Wisconsin an expert in the physical geology used it to test hypotheses about the behavior of volcanos. Indeed, I know personally, a Michigan biological scientist who rediscovered factor analysis in about 1955 while working on a problem in genetics, and published it in an agricultural journal before discovering that he was 20 years behind Thurstone.

But what are the disciplines that fit the definition of social sciences? For all practical purposes they include all of sociology, social anthropology, and social psychology, most of psychology, perhaps all of economics, and part of political science. Sociology and social anthropology are, theoretically, the same field. Their special focus is on the study of the structure and changes in social systems. They are given separate names only for historical reasons. Nevertheless, they have tended to have special focuses: those who call themselves sociologists tend to study highly complex social systems or their sub-systems; those who call themselves social anthropologists tend to study smaller, simpler tribal social systems. But both use the same concepts. Psychology is the general science of behavior of organisms. Behavior is a concept which is more inclusive than action; all observable motions in organisms are behavior. But action is one kind of behavior - organismic motion which is directed by goals. Psychology, then, is not only concerned with action, but also with other types of behavior. Similarly it is concerned with non-human behavior. Nevertheless, a great deal of psychology is concerned with human action, especially those parts focusing on learning theory and personality theory. These latter parts of psychology may be considered to be part of social science. Social psychology is often thought of as either a branch of psychology or a branch of sociology. Probably it is both. Like biochemistry it links two fields. It is concerned with the influence of social systems on human organisms and with human organisms on social systems. Economics is a science because it is concerned with formulating and testing theory with respect to its subject matters: supply and demand,

price structure, and related subjects. It is a social science because all economic actions are ultimately actions of individuals or groups with respect to each other. Finally, the field called political thought and who develop plans for the perfection of human political systems, often with little regard for the empirical realities of such systems. The other camp consists of those who use the methods and theory of sociology and psychology in explaining political actions. The latter camp, which is often called "political sociology," is clearly a part of social science.

The 'New' Social Sciences. In point of fact none of these sciences are really new. Even the most recent of them has been in existence for more than a half century. They are the work of many people from many nations: George Simmel, Max Weber, Kurt Lewin, and others from Germany; Freud and the neo-positivists from Austria; Durkheim and others from France; Malinowski, Radcliffe-Brown and others from England; Boaz and his students, the Chicago School, the behaviorists and others from the United States. But to the present they are practically non-existent in the Brazilian rural university and that is the sense in which we may call them new. These fields are sociology, social anthropology, social psychology and psychology.

Theoretic and Applied Social Science. Properly speaking, social science is a theoretic endeavor because it has the development of interrelated concepts as part of its definition.²

2/ Social science theory is today in a promising but still somewhat chaotic state. There are a few fundamental concepts which are generally agreed upon, but they are described by an enormously varied vocabulary. Indeed, one may doubt that there exists yet a unified social science theory, although Parsons and others have tried to formulate one. To many of us it seems that most of the ingredients are present but that we are still lacking the means for bringing order among them. In the meantime, we have a considerable number of low-level theories which proceed from similar or consistent bases: relatively concrete theories of adoption of innovations, delinquency, occupational achievement, social mobility, intergroup relations, etc., and more abstract theories such as the theory of cognitive dissonance.

All of the above fields are primarily theoretic disciplines, just as are physics and chemistry. But like the latter, their applications are many. To the extent that practical disciplines which deal with human relations use social science theory to guide their work, they are applied social sciences. In a large measure education, extension, and community development, for several examples, are just such applications of the theoretic social sciences, though, of course, they are mixed with considerable traditional non-scientific lore, as well as sound knowledge which comes out of practical experience rather than tested theory.

The Functions of the 'New' Social Sciences in the Rural University

The rural university exists to help rural people develop a more satisfactory way of life and to improve agricultural production. It does this in three ways: by developing knowledge of rural people and of agricultural technology, by communicating its discoveries to rural people, and by training young people in the theory, methods, and findings of the various disciplines. The first of these, the development of knowledge, is called research. The second, communication of findings, is usually called extension, but this term should be understood broadly to include all forms of direct communication of knowledge to rural people. The third, training the young, is called teaching. The "new" social sciences should perform each of these functions.

Research

With respect to research the functions of the "new" social sciences are three-fold: 1) Social problem research, to develop valid and useful explanations for problems which beset rural people; 2) Evaluation research, to test the effectiveness of proposed rural programs; and 3) Basic research, to develop ever-more accurate theory of human action.

1) Social Problem Research. By social problems, I mean wide-spread patterns of action which either impede peoples' attempts to improve their lives or which are detrimental to the national welfare. One such problem is the so-called "resistance" of rural people to new and useful ideas in sanitation, health, agriculture, marketing, and the like. The social sources of this "resistance" should be isolated. Fortunately, here there is already a fund of knowledge to go on, but few people seem to be aware of it. Another such problem is the population explosion. Research should be conducted to discover how the nation can introduce controls on the rate of population growth controls which are acceptable to the rural Brazilian value system. For another, we know that there exists an enormous migration of rural people to the cities, and we know that these people are ill-prepared to live and work effectively in their new homes. Research is needed to tell us what they should be taught and how to teach it in order to improve their lives in the city. For still another, the campones is now entering the national political life. Research should be conducted to describe these new movements, the pressures which produce them, and the pressures which often turn them against the rest of the society. The practical aim of these studies would be to smooth their entrance into the political life of the nation, and to help them to fulfil their potential contribution to the nation. For still another, we need to find out how to use television and films as effective communication devices for improving the lot of rural people. Because of their inexpensive mass coverage, they have much promise. But experience with them to date has shown them to be almost useless in communicating with the campones. But we can learn how to do so. A final example concerns land reform. We need research which can tell us what are likely social consequences - such as changes in family structure, migration, work habits, levels of living, and patterns of government - of various proposals for land redistribution.

2) Evaluation Research. Schemes for improving one aspect or another of rural life are constantly being proposed and put into action. Many are failures. We need to use social science theory and methods to test scientifically the effects of many such proposals before they are made into large-scale policy. Doubtless much of Brazil's valuable resources could be saved and used elsewhere if unworkable programs were detected early or if the difficulties in workable programs could be found early. For example, extension personnel often debate the relative merits of one technique over another. The social sciences should organize carefully-designed experiments to settle some of the debates with systematic evidence.

3) Basic Research. Basic research is a continuing need of any science because it clarifies theoretical concepts and tells us where there are important gaps in theory. Good theory, in turn, is indispensable in the search for an explanation of social problems. It follows that the rural university should encourage basic research - research which exists only to develop better theory and methods - so that the social science personnel will continue to visualize rural life and its problems from new and valid perspectives.

It should be emphasized that this includes translating into Portuguese fundamental works which already exist in other languages, and it includes writing theoretical works for publication in books and in technical journals and writing and publishing text books. The former is important to insure a continuous flow of useful information into the departments; the others are important because they permit the scientist to develop better concepts or theory which can be used by his colleagues, and because they aid in the instruction of young scientists and technicians.

Research Which Needs to be Discouraged. On the other hand, "community studies," projects which aim to describe all aspects of life in various communities, almost indiscriminately selected, should be curtailed. These were useful. They provided basic descriptions of rural ways of life. Today, however, we probably already have a sufficient number of such reports. Additional ones would probably contribute next to nothing toward the solution of persistent social problems, toward program evaluation, or toward the development of rigorous theory. More generally, research which does not have a specific, clear objective, practical or theoretical, should not be conducted.

Extension

In extension, too, the "new" social sciences have important roles. These include 1) community development and 2) interdepartmental program planning.

1) Community Development. The aim of community development is to help communities learn to recognize their own problems and to help them discover how to solve them. The "new" social sciences should work directly with communities, teaching citizens - young and old, men and women, rich and poor - how to recognize where problems exist and how to organize themselves and their resources to solve them. This could include advice on how to improve schools, where to go to for loans for hospitals, or for consultation on how to improve sewage or water systems, or how to organize and maintain marketing cooperatives, etc.

2) Inter-Departmental Program Planning. The social science extension personnel can help the extension programs of other departments in two ways: by suggesting problems which need solutions, and by suggesting ways to introduce the solutions into the groups who need them.

First, good training in the "new" social sciences increases one's ability to see problems in human living conditions and solutions to them, just as good training in botany increases one's ability to see diseases in plants and ways to eliminate them. One of the most important roles, therefore, that the personnel in such a program can perform is to participate in extension program planning in all departments of the university. With respect to the Department of Rural Engineering the social scientist might suggest the need for simple and sanitary water systems or new methods for improving the construction of the pau a pique house, or simple but useful ways to improve the caboclo's life through the use of cheap materials such as bamboo. With respect to the Department of Domestic Economy, he might suggest the need for simple hygienic techniques, or equally simple dietary improvements. To the economist he might suggest simple ways to organize workable marketing co-operatives for farmers.

Second, within a few years, these social scientists will have a good knowledge of the relative effectiveness of various extension techniques. Besides, they are likely to be able to anticipate barriers to the acceptance of new ideas. Thus, they can help other departments select the most likely methods by which to gain acceptance of technical innovations.

Teaching

The main teaching objectives of the "new" social sciences are: 1) to provide an accurate, objective view of the problems of Brazilian rural society to first-year superior-level students, 2) to provide, to fourth-year superior-level students, an introduction to the concepts and methods of the social sciences, 3) to provide specialized post-graduate training in the theory and methods of the social sciences, and 4) to participate in the post-graduate training of extension workers and others who work directly with rural people.

1) First-Year Students. Brazil is a huge and culturally diverse nation. Except for "folclore" and stereotypes, the people of one state often know very little about the people of another. Moreover, the rural people are highly stratified. Even though they may live side by side, the family in the casa grande and the family in the pau a pique house remain ignorant of each others' lives. Thus the student - usually from the middle class - who enters the rural university doubtless knows very little about Brazilian rural life. From his studies in classes he learns the technical subject matter, but often he has practically no realistic conception of how the subject matter can be applied. Beginning students should be given instruction in the structure of Brazilian rural society; its problems, its cultural types, its relations to urban society. The Bahiana fazendeiro's son should learn to know the São Paulo caboclo, and the Santa Caterina German boy should learn to know the Mineiro village family. In short, this course should describe Brazilian rural social organization and culture. It would then serve as a frame of reference which can help the student understand the social objectives of his technical courses. It should be obligatory.

2) Fourth-Year Students. The cultures, the social structure, and the problems of rural life are rather easy to teach to students, even when they have very little preparation. But the more basic theory and the methods of 'new social sciences require both that the student be mature intellectually and that he have a good understanding of the scientific method. Because the students all have strong, often factually erroneous, beliefs about man and his behavior, it is especially important that they be mature enough to treat alternative conceptions of man as hypotheses which can be tested scientifically. Besides, it is important for them to know the experimental method and statistics because these are the bases on which social science knowledge rests. For these reasons, the student's introduction to the theory and methods of the 'new' social sciences should wait until the last year in the university.

But why does he need to know it in the first place? Simply because he must understand people if he is to work with them, and in many cases he or others will have to work out explanations for their behavior. Valid explanations flow from valid general theory and from adequate methodology. A knowledge of the basic principles and methods of the 'new' social sciences will provide the basis for his analyses of the behavior he encounters in his work. This course, too, should be obligatory.

3) Specialized Post-Graduate Training. This type of training is primarily in research methods and theory. Its objective is to produce persons to man the 'new' social sciences departments of the Brazilian rural universities, as well as rural social scientists for new positions in government agencies. While the rural universities are developing programs in this area we can expect to see an increase in the demand for trained persons. Perhaps later this demand will decrease when the new positions in the rural universities are filled. But there will continue to be at least a small demand for these people. We can expect that for a few years the M.A.'s and Ph.D.'s in this area will be supplied by foreign rural universities and perhaps by the Fundacao Escola de Sociologia e Politica. These facts argue for a small, specialized post-graduate program. There seems to be no justification at the present for the Brazilian rural university to try to produce large numbers of M.A.'s and Ph.D.'s in the 'new' social sciences. Hence, when the university is prepared, it should concentrate on training one or two well-selected new post-graduate students per year, providing them with high-quality training. For the most part these people will be replacements for the first group of social scientists in the rural universities, and they should be trained well enough to be university professors.

We are suggesting that these few men become rigorously trained experts in their field. Brazil must eventually take over the training of its professors in these areas just as it has done in other areas. It should not continue any longer than necessary to depend on other nations. The universities should plan now to take over this responsibility as soon as they are themselves qualified to do so.

4) Post-Graduate Training of Extension Workers. By extension we mean all those sectors of agriculture and other rural subject matters which are involved in communicating new ideas and techniques to rural people. There is and will continue to be a large demand for extension specialists, both in the universities and in government. These people may be drawn from all the rural curricula, especially agronomia. The objective of their post-graduate training is to better prepare them to work with rural people. The training will probably be for about one year and will require courses in extension methods, economics, community development, and specialized communication techniques. The 'new' social sciences should participate by providing the students with a theory of human behavior, including group dynamics, social structure and behavior, interpersonnal and intergroup communication, etc. Social science training should be obligatory for this group.

Personnel

A social science program which can fulfil the above objectives must draw upon all of the four disciplines which make up the 'new' social sciences. Sociology and its twin, social anthropology, will contribute to the university's tools for improving methods for introducing changes among rural communities and families in that they will show the parts of the social structure which facilitate or impede change. Social psychology and those parts of psychology which deal with human behavior will help us to understand how to help rural people learn new ideas, to understand differences in individuals which produce variations in the adoption of new ideas, and to understand reasons why people react in unanticipated ways to presumably rational suggestions.

Faculty Training. Clearly, however, we cannot expect the rural universities to hire a highly but narrowly trained specialist in each one of these four disciplines. For the next decade the demand for their services will probably not be great enough to support more than three specialists even in the largest of the universities. Besides the objectives of the program require a considerable over-lap in knowledge with each other and with economics. But personnel with profound knowledge are needed in some of the areas. Thus we must find a reasonable compromise. The first persons comprising such a program should be specialized in one of sociology, social anthropology, or social psychology, and have additional training in other two, plus a little training in economics or psychology and in communication, as well as extension methods and community development. In particular the social psychologist should familiarize himself with the theories and methods of psychology. For the present, it is not necessary to have a specialized psychologist in the rural university, although such a person will be needed when the universities develop schools of rural education. In general, each of these people should have enough training in the specialty of the other so that they can communicate easily with each other, yet have training diverse enough so that each can make an unique theoretical and methodological contribution to the program.

The first faculty members should be trained in one or more of agricultural universities which have strong social science programs and which most closely approximate the needs of the Brazilian rural universities. There are many universities in the world and the writer cannot claim knowledge of all of them. The strongest of these, however, appear to be the University of Wisconsin, Michigan State University, and Cornell University in the United States, and Wageningen University in the Netherlands. The graduate social science training programs of these universities seem to be about equally good. Wisconsin has separate departments of Rural Sociology, Sociology, and Anthropology. A prospective rural university social science professor should, at Wisconsin, major in Rural Sociology, but take collateral programs in the other two departments. Michigan State University has one department called Sociology and Anthropology, which provides graduate training in Sociology, (including Rural Sociology), Anthropology, and Social Psychology, the latter in cooperation with the Department of Psychology. At that university the prospective faculty member can take all of his social science training in programs administered by the one department. Cornell has a Department of Rural Sociology and a Department of Sociology and Anthropology. If our future professor goes to Cornell he should major in Rural Sociology but take heavy training in the Department of Sociology and Anthropology. Wageningen has two chairs of Rural Sociology, one concentrating on problems of economically developed areas and the other on problems of economically under-developed areas. In that university, our prospective professor should study in both.

This is not to say that these are the only possible rural universities in which to study the 'new' social sciences. In the United States, for example, Pennsylvania State University, The University of Florida, Ohio State University, The University of Minnesota, Iowa State University, Washington State University, and Mississippi State University, among others, have good graduate programs in these disciplines. Also, rural social scientists in Pennsylvania and Florida, as well as Wisconsin, Michigan State, and Cornell

have had experience in Brazil. Moreover, the Fundação Escola de Sociologia e Política in São Paulo also has a strong program in the social sciences leading to the M. S. degree. There is, in addition, one year post-graduate program in rural social studies in the same school. Courses from this program may be applied to the M. S. degree. A prospective professor who studies there should plan to complete the degree.

Whatever the selection of schools, the personnel should be well-trained. The prospective faculty member should be prepared to study for at least two years. It is true that under favorable conditions a Master's degree may be earned in one year. But the degree is less important than the training, and competent specialists cannot be developed in less than two years. As a matter of fact, some of these people should remain for about five years to complete the Ph.D. degree, thus assuring a very high level of competence.

Division of Tasks. Assuming the program has at least two professors, each should participate to some extent in each of the functions of the department. The myth that research workers should only conduct research, teachers should only teach, and extension workers should only do extension work is evidently false. At least in the United States experience, within limits the most productive work in each of these areas seems to be done by people who are involved in all. Nevertheless, there should be some division of tasks because extension, in particular, involves the person in a great deal of travel away, while most of the work in research and teaching are conducted at the university. This implies that one person should be especially responsible for the extension tasks. He should work most closely with the extension groups in other parts of the university, and provide consultation with lay groups outside the university. He should also have the responsibility for conducting the social science contribution to the training of extension workers, and when possible he should contribute to teaching the fourth-year social science course. Finally, he should take the lead in evaluation research. Beyond this, if he has time he should be permitted to conduct research on problems which interest him, including basic research, and to participate in training of post-graduate specialists. The others should take the major responsibility for under-graduate instruction and for the post-graduate training of specialists in the social sciences. They should be encouraged to conduct both problem-centered research and basic research, and should aid in the conduct of extension work and training where their particular competences can make valuable contributions.

Facilities

Good work requires a certain amount of equipment. Both extension and research require adequate transportation to the rural areas. Each of these functions will require at least one sturdy car, capable of traveling on bad roads. When full-scale research teams are in the field, the social science program may require several additional cars. Obviously, sufficient resources should be available to supply them. In addition two or three good fully-automatic calculating machines and a mimeograph machine would be indispensable for research and teaching purposes. It would also be well to have a simple data-analysis laboratory, consisting of punch, a verifier, and a counter-sorter. This equipment could be shared with other programs. Funds should be available, as well, for competent typing help and for office supplies.

Conclusion

The need for social science programs in research, extension, and teaching is great. Knowledge concerning the material conditions for improving life in the rural areas already is abundant. The social sciences can help the socially conscious Brazilian rural university introduce this information into rural society. We cannot expect overnight changes, but a good social science program in an active university can, over the years, make an important contribution to resolving the problems of low production and rural misery. Let us work toward that end.