TITLE DECISION-MAKING IN RELATION TO PROPERTY ON A COSTA RICAN COFFEE ESTATE

AUTHOR THOMAS LEONARD NORRIS

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By

Thomas Leonard Norris

A THESIS

Submitted to the School of Graduate Studies of Michigan State College of Agriculture and Applied Science in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Department of Sociology and Anthropology

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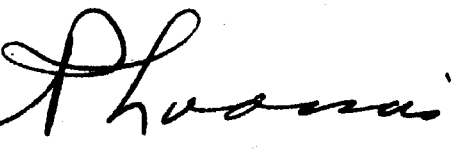
Approved 

Thomas Leonard Norris

ABSTRACT

The questions with which the study are concerned center in the land, its uses, and the relations which obtain among the occupants of the land in achieving those ends and goals towards which life on Aquiares, a large coffee hacienda, is oriented. More specifically, the following queries were formulated:

1. To discover how the population of the coffee estate is organized in terms of coffee production.
2. To describe the system and its sub-systems, especially with regard to how peers, subordinates and superordinates are identified in terms of the hierarchichal authority structure of the local community.
3. To determine how relationships to locally conceived categories of property affect one's membership and position in a sub-system within the total structure of interpersonal relations on the estate.
4. To describe how decisions are made within the larger agricultural system.
5. To discover which structural positions in each sub-system are most strategic in the decision-making process.

Aquiares, one of the largest coffee haciendas in the Turrialba Valley of Costa Rica, lies at the southeastern base of Turrialba volcano. The estate contains 2,369 acres and supports a population of 1372 persons. Seventy-eight families operate coffee lots as tenant farmers or sharecroppers (colonos), and about one hundred and thirty families are day-wage employees.

The population is organized primarily in terms of coffee production. Three systems characteristic of large Latin American hacienda-type estates are found, namely, administrative, managerial, and peon systems. A fourth, the colono system, is basically a tenant farmer or sharecropping operation, but is not common in other places in Costa Rica. Its importance for this study lies in the fact that almost half of the total population on the estate are colonos and their families. Furthermore, more than half of the land in coffee is operated under the colonia system.

The rationale which accounts for the division of the labor force into systems such as the administrative, managerial, peon, and colono is derived from the place which control of or possession of property occupies as that measure recognized by the population which distinguishes these systems. The administrative system is so designated because its members maintain the greatest degree of control over the property in question, namely the estate. Managerial status permits one, by a system of tips, bonuses and higher wages to accumulate not only more property than peons or colonos, but also certain kinds of property to which prestige value is attached. Few colonos or peons can purchase a small independent farm, but this goal is within easy reach of managerial employees. Difference in status between these systems is further reflected in other items such as housing, radios, urban vs. peon style clothing, iron stoves, shoes, etc.

Structural positions within each system are ordered by the general organization of the estate. In the administrative system, there is a unilinear chain of authority and line of communication between the owner and the administrator. In the managerial system, the chain of authority is somewhat split up between the overseer, foreman of the beneficio, chief

carpenter and some specialists. However, the overseer is in more direct control of the total labor force since he makes the initial assignments of laborers. Competition among managerial employees is minimized, however, by a highly explicit division of labor. The colono has higher status as a rule than the peon and this status differential can be traced to proximity to and control of property or the means of production.

Only some decision-making processes involve the modification of the behavior of others from normal, expected channels. Usually, decision-making in Aquieres is a highly explicit procedure in the sense that there is seldom any doubt as to the locus of authority in the situation under question. A typical decision of this type would be that of the overseer made each day relative to the work assignments for the current day. Three unusual decision-making situations are introduced into the study to illustrate the dynamics of the decision-making process when dealing with new and unique problems. Such situations are particularly relevant to the change agent since the consequences of his program imply modification of established and traditional behavior patterns. The relations obtaining among positions of varying status in the general authority hierarchy of the estate were altered but slightly in these atypical situations. Thus there is something of a halo effect emanating from the general organization and influencing the course of events in secondary activities.

This study, in summary, is a descriptive and analytic account community organization around one major theme: coffee production. The problems treated in the study are designed to further existing knowledge of Latin American social systems as well as to provide a basis for applied programs.

ACKNOWLEDGMENTS

The author is grateful for the guidance and counsel of Dr. Olen Leonard, the thesis advisor, Dr. Charles P. Loomis, head of the Department of Sociology and Anthropology and the Area Research Center of Michigan State College, and to Drs. Julio Morales and Ralph Allee of the Inter-American Institute of Agricultural Sciences for the use of Institute facilities.

Dr. Reed Powell's pioneer work on the Community Studies Project in the Turrialba area furnished a broad background of knowledge for large and small landholdings. Mr. Charles H. Proctor and Mr. Norman H. Painter, co-workers of the author in the field, have made inestimable contributions to the organization of the study. Mr. Antonio Arce, assistant sociologist at the Institute, gave invaluable aid in gaining entrance into the community. Among the many Aquiareños who gave time and effort were don Gilberto Duran, don Carlos Rojas, don Cerbiliano Duran, don Ernesto Vargas, doña Lena Jimenez, don Jose "Pepe" Luna, and don Hector Vargas.

Prof. Kenneth Tiedke rendered valuable assistance in organizing the data and Dr. John Holland offered many helpful

criticisms of the conceptual framework. The author is grateful to Dr. J. Allen Beegle for his time and effort in editing the manuscript.

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CHAPTER I

INTRODUCTION

In the fall of 1950, three area research assistants from the Department of Sociology and Anthropology of Michigan State College were assigned to the Department of Economics and Rural Social Welfare of the Inter-American Institute of Agricultural Sciences located in Turrialba, Costa Rica. The research activities in which they were to participate were a part of a cooperative program then being developed between the Institute and the Area Research Center of Michigan State College.[1]

A research area of the Institute was the study of the use of human and natural resources in terms of production. As a division of labor, the Department of Economics and Rural Social Welfare undertook the analysis of levels and standards of living in the Turrialba area as related to production per man unit, and the investigators from the Department of Sociology and Anthropology of Michigan State College assumed the responsibility for a descriptive analysis of selected rural social systems in Turrialba.

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1. Area research assistants were Charles H. Proctor, Norman W. Painter, and the author, Dr. Charles P. Loomis, head of the Department of Sociology and Anthropology and founder of the Area Research Center of Michigan State College, arrived two months earlier and remained until June 19, 1951.

The unit chosen for investigation in this particular study was a single, large coffee estate. Methodologically, the study was designed to utilize field techniques commonly associated with participant observation. Activities of the field worker, however, were not limited entirely to the agricultural system of this large landholding. The Institute desired other specific kinds of information for use in other projects as needed. As the study developed, the field worker became involved in such activities as health and nutrition, the analysis and evaluation of an extension program initiated through the local school system, relations between this community and both the general and specific programs of the Institute, and certain team projects initiated by other members of the department.

Statement of the Problem

The questions with which this study is concerned center in the land, its uses, and the relations which obtain among the occupants of the land in achieving those ends and goals towards which life on this estate is oriented. There are two assumptions underlying these questions. First, it is assumed that human interaction and convergence of interest give rise to real and persistent patterns of interrelations between and among men.[2] Second, it is assumed that these patterns of

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2. A. R. Radcliffe-Brown, The Nature of a Theoretical Natural Science of Society, pp. 25-26. Chicago: University of Chicago Bookstore, 1948.

interrelations are arranged to form social systems which can be objectively described, classified, and interrelated.

With these assumptions in mind, the study was given direction and focus by formulating the following more specific queries:

1. To discover how the population of the coffee estate was organized in terms of coffee production.

2. To describe the system and its sub-systems, especially with regard to how peers, subordinates, and superordinates were identified in terms of the hierarchical authority structure of the local community.

3. To determine how relationships to locally conceived categories of property affected one's membership and position in a sub-system within the total structure of interpersonal relations on the estate.

4. To describe how decisions were made within the larger agricultural system.

5. To discover which structural positions in each sub-system were most strategic in the decision-making process.

The data of the inquiry are patterns of observed inter-personal relations between and among positions within the larger system and its sub-systems. These are related to the agricultural system as a going concern in terms of reciprocal obligations, rights, duties, and immunities. These data are relevant not only to the goal of adding substantively to knowledge of social systems, but also to the change programs in which the Institute is engaged in cooperation with various Latin American governments and international research organizations.

The Strategy of Research

Aquiares Hacienda was chosen as the site for the research. The reasons for its selection were numerous, but most important were its relative stability as a community, its unique colono system, its comparative isolation, and the fact that it had not been subjected previously to long and constant investigation by Institute personnel.

Within the framework of the social anthropological approach, finding answers that lead to the development of testable and relevant hypotheses is largely a function of the strategy and experience of research itself. At least the

following phases are involved: (1) initial entrance into the community; (2) the establishment of a role acceptable to the community at large; (3) the solution of special problems, especially language, diet, and housing; and (4) the collection of data through the medium of research techniques which abstract from the universe selected material appropriate to an understanding of how the community operates in terms of the problems which have been stated.

Initial entrance into the community. Experience in field work seems to indicate that the investigator can achieve approved entrance into a community more effectively if he possesses some prior notion of the social structure of the community. As suggested by Kluckhohn:

> "In some societies it is absolutely crucial that the field worker's first sponsors have status or prestige. In stratified societies, one can move down if one's original identifications are at or toward the top, but it is difficult or impossible to work up the scale."[3]

In the present study, the decision to enter the community through the "top" was based not only on the assumption that large hacienda-type estates are likely to be highly stratified, but also on the consideration that this estate was

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3. C. Kluckhohn, "The Personal Document in Anthropological Science" in The Use of Personal Documents in History, Anthropology, and Sociology by Louis Gottschalk, Clyde Kluckhohn, and Robert Angell, pp. 110. New York: Social Science Research Council, Bulletin 53, 1945.

legally the private property of a citizen without whose express approval entrance into the community would have been legally questionable and strategically inadvisable.

To initiate the field research, Dr. Charles P. Loomis, Director of the Area Research Center, Mr. Antonio Arce, assistant sociologist at the Institute, and the writer, who served as field worker, met with the patron (owner) of the estate at his office on the hacienda. The administrator of the estate was also present. The proposed research was explained in terms of the interests of the Area Research Center of Michigan State College. The field worker was introduced as a graduate student interested in gathering data on the social life and customs of local inhabitants. Especial interest was shown in the colono (sharecropping) system which is part of the organization of the estate and considered a unique approach to the solution of labor shortages in Costa Rica. The conversation was conducted in Spanish for the first half hour of the interview, but shifted to English when the assistant sociologist, Mr. Arce, illustrated the work of a previous student in the form of sociograms. The immediate interest of the administrator in the clique structure of various nearby communities, as represented in the sociograms, helped to reduce the formal atmosphere which had prevailed. The interview terminated with the blanket approval of the study by the patron.

The field worker and Mr. Arce made several trips to the estate during the ensuing weeks to arrange for food and lodging. Arrangements were made with members of the local school board to use the school for sleeping quarters until the field worker could become sufficiently immersed in the local community to make an appropriate choice of a family with which to live. The police agent, whose wife was completing her twentieth year as a teacher in the school, offered board.

A bed, linen, and a Coleman gas lamp were provided by the Institute. The Institute also supplied paper, desk supplies, and transportation between the estate and the Institute. The Institute also provided a minimum monthly subsistence allowance. Clothing, typewriter, photographic equipment and personal articles were provided by the field worker. The administrator offered the use of horses on the estate.

Establishing a role. The problems of entering a strange community and establishing an acceptable role are contingent not only upon the personality of the investigator, but also upon the local social structure. A highly stratified social system frequently is characterized by conflicts between sub-systems and by varied ends, goals, and interests; hence, the field worker must decide with whom to identify and the manner of effecting the identification.

The manner of gaining entrance into the community often conditions the subsequent role which the field worker assumes and with which he becomes identified. Care was taken in the interviews with the patron, members of the school board, and police agent to emphasize that the field worker was from a North American college and was merely making use of the facilities of the Institute. This distinction was made for two reasons. First, identification with an academic institution far removed from local, regional, and national affairs, tended to make the study appear potentially less dangerous to any local vested interests. Second, since the Institute is an organization openly engaged in applied science in conjunction with action programs, it would seem inevitable that there would be some enemies in some, and perhaps all, strata with which there had been contact. In fact, workers at the Institute reported numerous negative attitudes toward the Institute on the part of people in the Turrialba area. For these reasons, it seemed desirable, at least in the beginning, to minimize identification with the Institute while emphasizing the more "harmless" role of the student from a foreign land.

While the study of native social life and customs was given emphasis in approaching the patron, the study of coffee production was stressed more among the natives themselves, although the original interview included both elements.

Throughout the field experience, the field worker perceived no hostility directed against himself. This does not mean that he achieved perfect rapport. Some informants were visibly nervous when confronted with an interview schedule, even though they were well acquainted with the investigator. Others hesitated to make an appointment for an interview until assured that the field worker's activities had the sanction of the patron. There were a few instances in which informants flatly refused to answer sociometric choice questions, though willing to complete the remainder of the schedule. On the whole, however, relations with persons on all levels were cordial and amicable.

Special problems. Spanish is spoken almost exclusively in Aquiares. The patron, who was of English extraction, and the administrator, who was of German extraction, both spoke Spanish fluently and used it in talking to each other and to native personnel. Although the field worker read, wrote and spoke Spanish, certain localisms required mastery, and special forms and usages were considered more appropriate in this area.[4]

The field worker spent much of his first few weeks of residence in the company of the administrator, mandador (overseer), foremen, and police agent, traveling around the estate. In this

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4. For example the formal "you" (usted) is used among members of the immediate family rather than the familiar "you" (tu), a practice which varies in different parts of Hispanoamerica. The use of "tu" in Aquiares is largely confined to the patron in addressing natives, among children and youth of the same sex, and between godparents (padrinos) and godchildren (ahiados).

way, he learned something about the complexities of coffee production and began to acquire a vocabulary of terms associated with coffee technology, without which conversation with the natives would have been more difficult. Other activities, such as futbal (soccer), were of great local interest and special vocabularies associated with them were learned as rapidly as possible.

The wife of the police agent, who prepared the meals of the field worker, was aware of the problem of adjusting to a new diet, and cooperated willingly in providing a few items which the field worker felt he could not forego, such as oatmeal or boiled drinking water.5 The field worker always made an effort to eat some of every food placed before him. He assumed that neighbor women would ask about the adjustment of the stranger and consequently was concerned about giving a favorable impression to his hosts. From notions of North Americans with whom they had previous contact or had heard about, the hosts frankly admitted

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5. Health specialists who seem preoccupied with the failure of the natives to boil water in this area seem to have overlooked the fact that these people seldom drink cold water as a beverage. Generally, water is mixed with sugar cane and boiled. This beverage, called "sweet water" (agua dulce), is probably more popular than coffee, as well as less expensive. The hosts of the field worker expressed amazement at the quantities of plain water (four to five glasses daily) which the field worker consumed. The comment was "why have it plain when you can have it sweet?"

that they did not believe it possible for the field worker to adjust to the native diet. Perserverance in this matter constituted, in the judgment of the field worker, one of the more strategic elements in establishing rapport.

After a month of residence, the approaching school term made it necessary to consider other sleeping quarters. This was a difficult problem since most housing units were overcrowded. Places with sufficient space for an additional guest with all his paraphenalia were few. Finally, arrangements were made to rent a room in the home of a commissary worker. The house was old and in poor condition (slight pressure from the thumb was sufficient to push a hole in the wall), but it was close to the central area. It overlooked the church, meat shop, school, beneficio (coffee processing plant), central office, stable and afforded a view of the whole central housing area. There was electricity at night, and the head of the family had improvised a shower and built an outside privy. A pipe brought water from a nearby stream. There were two children in the family, a boy aged five, and a girl aged three.

Collecting data. The following techniques were used in gathering data while in the field: (a) interviewing; (b) direct observation using a check list and a set of life activity

categories suggested by Coon[6]; (c) participant observation; (d) a schedule; and (e) private and public documents. This wide range of sources was necessitated by the responsibilities placed upon the field worker to provide information to persons engaged in other research at the Institute. For this reason, a large quantity of data not directly relevant to this study were gathered. While this may have placed limitations in the sense that the attention of the field worker was spread over a wide area, it served to provide insight into many systems of relationships which otherwise might have been overlooked. It also posed the problem of establishing the relationship of these systems to those with which the field worker was primarily interested.

(a) Interviewing. The field worker held frequent interviews with the patron who was especially valuable in providing specific information on the history of the estate, the rationale behind the colono system, and general problems in coffee production. The administrator invited the field worker to dine in his home about every fifteen days, and the informal conversations during these occasions brought out much valuable information on the attitudes accompanying his position in the estate organization as well as his conception of his own role.

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6. Dr. Paul Morrison of the Department of Geography of Michigan State College, who was then engaged in research in Turrialba for the Office of Naval Research provided a list of questions on coffee production which was useful. The life activity categories used were taken from Carleton S. Coon's A Reader in General Anthropology. New York: H. Holt, 1948.

Formal and informal interviews were conducted with the mandadores, police agent, school officials, and various foremen. They frequently accompanied the field worker on his trips around the estate, especially in the early period of residence. Formal interviews and later correspondence were conducted with a former superintendent of the estate. This man had introduced the colono system, and after leaving his duties as superintendent, rose to national prominence as Secretary of Agriculture of Costa Rica. He had long been engaged in research in agricultural problems, and his experience as a private land owner, administrator and manager gave him insight into the larger agricultural problems of the nation, especially from the viewpoint of the owners. Formal interviews were also held with two owners of large estates in the Turrialba area, and a number of informal interviews were conducted with independent agriculturalists in communities of small family-sized farms. Interviews were also held with doctors from the Social Security Hospital, school administrative officials, priests, and visiting tradesmen such as the local butcher, lottery vender, bread man, and door-to-door salesmen.

(b) Direct observation. Many of the activities in coffee production are not described in detail in this study as

they have been documented elsewhere.[7] Dr. Paul C. Morrison collaborated with the field worker in the attempt to describe the technical aspects of coffee production, geographic features, housing and buildings, and mapping, and provided the extensive list of questions which served as a check list.

For a general overview of the life of the community, the fifteen life activity categories suggested by Coon were used as points of reference. These include: getting raw materials; carrying; processing; trading; testing; and experimenting; leading and deciding; teaching and learning; sharing; mating, eating, drinking and feeding; playing; fighting; entertaining, grooming and healing; and worshipping.[8] Thus, church services and other religious observances, recreational activities, economic pursuits, family life, etc. were observed in detail.

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7. T. L. Norris and P. C. Morrison. Some Aspects of Morphology and Life on a Large Costa Rican Coffee Finca and Aspects of Coffee Production and Processing on a Large Costa Rican Coffee Finca. (Unpublished paper read before the meeting of the Michigan Academy of Science, Arts and Letters, Ann Arbor, Michigan, April 11, 1952). (Unpublished manuscript, Department of Geology and Geography, Michigan State College, East Lansing, Michigan, 1952).

8. C. S. Coon, op. cit. pp. 581-604.

(c) Participant observation. As rapport became more evident, the field worker was able to actually participate in a wider range of activities with greater frequency. He attended weddings, baptisms, family gatherings, committee meetings, wakes, funerals, and informal spontaneous gatherings, insofar as he was able to determine, as an expected and accepted participant. Later, he was asked to assume responsibilities in the conduct of fiestas, and served as a sponsor (padrino) for the traditional soccer match between Aquiares and Turrialba.

(d) Schedule. To facilitate the collection of the wide range of data concerning problems in health, nutrition, levels and standards of living being investigated by other members of the Department of Economics and Rural Social Welfare of the Institute, a schedule was prepared and administered. In order to maximize the benefit that might come through the contacts made in administering the schedule, a sample larger than may have been necessary was taken.[9] The names of the two hundred and six heads of households residing in the estate were placed in a container, and one hundred names drawn by lottery in the presence of the estate bookkeeper. Because of the length of the schedule, it was administered to the informants in either two or three sessions of approximately fifteen to twenty minutes

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9. Dr. Reed Powell used a sample of 48 heads of households, giving about a 25% sample, in a schedule administered in 1948 in connection with a previous study. His census estimates correspond to full coverage expressed in estate records and the later census of 1950.

duration.. It was administered during the rainy season when intense downpours confined most of the laborers to their homes for days at a time. In this way, it was possible to completely cover the sample with no omissions or substitutions. One case moved to San Jose before he could be interviewed, but was finally located so that the sample would be complete. Aside from the information which this schedule offered, it performed a unique function in that it maximized the interaction of the field worker with what is thought to be a representative sample of the population. The inclement weather provided an ideal interview situation, for the visit of the field worker provided a break in the prolonged confinement of the laborers during the rains. Thus, the sample brought him into continuous first hand contact with a wide range of individuals occupying differing structural positions within the agricultural system, and it carried him to every corner of the estate. A portion of each interview, at the beginning and at the end, was devoted to small talk, admiring children, and frequently answering questions about life in the United States. The local norms of hospitality meant the offering and accepting of an invitation to share coffee and bread with the head of the household. These invitations were seldom refused by the field worker.

From the sample of one hundred heads of households, the field worker selected ten informants to serve as judges for ranking problems. Unfortunately, cross-cultural field techniques have not been sufficiently developed to provide a standardized formula for the isolation of those individuals best suited for different kinds of informant roles. However, ranking problems seem to indicate the need for informants who are acquainted with a large segment of the population. Apart from this criterion, the selection of judges, on the whole, depended upon the judgment of the field worker as to the usefulness and value of the informant for the purposes at hand.

(e) Private and public documents. School children were asked to write essays on "Our Town", "My Home", "My Family", and "My School". A contest was conducted among fifth and sixth graders to assemble a large number of folk sayings and proverbs. The field worker carried on correspondence with the administrator, police agent, overseer, ex-superintendent, and commissary worker after leaving Costa Rica. The records of meetings conducted by the Board of Education (Junta de Educacion) and Parent-Teacher Association (Patronato Escolar) were available for their entire histories. Certain records, such as blueprints of buildings, maps of the estate, housing, and population records were available from the estate files.

Note-taking constituted an important part of the field research. In the process of observing a specific coffee operation, the investigator used a notebook freely, but during interviews in which personal matters were discussed, the notebook was frequently left behind and notes recorded following the interview. Notes were typewritten twice or three times a week and a carbon copy was left at the Institute. The continuous first-hand contact with the population places greater reliance upon the persistent and recurring patterns and helps to avoid over-emphasizing the dramatic or unusual. It was the recording of these recurring patterns that constituted the main objective of the field experience.

CHAPTER II

THE SETTING

Costa Rica is bounded on the north by Nicaragua, on the south by Panama, on the east by the Carribean Sea, and on the west by the Pacific Ocean. It covers an area of 19,238 square miles[1] and has a total population of 835,000 inhabitants[2] of predominantly Spanish descent. The mountains are inland and run longitudinally. They do not form a continuous chain but are divided into two main groups, the northwest chain and the southeast chain. A transverse system, the Cordillera de Dota, below Cartago, renders communications between the northern and southern sections of the country more difficult. Tropical forests and savannas are found along the coastal sections up to an altitude of 2900 feet. As the surface rises to the central plateau (Meseta Central) region, dense virgin forests begin to appear at about 3000 feet. Oaks and chaparrals dominate around 6800 feet, and in the higher mountainous regions, the flora is essentially sub-Andean. The annual mean rainfall is about 100 inches. Tropical diseases are prevalent in altitudes of less than 500 feet.

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1. Preston James. Latin America (New York: 1950) p. 649.
2. Ibid. p. 649.

The principal economic activities in Costa Rica are coffee, banana, and cattle production. The banana plantations are found in the tropical lowlands of the coastal regions. Coffee interests dominate in the central plateau. Extensive cattle industries are found in the province of Guanacaste. Some gold has been mined in the region of the Coast of Nicoya. The cultivation of maize is scattered throughout the meseta central, and sugar cane is found in sub-tropical areas. Lumber enterprises exploit the reserves of mahogany, cedar, cocobolo (a species of rosewood), brazilwood, ebony, balsa and mora. Rubber, hemp, cacao, and tobacco are minor agricultural enterprises. Some dairying is found in the higher altitudes, especially around Cartago.

Politically, the nation is divided into seven provinces, which are subdivided into cantons. Each canton is in turn divided into districts. Each province and each canton has its own capitol.

Costa Rica is commonly thought of as a nation of family-sized peasant farms. A relatively recent survey showed 25,447 coffee farms, belonging to 21,576 owners and having a total population of 144,026.[3] Census reports further indicate that

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3. "Costa Rica (Summary of Current Economic Information)", International Reference Service (U. S. Dept. of Commerce, Office of International Trade), Vol. 4, No. 10 (May, 1947):2.

holdings of less than ten manzanas (one manzana equals 1.727 acres) predominate. However, it is not unusual for an individual to own a number of such farms and be recorded as an independent owner in each case. In the Turrialba District, the region of this study, peasant operators far outnumber the large estate owners. Their importance diminishes, however, if quality and quantity of holdings are compared or when the amount of peonage is taken into consideration. The power of large estate owners in national, regional, and local affairs weighs heavy in contrast to the unorganized and comparatively powerless small operators. Biesanz speaks of the present era as the "transition from peasantry to peonage in Costa Rica."[4] A more recent census provides an estimate that something more than 45 percent of the agricultural land is in the hands of less than 7 percent of the farmers.[5] Observation by this investigator seems to substantiate the position of Biesanz in this matter, with the qualification that large estates are not only becoming more and more predominant, but also that they themselves are becoming larger and increasingly more powerful in the agricultural life of the nation.[6]

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4. John and Mavis Biesanz, Costa Rican Life, (New York: 1944), p. 151.

5. Sample Census of Agriculture, Costa Rica, 1950. Computation from the raw data was made by Charles H. Proctor.

6. The extent to which large landholdings are still dominant in Latin America has not been adequately evaluated. George M. McBride in Chile: Land and Society (New York: 1936) and The Land Systems of Mexico (New York: 1923) considers that large landholdings have continued to dominate these nations since colonial times, in spite of agrarian "reforms."

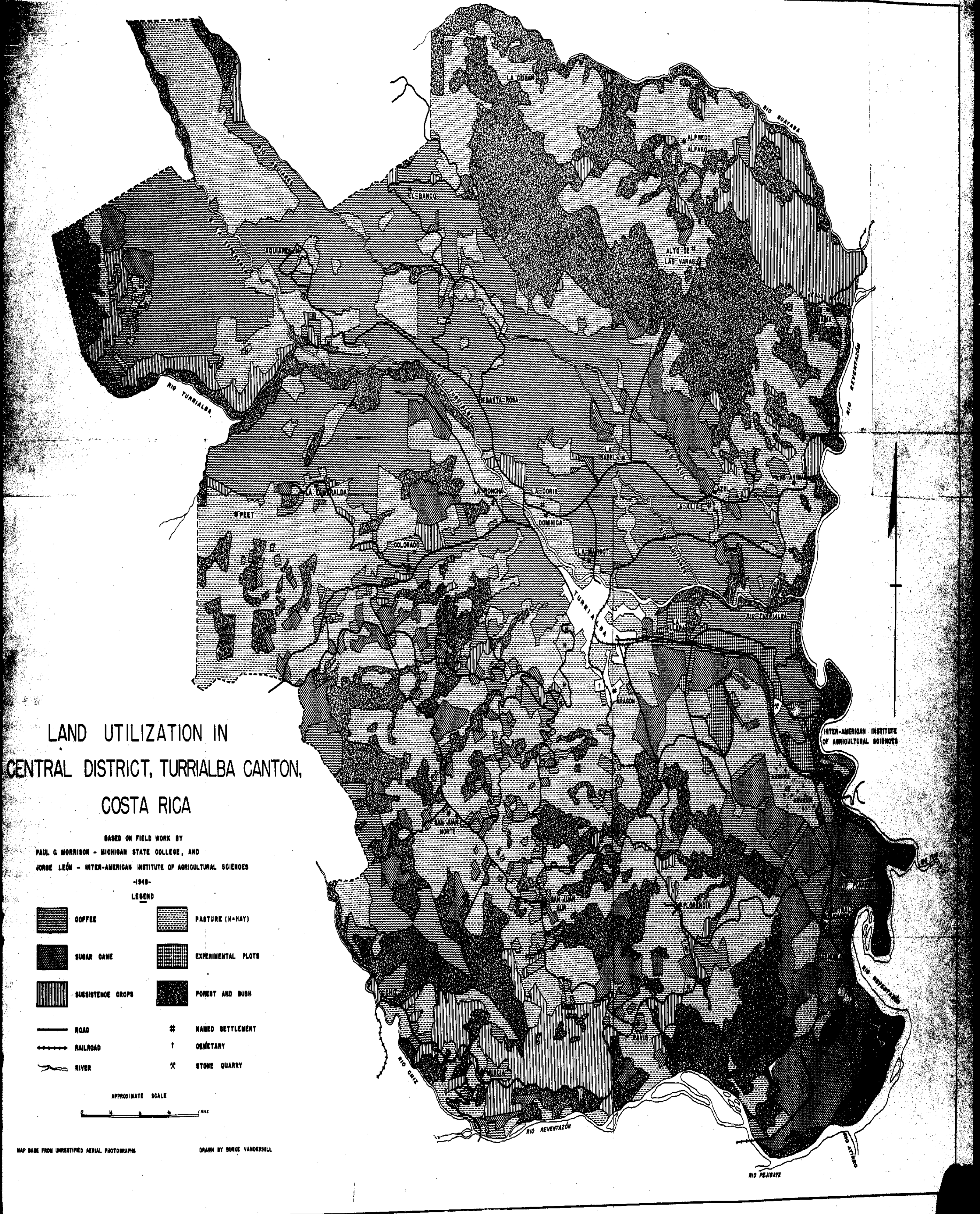
LAND UTILIZATION IN
CENTRAL DISTRICT, TURRIALBA CANTON,
COSTA RICA
BASED ON FIELD WORK BY
PAUL C. MORRISON - MICHIGAN STATE COLLEGE, AND
JORGE LEÓN - INTER-AMERICAN INSTITUTE OF AGRICULTURAL SCIENCES
LEGEND
COFFEE
PASTURE (H=HAY)
SUGAR CANE
EXPERIMENTAL PLOTS
SUBSISTENCE CROPS
FOREST AND BUSH
ROAD
NAMED SETTLEMENT
RAILROAD
CEMETARY
RIVER
STONE QUARRY
APPROXIMATE SCALE
MAP BASE FROM UNRECTIFIED AERIAL PHOTOGRAPHS
DRAWN BY BURKE VANDERHILL
LA CEIBA
ALFREDO ALFARO
RIO GUAYABO
ALTO DE LAS VARAS
RIO REVENTAZÓN
RIO TURRIALBA
SANTA ROSA
LA ESMERALDA
LA DORIS
DOMINICA
COLORADO
TURRIALBA
ARAGON
INTER-AMERICAN INSTITUTE OF AGRICULTURAL SCIENCES
RIO PEJIBAYE

Fig. 1

The Site of the Study

Aquiares is located in the Turrialba Canton of Cartago Province. Coffee production is the chief agricultural enterprise of the Turrialba District. The planting, cultivating, harvesting, and processing of coffee form a complex of activities which provides the basic framework upon which the tapestry of economic and social life in rural Turrialba is woven. Without an intimate knowledge of local conventional understandings and practices, the observer cannot hope to gain even a superficial knowledge of how coffee agricultural systems function as going concerns. The more salient elements of this coffee complex as manifested in the Aquiares coffee estate are presented in this study; more adequate and detailed analyses of coffee production will be found in articles referred to previously.[7]

Hacienda Aquiares, one of the larger coffee plantations in the Turrialba District, lies at the southeastern base of the Turrialba volcano. The estate covers an area of 2,369 acres, 898 of which are planted in coffee. It is bounded by two rivers, the Turrialba, which flows along the base of a ridge to the south,

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7. T. L. Norris and P. C. Morrison, op. cit. Ch. I. fn.6.

and the Aquiares, a tributary which flows along the base of another ridge to the north. Aquiares is situated on a rapidly rising slope to the northwest of Turrialba city.[8]

The land surface of the estate is rolling to rough and is formed of extrusive volcanic materials. A more complete description of the soils and their origin is found in the following:

> "Derived from volcanic rocks, the soils of Aquiares are friable, dark red or brown, sandy-clay loams, with high fertility, good organic content, and a structure which favors rapid moisture absorption. Their general excellence, plus the fact that under-drainage is especially good because of the porous nature of the underlying flow materials have helped to make this a favored coffee area."[9]

The altitude of the estate ranges from 2,600 feet to 4,000 feet; at the central settlement it is about 3,200 feet. Its altitude places the estate in a transition area between "highland" (3,300-5,100 feet) and "lowland" coffee regions.[10] Temperature and rainfall records are not available for the estate itself, but data from the city of Turrialba (2000 feet elevation and 3.7 miles from the lower reaches of the estate) offers an adequate approximation. To quote a previous report:

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8. See Figs. 1 and 2. Land Use in Turrialba and Map of Aquiares.

9. T. L. Norris and P. C. Morrison, Aspects of Coffee Production and Processing on a Large Costa Rican Coffee Finca, unpublished manuscript, (Michigan State College: 1952), p. 2.

10. Ibid, p. 2.

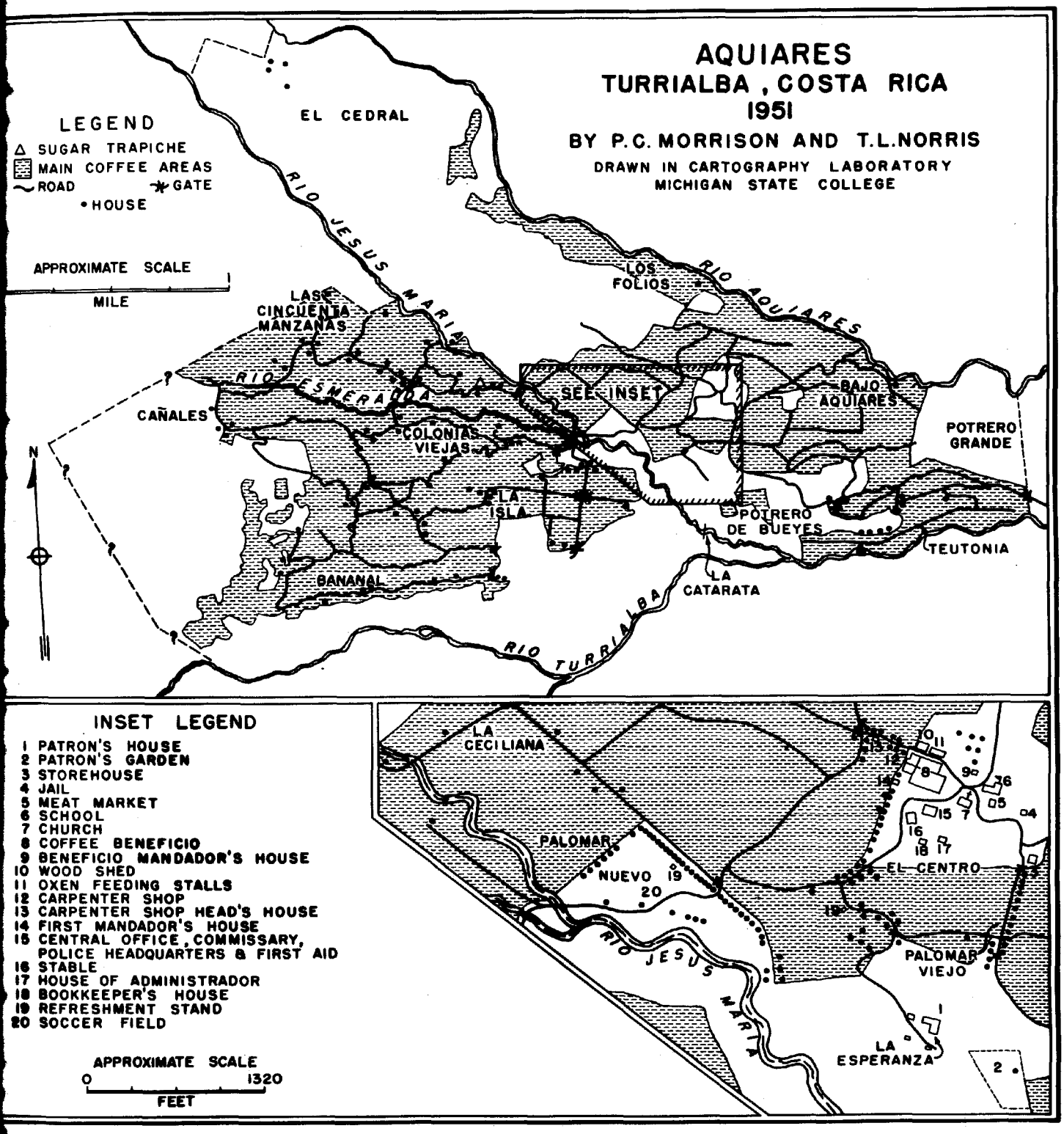
AQUIARES
TURRIALBA, COSTA RICA
1951
BY P.C. MORRISON AND T.L.NORRIS
DRAWN IN CARTOGRAPHY LABORATORY
MICHIGAN STATE COLLEGE
LEGEND
SUGAR TRAPICHE
MAIN COFFEE AREAS
ROAD
GATE
HOUSE
APPROXIMATE SCALE
1
MILE
EL CEDRAL
RIO JESUS MARIA
LOS FOLIOS
RIO AQUIARES
LAS CINCUENTA MANZANAS
RIO ESMERALDA
LA
SEE INSET
BAJO AQUIARES
POTRERO GRANDE
CAÑALES
COLONIA VIEJAS
LA ISLA
POTRERO DE BUEYES
TEUTONIA
BANANAL
LA CATARATA
RIO TURRIALBA
N
INSET LEGEND
1 PATRON'S HOUSE
2 PATRON'S GARDEN
3 STOREHOUSE
4 JAIL
5 MEAT MARKET
6 SCHOOL
7 CHURCH
8 COFFEE BENEFICIO
9 BENEFICIO MANDADOR'S HOUSE
10 WOOD SHED
11 OXEN FEEDING STALLS
12 CARPENTER SHOP
13 CARPENTER SHOP HEAD'S HOUSE
14 FIRST MANDADOR'S HOUSE
15 CENTRAL OFFICE, COMMISSARY, POLICE HEADQUARTERS & FIRST AID
16 STABLE
17 HOUSE OF ADMINISTRADOR
18 BOOKKEEPER'S HOUSE
19 REFRESHMENT STAND
20 SOCCER FIELD
APPROXIMATE SCALE
0
1320
FEET
LA CECILIANA
PALOMAR
NUEVO
EL CENTRO
PALOMAR VIEJO
LA ESPERANZA
RIO JESUS MARIA

Figure 2.

> ". . . the warm month averages (are) between 68 and 72 degrees and the cold month between 63 and 67 degrees. These temperatures do not differ significantly from the Meseta Central, but annual rainfall, in the neighborhood of 100 inches, is much heavier than on the Meseta Central."[11]

January, February and March have less rainfall than other months. However, the Meseta Central is distinctly dry during these same months. The contrasting amount of precipitation between the two areas accounts for differences in yield, quality, and differing methods of processing coffee. The average yield of 14 fanegas (158.9 bushels) per manzana for the Central District of Turrialba Canton is almost twice as great as the average yield for the Meseta Central, although the coffee grown in the former area is of poorer quality. The greater precipitation conditions the yearly round of activities and the methods used in drying the beans.[12] Between 1940-41 and 1950-51 the annual yield of coffee from Aquiares averaged 1.4 percent of that for the whole nation.[13]

History of the Farm

The Turrialba valley was settled permanently after completion of a railroad in 1890 connecting Puerto Limon with

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11. Ibid, p. 2.

12. Ibid, p. 1.

13. T. L. Norris and P. C. Morrison, Some Aspects of Morphology and Life on a Large Costa Rican Coffee Finca, p. 2.(unpublished paper read before the meeting of the Michigan Academy of Science, Arts and Letters, Ann Arbor, Michigan, April 11, 1952).

San Jose, the capitol.[14] With the introduction of adequate rail transportation, farms were organized rapidly for the production of the cash crops of sugar and coffee.

The present area covered by Aquiares was consolidated into one farm in 1908 by a Jamaican of English parentage. He was one of eight brothers, all of whom eventually migrated to Costa Rica and played important roles in the economic development of the nation.

In 1908 the present area of Aquiares consisted of three separate holdings. The center section, with 150 manzanas of coffee and 50 manzanas of pasture, had a processing plant (beneficio) and a drying machine (secadora). Another section of 50 manzanas, located toward the lower reaches of the farm, now known as Teutonia (see Fig. 2), was owned by two Germans. A third section, a large uncultivated tract including the present upper reaches of the estate, belonged to a native, Jaime Carranza.

During the first fifteen years following the consolidation of the property in 1908, when the present owner purchased the three sections mentioned above, the estate was reorganized and activities were expanded. Between 1908 and 1927, some

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14. P. C. Morrison and J. Leon, "Sequent Occupance, Turrialba, Central District, Costa Rica", Turrialba, Vol. I, No. 4, pp. 185-198. April, 1951.

600 manzanas of coffee were planted and a small settlement of 20 houses for laborers (peones) was increased to 200. The beneficio was enlarged, three additional secadores installed, and central offices, a carpenter shop, school, church, and stable were constructed.

In 1915 a sharecropping system was introduced under the recommendation of the estate superintendent[15] and in the first year, about 25 sharecroppers (colonos), selected from the "best" peones on other holdings of the owner, were ceded lots (colonias) of one to four manzanas each. Today, there are about seventy-eight sharecropper (colonos) on 341 manzanas given over to colonias.

In 1940 sugar cane was introduced and a sugar mill (trapiche) constructed. The cane is planted on the higher elevations of the estate (Fig. 1) where conditions for coffee growth are not too satisfactory. In 1950 there were 36 manzanas of cane producing 32,500 atarros[16] and 520 manzanas in coffee producing 7500 fanegas of beans ready for shipment. There were 294 manzanas in pasture and 422 in forest and brush.[17] About one third of the total coffee production of the estate was

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15. See Chapter I, p. 10.

16. An atarro is an ox cart (carreta) full of cane. This measures about a ton.

17. Fig. 1.

cultivated and harvested by a hired labor force on 179 manzanas, while the remaining 341 manzanas were operated by colonos. Included in the land given over to pasture, forest, and brush were an estimated 150 manzanas in gardens, residences, the central area, roads, etc.

Production

Seedlings (manquitos). The coffee nursery is located in a large central pasture of the estate. During the coffee harvest select berries from superior trees are collected and in March are planted in a well-prepared seed bed. Five weeks later, they are transplanted to the nursery itself (amacigal). The nursery is prepared by skimming the weeds from the surface of the ground with a machete or shovel. The ground is then ploughed by two laborers with an ox, one guiding the animal and the other behind the plow. After this, women go through the nursery breaking up the large and hard lumps with their fingers. Low, parallel, rectangular ridges (eras) are constructed and the seedlings transplanted to them. The plants remain in the nursery for about a year, and then are moved to coffee groves (cafetales) to replace old and defective trees. Guineo plants provide the shade in the nursery.

Cultivation of the cafetales. The coffee trees are spaced in rows about eight and one fourth feet (three varas) apart. The plants in each row are staggered in relation to the plants in adjacent rows in order to increase the number of plants which can be set out in one manzana. In Costa Rica, shade trees are used in coffee groves. The most common types are the guineo, caujiniquil, guava, and poro. The guineo tree is trimmed twice a year, the others only once, between January and June.[18]

Coffee trees begin to bear after four or five years and during the following ten years maintain maximum production. In Aquiares, however, there are a number of colonias which have trees as old as thirty years still giving good yields.

The rainy season in the Turrialba valley brings with it a more rapid growth, necessitating more frequent weeding of the rows (calles) between coffee trees. The palea, as this is called, takes place from five to ten times a year in Aquiares, depending upon the rate at which the beans are ripening in any given season.

The harvest. The coffee harvest begins early in September. Since the berries ripen at different rates, it is necessary to go through the groves a number of times before the complete crop is harvested. During the 1950-51 season, the coffee groves were picked thirteen times before all the beans were harvested.

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18. Trimming the trees, whether shade or coffee, is called the poda.

The most pressing problem which confronts coffee growers in Costa Rica is securing an adequate labor supply during this season. The remainder of the year requires only a fraction of the harvest force to maintain operations. The colono system, functioning in Aquiares since 1915, is a partial solution to that problem. The colonos contract to care for and harvest a plot of coffee for a fixed rate per fanega of berries produced. The colono and his family lives on a plot, referred to as a colonia in a house provided by the estate. With the help of his family, he carries out his contract. This system eliminates the need for the estate to hire extra help during the harvest. That portion of the coffee not included in colonias is cared for by a permanent day labor force of workers. Men, women, and children participate in the harvest. If at any time during the year, including the harvest, the estate has need for extra workers, the colonos are bound by contract to supply it. The estate stimulates picking through two kinds of rewards: (1) each basket of coffee picked is worth a fixed amount of credit at the commissary and tokens are distributed at the end of each day when the coffee is brought in and measured, and (2) each wage earner receives double pay during the week preceding Christmas.

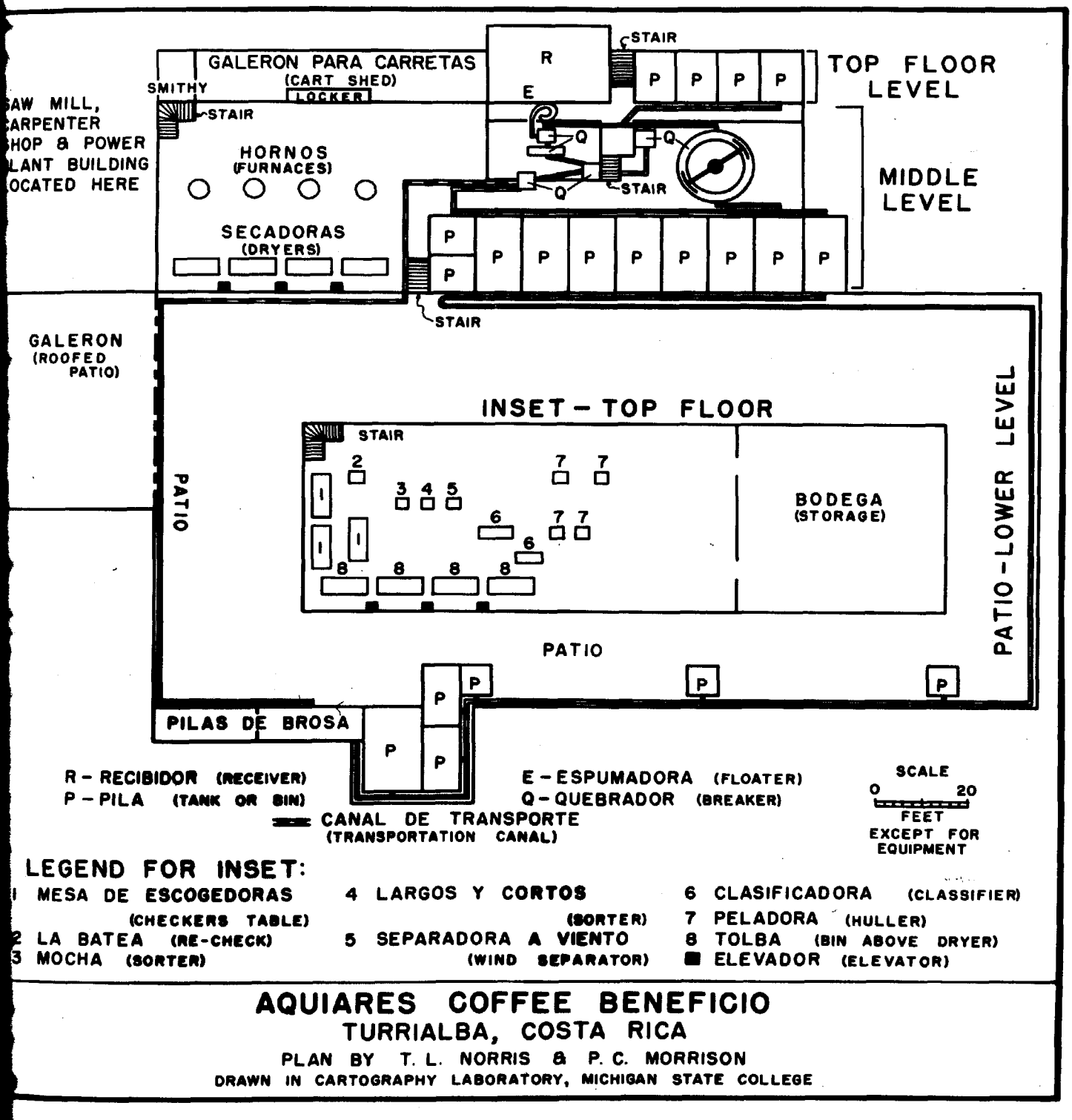
Processing. The estate collects the picked berries in ox carts (carretas). At the end of each day, at about 3 p.m., the carretas leave the center area in single file to pick up the

coffee which the day workers have picked in the areas operated directly by the estate. One of the foremen (encargado) summons the peones by blowing a whistle or sea shell horn (concha). The peones gather and spread their beans on burlap, separating the green beans picked accidently from the ripe red beans. Each peon turns his coffee into a waiting carreta by the basketful (canasta), and receives his credit tokens for each canasta as it is dumped into the waiting cart.

In the mornings, carretas travel through the colonias picking up the coffee from large storage boxes located on each colonia. When a colono has filled his box, he leaves a slip with his number and the amount of coffee he has picked at the estate office. The overseer picks these up each night and gives his instructions for the following day to the foreman in charge of ox-cart transportation. The ox drivers (boyeros) measure the coffee when picking it up at the colonia, and a worker rechecks it when the coffee is brought in at the beneficio for processing.

The steps in the processing of coffee as it occurs in Aquiares can best be described by employing the following summary from an article on the subject and by referring to Fig. 3:

> "Arriving at the Aquiares beneficio (Figure 3) the loaded carreta is backed up to the recibidor, a cement receiving tank. Two peons in the tank open the trap door on the back of the cart through which the boyero shovels the coffee berries into



AQUIARES COFFEE BENEFICIO
TURRIALBA, COSTA RICA

PLAN BY T. L. NORRIS & P. C. MORRISON

DRAWN IN CARTOGRAPHY LABORATORY, MICHIGAN STATE COLLEGE

Figure 3.

a rectangular box having handles on each end. This box holds a doble of berries. Small quantities of berries left over after filling the larger box are measured in a box about a foot square and four inches deep. This is measured to halves. Each measure is recorded on a talley board, after which the berries are dumped from the measuring box to the floor of the recibidor.

From here on, the described passage of the coffee through the beneficio can best be followed by frequent reference to the flow sheet (Figure 3). From the recibidor, the berries are flushed by water to the espumador (floater), a water-filled, circular cement pit in which the heavier berries sink to the bottom and the lighter ones, which are inferior, float to the surface. These lighter berries are drawn off by flowing water through a channel to a special quebrador (breaking machine) consisting of large rotating, iron-rimmed, cement wheels.

The heavier berries are carried by water running from the bottom of the espumadora to quebradoras consisting of rotating drums. These breaking machines, four in number, snap the shell and pulp off of the berries. This waste, being more buoyant than the beans, floats off down a channel which circles one end of the patio (drying floor) to be dumped into shallow tanks called pilas de brosa. The pilas are two feet deep on the patio side and about six inches deep on the side next to the road. Here excess water is drained from the waste, which is then shoveled into carretas and hauled to the cafetales to be used as fertilizer.

Meanwhile the cleaned coffee beans have passed from the quebradoras into the pilas (tanks) on the middle floor level about the patio. In these pilas the beans ferment until a hand test determines that the miel layer (honey-like film) will easily slip off, but they never remain here more than thirty-six hours . . . The running water which carries the beans to the patio drying floor usually removes the miel, although on rare occasions, when the weather is too cool, it has to be cut off by passing hot water over beans in the pilas.

In the channel into which the beans are flushed from the fermentation pilas for movement around the patio to the four pilas adjoining the pilas de brosa, the running water not only removes the miel, but sorts the beans by weight, the lighter beans floating with greater speed and the heavier ones lagging behind. This sorting is facilitated by six peons with wooden paddles who push the beans backward up the channel, letting the lighter ones flow past over the top of the paddles and holding back the heavier ones that move on the channel bottom. When the lighter beans have been flushed into one of the pilas at the end of the channel, this pila is closed and another is opened to receive the heavier beans.

From the recibidor to this point the movement of the coffee has been by running water. The beneficio is so located on a slope that the water of a creek can be diverted into its upper level, move by gravity flow through the middle level to the patio level, and away. Water from the same source runs plant machinery and generates the electricity used in lighting. A dependable supply of clean water moving by gravity is thus a requisite for efficient and successful operation of the Aquiares beneficio.

Movement of beans from the fermentation pilas to the pilas by the patio lasts about three hours a day. Different classes of beans, as determined by the sorting action of the water in the transportation channel, are flowed in succession into different pilas. The first of each lot of coffee to come through the channel is known as cabeza de caño. This is regarded as a quality slightly inferior because it washes through the channel so quickly it hasn't much chance to be properly classified. Consequently it is collected in one pila and then carried by carreta back around to be put through the washing and sorting process again with the following lot.

From the final receiving pilas the coffee, other than the cabeza de cano, is shoveled into hand carts which have a small trap door at the back. Shovels are entirely of wood and are made by a local craftsman. If the weather is good, and

there is plenty of sun, the carts are wheeled onto the patio, the trap door opened, and the beans spilled out in rows. Later, peons with long handled rakes spread, turn and re-turn the beans to facilitate drying.

The beans are never dried completely on the patio, as is often the case in the Meseta Central. They are usually left there about four hours, chiefly to get all the surface water off of them, but if the sun is hot and constant, they remain there even less time. From the patio, the coffee is moved in hand carts to bucket-type elevators which raise it to the top floor of the beneficio and there dump it into four bins. Each bin has an outlet leading to one of four secadores (drying machines) on the floor below. Each secadora is supplied heat by a furnace which burns cascara blanca, the white inner hull removed from the coffee beans just before shipping, and wood cut by finca peons.

If dried well on the patio, the beans may remain in the secadores as little as twenty hours, but if the weather is inclement, they will be held there as long as thirty-six hours. The drying drums rotate, thus continuously turning the coffee in warm air blown in from the furnaces to maintain a seventy degree Centigrade interior temperature.

Leaving the secadores the dried coffee is again raised to the top floor by bucket elevators. There it is commonly stored for a few days in a bodega (store room) built across one end of the floor. Storage is in bags, except during rush periods when the coffee is piled on the floor in bulk.

After removal from storage the beans are usually put through machines which further classify them by size, shape, and weight. In one machine, the clasificadora, they are pulled by a revolving screw over a screen whose varied sized holes separate them by size and shape. In another, the separadora a viento, the beans are sorted by blown air according to weight.

Following this, girls seated at long tables, known as mesas de escogaderas, check the beans. These girls, ages 9 to 14 years, are daughters of the head of the beneficio, the general mandador, the head of the machine shop, the police agent, and others of higher social status. Since everyone takes part in the harvest activities, this is considered a choice job for here the young girl can be better protected from gossip and possible molestation by the opposite sex than if she were picking in the cafetales. In an eight hour work day a girl will check about two bags of coffee weighing 70 kilos (155 pounds) each. For this she is paid 1.70 colones per bag.

As each girl finishes checking a quantity of coffee, it is rechecked by a supervisor seated at another table called la batea. The coffee can be sorted into as many as ten classes, but usually it is divided into only four; one European bound; another destined for the United States; and two of inferior quality for Costa Rican consumption.

The final process just before shipping is removal of the hull from the bean by a peladora. This machine also polishes those beans bound for Europe by throwing them against an interior bronze finish. After hulling, the coffee is spouted into bags by a worker who weighs each bag and sews it up when filled. European-grade coffee is bagged in high quality burlap; the rest in bags of domestically produced cabuya, sisal, or abaca. The bags of coffee are trucked to Turrialba, carried from there to Puerto Limon on the Caribbean, and thence transported by ships to world markets."[19]

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19. T. L. Norris and P. C. Morrison, Aspects of Coffee Production and Processing on a Large Costa Rican Coffee Finca, Part I, pp. 8 - 12. (unpublished manuscript, Department of Geology and Geography, Michigan State College, East Lansing, Michigan, 1952).

Houses and Buildings

The land use map (Fig. 1) illustrates the utilization of the entire estate in terms of crops, pasture, forest, and brush. The inset in Fig. 2 indicates the distribution of buildings in the central area. The house of the owner (patron) is the largest and most "modern" of the residences on the estate. It includes a living room, dining room, kitchen, servants quarters, guest rooms, and a glassed-in porch. It is plastered within and painted both inside and out. There is hot and cold running water, continuous electricity, and a garage.

The house of the administrator (administrador) is the second largest residence. It has a living room, kitchen and store rooms, bedrooms, bath, servants' quarters, glass windows, inside plaster, and exterior paint. There is running water, electricity at night, and the residence is isolated by high hedges.

The bookkeeper (contador), overseer (mandador), and foreman of the beneficio (mandador del beneficio) live in houses of similar style, except that the house of the bookkeeper is new and has glass windows, while the others are about fifteen years old and have windows with shutters which open inwardly. The siding consists of vertical board panels and are square, measuring twenty-seven feet on a side. There are six rooms leading into a central hall. From front to back on one side are the living room,

bedroom and dining room; on the other, are two bedrooms and a kitchen. The inside partitions consist of vertical panels. These houses are painted grey on the exterior and have running water, a shower and electricity at night. The privies are apart from the house to the rear.

The chief carpenter has the largest employee residence, built in the style predominating on the estate. It has six rooms, vertical plank walls, running water, a shower, electricity at night, broad rough plank floors, and a privy. The exterior and interior are whitewashed.

The remaining houses on the estate have two or three rooms, vertical plank walls, and are whitewashed outside. The only exceptions are six new houses in the colonias which have four rooms and a separate kitchen. Except for houses in the central area belonging to persons in managerial or specialist categories, there are no facilities such as electricity, running water or privies. There are frequent modifications of the basic two or three room design, but peones are reluctant to make changes since alterations require the permission of the estate authority and become estate property.

The two-room houses are twenty feet by thirteen feet; the larger three-room houses are thirty-three feet by thirteen feet. Each has a narrow porch which runs the length of the house.

The houses are slightly raised from the ground, have broad rough plank floors, no ceilings, vertical plank partitions, and are whitewashed on the outside. None of these houses have glass windows. Persons in the central area who have higher incomes may have an iron stove to supplant the crude fogon, a cooking stove consisting of a metal sheet supported by bricks on a table. Water is piped to a few of these houses. At Palomar Viejo, there is an outlet from which residents obtain water. Less than ten percent of the local population have privies, and the people are accustomed to using the cafetales or brush. Water for drinking or for bathing is carried from streams or springs; in some instances, bathing is done in ditches and streams.

Inside furniture in the homes of peones consists of a few crude benches, one or two beds, some four-legged stools, a moledero (plank along the kitchen wall used as a table on which food is prepared and eaten). Beds do not have mattresses but are provided with wooden slats. It is necessary for some members of large families to sleep on the floors of the living room or kitchen. In this case blankets or mats of banana stems are used. Cooking by fogon means that kitchens are smoke-filled most of the time, since no chimney is provided for this style of cooking.

The central offices are located with the commissary, police office, and first-aid station in a building at the center area, as indicated in Fig. 2 (15). Nearby is the stable (16),

the church (7), and the school (6). Behind the school are the jail (4), and a supply house (3). Beside the school is the meat shop (5). The beneficio, carpenter shop, and smithy are situated together (8, 12). The trapiche is in the colonias.

The Population

Approximately 1372 persons live within the bounds of the estate. On January 1, 1950, there were 75 families with a total of 547 persons living in colonias, and 132 families, including managerial and administrative personnel, and peones living in the center area, a total of 825 persons.[20] The average length of residence for heads of households is 24 years.[21] Sixty-four percent of these heads of households were born in Aquiares; twenty-one percent came from other farms owned by the patron; and sixteen percent were recruited from Turrialba or San Jose. Thus, eighty-five percent of the heads of households have ties with the patron, either through birth on the estate or through some previous association with the patron on another of his enterprises.

Originally, the task of recruiting labor for the estate was the duty of the general superintendent of the various enterprises. The colono system was conceived as a device by which a permanent labor force could be secured at a minimum of cost. The plan was to bring groups of families from other established farms

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20. Computed from the estate roster of housing and occupants.

21. Computed from the schedule administered by the field worker.

of the patron. This scheme was calculated to facilitate the adjustment of the laborers to the new situation. The recruiting was "selective" in that only those laborers who possessed qualities desired by the patron (respect and obedience for authority, industriousness, etc.) were imported. With some minor variations, the original colonos were ceded about three manzanas per family of five persons. A house was erected on each colonia and the head of the family entered into a contractual agreement with the patron. Laborers and additional colonos were recruited from Desamparados, San Antonio, Patarra, San Pedro Monte de Oca, San Francisco de Dos Rios, and Tres Rios. The superintendent also recruited some workers from the estate of his own father in Tres Rios, as indicated by the following interview notes:

> I only kept for Aquiares the peones I liked best . . . I reckon I moved five thousand families in fifteen years to the Turrialba area.

The superintendent selected and trained those who now occupy the principal managerial positions, and on more than one occasion the overseer and foreman of the beneficio remarked that "he taught us all we know." Certain families have become associated traditionally with specific activities. The care of stock and the supervision of the ox cart crews have been the responsibility of two families for more than three generations. The overseer's father was a mandador for the patron, and the

TABLE I.

SOCIAL CONTACTS MADE BY THE PEOPLE OF AQUIARES WITHIN AND WITHOUT THE COMMUNITY.*

Type Contact	Totals		Aquiares		Turrialba		Other	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Service Center[1]	36693	100.	32441	88.41	4133	11.26	119	.32
Social Activities[2]	19737	100.	18932	95.92	760	3.85	45	.23
Education[3]	26	100.	25	96.00	1	4.00	--	--
Health[4]	613	100.	58	9.46	551	89.88	4	.65
Religion[5]	1770	100.	1560	88.13	195	11.02	15	.85
Public Services[6]	3168	100.	2527	79.77	629	19.85	12	.38
TOTAL	62007	100.	55543	89.58	6269	10.11	195	.31

* Based on a twenty-five percent random sample, consisting of forty-eight families, made in connection with the cooperative community study project of the Department of Economics and Rural Life, Inter-American Institute of Agricultural Sciences, and the Area Research Center of Michigan State College. Table from Norman W. Painter, "Locality Systems as Aspects of Human Ecology," in Charles P. Loomis, et al, The Anatomy of a Costa Rican Community, (Publication in preparation: 1952).

1 Service Center items analyzed include: clothing, groceries, vegetables, butcher store, dairy, bakery, hardware store, shoe store, drug store, cantina.

2 Social Activity items analyzed include: Formal visitings, other visits, meetings with friends, movies, football.

3 Education items analyzed include: Primary and secondary schools.

4 Health items analyzed include: Social Security Hospital, Sanitary Health Center, dentist, doctor, obstetric nurse, midwife, "curandero."

5 Religion: Church and Catholic Action Organization.

6 Public service items: Bank, post office, telegraph, railway, bus.

present overseer is training sons for managerial positions. Another family has provided the bulk of personal servants and chauffeurs for the patron. The present foreman of the beneficio took over from his older brother and is training a son for the job. The chief carpenter is similarly apprenticing his sons for his specialty.

Basic to the people's feelings of identification with Aquiares is the relative isolation of the estate from other communities. The trail leading to Santa Cruz (Fig. 1) is difficult even by foot and takes about an hour and a half by horse. A foot path leads to El Banco, a small scattered settlement of independent farms, but the trail leads across a river with no bridge and it is difficult to cross the stream in the rainy season. Furthermore, El Banco offers none of the services found in Santa Cruz or Turrialba city. A good paved road leads from the farm to Turrialba city. The chauffeur of the patron operates a bus service on weekends. Most trips to Turrialba are either by bus or on foot. The bus trip takes twenty minutes while the trip on foot takes an hour and three quarters.

The estate provides for most of the immediate needs during the week. The school, butcher shop, and commissary are located in the center area. All of the personnel of the estate normally work within the confines of the estate, except on occasions when the patron is requested to send work crews to other

TABLE II.

ACTUAL CONTACTS MADE BY THE PEOPLE OF AQUIARES IN THE USE OF SERVICE CENTER FACILITIES FOR A ONE YEAR PERIOD, 1948.*

Service	Total Contacts	Aquiares		Turrialba		Other	
		Number	Percent	Number	Percent	Number	Percent
Clothing	158	--	--	137	87	21	13
Groceries	6106	4358	71	1736	29	12	--
Vegetables	1480	1456	98	--	--	24	2
Butcher Shop	13336	13104	98	108	1	52	1
Dairy	6935	6935	100	--	--	--	--
Bakery	6518	5506	84	1012	16	--	--
Hardware Store	91	27	30	60	66	4	4
Shoe Store	71	--	--	65	92	8	8
Drug Store	1964	1055	54	909	46	--	--
Cantina	41[1]	--	--	41	100	--	--

* Based on a twenty-five percent random sample, consisting of forty-eight families, made in connection with the cooperative community study project of the Department of Economics and Rural Life, Inter-American Institute of Agricultural Sciences, and the Area Research Center of Michigan State College. Table from Norman W. Painter, "Locality Systems as Aspects of Human Ecology," Chap. VII in Charles P. Loomis, et al, The Anatomy of a Costa Rican Community, (Publication in preparation: 1952).

1 The Finca owner does not permit the sale of alcohol on the hacienda. This figure of 41 does not represent actual number of contacts, but rather the number of persons (out of the sample of 48) who make use of the cantinas in Turrialba.

estates. Few persons on the estate have regular contact with the outside during the week. The chauffeur carries coffee to Turrialba and gets commissary supplies once a week. The mail carrier rides by horse to Turrialba daily. The administrator drives to Turrialba in the station wagon once a week to pick up the payroll at the bank. Only on weekends is there much movement towards Turrialba. A previous study indicated that 89.58 percent of all contacts made by the population in social activities, public services, religion, health, and education were within the community. Tables I and II indicate social contacts of people in Aquiares and their use of service facilities.

The Yearly Round

Economic. The annual round of activities connected with coffee production sets the tempo of communal life, for the Aquiarian follows the life history of the coffee bean, from harvest to harvest. During the last ten years coffee harvested on Aquiares has varied between five hundred thousand an a million pounds of processed beans per annum.

In late January, the harvest begins to slow down. The final ripe beans are picked. The labor needed for the final scanning is not great, and crews of peones are diverted to cleaning the aisles between coffee rows by shoveling the weeds (the palea). The weeds are skimmed off of the surface and are heaped along with fallen leaves and dirt around the base of the

trees. At this time, the long task of trimming the shade and coffee trees is started. The older men stay on the ground with the lower trees, while the younger and more supple boys ascend the tall trees. A sure signal of the beginning of trimming activities, called the poda, is the continual falsetto hooting which the boys carry on in the trees. They never seem to tire of this unrefined yodeling, if such it may be called. The trimming is done with machetes and a club (maleta) which is tapped against the machete to get the required "cut" (corte). There is a good deal of folk knowledge about this activity. For example, one must have the "right warmth" in the palm of his hand when handling the machete. Or he must have a "feeling" for the correct type of cut which must be made in removing a dead or defective branch from a coffee tree. Formerly, the trimming of coffee trees was done in work crews of peones on the coffee estate, and by each individual colono and his family on respective colonias. Now, each colonia belongs to a section under the supervision of an encargado (foreman, crew boss). Each section of colonos trim the trees for all of the colonos included in the section. They work on one colonia at a time under the supervision of the encargado. The administrator and overseer say that colonos were becoming careless in the care of their trees, and the poda is considered a delicate and important operation.

The aboreal life of the younger men trimming tall shade trees is inevitably accompanied by a number of accidents, due chiefly to carelessness in using the machete. Most of these accidents are cuts on the legs and feet, and the police agent is kept busy during this season dressing wounds sustained in the trees.

During February, a final cogida or picking is carried on, and all beans, whether ripe or not, are harvested. The trimming continues and dead or defective trees are pulled out. The wood is collected and cut up for fire wood to be used by the peones and colonos. It is the responsibility of each family to secure their own firewood, but there is an ample supply for all.

In March, the coffee seeds which have been selected for the nursery are planted. During April, the rows between coffee trees are again cleaned and the debris heaped around the trees. Trimming trees, cutting wood, and cleaning the lots continue through May until June when the new coffee plants are set out. Fertilizer is applied. The holes created by pulling out old and defective trees are filled in to receive the new plants.

Colono production accounts are settled in July, and with the liquidation of the coffee accounts comes a certain number of changes in residence and moving. Some colonos are given better lots if their records have been satisfactory. Others, unsuccessful as colonos, revert to peon status or leave the estate. A few new

contracts are available for peones or outsiders. In late July, the younger shoots at the top of the coffee trees are cut to prevent the plants from growing too tall for the pickers. The coffee groves are cleaned again.

During the month of August, the guineo and banana trees are trimmed again. Weeds and small bushes in the pasture areas are cut out. The heavy rains have fallen and the trunks of the coffee trees are covered with moss-like growths. During the latter part of August and early September, this growth is removed with a wooden knife. The berries are almost ripe, and just before the harvest begins the coffee groves are again cleaned so that beans which fall from the trees during the heavy rains or while the harvesters are disturbing the branches may be easily picked up from the ground.

Toward the end of September, the harvest begins in full swing. School lets out in time for the harvest. Permission is secured from the priest to work on Sundays if necessary. Men, women and children begin the long task of going through the coffee groves from five to thirteen times during the harvest season. The beneficio opens to process the coffee as it is brought in. The harvest continues through late January or February.

Religious. Aquiares is dominantly Catholic. Only the family of the administrator and the patron himself are not Catholic. But the administration supports the activities of the church and is

anxious that religious dissension be kept to a minimum. To the investigator, only one case of religious deviancy was obvious. The chief carpenter is known to read "atheistic" books and to hold anti-Catholic sentiments. However, he does not interfere in the religious education or activities of his family, nor does he actively preach any faith nor does he publicly attack the church. The gardener of the patron is thought to be an "evangelico" (Protestant) by local inhabitants, although he attended mass regularly and gave outward appearances of being an adherent to Catholicism.

Every other week, the priest comes to Aquiares for the weekend to say masses and hear confessions. The church is full at both masses on Sunday, and contrary to the usual pattern in Latin America, the men outnumber the women. Attendance at mass on weekdays when the priest is present from time to time is limited almost exclusively to women.

Christmas, Holy Week, and the Fiesta Patronal are the high holidays in the life of the community. Preparations for these events begin weeks beforehand. There are also eight holy days of obligation during which work is suspended and the usual masses are said.

A few days before Christmas most families place a manger scene in the living room of their homes. This remains

until the family sets a date for a "vela" when friends and relatives will be invited in to say the rosary. A lay prayer leader is hired and usually some musicians are secured for the occasions. This occasion takes on a distinctly social flavor. Higher status families serve rum and wine and chicha, cigarettes, and sandwiches, cookies and coffee. Poorer families rely on corn liquor, chicha, coffee, and bread for their guests. These occasions frequently become hilarious, and even riotous, especially in the colonias which are somewhat removed from the central area and the watchful eye of the police agent. Sometimes the religious festivities may be put aside for dancing as the guests become more and more intoxicated from the drinks served between each rosary. The investigator was present on several occasions when both dancing and fighting took place. These rites go on through January, although they are supposed to be terminated within about thirty days after Christmas. Among higher status families, the vela tends to be a more subdued and conventional affair. The guests are selected carefully and care is taken to see that the ceremonies are in hand at all times. The rosary is recited from three to four times and the gathering disbands early. Among lower status families, the rosary may be recited throughout the entire night.

The processions and services of Holy Week are a genuine community affair. Processions begin on Holy Thursday and are conducted every day until Easter Sunday morning. There is some

competition for the roles assigned to persons taking part in the drama that the processions represent, and choice roles go to people of higher status. The entire community turns out for these affairs, and there are a number of visitors from the neighboring towns of Santa Cruz, El Banco, and Santa Rosa. Relatives from Turrialba and San Jose, or other parts of the republic customarily make their annual visits at this time. That the observance of Holy Week is not as pious as the old priest would like was expressed by him in these words:

> "In Aquiares during Holy Week, there is much procession and little confession."

The climax of Holy Week occurs on Easter Sunday morning. The bells are silenced on Friday and fireworks are used to announce impending services. Boys are given all sorts of wooden noise-makers which they operate during the processions and before the Sunday morning service. The choir from Turrialba is usually hired for the late mass, and the altar is profusely decorated with flowers. Following the mass, the person playing the role of Judas reads a last will and testament of Judas in which he leaves ridiculous things to persons in the local community. Some of these inheritance articles are designed to poke fun at or criticize the persons to whom they are left. The article is designated in verse and Judas reads his testament on a high rock above the crowd of people. That the Testament contained a verse leaving the field worker a pair of binoculars with which to better

peer into the lives of others indicates, in humorous form, the underlying sarcasm and satire reflected in these verses. Formerly, it is said, these testaments were especially barbed and cruel, On more than one occasion in the past, this part of the ceremonies of Holy Week resulted in violence and ill-feelings. Today, the verses are less insulting, and the patron, administrator, police agent, priest and overseer are immune from negative treatment in these verses. Following the recitation of the testament, an effigy of Judas, stuffed with firecrackers and soaked in gasoline is strung up on a pole and ignited. The crowd jeers and boys throw stones at the burning effigy. Finally a giant firecracker in the effigy blows up, disintegrating the Judas, and with a loud cheer, the ceremonies of Easter are at an end.

The Fiesta Patronal, or the day of the patron saint, consists of a special mass to St. Joseph, a procession, and a bacchanalerian orgy of three days duration. This festival follows immediately after the liquidation of the coffee accounts in July, and large sums of money accumulated by the people during the year are consumed in drinking and gambling. The one room jail of Aquiares is filled to capacity with belligerent drunks. A band is hired from Turrialba or the capitol at Cartago or even San Jose, and hundreds of visitors arrive from the Turrialba area to participate in the festivities.

Most of the rites of passage observed in Aquiares are in the hands of the church. Baptism, confirmation, marriage, and death are all solemnized by the rituals of the church. Birthdays are of little importance, but one's Saint's day is marked by gift-giving and special ceremonies of a familial nature.

Special foods are prepared for most high religious holidays. There are Christmas candies and cakes, and it is the season when chicha is made and consumed. A simple cake is made for the celebration of a Saint's day. Sardines and bread are the characteristic diet for Good Friday.

Recreational. Soccer (futbal) is the most prominent sports activity. There are several teams in Aquiares, and the first team competes with other teams from the Turrialba and the Meseta Central areas. Boys begin acquiring skill in this game from their first year of school, and whenever the weather is fair, especially from January through April, boys and young men can be found playing soccer in the afternoons and evenings around the estate. Sometimes a padrino or sponsor is suggested for a more important contest, and in exchange for this honor he provides the trophies or medals for the winning team. If wealthy enough, he may treat both teams to rum punch. Thus, skill in soccer is rewarded with visible symbols of status. The field worker was elected for the honor of padrino at the annual soccer match between Aquiares and Turrialba city in April of 1950. For that event, the

winning team was awarded medals and both teams treated to rum punch at the home of the overseer. The first team of Aquiares has its madrina (sponsor or mascot) who is a young teenage girl in the community, and she appears at all matches dressed in white. The soccer team is formally organized into a club of which the overseer is the president. The relationship between ability to play soccer and the awarding of favored job assignments in economic activities seems to indicate some systematic favoritism on the part of the overseer, a practice for which he is criticized, though not to his face.

Marbles are a universally popular game with the children, although grown men are frequently avid fans. Girls engage in jump-rope which they learn at school. The chief recreational activity for the older girls is walking around the central area of the estate with girl friends on Sunday afternoons. Late that same day, if the priest is in Aquiares, the girls may attend a meeting of the Daughters of Mary (Hijas de Maria), a female religious service organization. After their meeting, the rosary is said, and boys begin to congregate outside the church to wait for the conclusion of the service. When the service lets out, many of the girls pair off with boy friends who walk them all or part of the way home. It is through this medium that most engagements for marriage are started. After the couple has decided to "go steady", that is, become novios, the boy seeks

permission from the girl's parents to visit her for a few hours in the evening once or twice a week, under the supervision, of course, of the parents, brothers, sisters, or an elder in the family.

Some of the upper status people go to the movies in Turrialba once a week. The weekly trip to Turrialba, by foot, horse, or bus, combines pleasure with business and generally involves meeting friends in a bar (cantina) or parading up and down the main street of Turrialba in the early evening. Dancing is limited largely to community fiestas and weddings, although young men who gather to rehearse guitars and other instruments such as cornets or violins, join in singing or dance with each other until nine or ten in the evening. Card playing among the men is especially popular during community fiestas. A bingo game is held every Saturday evening at the commissary and is attended by some forty to fifty men and boys.

Casual conversation, informal and formal visiting, and walking about the estate, constitute other leading forms of recreation. There is considerable variation in activities of this sort according to status. The administrative group does not customarily participate in activities with the rest of the community, but rather have their own interests with friends of concomitant status outside the community.

Education. The school in Aquiares has six grades, but only children of the managerial and specialist group aspire to finish all six. Most children drop out at the end of the second or third year of school. Schooling until the fourteenth year of age is obligatory under law, but local sentiment and the reluctance of local school authorities to force issues prevent enforcement. The main reasons for absenteeism are that children are used extensively to run errands, the school is some distance from remote portions of the estate, and inclement weather makes the trip to school often difficult if not dangerous. Normally, there are about 100 children registered in the school and since the staff of five teachers is not sufficient morning and afternoon sections are held. As a rule, parents seem to be more concerned that their children learn the three "R's" than that they learn music, geography, history and "nonutilitarian" courses. Nominally, the local system is under the direction of a local board of education. However, the director of the school calls and presides over meetings. Only in crises situations does the school board tangibly influence the school's operation. There is also a PTA (Patronato Escolar) which is active in supplying school lunches and in raising funds for equipment and improvements. The members of these boards are dominated by the director, teachers, and representatives of the managerial group. The school building is in a run-down condition, but since it is the property of the estate, the Ministry of Education is not in a legal position to build facilities of a more adequate nature.

Politics. Another important pattern of activities is of a political nature. Political activity is not, however, constant, in the formal sense, but when national elections occur, political activity becomes more intense. Formerly, the patron dominated political activity, and the population voted as he voted. In the recent 1948 revolution, the patron and his son were reputed to represent opposing factions, and the estate did not interfere with political activity. Sharp factions arose and underlying many of the day-to-day conflicts in many matters rests this split. There are many members of the community who will not enter the houses of others who were on opposing factions during the revolution. When a crisis arises in the community, alliances are largely conditioned by this historical event.

The Aquiares Day

During the harvest, activity in Aquiares begins about seven A.M. when workers leave their houses for the assignments of the day. School also begins at seven o'clock, and school children will be seen walking toward the center area with their pencils and cups for their school milk. The boyeros hitch up their oxen at four o'clock or before, especially if they must make a few trips to the cane fields to haul cane to the trapiche before picking up coffee in the colonias. Coffee at the beneficio is started through the channels for processing shortly after six A.M. when peones arrive. The checkers and sorters start work at the beneficio at seven A.M.

Throughout the morning, carretas come and go from the beneficio, hauling coffee. At nine A.M. workers stop for a brief morning lunch consisting of rice, tortillas, and sweetened water. In the colonias, the colono and his family pick the coffee, and in the estate groves, crews of pickers under the supervision of an encargado fill their baskets. The commissary, which opens at seven A.M. has few visitors during the morning. At the police agent's office, a line of people gather for first-aid treatment, or seek petitions for medical attention at the Social Security Hospital in Turrialba at the central office.

Work normally stops in the coffee groves around three P.M. The carretas arrive at a central point, and the pickers sort out their beans on burlap sacks. They then line up and dump their coffee into the carretas. The overseer's assistant, his son, stands on the carreta wheel, and throws a credit token into each basket as it is dumped. The peon returns to his pile of coffee and refills his basket to repeat the process. When all of the coffee has been placed in the carretas, it is carried to the beneficio, measured, and dumped into the receiving tank. It is immediately flushed to the breaking machines and washed into the pilas where it remains overnight. The beneficio normally ceases all activities at six P.M. when a night watchman and fireman come on duty to keep the drying machines fueled throughout the night.

When the coffee has been turned into the carretas, the peones wend their way home. Many go immediately to their garden plots or the pasture to bring back their cattle. From four until six, the commissary is quite busy and the porch is filled with people passing the time of day. A few residents who receive newspapers come to town to pick up the day's edition or look for mail which is distributed at the commissary. The police agent opens his office for first-aid cases, and the overseer picks up the slips deposited by colonos so that he can plan his instructions for the boyeros the next day. All through the early evening, the shutters on the front room window of the overseer's house are open and encargados visit to receive instructions. Persons needing new spades or baskets come and leave their orders. As soon as darkness descends, the electricity is put on, and the huge light on the porch of the overseer burns brightly; his nine-tube philco radio blares out over the central area. In the evening, the futbal players may gather at his home, or if there is nothing to be transacted, gather on the commissary porch where the news of the day is talked over and re-hashed until nine P.M. when the crowd disbands.

When the harvest season is over, workers leave their jobs at two P.M., and either work in their garden plots, cut wood, or visit in the center area. Some may even have time to make a trip to Turrialba with a load of bananas or garden produce, to return late in the evening.

This routine of life is interrupted during the weekend. During the harvest season, workers may be busy picking up until two p.m. on Saturday when the payroll call is held at the commissary. During the rest of the year, there is little Saturday work, and the payroll may be met on Friday afternoon. On Saturday many inhabitants go to Turrialba where some supplies may be purchased more cheaply than at the commissary. The bus service operates on weekends and carries passengers and produce to Turrialba every few hours.

Sunday is usually a quiet day, unless it is a high religious holiday. When the priest is in town, mass is heard at six a.m. and nine a.m. In the afternoon, there is generally a soccer game, and at five p.m. the rosary is recited. Most people spend Sunday visiting with friends in town or shopping in Turrialba. There are almost always a few who have over-imbibed. Few weekends pass without an altercation between inebriates, and the jail generally has an overnight visitor or two. Throughout the day there is a constant flow of people to and from the small candy and refreshment concession run by the police agent at Palomar Nuevo, but by nine p.m. the lights in most houses are out. The evening silence is broken only by the arrival of the bus at nine and eleven p.m. carrying its load of passengers, including a few drunks who struggle home under the supporting arms of friends.

The Life Cycle in Aquiares

Birth. Few babies are born at home in Aquiares today. Most workers have social security insurance and their wives are entitled to maternity care at the Social Security Hospital in Turrialba. However, a few employ midwives and have their children on the estate. A pregnant woman about to give birth, unless receiving maternity service in Turrialba, generally goes to the home of her mother and a local midwife is called in. Breast-feeding seldom occurs in public, although the field worker observed it occasionally. The baby is soon initiated into a banana mush and sweet water diet. Children under four years of age run around the house without clothing, but the parents usually slip on panties if there is a visitor or shield the genitals with their hands, if naked children are on the porch when a pedestrian passes.

Within the first month, a padrino is sought for the child. It seems advantageous to select a padrino of some means since he may be counted on to take rather serious responsibilities in the upbringing of the child. However, this is not always so, and a relative or friend close to the family may be selected. Some persons are exceptionally popular as padrinos. One colono, of moderate means, is godfather to sixty-five children on the estate, and he is still a relatively young man in his late thirties. The padrino usually remembers the child's Saint's day and perhaps

his birthday. Formerly, the child was taught to kiss the hand of his padrino when meeting him, recite Our Father, and greet him, but this custom is passing. However, the padrino has special concern over the moral development of the child, and a godson may be more concerned about an off-color remark in the presence of his padrino than in the presence of his parents. The padrino may serve the same function at confirmation, and even at the wedding of the godson. This is more likely if the padrino has the means to provide the appropriate feasts and gifts for these occasions. The padrino becomes established as such at the rite of baptism when he assumes responsibility for the upbringing of the child in the event of the death of the parents. This ceremony is at the church in a brief private service conducted by the priest.

The child learns early to run errands and to help around the home. The girl models herself after her mother, and the boy after his father. The child enters school at the sixth year, although many keep their children at home until the seventh year. By this time, the child is already performing many routine tasks about the house.

The child is confirmed between the ninth and eleventh year. Training for confirmation consists largely of drill in the catechism by the priest and by one of the Daughters of Mary who assume teaching responsibilities. The children are confirmed

in the afternoon by the bishop of Limon, who comes to Aquiares for this purpose every two or three years. The children answer the questions concerning belief and loyalty to the church and are struck by the back of the bishop's hand to symbolize obedience to the dictates of the church. The girls are dressed in white and wear veils; the boys, in black suits. Both sexes carry ornate candles throughout the ritual.

Slowly the child is taught the routine tasks and gradually assumes greater responsibilities. By the time the child is fourteen, the youth is ready to work. Girls remain at home or secure work as domestics and boys work with their fathers in the garden plots or find work as peones. There is work for all during the harvest season. It is not uncommon for a girl to marry at fourteen, though most girls are sixteen or seventeen at marriage. Until she is married, great efforts are made to protect her chastity, and she is under the watchful eye of a parent or brother most of the time.

The boys do not marry as early as the girls, and most grooms are between their twentieth and twenty-fifth year before they become engaged. When the young couple decides to get married, the boy asks his father to make the arrangements. The father visits the girl's parents, and after a formal conversation, they come to an agreement about the plans. A tentative date may be set, and the matter of a suitable padrino is discussed. The

padrino is important, for he will share the larger part of the financial burden connected with the wedding festivities. High status families may arrange to use the storeroom of the beneficio for the wedding dance, but most families use one of the homes. The marriage ceremony is performed in the early evening of a day when the priest is present. It may not take place during Lent due to church rules. The padrino and the couple go to the church for the brief ceremony. The parents remain at the place of the reception while friends of the couple attend the service. When the service is completed, the bride and groom leave the church followed by the padrino, his wife, and the friends, who shout "long live the bride", "long live the groom!" A few firecrackers are set off. When the couple arrives at the place of the reception, a cake is cut and the couple eat with their parents, the padrinos, and any special guests. Trays of drinks, cookies, cake, and sandwiches are distributed to other guests. A few musicians strike up some dance music and the festivities continue throughout the night until the early morning hours. Usually, the couple must live for some time with one of the in-laws until the estate has a vacant house or the groom finds work elsewhere.

It is the duty of the wife to remain at home, care for the chickens, clean the house, sew, and cook. During the harvest season she may be employed, especially if her husband has lower

status in the community. Children begin arriving in rapid succession, although many die from malnutrition, intestinal parasites, tuberculosis, and childhood diseases.

Death is common in Aquiares. When a child under five dies, it is thought of as a "little angel" (angelito) for little children are regarded as incapable of sin and thought to have immediate passage to heaven. The body is dressed in white and the nose stuffed with cotton. It is set on a table in the living room on a white sheet. Back of the table is a white sheet on which a flower for each year of life is pinned. Musicians are sought and friends and relatives spend the evening watching over the body, singing, drinking, and conversing. In the Guanacaste area of Costa Rica, the wake of an angelito is the occasion for riotous drinking and dancing. The wake is much more subdued in Aquiares, although drinking may be carried to excess and an occasional fight breaks out. In the morning, the father goes to the carpenter shop and gets a coffin. The body is placed in the coffin and carried to Turrialba where it is buried. The procession is generally small for the death of a very young child.

When an adult dies, a wake is held, but the body is placed in the coffin beforehand. Candleabras are brought from the church, and a layman is hired to recite the prayers which last through the night. Most families try to purchase a cloth

covered coffin from Turrialba if possible, but the estate will make a simple wooden coffin if the family does not have funds. Most people today borrow money if necessary in order to provide an adequate coffin. When the estate makes the coffin, it is painted on the exterior, and a member of the family goes to Turrialba for cloth to decorate the interior. The funeral processions of adults are generally well attended. Only males participate. The coffin is placed on a stretcher and four men carry it on their shoulders, shifting off frequently. The procession goes to Turrialba where the coffin is brought to the church and a priest pronounces the last rites. The procession then goes to the cemetery and the men lower the coffin into the grave with ropes. Someone recites a few prayers and each attendant throws a handful of dirt on the coffin. The grave is then filled in and the people depart. At the gate to the cemetery, two friends of the family stand with bottles of rum and glasses. Each person who attended receives a drink. Most of the participants go directly to a bar in Turrialba, including the near-relatives of the deceased, and the rest of the day is spent drinking.

CHAPTER III

AUTHORITY STRUCTURE

The organization of the labor force in the agricultural system of Aquiares is set up through a complex of activities in the interests of coffee production. For the purposes of this analysis, these activities may be dichotomized into primary and secondary activities. Primary activities may be thought of as those which contribute directly to the production of coffee; secondary as those which contribute indirectly to the production of coffee.

Primary activities in Aquiares include the planting, cultivating, harvesting, processing and transporting of coffee. Secondary activities include the maintenance of property and equipment, extraction and preparation of lumber, sugar cane production, food supply, police control, medical services, education, and religion. The organization of labor around these primary and secondary activities is highly complex. A structural position in the division of labor may be concerned almost exclusively with primary activities, secondary activities or both. The configuration of technical and social skills, delegated and implied rights and duties characteristic of a given structural position in the hierarchy of estate organization, largely determines the authority which one exercises in the total system and its sub-systems.

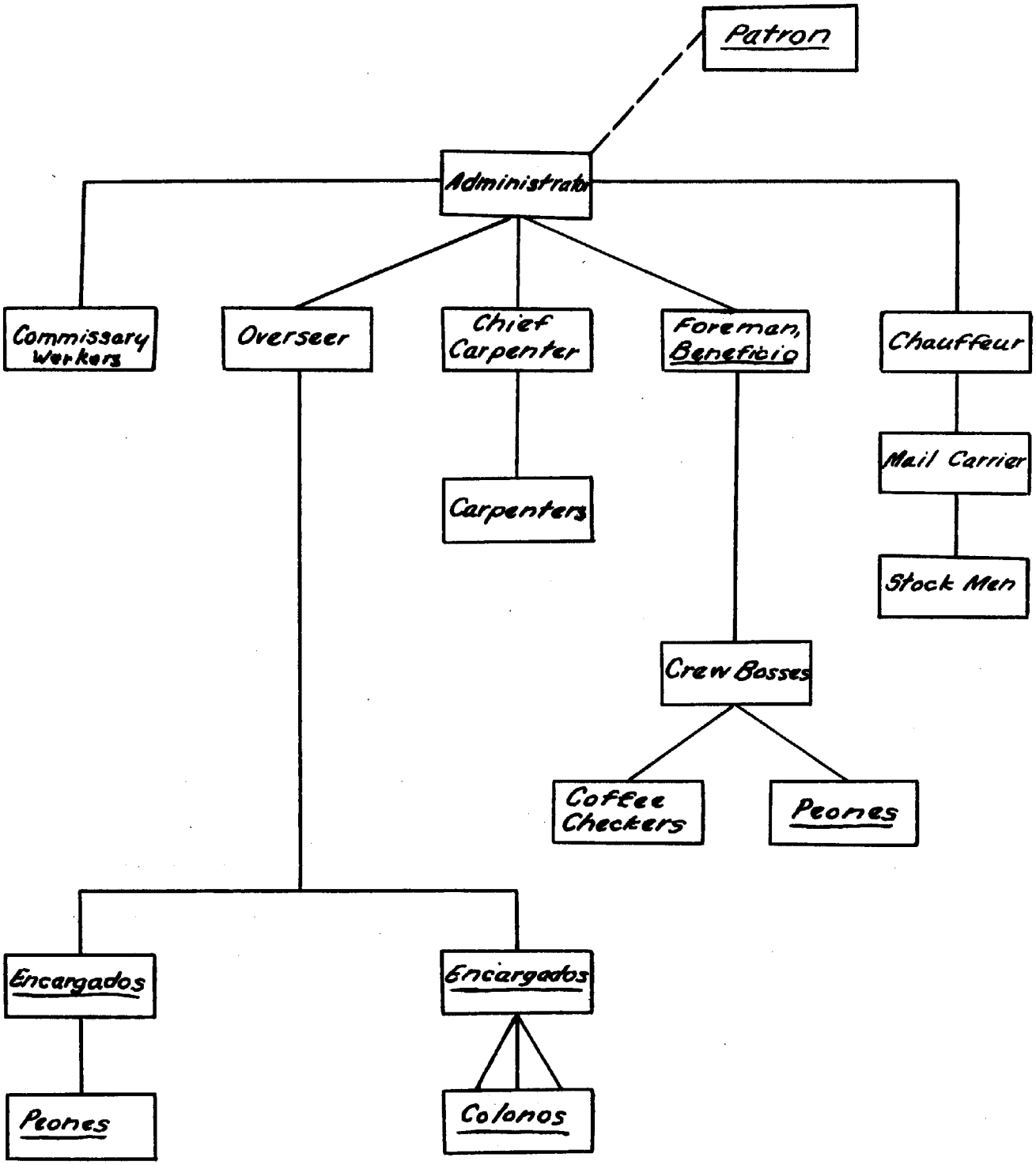

Figure 4.

GENERAL ORGANIZATION OF THE ESTATE: AQUIARES, 1952.

As coffee "took" in Turrialba, the various estates of the patron were administered by a single superintendent who traveled from one holding to another supervising the work on each farm. The operations at Aquiares soon became so complicated that a full time administrator was needed and the position of general superintendent gave way to the appointment of local estate administrators.

For the most part administrators at Aquiares have been men of urban background who found the relative isolation of Aquiares incompatible with their accustomed pattern of living. Administrators have not lasted long since there have been fifteen of them in the last forty-three years. As the estate grew in the magnitude of its operations, its organization has become more complex. The demands upon the vitality and physical energy of the administrator have therefore been great. An administrator must know his entire operation intimately and make frequent visits to every portion of the estate to insure its smooth operation. Administrators have been younger men who remained for a few years only to move to larger urban centers where living facilities and the conditions of urban life were more to their tastes.

Formal Structure

The present administrator is from a German family whose holdings were wiped out during World War II when German property was expropriated by the Costa Rican government. He is responsible

for the estate in the absence of the patron. He hires and fires help and issues orders to the employees. He maintains daily telephone contact with the patron in the latter's San Jose office. In addition, he directly supervises other personnel such as the chauffeur, stable and stock men, repair men, and the domestic help for the house of the patron and for his own home.

The bookkeeper makes up the payroll and supervises the purchase of goods for the commissary. He completes a number of forms required by the government, including records of production, running expenses, payroll, and hospital petitions for the laborers. He is in charge of the farm during the infrequent absences of the administrator.

Formerly, there were two overseers (mandadores) each responsible for a separate portion of the estate. For reasons difficult to isolate (rivalry, failure to check coffee thefts, careless practices by work crews and colonos), the patron has created a series of intermediary positions between the laborers and the overseers designed to give closer supervision to the work. When one of the overseers became ill and unable to continue the strenuous work of covering a large section of the estate each day, he was assigned a colonia, and the present overseer undertook complete supervision of the labor force. He is assisted by his son. Under his supervision, three encargados (foremen) direct the colonias. Each work crew of peones is under the direction

of an encargado, but they are of lesser status and receive less pay than the colonia encargados and the positions are not as permanent. The number of crews varies, but the supervision of crews is a testing point where potential managerial workers are given opportunities to demonstrate their abilities. The overseer daily issues instructions to the chief ox-driver who has encargado status and is permanent, and who, in turn, gives instructions to the ox-drivers (boyeros). Nominally, the stock and stable help are also under the command of the overseer, but at the time of the study, they were more frequently receiving orders directly from the administrator. There is an encargado who supervises the crews appointed to work in the cane fields, and he is permanent and responsible to the overseer. Of lesser consequence than the position of encargado is that of the first mule driver who leads five other mule drivers. These mule drivers transport coffee from areas inaccessible to the ox carts. The lead mule driver is a son of the overseer.

The foreman of the beneficio has one assistant, his son. In addition there are two men in charge of the girls checking coffee and the men who are assigned to the beneficio during the harvest season. Two firemen and a night watchman also fall under his supervision. The chief carpenter directs four other carpenters who work about the estate repairing houses, gates, and fences. In the shop, there is a smith and metal worker, one general carpenter, and an ox cart maker who also constructs coffins when needed.

Ordinarily, there are about ten laborers working in the beneficio during the harvest season. At this time of year, there are nineteen ox drivers and twenty day laborers in the cane fields. There are also five mule drivers, and fifty to one hundred peones, including women and children who help in the harvest. When the harvest season is over, the daily force is cut, but since a large proportion of the harvest labor force are wives and children of resident colonos and peones, they merely join the ranks of the unemployed during that part of the year when their services are not needed.

The problem of providing adequate work for those who need and desire it entails considerable shifting of crews and work schedules, and requires that the organization be kept flexible. It is the custom of the estate to employ widows of men who served the estate for many years and to provide lighter work for men in their declining years. This means that the overseer must place t them in the easier tasks even when work is scarce.

The Emergence of Systems

The location of structural positions within the general agricultural system, while a useful device for understanding the communication of authority, does not provide insight into the arrangements of related systems operating within the more general social structure. From this point of view, the over-all organization of estate life will be referred to as the general

structure, and the constructs used to differentiate categories of relationships and convergence of interests will be referred to as systems. To establish these categories, it is necessary to inquire as to the bases upon which these positions within the general structure become identified with each other and differentiated from other segments of the general structure as more or less independent units.

While the division of labor gives an immediate basis upon which systems may be perceived, the ultimate condition seems to lie in the use of property. In this connection, Herskovits remarks that:

> "Whatever absolute criteria of property may be set up, the ultimate determinant of what is property and what is not is to be sought in the attitude of the group from whose culture a given instance of ownership is taken."[1]

If property, and in this case land as property, is to be valued, it must be somewhat scarce, figure consciously in the life of the people, and must yield some recognizable return, economic, or psychological. That land is a scarcity and is important in the conscious thinking of Aquiarians is immediately evident. In interviews, informants consistently expressed a high value placed in private ownership of land. The land comprising Aquiares is, of course, a monopoly, completely controlled by the

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1. M. J. Herskovits, The Economic Life of Primitive People (New York: A. Knopf, 1940) p. 288.

patron. The returns from the land in Aquiares have been discussed at some length in previous chapters. What concerns this study is the ordering of relations among the population of a given territory in terms of the extent to which possession of land conditions the organization of these relations. The capacity to order relations among members of a population is a function of social power, or the ability "to produce intended effects."[2] Social power "either is derived from private property or is against it."[3] Man may thus control his external environment and may also control other men because of his control over nature or environment.

The patron is legal owner of the property-in-land which constitutes the territoriality of Aquiares. The legal sanction for his ownership is given by national law in Costa Rica. This does not mean that he has exclusive right to do what he wishes with either the natural or human resources upon that property. There is no restriction as to the kind and extent of crops which may be cultivated aside from the usual restriction against certain narcotic plant industries. However, if he grows coffee, the law requires that he allow the harvest to be inspected periodically by agents of the government. Law also requires that certain specifications be met with regard to employee

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2. B. A. Russell, Power (London: W. Norton & Co., 1938) p. 35.

3. F. Neumann, "Approaches to the Study of Political Power" Political Science Quarterly, Vol. LXV, No. 2 (June: 1950) p. 173.

housing, medical provisions, minimum wages, conditions under which workers may be hired or fired, and health conditions for workers and residents. Legally, he must accept a police agent appointed from Turrialba, although he may make recommendations regarding that appointment. He must provide educational facilities for children under the age of fourteen, who are forbidden to work as salaried employees. Rights and duties of laborers in relation to their employer are specified in the Código de Trabajo (Labor Code), and the relationship between owner and colono is specified in a contract which the individual colono makes with him each year. Regardless of how faithfully the patron responds to the conditions laid down by legal sanctions, he is technically responsible for seeing that they are met.

The day-to-day administration of the estate proper is in charge of an appointed representative of the owner, the administrator, who regulates activities and sees that the interests of the patron are protected. He is, however, in daily contact with the patron at the San Jose office via telephone. He authorizes expenditures and obtains payroll funds each week from the bank in Turrialba.

The patron and his administrator, with their families, constitute a clearly differentiated segment in this population, and for the purposes of this analysis will be defined as the administrative system. Their identification and relations to

each other, class position, social and technical skills, are functions of their relationship to property, a criterion which has been stated early in this chapter. While the administrator is not the property owner, he performs his role as though he were, and this behavior is sanctioned socially and legally by the patron. It is his prerogative to behave as though he were the ultimate source of authority in most patterned activities involved in running the estate.

A second system, differentiated by its managerial functions, consists of salaried employees of concomitant socio-economic status, united by kinship ties and technical and social skills different from those of the administrative system insofar as they are more directly concerned with the primary and secondary activities and are immediately responsible for the labor force. They are more visibly and actually removed from control or possession of land, the means of production. This group will be defined as the managerial system.

Because of the specific nature of the relation which obtains between the colono and patron, the colonia system will be treated as a separate unit apart from the day wage earners in this analysis. Their relation to the estate is by virtue of a contract which gives them certain rights relative to property-in-land. They are not paid as wage earners, but in kind, much as are the sharecroppers in southern United States. The distinction

in status between colono and day wage earner is one consciously recognized by all segments of the general structure, and for that reason will be referred to as the colono system.

The day wage earner, or peon, is farther removed from control of the means of production than any other segment of the agricultural system. The skills which characterize this level are almost exclusively manual and it is the lowest socio-economic group on the estate. Because of the serf-like nature of this level, it will be referred to as the peon system.

A number of structural positions are held by persons who derive their status from membership in some other system, hence their activities in Aquiares are tangential to the operation of the agricultural enterprise. They are almost exclusively concerned with secondary activities, and include positions such as the doctors, priest, police agent, and school teachers. They do not constitute a system of and by themselves since their interests and functions are divergent and they have little relationship with each other. Nevertheless, their status in their own system many times does influence the behavior of members of one, some, or all of the above categories in the agricultural system. In a certain sense they may act as a wedge, insofar as they are immune from most of the dictates of the agricultural authority system and insofar as they perform specific services of value to the community. Thus, the police agent, nominally

independent of any vested interest, is committed to the protection of all the inhabitants from injustices by another and is in a position to exert influence and authority over any of the sub-systems operative in the agricultural system.

Technically speaking, these systems do not exhaust the number and kinds of systems in Aquiares. There is a religious system, an educational system, recreational systems, familial systems, etc. They are not discussed here because they are not perceived as directly relevant to the problems posed. They will be dealt with, however, insofar as they are relevant to the purposes of the study.

Sociometric Aspects of Systems

In an effort to measure the extent and determine the ways in which individuals in the systems identified with each other, the one hundred heads of households in the sample were asked to make sociometric choices of person, such choices to be made on the basis of a mixed clique-prestige question. The choices reflected in the responses appear in Table III. Two hundred and sixty choices were made, but only one hundred and sixteen of these were to ranked persons in the sample. Three indices were computed, all of which were based on the ratio of observed to expected choices.

The index scores are shown in the columns at the extreme right of Table III. These indices are C (Cleavage Index), I.P. (Ingroup Preference Index), and G.P. (Group Preference Index).[4] An index score of approximately 1.00 indicates that there has been neither more nor less choices than expected. The C index indicates the amount of ingroup choices made relative to the total number of choices made and received by the group; that is, the expected frequency in this case is found by multiplying the proportion of the total one hundred and sixteen choices which were received by the total number of choices the group made. A larger C indicates more ingroup choosing. The C score for the colono system in Table III is 2.05, and since this is the highest index recorded for the systems itemized, a relatively higher degree of cleavage may be inferred for that system. The peon and managerial systems reflect somewhat greater cleavage than the expected, but the tangential system, composed of individuals of heterogenous functions, goals, and interests shows no cleavage whatsoever.

The G.P. index indicates the relative extent to which others choose into a group in relation to its size. When G.P. is 1.00 the group's drawing appears to be directly related to its size. If less than 1.00 its drawing power is less than would be expected in terms of its size, if greater, its drawing

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4. Charles H. Procter and Charles P. Loomis in "Analyses of Sociolmetric Data" Research Methods in Social Relations by Maria Jahoda, Morton Deutsch, and Stuart Cook, pp. 569-581.

power is greater, etc. The tangential system has the highest index (2.61) which seems to indicate relatively high drawing power. An inspection of the matrix on which the choices were recorded revealed that almost all of the choices were to the police agent who is a former peon and who has close, life-long ties with the peon group. The index for the managerial system indicates slightly more group preference, and the peon and colono systems both fall below the expected.

The I.P. index indicates the ratio of observed ingroup choices to the expected number of choices in terms of the size of the group. I.P. is 1.00 when the number of ingroup choices is directly related to the size of the ingroup. When I.P. is less than 1.00, the number of ingroup choices is less than the expected on the basis of its size. When I.P. is greater, the number of ingroup choices is in excess of the expected. I.P. as expressed by this ratio indicates that the managerial system with an I.P. equal to 4.07 is characterized by greater ingroup identification as reflected in the choices. The colono system with an I.P. equal to 1.03 reflects the approximate expected amount of ingroup preference. The tangential system with an I.P. score of 0.00 reflects the minimum possible mutual identification. Peon ingroup preference is somewhat less than expected though not the extreme indicated in the I.P. score for tangentials.

TABLE III

DISTRIBUTION OF SOCIOMETRIC CHOICES EXPRESSING CLEAVAGES, INGROUP PREFERENCES, AND GROUP PREFERENCES BY SYSTEMS: AQUIARES, 1952*

SYSTEMS	MANAGERIAL	COLONO	TANGENTIAL	PEON	TOTAL	SCORES		
No. Persons	10	35	5	50	100	IP	C	GP
Managerial	7	1	1	8	17	4.07	1.84	2.26
Colono	7	23	7	5	42	1.03	2.05	.77
Tangential	0	2	0	1	3	0.	0.	2.61
Peon	12	5	7	30	54	.56	1.47	.77
Total	26	31	15	44	116			

* In response to the question: "With whom do you like to converse most frequently and with whom you enjoy greatest confidence?"

Whatever cohesiveness might be imputed here cannot be attributed to social factors alone. In the 1948 community studies project, there were one hundred and thirty-seven sociometric choices, one hundred and thirty-six of which were to persons in Aquiares. Twenty colonos in the sample made sixty-seven choices. Fifty-three (79%) of these were to other colonos. Fourteen (21%) of the choices were made to managerial and peon employees residing in the central area of the estate. Residents in the central area made seventy-one (92%) of their choices to other estate employees living in the central area, and only six (8%) of their choices to colonos. This may well be, at least in part, a function of physical distance since the two groups, central area managers and peones on the one hand, and the colonos on the other, are separated from each other by considerable physical distance. The members of these groups live closer to others in their respective group than to those in the opposing group. It is not clear as to the relative importance of physical distance, common interests, occupation, etc. in the clusterings reflected in Table III, but it does seem apparent that all of these factors, and perhaps more, are operative.

General Ranking

A general ranking of one hundred heads of households was devised, based upon the evaluations of a set of judges. In addition to ranking individual members of the sample, roles as

conceived by the ten judges were also evaluated and ranked. Ten judges were selected[5] and each judge was instructed to arrange in groups the one hundred names appearing on 3 x 5 cards. The judges were not told what kinds of groupings were desired, and if they asked, were given an evasive answer such as "whatever seems most logical to you." When groups had been formed, each judge was asked to arrange the groups in rank order. The names in each grouping were then ranked. There was, of course, considerable re-arranging and shifting of cards in this process. The scores given each person by the judges were averaged and the one hundred persons ranked in order. There was general agreement among judges about ranking.[6] The patron and administrator did not occur in the sample and thus were omitted. Rank positions, according to membership, appear in Appendix I.

The sample was then compared as to rank order and occupation to answer the question as to whether socio-economic status could be associated positively with adjudged rank order, and the computation showed F - 11.63, 5 and 94 degrees of freedom, is less than .01. This demonstrated that there was a marked tendency for the judges to rank their fellows in an order which corresponded to their position in the general structure.

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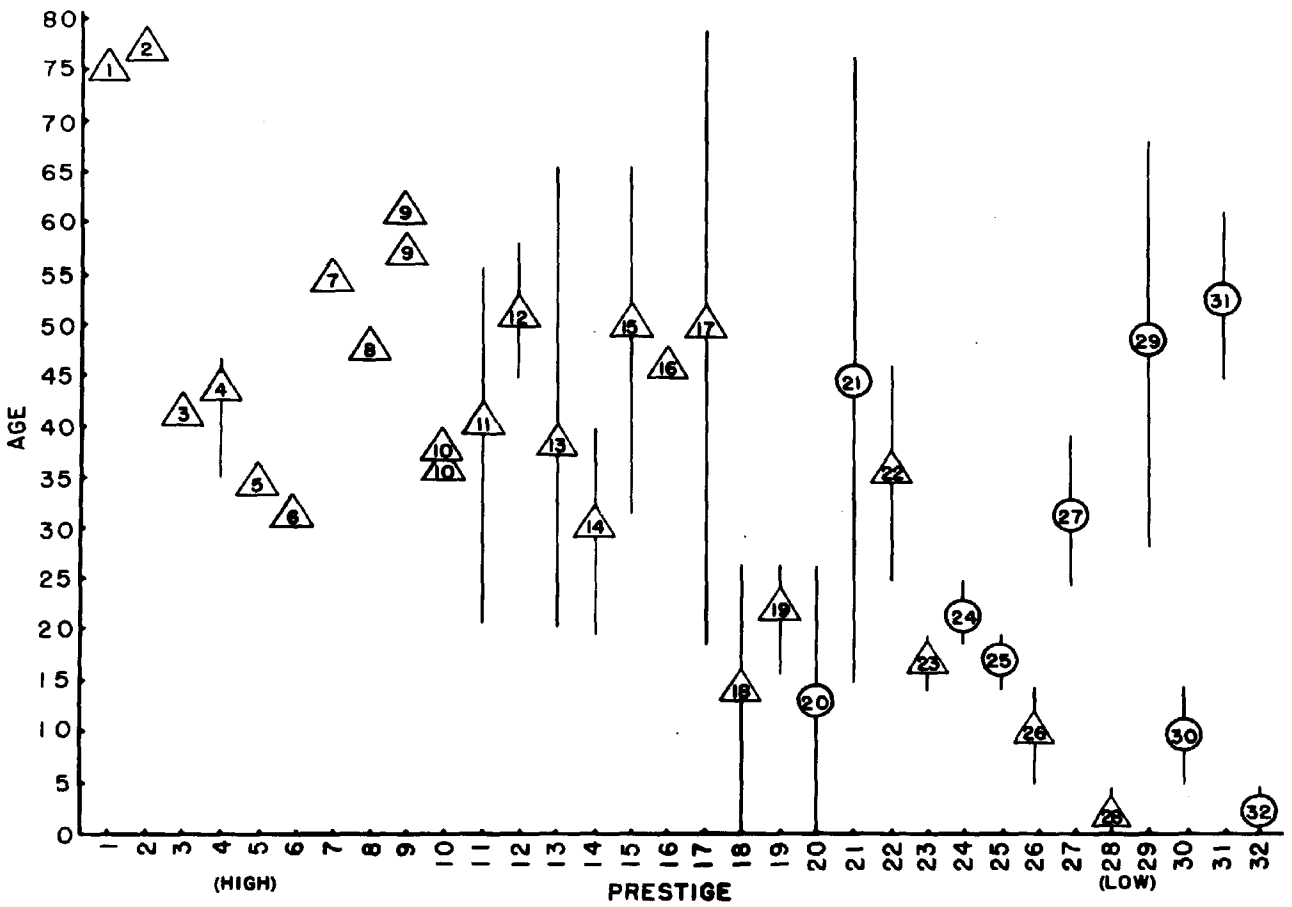
5. Appendix II, Methodological Note contains a discussion of the problems of this method.

6. For a detailed account of agreement and disagreement of judges in ranking, see Appendix II, Methodological Note: The Use of Judges.

AGE, SEX, & OCCUPATION IN THE SOCIAL STRUCTURE OF AQUIARES 1951

BY THOMAS L. NORRIS



KEY

RANK	AVE. SCORE	ROLE	RANK	AVE. SCORE	ROLE
1	1.2	PATRON	16	15.4	COLONO
2	2.5	PRIEST	17	16.9	MARRIED PEON
3	3.2	ADMINISTRATOR	18	19.1	PREFERRED SON
4	3.7	DOCTOR	19	20.3	MALE YOUTH
5	5.7	TEACHER	20	20.4	PREFERRED DAUGHTER
6	6.4	BOOKKEEPER	21	20.6	MARRIED WOMAN
7	6.6	GENERAL SUPERINTENDANT	22	20.7	BACHELOR
8	7.1	POLICE AGENT	23	22.8	BOY
9	8.3	BENEFICIO SUPERINTENDANT	24	24.5	FEMALE YOUTH
	8.3	SHOP FOREMAN	25	25.6	GIRL
10	11.3	CHAUFFEUR	26	26.2	MALE CHILD
	11.3	CARETAKER OF STOCK	27	26.5	OLD MAID
11	12.2	CARPENTER	28	27.3	MALE INFANT
12	12.6	FOREMAN OF COLONIAS	29	27.4	WIDOW
13	13.0	FOREMAN OF WORK CREWS	30	28.1	FEMALE CHILD
14	14.2	CURANDERO	31	29.8	COMMON-LAW WIFE
15	15.2	OX DRIVER	32	29.9	FEMALE INFANT
	△	MALE		○	FEMALE

VERTICAL LINES INDICATE SCOPE OF AGES ACTUALLY PERFORMING ROLE. IF THERE IS NO VERTICAL LINE, IT INDICATES THAT THERE IS ONLY ONE INDIVIDUAL OF THAT CORRESPONDING AGE PERFORMING THE ROLE

Figure 5.

To secure further confirmation, the reverse process was conducted two months after the ranking of individuals, that is, each judge was interviewed and an attempt was made to elicit "all the different kinds of people who live in Aquiares." Through this technique, a list of thirty-two kinds of people was constructed. This was a mixed list, and included not only patron, administrator, doctor, foremen, carpenters, ox drivers, peones, colonos, but also a family breakdown to include age and sex gradations within the family. At a later date the list was transferred to cards, and judges were asked to rank these positions in order of importance. The rank order, average scores, and roles are listed and charted in Fig. 5. Ranks numbered one through sixteen refer to positions existing either in the formal structure of the estate, or in tangential systems. Ranks numbered seventeen through thirty-two refer to family status.

It seems obvious that while one may occupy a relatively low position in the general structure, he may enjoy a high status in one or another of the systems of which he is a member. The reverse may be true. For example, the police agent, a member of a tangential system in which he is of low rank, has high status in the community. Or a carpenter, while of low rank in the general structure, is high in the peon system. It is possible, though infrequent, for a person of low rank in the general structure to have a high rank in a local formal organization. Inspection of

lists of officers of organizations through time, however, has indicated that there is a tendency for persons high in rank within the general structure to monopolize those positions in local association of greater importance.

This system of analysis, while not without its shortcomings, indicates clearly why systems for the determination of horizontal stratification may encounter difficulty since the abstraction which the investigator uses may not correspond to criteria which have meaning for the local population. This is particularly important when differential status systems are to be used as a basis for manipulation of inhabitants in change programs, for they will be expected to behave in terms of their own understanding of their status system.

The major thesis of this study is that differential ranking in sub-systems is related to the proximity to the control of property or the means of production, and these data presented here represent the first step in the confirmation of this hypothesis.

CHAPTER IV

THE ADMINISTRATIVE SYSTEM

Only two persons in the general authority structure of Aquiares, the patron and the administrator, occupy administrative positions, and the latter is legal and personal representative of the patron in all matters pertaining to estate business when the former is not present on the estate.

The Patron

The patron, as previously indicated, is the legal owner of the land on which the estate lies. He also owns all the buildings, including residences, school, church, commissary, stable, beneficio, trapiche, jail and storehouse. The entire estate is organized to produce coffee and provide subsistence for the labor force, and every activity is in direct or indirect relation to these ends. In such a large-scale enterprise, extending over hundreds of acres of territory and involving more than twelve hundred inhabitants, it would seem that the supreme power holder, in order to maintain and perpetuate his power, must act in such a way as not to dissipate that power.

There have been events in the history of Aquiares when these ends were being circumvented in the eyes of some people. Landowners in Costa Rica looked upon the introduction of the

colono system, for instance, as one such step. They considered that giving independence and extra benefits to the peones were "socialistic" or even "communistic" moves, and as such would be detrimental not only to the interests of the patron of Aquiares but to other landholders as well. These critics did not agree that the colono system could be one of the most effective means by which the farm could achieve its ends. In the Meseta Central, for instance, farm owners draw their labor force from the large cities during the harvest season. In Turrialba, with its longer harvest season of almost five months, there is no such supply available, and if it were, the cost would be greater than the operation of the colono system. The expense of a payroll over five months for daily wage earners would skyrocket the current cost since the colono operates with the help of his family on his lot. This system guarantees a steady labor potential at a minimum of cost with a maximum of dependency of the colono upon the owner. Such a policy, therefore, does not dissipate the control of the patron, but rather forces it into channels which have legal and social sanction. To cite another example, the local school is estate property. Repairs and additions are made by the estate at its own expense. It also bears the cost of electricity and water. The national educational system would build a new school and maintain it if the estate would cede or sell a small lot for that purpose. The patron considers that this would constitute dissipation of his power and feels that

possession might later be interpreted as the greater part of law, for "if they get one foot in, who knows how far they might go," he exclaimed. As it now stands, the director of the school and his family are dependent upon the patron for housing and school facilities. Without the support of the patron their activities would be seriously crippled.

When in Aquiares, the patron lives in his large residence. While not elegant by San Jose standards, it is nonetheless superior for the Turrialba area. The patron visits the farm once or twice a month. The remainder of the time, he is in San Jose, the capitol, where he has his office and permanent house.

The capacity to modify the behavior of others to suit one's own purposes is dependent somewhat upon the possession of technical and social skills, competence, class membership, and other elements which have been at one time or another classified as "social capital." In the case of the patron, his Anglo-Saxon origins are most certainly a significant part of that social capital which reinforces his power position. In Costa Rica, a foreigner, especially one from the United States or Europe enjoys considerable prestige. Whiteness of skin, "know-how" in technology, and material wealth seem to be qualities associated with these peoples admired by Costa Ricans. "Son gente de alta calidad" or "tienen buena sangre" (they are people of high quality or

they have good blood) are oft-heard expressions directed toward foreigners. The skill with which he handles his farm enterprises is indicated in a paragraph from a national agricultural magazine which speaks of the estate as a "model in every respect," a result of the worth of its "intelligent proprietor."[1]

Another item of his "social capital" of no small import would consist of his alliances and contacts with other persons prominent in Costa Rican economic, business, political and social life. However, the creation and productive operation of such an enterprise as Aquiares requires not only skill and efficiency in matters of commerce, but also certain charaismatic qualities obtaining to the personality of the patron in his relationship to peers and to persons within the community. Another large landowner in Turrialba spoke of the patron of Aquiares as "a perfect Christian gentleman in every sense of the word." To his employees, the patron plays the role of the good father. Far from being a tyrant (a role left to the administrator), he deals with his employees in a quiet, benevolent and patronizing manner. He does not dictate in a harsh, commanding manner, but rather uses, with no little skill, a fatherly approach to complainants. His willingness to give counsel is the consession of a kind and interested father to his children. Peones, however, have also learned that it is

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1. Carlos L. Valle, "Colonias Agricolas con Hombres que Sepan Hacer Producir la Tierra," Suelo Tico, p. 13F

not proper to call the attention of the patron towards oneself ("no debe llamarse la atencion al patron"). The outward symbols of clothing accentuate both the differences in outward appearance and social status of patron and peon. The patron, dressed in ties, shining shoes, business suit, watch and chain, sits in a swivel chair before a large polished desk covered with papers and account books. The unshod peon, straw hat in hand, stands before him in his cheap white work clothes while the patron explains what is just and good in relation to the problem the peon has brought.

Servants of the patron recount endless tales of life on the hill, much of which is probably exaggeration. Bedrooms with private baths, American and Scotch whiskey, and a large radio are items which only the elite are reputed to consume. Much of the gossip concerns hilarious wild parties "thrown" by the patron's son for his cronies when the son was younger. Prior to the visit of the patron, there are extensive preparations to ready the house. Paths between the house and office are spread with red gravel in case the patron should prefer to walk the distance rather than ride in chauffeured car. But regardless of whether the patron walks or rides, the peon traditionally removes his hat as he passes.

Competence in business matters, skill in manipulating inferiors, ability to dress and live as a member of the elite,

and expertness in playing up the stereotype of the father and benevolent patron are manifestations of influence which hover in the background and condition the outcoming of decision-making situations exclusive of his defined authority as employer.

Lines of authority are clearly delineated for the administrative system in Aquiares. The patron sets basic policy, and decisions are contingent upon his wishes. As owner of the estate it is his prerogative to organize production as he sees fit, subject to certain legal restrictions imposed by the government. The labor code, for example, makes him responsible for meeting minimal housing and wage requirements, payment of social security tokens, and requires that he show just cause for the dismissal of an employee.

The patron is cautious about the direct use of authority. Some years ago, the peones were given orders for Sunday work during the harvest. There was considerable hesitancy about violating the Sabbath, in view of which the patron solicited the support of the priest who informed the people at mass that it would be no violation of their religious obligations to work during the current season on Sundays. In matters of religion, the priest, of course, takes precedence over the patron, but they are aligned traditionally and there is no memory of conflict between the two in the history of the estate.

According to legal codes, the patron's responsibilities end when he has met wage, housing, and health requirements. Generally, extension agents and other reform agencies feel that owners are interested in barely meeting these requirements and no more. This was the attitude of the school officials, and government agricultural agents who had contact with Aquiares.

This attitude, however, is not shared by all of the patron's employees. During the interviews conducted by the field worker, this attitude occurred with relative infrequency, and most employees felt that their patron goes "above and beyond" the minimal requirements. It is this notion of the "above and beyond" which makes the patron less a legal-rational employer and more a benevolent father to whom his charges adhere with devotion. The system of rewards is one of the instances in which the patron goes beyond the minimal requirements. The week prior to Christmas all wage earners and colonos receive a bonus equal to the earnings of the worker for that week. It is called the propina or tip. In addition, certain persons, especially managerial employees, receive additional bonuses of coffee and/or money at the liquidation of the coffee accounts. To the knowledge of the field worker, this is the only estate in which such a practice has been in continuous use throughout the last three decades. Without discussing what might lay behind such a procedure, the consequences of the gesture are plain. The recipients are more closely bound to and indebted to him as a

result. Christmas is a time of sentiment, and the patron makes it possible for the employees to purchase ceremonial foods and decorations which otherwise might not be possible. The tips to managerial employees enable them to purchase those items which give them status and prestige. Without the support and good favors of the patron their style of living would be limited, if not deflated.

The Administrator

In many respects, the administrator is the antithesis of the patron. It would seem as though their parts were conceived as protagonist and antagonist. It would be purely a matter of conjecture as to whether or not this type of personality was purposely selected by the patron to deflect criticism which might otherwise be directed against himself.

The administrator lives on the estate throughout the year, except for brief visits to the capitol. His residence is the second largest on the estate. As personal and official representative of the patron, he is responsible for the management of everything that occurs in the absence of the patron. His consumption patterns must be in keeping with his position.

The administrator, of German origin, sees his role as that of running the estate with a maximum of efficiency and minimum of cost. This is not an easy task in a Latin situation

for one reared in the German tradition of efficiency and rigid expectations. But he is skillful in handling intermediaries between himself and the peones in the pursuit of those ends. Characteristically, he remains aloof, communicating with native employees only on a "strictly business" basis. Occasionally, he entertains visitors or relatives from San Jose or Turrialba, but does not visit socially with local inhabitants. He feels that:

> "these people are not, by nature, cooperative... they have much of the Indian in them yet. Notice their slant eyes and darker skin, and the custom of eating apart from each other. Even X (referring to the overseer) is very delicate (muy delicado) to handle. And you can't expect them to do any but the most simple task at one time."

And so, to maintain order, one must let them know "who the boss is." The tendency for the German to shift the blame outwardly was reflected in a comment he made when he forgot to have the social security forms for sick peones ready for the doctor. As the doctor left, visibly irritated because of his useless trip, the administrator remarked: "He was probably happy not to have to work anyway."

The administrator is thought of as hardworking, demanding, frugal and severe ("Usted sabe como son los alemanes . . duros, duros, pero bien duros.") This configuration of qualities isolates him from the rest of the community and

symbolizes those qualities of foreigners repugnant to the native just as the patron symbolizes those qualities admired by the natives. Yet, in his role, such attributes facilitate control. Since he is the official through which inferiors are supposed to approach the patron, many complaints remain unstated, through fear, or are cut short. Fear of reproach or refusal minimizes communications between administrator and most of his inferiors.

The actual day-to-day administration of the estate rests in the hands of the administrator who hires and fires and directs the various operations of the estate. He issues orders directly to the overseer, head of beneficio, and chief carpenter, as well as to the chauffeur, handy-man, and domestic servants. He supervises the payment of employees. Although his decisions are generally upheld by the patron, there are occasions when the patron over-rules him. During the residence of the field worker, the school director tried to enlist the help of the estate in building platforms for peones participating in an out-house building campaign. The school director went to the administrator, and after calculating the cost and the amount needed, the administrator refused. The director waited until the patron visited the estate and then re-stated his case to the patron. The patron ordered the administrator to arrange with the chief carpenter for the construction of the necessary platforms. Some

of the more subtle aspects of this particular episode, representing the patron's reversal of the administrator's decision are presented in Chapter VII.

The Priest

The priest is not considered a member of the administrative system, partly because of the secondary nature of his activities in relation to coffee production, and partly because he is officially a member of a tangential system. However, he is the highest ranking of those belonging to tangential systems and was ranked by judges second only to the patron. Traditionally, the church and large landholders have been closely allied throughout Latin America and it is for this reason that the priest is included in this discussion. He lives in Turrialba, and is absent from Aquiares save for bi-weekly visits to say mass and hear confessions. During Holy Week he is present for five consecutive days. He also comes to Aquiares to celebrate mass on Holy Days of Obligation. The estate provides him with transportation to and from Turrialba. The church is equipped with bedroom and toilet for his use. He receives meals on a tray from the kitchen of the administrator's home. In passing, it is well to mention that the church is an attractive structure, superior to the school in every detail. This pleases the priest who sees in the school teachers an element of disrespect and even denial of the values which he represents. "They are all agnostics

and heretics", he says. Although not a Catholic himself, the patron supports the program of the church, and provided most of the money for construction of the chapel. He feels one faith in the community is a guard against internal conflicts, and is thus inclined to grant the occasional requests of the priest for minor church alterations, repairs, or equipment. The wife of the patron is Catholic and attends mass when present on the estate. The front pew is reserved for the family of the patron. It has a hinged gate indicating that it is not just an ordinary pew for ordinary persons.

Life in Aquiares is the only life that most of its inhabitants have ever known. The roots of the attachment of the workers to their patron may go back into the historical tradition of peonage in the patriarchal organization of most Latin American landholdings, but they are sustained and perpetuated contemporaneously through the mechanisms which have been discussed in this chapter. In the role of the good father, it is believed that the patron will care for his "children", if worst comes to worst; hence a profound sense of dependency has developed. For all the poverty and concomitant discomforts of peon life, the ties with the patron and the accompanying traditional and paternalistic hierarchy give security to the people. For it is the patron and his representatives who have fed, and are expected to continue to feed the loyal peon. In exchange for this, the peon owes his loyalty and labor.

CHAPTER V

THE MANAGERIAL SYSTEM

About thirteen percent of the local population may be classified as occupying managerial posts. In the sample of 100 heads of families, these included the overseer, foreman of the beneficio, chief carpenter, chauffeur, one commissary worker, six encargados, and a stock manager.

Positions in the managerial system were characterized in the following terms by the judges:

Spanish	English
Son gente acomodados	Comfortably set up
Tienen una mejor vida	Have a better life
Vive mas a gusto	Lives about as he wishes
Clase preferencial	Preferred class (of people)
Tiene varias animales	Has several animals
Tiene su platilla	Has money
Sin vicio	Without any vices
Muy trabajador	A great worker
Muy luchador	A real fighter
Tiene plata en el banco	Has money in the bank
Tiene pequeña ventaja	Has an advantage
Tiene medios para mejorarse	Has the means with which to better himself
Observa buena conducta	Observes good conduct
Carece de cultura	Reflects culture
Es buena persona	Is a good person
Muy decente	Very respectable
De lo que hace, sobra	Comes out ahead in whatever he does
Buenos hábitos	Good habits
Alto por su trabajo	Up high because of his job
Elemento bueno	A good element
Guayacan	Big shot
No vive mal	Doesn't live badly
Produce mas por tener mas comodedades	Produces more because he has better means

Spanish	English
Gana buen sueldo	Earns a good salary
Bien sano	Stable, reliable
Mas en el servicio del pueblo	More active in serving the community
Es mandador	Is a foreman
Distinguido	Distinguished
Tiene terreno	Owns land
Honrado	Honorable

These statements reflect three conceptions of what gives one status in the managerial system: (1) possession of material wealth, (2) occupation, and (3) moral qualities.

Kinship ties are playing an increasingly important part in the consolidation of positions in the managerial system. The foreman of the beneficio, for instance, has six children married to the following persons:

Daughter married to a son of the overseer's brother
Daughter married to a fireman in San Jose
Daughter married to a son of the chief carpenter
Daughter married to the chauffeur
Son married to a daughter of the chief carpenter
Son married to a daughter of the overseer

The chief carpenter's married children have been similarly selective:

Daughter married to a mechanic in Limon
Daughter married to a son of the overseer
Daughter married to the owner of a bar in Turrialba
Daughter married to a son of the foreman of the Beneficio
Son married to the daughter of the owner of a hardware business in Turrialba

The chauffeur is married to a daughter of the foreman of the Beneficio. His mother is chief cook for the patron. His sister is a school teacher and is married to a commissary worker, the son of an encargado. The wife of the police agent is cousin to the chief carpenter. All of the marriages listed above are in the family of the chief carpenter. The overseer, while not so overwhelmingly successful as his peers in this respect, has nevertheless tended to be selective in much the same way about the mates for his children. These selections are as follows:

Son married to a daughter of the chief carpenter
Son married to a daughter of a small store-owner in San Juan Vinas
Daughter married to the son of the foreman of the beneficio
Daughter married to a colono
Daughter married to the son of a colono, the former overseer
Daughter married to an ox-driver

Of the remaining individuals in the managerial system, only one encargado has married children, two sons, one of whom is married to the school-teacher sister of the chauffeur, and the other to a carpenter. The remaining children of these individuals are not yet married.

Accessibility to the administrator and the patron, and therefore to the ultimate source of control over property and the means of production, is another factor which increases the power potential of structural positions in the managerial system. This

accessibility is manifested in the ability of individuals occupying these positions to gain certain concessions and advantages not normally available to their inferiors. The use of the storeroom of the beneficio for wedding dances is an example of the advantage which membership in the managerial system may bring. Weddings are important occasions. Even the poorest of fathers will go into debt in order to have the appropriate appointments for the celebration. Some deliberate calculation is generally involved in the selection of a padrino or godfather for the wedding, for he will be expected to share a good portion of the cost. The high point of the festivities is the dance and distribution of ceremonial foods consisting of cake, cookies, sandwiches, and liquor. The parents do not attend the wedding ceremony at the church. The padrino and his wife accompany the couple and the ceremony is completed in a few moments. But after the ceremony there is dancing, an orchestra, however humble, food and drink. Only members of the managerial system have had their wedding dances in the storeroom of the beneficio, with its smooth, hardwood floor. The storeroom is spacious and can accomodate a large group. Its floor is the most suitable on the grounds for dancing purposes. The cost of decorating a room of this size, hiring an orchestra of suitable quality for the high ranking guests, and the refreshments are, of course, far beyond the capacity of the ordinary peon to beg or borrow. Besides, only the higher income families are in a position in which it

would be proper for them to ask for its use. Members of the managerial system consider the storeroom the only suitable place in Aquiares for the weddings of their offspring. If it were not available, they would hire a dance hall in Turrialba. The idea that a peon might even give thought to asking the patron for the use of the storeroom was greeted with laughter when the investigator suggested it.

Managerial employees, in addition to higher wages, enjoy other advantages which increase their influence. The estate provides them with better housing. In the case of the overseer and foreman of the beneficio, the houses have six rooms, are painted inside and out, and are provided with running water, electricity, and a privy. The chief carpenter's house also has six rooms, but it is of the same construction as the homes of the peones. It is provided with electricity and water.

The six highest ranking members of the managerial system substituted iron cooking stoves imported from the United States, for the usual fogon. They also had radios. All members of the managerial system have beds of iron and mattresses. Seventy-five percent of the members of the highest ranking managerial group wear shoes daily and all of them use shoes for ceremonial occasions.

Managerial employees are most active in local associations. The foreman of the beneficio served twelve years in

various offices of the P.T.A. The overseer has served similarly for seven years, and the chauffeur has served a total of five years. Two encargados have served in lesser posts as "Vocales" (Alternates), but have not served as president, treasurer, or secretary. Other individuals in the community who have actively served in official posts in the P.T.A. include the brother of the overseer who is a prominent colono, the encargado of the ox-drivers, a carpenter, and another prominent colono. These same personalities have been traditionally involved in church leadership. The president of the Church Committee is the overseer. The secretary-treasurer is the police agent. The priest complains that he gets little help from anyone in running the church ceremonials and commented that he "can't count on them (the Committee) for anything." On the other hand, the president of the Committee, the overseer, complained that "all the responsibility falls on my hands. Last year I was in charge of the processions for Holy Week, ran the Church Committee, was president of the P.T.A. and Board of Education, and ran the futbal club." The police agent complains that the real work falls on him since "it takes money to do these things" and he complains that "the overseer tries to dominate everything."

In addition to higher salaries, managerial employees receive additional bonuses of coffee and money at the liquidation of the coffee accounts, as mentioned previously, in July. The overseer and foreman of the beneficio get one hundred pounds of

coffee each. The chief carpenter gets seventy-five pounds, the encargados receive fifty pounds, and the crew bosses of the beneficio are given twenty-five pounds each. Managerial employees also receive double salary the week before Christmas and receive a percentage of the harvest profit. In 1950, the bonus of the overseer is reputed to have totaled some three thousand colones.

Managerial employees, highly conscious of the relatively superior position they hold, feel that they are morally better because they have "character" which apparently is not a quality expected to accrue to lesser individuals in the hierarchy. In words of the overseer:

> "What makes a good overseer? One needs character. He must not be afraid. Character means making oneself respected, knowing how to do things, and knowing how to get others to do things. One must give them (the peones) good treatment. The most difficult is finding easy work for women. The overseer should have lived a long time on the finca, he should know every job, be able to do every job, and be willing to take complete responsibility. He should show greatest respect to his patron and keep his confidence. However, there are certain things about the peones that should not be told to the patron, and certain things about the patron that should not be told to the peones."

The success of the overseer seems more dependent upon the possession of charismatic qualities than other members of the managerial system. He must deal with a large number of persons each week, and is the only legitimate channel through which

inferiors can communicate to the patron or administrator. During the 1948 revolution, an analysis of clique and prestige votes taken during a survey[1] revealed that the overseer ranked highest in both respects. Two years later, the sample was tested on the same questions to elicit clique and prestige votes, and the overseer had dropped to second place behind the police agent. The results of the voting was discussed with both these parties and they were in agreement that the rise of the police agent and fall of the overseer could be attributed to the fact that the police agent had identified with the winning force in the revolution while the overseer had identified with the losing force. Nevertheless, managerial employees still tended to receive highest prestige votes (police agent, 28 votes; overseer, 26 votes; a colono, brother of the overseer, 20 votes; and the foreman of the beneficio, 19 votes).

The administrator made the following comment in comparing the overseer and foreman of the beneficio:

> "The fact that X (overseer) has been able to maintain himself with the patron and with all the administrators of the estate since holding this position, and that he still controls the people in spite of his numerous petty injustices and abuses of his authority is an indication

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1. Based on a twenty-five percent random sample, consisting of forty-eight families, made in connection with the cooperative community study project of the Department of Economics and Rural Life, Inter-American Institute of Agricultural Sciences, Turrialba, Costa Rica, 1948. The questions asked were: "With whom do you like to talk and visit most frequently," and "who would you want to represent this town in a commission to the president in case of a difficulty?"

> of the intelligence of the man. On the other hand, while Y (foreman of the beneficio) has more money in the bank, he is very "delicado" (temperamental), hard to get along with. Not only that, but he is mentally quite dull."

At the level of the managerial system, authority is explicitly defined. One of the most difficult and delicate relationships to maintain in equilibrium has been that which exists among the three top men, the overseer, the foreman of the beneficio, and the chief carpenter. The administrator cited a "disgusto" between the overseer and foreman of the beneficio over the assignment of workers. As a result, they finally refused to communicate at all with each other for the greater part of a year, and every point of contact between the two had to be mediated by the administrator. "For a whole year," the administrator said, "I played errand boy between these two men. It wasn't worth the trouble, but the patron is accustomed to babying them."

The Overseer

The overseer issues work orders and equipment (shovels, baskets) to his encargados, who relay these to the workers. His day begins at 6:30 a.m. when he goes to the stable to get his horse. One of the daily routines, on many of which the field worker accompanied the overseer, is presented here:

6:30 Picks up horse. Stable boy has it ready.
6:35 Instructions to foreman of ox-driver for the day.
6:50 To storehouse. Supervises distribution of baskets to peones.
7:15 Issues orders to encargado of colonias.
7:25 Inspects fence repairs on road to patron's residence.
7:45 Checks peon making drain in the yard of the patron's residence.
8:05 Encounters son, his assistant, sends him on errand.
8:15 Called into house of colono about house repairs. Promises to relay request to administrator who will issue order to the chief carpenter.
8:35 Overtakes ox-drivers at trapiche. Issues afternoon orders to encargado. Talks with workers at trapiche.
8:55 Colono asks for baskets.
9:15 Arrives in cane fields. Finds encargado and issues orders for following day.
9:35 Cuts across estate to check on men repairing bridge.
9:50 Returns by back trail, stops at colonia to discuss house change.
10:00 Checks men cutting cane. Crosses cane fields to check men digging furrows for planting cane. Demonstrates after scolding them for not making them wider and deeper.
10:15 Passes through banana lot of his own in which a son is trimming the trees and clearing brush.
10:35 Arrives at coffee nursery. Discusses planting and transplanting with encargado. Talks with two women about work for the rest of the week.
10:45 Returns to center of estate and leaves horse at stable.
11:00 Dinner and siesta.
1:30 Consults with administrator on work crew picking coffee.
1:55 Returns to home where encargado of colonias reports problems encountered in the morning. Issue orders.
2:30 Goes to beneficio to supervise delivery of coffee. Issues orders to son who leaves to supervise measuring of coffee collected during the day. Remains at receiving tank for two hours until all the coffee is in. Talks with encargados.
4:45 Returns to administrator's office to report on coffee picked for the day.
5:15 Goes home for evening meal.
6:00 Enters statistics of day's production in books. Visited by peones needing baskets and shovels. Colono foreman discusses problems of his section.

Son brings tags deposited by colonos at office indicating colonias ready to have coffee picked up the following day. Enters number of colonia and amount of coffee.

7:30 Futbal club meets and he conducts the meeting.

Costa Rican law is highly explicit as to the reasons for which a man may be fired from his job, and every laborer has recourse to the courts in the event of being discharged under conditions not covered by law. Yet, the overseer manages to fire those who incur his displeasure with little difficulty. "I know," said the administrator, "that when X complains that he doesn't like a certain man, that sooner or later that man will have to go." But X is far too clever to get caught rigging a framework. "Every man," says X, "must make a slip sometime, and I make it my business to be there when he does." This was in reference to getting rid of persons he did not like.

In addition to exercising power in firing employees, X manages to flagrantly violate local moral codes without dissipating his power. It is a matter of universal knowledge that he is the father of at least three local, illegitimate children, and has offspring by a mistress in a nearby town. Nevertheless, this behavior, which would result in violence if committed by another, seems to leave X unaffected. His bastard children are recognized by his legitimate children as step-brothers and step-sisters, but there is no special consideration given them beyond the guarantee of employment for their mothers.

X is openly frank about these matters, and readily confirms numerous stories concerning his abuses. In 1949, he was hospitalized in San Jose for "noises in the head" which he attributes to excessive drinking, but which the administrator thinks was a syphillitic condition. Whatever the cause, everyone is agreed that X went "crazy" (loco) and was in the hospital for six months. X says that he is much better now, and the noises occur less frequently. The behavior of X constitutes something of a puzzle in terms of the local situation, and perhaps can be accounted for better psychologically than sociologically.

The P.T.A. committee in charge of the spring festival was delayed in making detailed arrangements until X could be induced to enter the scene. After three futile meetings in which no one was willing to support definite decisions, the chief carpenter dourly commented: "Without X nothing can be moved in this town." When X appeared at the end of the fourth meeting, he stepped before the group, snapped a list of orders, and then stipulated those persons who would handle each detail. There was no complaint about this manner of handling the situation, nor was there criticism that he would manage the financial aspects of the festival. The meeting ended with all apparently satisfied now that X had "straightened out" the necessary details. When the committee presented its report after the festival, there was rejoicing because the tally showed a profit of some two thousand pesos. On the basis of quantities of food and liquor purchased

and sold, the field worker, a member of the committee, calculated that the profit should have exceeded five thousand pesos after other expenses were deducted. It was taken for granted, however, that X would make some personal profit, and questions were answered with a shrug of the shoulders and comments to the effect that without X there wouldn't even have been two thousand pesos.

X was chosen by the field worker as one of the judges for the evaluation of ranks in the sample of one hundred heads of households. He was, without question, one of the most intelligent and frank informants possible to secure. His information inevitably stood up under checking and rechecking. He was quick to guess, and usually with uncanny accuracy, the kinds of information in which the investigator was interested. He would often re-word a leading question and answer it showing shrewd insight into what the field worker sought. After ranking the cards, he further obliged by separating them into two groups. "These are my friends," he remarked, "and those are my enemies." He further obliged by using the cards to show how local communications operated with special attention to his spy system, filling in names when a link in the chain was not represented in the sample. The overseer's power will be discussed in greater detail with reference to a specific case in the chapter on decision-making.[2]

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2. See Chapter VII.

Foreman of the Beneficio

The daily routine of the foreman of the beneficio is far less complex than that of X. His assistants begin the work at the beneficio shortly after 6:00 a.m., and he arrives one hour later. He first checks the coffee which has been soaking overnight. He checks it as it appears in the receiving tank. His chief preoccupation for the remainder of the day is to be present in the event something goes wrong. On Saturdays he pays those employees who work in the beneficio. For five or six months of the year when there is no processing of coffee at the beneficio, he supervises the repairs which are made of the beneficio and its machinery. It is the importance of the beneficio and a key operation in coffee production that gives his position the rank it holds in Aquiares.

The foreman of the beneficio has been less active in community affairs in the last ten years, and as he approaches retirement, he is withdrawing more and more from local activities. That he is in special favor with the patron is illustrated by a conflict which resulted when a newly arrived administrator asked to examine the records of the coffee processed at the beneficio. Y, the foreman of the beneficio, considered this a questioning of his integrity, and being "muy delicado", refused. The administrator complained to the patron, who in turn tried to ameliorate the hostility of Y. But Y was adamant, and the patron

let him has his way. The books were open to the patron and Y, but not to the administrator. Upon the arrival of a new administrator some time after this occurence, Y had no qualms about showing his books. Such favoritism makes its unquestioned impression upon the peones who are quick to detect special relationships which obtain between members of the managerial system and the patron.

The Chief Carpenter

Disliked for his radical views on religion and politics, the chief carpenter also has an area outside his defined locus of authority in which he is able to command special deference. Even the bookkeeper has learned to treat him carefully. For reasons which are not immediately apparent, a conflict was engendered between the two. When some repairs were needed for the bookkeeper's house, the chief carpenter initiated a series of delays. When the administrator finally insisted that the job be done immediately on complaint of the bookkeeper, the job was finished but with inferior tools and in an unsatisfactory manner. There could be no recourse.

Even the lesser carpenters have ways of granting favors which enhance their position and help them set the stage for future manipulation. No peon would dare ask the chief carpenter for a few nails, but he might secure them from an ordinary

carpenter, though such a favor would not be forgotten. The police agent waited until the chief carpenter left the estate for a day before taking a collection of household items over to the shop where he and a carpenter repaired them. Thus, he is in a position to gain personal ends through the carpenters, but knows his limit is with the chief carpenter.

The chief carpenter supervises the cutting of logs, construction of carretas (ox carts), coffins, and furniture. He received orders from the administrator for new construction jobs and repairs on houses, gates, bridges, and fences. The present chief carpenter is a comparative newcomer to the local scene and has been on the estate only eleven years. He was brought to the estate from an urban enterprise of the patron, and his general attitude reflecting urban cynicism, agnosticism, and materialism are a source of friction with the local population. However, since he is the one who decides just how repairs will be done, who will do them, the quality of materials to be used, and the quality of craftsmanship and time to be consumed in the task, he enjoys a rather automonous position.

The encargados are all subordinate to the overseer. Three are in charge of sections of colonias, and normally there are three in charge of work crews, although on occasion there may be more. They receive general orders from the overseer, but in the case encargados of colonias each decides how the

individual colono is to comply with the general order. The encargado is an important intermediary between the patron and colono, for the encargado knows intimately the conditions of each colonia and has a day-to-day working relationship with the colonos.

The Chauffeur

The chauffeur transports coffee from the estate to Turrialba and carries necessary supplies. He has from one to four helpers depending upon the materials to be transported. He also drives for the patron while on the estate and drives him to and from San Jose. He has a half-interest in a bus which he drives back and forth to Turrialba weekends carrying local passengers. The other half of the bus is owned by his father-in-law, the foreman of the beneficio. He is in a position to grant favors to persons who wish to have heavy articles carried to or from Turrialba. When he does this with the estate truck, he can, of course, make no charge. On the other hand, he is under no obligation to perform such services. When he uses his bus, he may or may not charge depending upon how he wishes to conduct the matter.

The Commissary Employees and Stock Manager

The commissary workers and stock manager hold positions of lesser consequence as members of the managerial system. The

commissary worker is in charge of the goods in the commissary. He is in charge of goods sold and directs those assigned to work there. He may occasionally extend small amounts of credit without being detected, thus incurring the indebtedness of many persons. The stock manager controls the pastures and is in a position to give advice on the care of stock owned by local inhabitants, and he occasionally allows temporary use of estate pasture for grazing, although this is not frequent because of the danger of detection.

In summary, the managerial system is to be distinguished from the administrative system in terms of its more distant relationship to ownership and control of the means of production, namely land in Aquiares. Members of the managerial system hold their positions by virtue of skills they have of value to the estate. They can handle their own people and they know their respective jobs. Recruits for the managerial positions seem to be drawn largely from the families of those already in the managerial system. As kinship ties between the families comprising the managerial system multiply, the system becomes more and more a self-perpetuating stratum.

CHAPTER VI

THE COLONO AND PEON SYSTEMS

While the *colono* and *peon* have much in common which makes a distinction between them at times difficult to discern, they belong to different systems both in terms of their legal relationship to the *patron* and in terms of the analytic distinctions of this study. These distinctions have a number of consequences in the life of the inhabitants which merit detailed discussion. Following a discussion of these differences, some general observations will be made regarding those aspects in which the two systems share common elements.

The Colono System

The *colono* system was introduced into Aquiares in 1915 as an experiment designed to resolve a problem with which the owners of large estates in Costa Rica had long been confronted, that of an unstable and limited labor supply. Coffee production requires large numbers of laborers for a few months during harvest, but during the remainder of the year, in which coffee is being planted and cultivated, only a small force is needed. In Turrialba, the harvest is longer than in other areas because of climatic peculiarities in this area. Furthermore, there are no large urban centers nearby, aside from Turrialba city, from which laborers can be easily recruited.

As a means of alleviating this situation, the first superintendent of Aquiares proposed the following five-point plan to establish a low cost labor force:

1. Import colonos who held positions as peones on other estates of the patron. (Only peones with histories of loyalty and desirable work habits were to be selected.)

2. Import groups of families which were already acquainted with each other in order to facilitate their adjustment.

3. Cede each family a colonia of about three manzanas per family of five.

4. Provide housing and wood.

5. Grant each family a small plot of land for the cultivation of garden crops "to keep them busy during the off-season." The produce and income from the harvest on these plots were for subsistence purposes, although surplus could be sold. Money for the purchase of seeds, fertilizers, and equipment was to be made available in the form of loans.

Colonos were imported from Desamparados, San Antonio, Patarra, San Pedro, Monte de Oca, San Francisco de Dos Rios, Tres Rios, and Cachi. The dependence of these colonos upon the administrative representatives must have been marked, and the established tradition of deference behavior obtaining between administrative and labor personnel appears sufficient to preclude the need for much direct coercion. Even in the matter of voting which had been previously discussed, the administrative system maintained control. In an interview, the former superintendent remarked:

> "I never used a revolver. In fact, I never owned one. Before the people voted, they used to come to us (the patron and himself) and ask how we planned to vote. They always voted as we did."

The system seems to have worked out satisfactorily for the owner, for it is still in operation and apparently will continue into the future. One author has evaluated this particular experiment in an article on agricultural colonies appearing in a Costa Rican journal:

> "The farm in general can be considered a model in every aspect.
>
> Its inhabitants live with the happiness of those who satisfy their needs by the effectiveness of their labor and the productivity of the soil, by their trust in their patron, and finally because it is easy to continue in the patriarchal life of their forefathers of ancient times with its simple happiness within the heart."
>
> Every inhabitant of Aquiares who completes a determined length of residence on the farm is eligible for a plot of land, a colony, which is for him a small investment."
>
> These colonists never leave the land, because it does not betray them."
>
> For Mr. ----, the farm is productive. And he has not attempted to sell it although his health is not good. He loves his land."
>
> An important detail is that each colono is advanced the money necessary for continuing the work of his colony, and when he harvests the beans, he is paid a fixed price."

> All of the inhabitants of Aquiares are stable, independent, and markedly attached to their land. One never sees a drunk worker there and liquor is not sold in the commissary."
>
> It would be worthwhile to make special studies relating (this system) to the operation of the farm in order to adapt it to others in the nation."[1]

Although the colono system obviously has many advantages these comments seem somewhat biased in favor of it. People do leave the colonias, one does see drunk workers here, not all persons receive a colony after a determined length of time, and not all the inhabitants are "stable, independent, and markedly attached to the land.

The technical aspect which obtains between the administrative and colono systems has been described in these words by Paul Morrison:

> "The colono contracts with the landowner to care for and harvest, under the supervision of an employee of the landowner, a lot of coffee for a fixed price per fanega of coffee produced. At the end of the harvest, the colono is paid any difference due him after the total of weekly advances he has received has been deducted from the value of the crop at the contract rate."[2]

The colono receives his orders from a member of the managerial system called an encargado (foreman) who supervises

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1. Carlos L. Valle, op. cit., p. 167.

2. Thomas L. Norris and Paul C. Morrison, Aquiares a Large Costa Rican Coffee Finca: The Agricultural System, op. cit. pp. 8-9.

the colonias in one section of the estate. The encargado passes through his sector daily and observes the progress of each colono in the work presently being carried on. Once a week he talks with the colono to calculate how much money he shall be advanced for the operation then in progress. The rate for each operation varies, but is set so that a week's advance will approximate the salary paid to a peon. The colono does not, however, receive compensation for the work of members of his family in the colonia. The rate for the current operation is paid only to the head of the colonia.

The rates for the most important operations during the 1950-51 season were as follows:

Harvest	60.00	colones per fanega
Bonus (credit in Comis.)	1.20	colones per canasta
Cleaning weeds	25.00	colones per manzana
Shade pruning	6.00	colones per manzana
Trimming coffee trees	6.00	colones per manzana
Trimming tops (dishija)	10.00	colones per manzana
Planting new trees	.10	colones per seedling

In addition to a two or three-room house, the colono gets free firewood (taken from dead coffee trees on his colonia) and a plot for home crops, if he so desires. Bananas, beans, onions, cane, maize, tomatoes, squash and pumpkins are most generally grown. The average size of the garden plots worked by colonos is .7 manzana. The "right" to work a plot, which is ceded by the patron, is often "sold" to another colono or

peon, and the price ranges from two hundred to five hundred colones, depending upon the size of the plot, whether or not it is cleared, or has a crop planted. The average size of colonias is about five manzanas, but the seventy-eight colonias on the estate range from two to ten manzanas in size. The average harvest per colonia in 1950 was about forty-seven fanegas, giving an average coffee-production return of some 2800 colones to the colonos. At best individual and average calculations on this type of data are rough approximations since inclement weather, a poor crop, or lack of work may modify production over a period. Furthermore, a colono frequently finds it difficult to recall what the total income was because of weekly deductions. The difference in income between peon and colono is about 1300 colones, the former averaging 1500 colones a year. This difference is somewhat balanced out by virtue of the fact that a colono receives no compensation for the productive labor of any able bodied members of his family, while the peon's son is likely to be able to secure at least intermittent employment as a peon. However, there are occasions, though infrequent, when extra labor is needed, and the sons of colonos are able to secure work as peones. The contract of the colono also obligates him to work for the estate as a salaried day worker on occasions when his labor may be needed.

As members of a system distinct from that of the peones, the colonos feel that their lot is somewhat more advantageous, as shown by the following remark:

> "The advantage in being a colono is that I can get up in the morning whenever I want, while the peones must be at work at 6 a.m."

Interviews with peones and colonos alike indicated almost unanimous agreement that the life of the colono was more desirable, chiefly because of the added independence. The fact that the colono receives a substantial sum of money at one fixed time during the year appealed to those peones who were questioned, but the colonos were more reserved in estimating the pecuniary advantages of their system. This is indicated in these words by a colono:

> "The colono system is deceptive for those who have never operated a colonia. Nevertheless, the colono has a better opportunity to open the doors to luck if he uses his head."

Much of the money received at the liquidation of the coffee accounts goes towards the purchase of clothing and household supplies. However, a certain amount of celebrating and party-giving seems expected at that time, and occasionally large sums of money are dissipated in a few days. One colono went on a weekend celebration in San Jose, and spent the last 100 colones of his year's earning to pay a return taxi fare from his spree in the capitol.

Apparently, the independence of the colono has been dwindling in recent years. More and more, the administrative system has undertaken to organize the colonos in work crews to carry out more crucial coffee operations under the surveillance of an encargado. A number of colonos in a section are brought together on one colonia, and perform the work under the supervision of an encargado. The colonos are paid the minimum wage for peones when working under these circumstances, and the total amount paid the workers in each colonia is deducted from the account of the colono on whose colonia they have been working.

Insofar as the purpose of the colono system is to provide a stable population affording a constant reservoir of workers at a minimum of cost, it can be said that it is a successful and integral feature of the structure of Aquiares. The contractual relationship between colono and patron is the strongest element in producing this condition. Dependency has been increased, and with some calculation on the part of the members of the administrative system, by selectivity of colonos, provision of elements for subsistence in the form of housing, garden, fire wood, and awarding of loans. Colonos have also been encouraged by the patron to acquire a nominal amount of capital, especially in the form of chickens, cows, and household goods. The move to encourage acquisitions of cows has

been somewhat hampered by the lack of pasture for both estate and privately owned stock. The rationale behind this policy seems to be that the acquisition of a nominal amount of capital goods restricts the mobility of the owner, and therefore ties him more securely to the estate. The relative isolation of the estate has also resulted in considerable development of kinship bonds through inter-marriage, a factor contributing also to greater stability. That the colono himself feels that his lot is more desirable than that of the peon is evidenced both in their own comments and in the evaluations of the judges (see Table I Appendix). The table indicates a tendency for the judges to rank colonos somewhat consistently higher than peones although there is no clear line of demarcation between the two systems as far as ranking is concerned.

Comparison of the Colono and Peon Systems

The peones were characterized by the judges by the following comments:

Spanish	English
Muy jodidos	All messed up
Es cochinado	Filthy
No tiene nada	Has nothing
Muy pobres	Very poor
No sabe manejar	Doesn't know how to manage money
No tiene dinero ni busca el medio	Has no money nor seeks a way to get it
Vicioso	Given to vice

Spanish	English
Tiene sus defectos	Has shortcomings
Fregadillo	On the rocks
Es viuda	A widow
Es inutil	Useless
Apenas pasa	Barely gets by

Just as colonos tend to fall below the managerial system, day laborers predominate towards the bottom of the rankings, as Table I, Appendix, indicates. Widows, by and large, fall at the very bottom. This is because the woman, in Aquiares is almost completely dependent upon her husband for her status. When a poverty-bound peon dies, leaving a widow and children, she is entirely dependent upon the charity of her relatives and friends, or in cases where her husband has served the estate faithfully over a period of time, she may receive a pension of from five to twenty-one colones a week.

The advantage which the colono has over the peon in rank is both a function of superior over-all income and greater independence. While the colono must, in general, comply with the instructions of his encargado, there is no one to insist that he begin and quit work at specified hours or days, and time which he takes off is not accompanied by any direct penalty. "He is more independent," said one colono, "and has a base upon which to build. He has liberty to do many things which the peon doesn't." One peon expressed the more advantageous position

of the colono in terms of the confidence he felt was manifest on the part of the administration towards the colono: "They have confidence in him and so give him a contract."

Colonos are not as sure that their position is advantageous as their peon associates believe. A higher ranking colono said:

> "The colono system is tricky for anyone who has never had a colonia. Nevertheless the colono at least has a chance to get ahead."

The following soliloquy was uttered by a twenty year old youth who was born on the estate and who worked as a peon:

> "Here we are born shoveling (paleando). Day after day, week after week, month after month, the same thing. Every day all day I'm stuck in this mess, tossing dirt from this side to that. Comes Sunday, and I take a few drinks. There is always someone who will take me home if I get too drunk."

As mentioned previously, the festivities during Holy Week afford opportunity for the expression of indirectas in the form of derision cloaked in humor. A local peon dressed as Judas reads a last will and testament prior to the burning of his effigy after the high Mass of Easter morning. The will is written verse and is read from a high rock with the townspeople congregated around him. Each verse specifies an item which the Judas is leaving to some local personage. This

affords opportunity for some subtle, and some not-so-subtle jabs at persons higher in the structure. Even the overseer and foreman of the beneficio are not immune from this mild form of aggression. During the display seen by the field worker the verse for the overseer referred to his affairs with younger girls, and that for the foreman of the beneficio to his frugality. But nothing is said about the priest, administrator, or police agent. "One cannot joke about them", said Judas. The patron is also included, but the verse is complementary. Formerly, the jokes were more barbed in content and intent, and fights are supposed to have been common.

In a discussion with peones about their chances of getting ahead, an older peon dryly commented:

"Aqui somos nosotros, y nada mas."
"Here we're ouselves and nothing more."

It appears as though the peon were literally at the end of the pecking order. Continual pressure from above accompanied by the ever-present struggle to keep home life at a subsistence level seems to be accompanied by various forms of aggressive behavior. Fighting, quarreling, and bickering are common. A common occurence is the indirecta, a form of aggression frequently found in Latin American communities. The indirecta in Aquiares consists generally of rolling a large

stone in the middle of a road to be used by ox-carts, jeeps, or the estate truck, blocking traffic until it is removed. The large coffee storage boxes in front of each colonia are frequently over-turned, although a storage box containing harvested coffee was never turned over during the residence of the field worker. The aggression seems to be directed not against fellow peones or colonos, but rather the estate itself. Another practice consists of shouting and whistling late at night to disturb those who are sleeping.

If a peon has a job entailing less manual labor, he is envied by his fellows even though the work may mean no increase in salary. A boyero or ox-driver, earns the usual 5.20 colones a day but is considered to have more desirable employment.

Direct violence when it occurs among the peones or colonos is generally accompanied by heavy drinking. For example, the son of a colono was engaged to marry the daughter of another colono. Before the marriage was performed, the girl became pregnant. Nothing was done about the matter until several weeks after the discovery, when the families involved engaged in rebuttal after considerable drinking. The girl's father insisted that the boy marry the girl immediately. A fight ensued. Several weeks later the marriage was performed.

Shortly after the wedding, the boy and his father-in-law were present together at a party, and again, under the influence of liquor, a fight broke out and the older man sustained a fractured nose. The police agent intervened and locked the boy up in the jail. He was released several days later, but only after relatives of both parties applied pressure to the fathers to settle their difference peaceably. The families were already closely knit by marriage ties, and the dispute was taxing the family system.

Similar circumstances which occur across systems are not conducted in the same way. The case of the overseer who was able to consistently violate local girls, and thereby occasionally making them pregnant, has been discussed in a previous chapter. Here there was no violence. The families of the girls accepted the consequences of the overseer's behavior. However, when the same behavior resulted in the pregnancy of a daughter of the foreman of the beneficio and a son of the overseer was responsible, violence was threatened and the pair was married.

Since fighting is one of the few retorts which a peon has against his peer, a premium is placed upon masculinity. Various symbols are used to manifest one's masculinity. Most conspicuous among them is the possession of a machete. Greater status accrues to the one whose machete rings true when flicked with the finger, and the quality and intricacy of design on the

scabbard are important. Those who can afford more ostentatious machetes and scabbards display them ostentatiously and proudly. An ornate buckle and belt for the scabbard complete the equipment. The overseer has a curious way of judging newcomers or applicants for employment. He says:

> "I always judge a man by his belt and machete. It never fails. The quality of the man is seen in these. If the machete is rusty, the scabbard torn or bruised, and he uses a rope cord for a belt, I won't hire him. But bring me a man with a machete which rings true and a belt that is a belt, and I know I can hire him."

It is a man's world in Aquiares, and though a man may be at the bottom of the social heap, he may rightly say: "in my house, I am king." (En mi casa soy yo quien manda). It is the male who is the breadwinner although all are expected to turn out for the harvest, and it is the father who carries a cloth sack to the commissary or to Turrialba to make purchases. The only women who appear at the commissary are small girls running occasional errands or widows whose husbands are dead. Men strongly disapprove of too much visiting among women, and gossip, though common, is frowned upon.

The bachelor and old maid do not fit well in Aquiares and are apt to be regarded as peculiar. "He who has no son has no value." "A single person is dead weight."

It is uncommon for a widower to remain single for long after the death of his wife, unless he is already senile. Generally a widower will look for a younger woman. Twice during the residence of the field worker, widowers over sixty-five arranged for women under twenty-five to keep house for them, and "keeping house" in Aquiares extends beyond domestic duties. It is seldom that a widow will remarry if she already has children although there are some cases. The woman "keeping house" for a prominent colono is regarded highly in the community, and one informant, an intimate friend of the colono commented that he found her a more satisfactory woman about the house than the wife who had died. But the position of these common-law-wives is difficult since her security depends largely upon her ability to please the man with whom she is living. Neither church nor state make any provisions for her defense, and she must frequently struggle with the problem of children who, with their father, romanticize and idealize the first wife.

Sons are, of course, valued higher than daughters. A son is expected to contribute to the family from the time he begins to work until he marries, usually at about twenty-five years of age. Between eighteen and twenty-five it is expected that he will "sow his wild oats" and "become a man by doing what a man does." Aquiarenos frequently speak of "preferred sons" and "preferred daughters." "We have spoiled V and can't deny him anything. We let him have his way, because after all,

he is our 'hijo preferido' (preferred son)." In this connection, it becomes possible for a younger brother to command an older brother. "Hijo preferido" tends to be the youngest male and both older brothers and all sisters not only tolerate his demands but also indulge him.

Although living conditions in Aquiares are estimated to be better in general than on similar estates in the Turrialba area and the inhabitants are strongly identified with their patron, the weight of this system gives rise to some grumblings. The following is an indicative statement:

> "This is a good farm to work on, but it
> needs another type of administration.
> That ---- German is too totalitarian."

Most antagonism on the verbal level is directed toward the administrator who is considered harsh, over-economical, unsympathetic, and tyrannical. For example:

> "He soaks the peon
> To give to the patron."

However, on some occasions, a peon may over-step his bounds. Once during the residence of the field worker, a peon appeared before the administrator and threatened violence. The overseer predicted that the man would not be on the estate long, and within a few days was dispatched to other grounds.

The patron, on the other hand, remains quite immune from direct criticism. He is thought of as "our second father" and "a good and just man." A sampling of the comments, yields the following:

> "When it is necessary to be firm, he is firm, and gentle when he should be gentle. But he is always just."
>
> "He gives the mandadores their bonuses, and the widows get their pensions. Everyone gets the Christmas tip. This doesn't happen anywhere in Costa Rica but Aquiares."
>
> "In all of Costa Rica there is no patron like ours."
>
> "If Costa Rica has twenty patrons like ours, this country would be singing a different song today."
>
> "He protects the poor widows."
>
> "Aquiares is his first love. Who knows what will happen to us when he dies."

It is this sense of dependency which minimizes any sense oppression which might be directed against the owner. One is born to be a peon (Aquí nacemos paleando) and one dies a peon (y morimos paleando). On the other hand, high status is not always envied, as suggested in the following quotation:

> "They (the administrative personnel) are always complaining. We who have nothing are happy. If we are fortunate to win a few colones or earn a little, we are still happy; but they are never happy with all their thousands and thousands of dollars."

Thus, the life of the peon consists of being reconciled to the station to which he was born and in remaining content with the yearly round of work with its periodic releases in the Nativity, Easter, and Patron Saint festivities.

Security is derived from the relationship which obtains between the peon as the obedient son and the patron as the good father. Insecurity results in some hostility directed toward the administrator who is seen as the tyrant. All three elements seems an indispensable part of the drama of life on this Costa Rican coffee estate, and as long as the three are kept in balance the system will go on.

CHAPTER VII

THREE DECISIONS

The relationships which obtain between structural positions of different systems are manifested in patterns of expectancies and demands, rights and duties, identification with a dominant and/or submissive system, and are part of the inquiry with which this study has been concerned. To see the systems previously described in a unit of interaction as they strive to protect, maintain, and perpetuate their interests is one way to pin-point the problem of probing into the dynamics of inter-system relationships. Specific decision-making events have been selected because they make more explicit the goals towards which each system is striving.

The three decision-making events are (1) the election of a popularity queen, (2) a P.T.A. meeting, and (3) an outhouse building campaign. As each episode is presented, the actors are identified as to their structural position.

1. The Election of a Popularity Queen

In connection with the spring festival, the overseer proposed that a popularity queen should be elected. Admirers would buy votes for the girls nominated and the proceeds would

be used to defray fiesta expenses and the balance would be applied to the P.T.A. budget for school hot lunches. The following individuals were the principle actors in the decision-making events:

1. Overseer, managerial system
2. Colono, of the colono system
3. School director, of a tangential system
4. Field worker, of a tangential system
5. Chief carpenter, managerial system
6. Teen-age girl, daughter of the foreman of the beneficio, managerial system
7. Teen-age girl, daughter of the overseer, managerial system
8. Teen-age girl, daughter of a colono colono system.
9. Teen-age girl, daughter of a peon, peon system

A committee of "judges" was nominated in a P.T.A. meeting. They were to supervise the election and presentation of the queen to guarantee that everything was kept "above board." The committee consisted of the chief carpenter, the field worker, and a colono, the brother of the overseer. The judges agreed unanimously to the proposal of the chief carpenter that the young men of the community between the ages of fourteen and twenty-five would cast nomination votes for candidates at a special meeting. This procedure would not eliminate other girls from being nominated by receiving purchased votes, but it did constitute a device by which the campaign could be spear-headed and given impetus. The meeting was held one evening in

the school house. A ballot box was placed at the front of the room, and the three judges sat behind the box. The youths were allowed one hour in which they could come and cast their votes. At the end of the hour, the votes were tallied with the following results:

1. Daughter of the foreman of the *beneficio* (45 votes).
2. Daughter of *Colono* X, *madrina* of the *futbal* team (39 votes).
3. Daughter of *Peon* Y (6 votes).

Votes were then mimeographed, and each vote was signed by each of the judges and stamped with the school seal to avoid counterfeiting. They were then placed on sale at ten *centimos*. Each judge kept his own record of the number of votes sold and the amount allotted was recorded. Two weeks were allowed for the purchase and casting of votes. Results were tallied every five days and posted at the commissary. One other candidate, daughter of a *colono*, was nominated by purchase-ballot, but did not poll a significant total of votes. As soon as the first nominations were definite, the judges talked with the fathers of the girls to ascertain whether or not they would permit their daughters to participate. All of the fathers were at first dubious, but succumbed to the argument of "the good of the school and community" and the honor which it meant for the girls. The cooperation of the fathers was necessary since some expense would be involved in having evening dresses made.

The *futbal* team rallied around their *madrina*. The chief carpenter, his son, and the son-in-law of the foreman of the *beneficio* rallied behind the daughter of the latter. Her fiance from Turrialba, reputed to be wealthy, was rumored to have guaranteed her election by providing money to underwrite the campaign in her favor. The remaining candidates were supported by neighborhood groups, and made slim showings. Prior to the first vote count, the judges announced that all candidates would serve as maids of honor to the queen.

The overseer did not enter the scene again until after the election. He remarked to the field worker that "this queen business would only make for bitterness. There is nothing worse than letting an Indian serve *chicha* (no hay cosa peor que poner a un indio a repartir chicha)." That is to say, the Indian will imbibe the drink he is supposed to distribute, get drunk, over-exaggerate his importance, and cause a scandal. This was a curious position to take in view of his role in getting the campaign started. The overseer further suggested that the election was "in the bag." "No one here can out-buy B's (daughter of the foreman of the *beneficio*) boy friend. Besides, she is getting married soon and her father wants her last party to be a big affair."

The daughter of the foreman of the *beneficio* maintained her lead in the first count. She was passed by the

madrina of the futbal team at the second count by a narrow margin. At this time, the overseer showed the field worker his own calculation of the distribution of votes, demonstrating that more votes had been purchased than were cast, and that someone was holding a large reservoir of votes. A check with the vote-allotment record showed that the chief carpenter and his son and son-in-law had purchased a quantity approximating that not yet cast. On the morning of the final count, five hundred votes were mimeographed for final sale. The overseer suggested that the field worker purchase all five hundred. Obviously he felt the field worker might play ball, cast the votes for the madrina of the futbal team of which he was president, and carry the election with a three hundred vote margin. As soon as the votes were signed and stamped, the chief carpenter spoke up for two hundred and fifty votes which he stated were promised to an admirer of one of the candidates. In view of this move, any inclinations which the field worker may have entertained to participate in the purchase of votes were dispelled.

A large group gathered for the final count of more than two thousand votes which had been cast. The votes were counted by each judge separately and the tally marked on the board. The daughter of the foreman of the beneficio won by several hundred votes. The chief carpenter was triumphant.

Preparations for the fiesta moved rapidly. The jefe político was invited and invitations were sent out to other towns. The night before the appearance of the queen and her court of honor, the overseer swung into action. Within an hour's time, he contacted the judges and the director of the school, pointing out how ridiculous it was for a queen to have only three maids of honor. "In Turrialba, they always have four" was his argument. "People will laugh at us in Aquiares for not knowing better. There should be another maid of honor." The fact that this was a violation of the policy set by the judges did not seem to be relevant. The field worker stated that he would have to vote negatively to such a procedure because it would not be fair to the other candidates nor to the persons who had purchased votes. But the other two judges agreed to reverse the policy. Late that evening, the seamstress daughter of the chief carpenter was busy making an evening gown for the overseer's daughter. She appeared in the processions and at the coronation of the queen.

The event demonstrates the superior skill of managerial positions in manipulating others to achieve their desired ends. The overseer could not compete with the foreman of the beneficio since he did not wish to put out the money involved. Although he felt it was hopeless, he did throw support to the madrina of his futbal team and came close to stealing the election by almost bringing the field worker to purchase a large block of

TABLE IV

DECISIONS IN THE POPULARITY QUEEN CONTEST

DECISION	BY WHOM	SYSTEM OF ORIGIN
1. To conduct popularity contest.	overseer	managerial
2. To establish rules for voting.	judges: chief carpenter, school director, investigator	managerial, tangential.
3. To purchase election for the daughter of the foreman of the beneficio.	foreman of beneficio, chief carpenter, girl's fiance	managerial managerial tangential
4. To declare election final and valid.	judges: above (1)	judges: above (1)
5. To include the daughter of the overseer in the queen's court of honor; i.e., over-rule decisions 2. and 3.	overseer chief carpenter school director	managerial managerial managerial

votes. Once the election was decided, he waited until the last moment and then proposed his daughter as a maid of honor, enter into alliance with two of the judges. The chief carpenter benefited by the move because his daughter received a dress-making job. The remaining judge, a colono, was brother of the overseer. The other candidates received only token support. The standing of the systems involved at the end of the campaign in all respects was in rank order. The managerial system was dominant, the colono system followed, and the peon system was at the bottom in terms of the arrangement of the actors in the event. Table IV shows the sequence of salient decisions in terms of the structural position involved, and the system of origin.

2. A Meeting of the P.T.A.

The following transcript of a P.T.A. meeting from field notes shows the interaction among members of the administrative, managerial, colono, and a tangential system, the school. The total number of persons present was fifteen, but only the following contributed:

1. Director of the School, member of the school system.
2. Administrator (traditionally treasurer of the P.T.A., member of the administrative system.
3. Chief Carpenter, Vice president of the P.T.A., member of the managerial system.

4. Colono X, brother of the overseer, member of the colono system.
5. Sra. Y, teacher, wife of police agent, member of school system.
6. Sra. Z, teacher and wife of commissary worker, member of school system.
7. A, an encargado, father-in-law of Sra. Z, and member of the managerial system.

Introduction by Director of the School. Thanks to participants for interest and to the farm for its carino (love) towards the community as manifested by the presence of the administrator. Review of the ideals of the educational system. Administrator asks for floor.

Adm. : I desire that a committee audit my treasurer's reports.

Y : No audit of the books is necessary. We all have confidence in don F (the administrator).

Adm. : We have begun a new year, and an audit, though purely a matter of form, is necessary. I know you don't doubt my honesty, and neither do I, but we should go through the formality.

Ch. Carp. : We have complete trust in don F. There is no point in an audit. I only want to know how much cash we have on hand.

Colono X : I think such a statement is enough. (Exclamations of agreement from A and Z.)

Adm. : We have seven hundred and fifty-four colones.

Dir. of Sch. : This is three hundred colones gain over what we had last year. Magnifico! Magnifico! Now, what to do with this money! The most important work of the P.T.A. has always been the school lunch program.

X : We must build a shelter to protect an eating table.

Dir. of Sch. : (Enters into four minute discourse including description of a summer course he took, sanitation, home improvements, new agricultural techniques, "culture", and the possibility of using the shelter as a carpenter shop.)

Adm: : Our problem, then, is what will we need and how and when can we get it? I understand that last year there were some difficulties that you wish to avoid this year. Let us begin from the beginning. First of all, is the stove you used last year satisfactory?

Dir. of Sch. : No, no. The stove is very poor.

Adm. : What do you propose to put in its place?

Ch. Carp. : (Enters long discussion of the stove, draws diagrams showing circulation of smoke. Proposes a shield be added to protect the cook.)

Adm. : Then is it simply a matter of having the shop produce a shield. The estate will donate that. Now, the next point is equipment. How many pots and pans do you need, and what will they cost?

Sra. Y : We need several new pots. (Interjection by Sra. Z, "yes, all new pots!") It would cost at least seventy-five colones.

Adm. : Then we buy new pots.

Sra. Z : I think each teacher should have a small pot so that she can feed her own class.

Adm. : If each teacher does this in her own class room, why do you need a new shelter? Besides, such projects can be carried out only through the permission of the patron. I understand you are also interested in a new class room. Which do you want?

Dir. of Sch. : But we want all the children together at one time. It's for their own cultural benefit. We want them to learn to eat like human beings.

X : Yes, part of education is to teach children to eat properly.

Ch. Carp. : At least there should be a shelter for cooking equipment and the stove.

Adm. : This may be a good idea, but . . .

Ch. Carp. : The construction of the shield is also very important. (Begins six and a half minute discussion on the construction of different kinds of cooking stoves and proposes a design for a shelter which he illustrates on the blackboard and corrects several times.)

Adm. : Very well, I suggest that don A (chief carpenter) make a design for the stove and shelter. The farm will give the wood and labor. The P.T.A. can buy the utensils, but I suggest that they buy it through the patron in San Jose. He can get a discount.

Ch. Carp. : The trouble with a shelter is that it would be first, dangerous; second, of short duration; and third, unaesthetic.

Colono X : Yes, very unaesthetic.

Adm. : Then what will you do with the class in carpentry?

Ch. Carp. : A good carpenter can install himself in a square meter of space. There is no need for a shelter.

Dir. of Sch. : I think we have resolved the problem of carpentry and school lunches. The new room for the school is more important.

Adm. : But actually the question of the school room is not for the P.T.A. to decide, but rather for the school board in conference with the patron. The school board might present the matter to the patron if they wish.

Dir. of Sch. : We will leave the matter of the stove and its shelter in the hands of don A (chief carpenter) and don F (administrator).

Ch. Carp. : The teachers will prepare the lunches and we will provide the necessary materials.

Adm. : Very well. Now, when does the lunch program begin?

Ch. Carp. : The best we can do is the first of April since we are now almost into Holy Week.

Adm. : How much money a month will we need?

Sra. Y : Last year it was one hundred colones a month.

Adm. : I have an idea it was two hundred colones a month. (Checks and discovers it was.) In that case, we will have enough money for two months after buying the new equipment. You will have to have a school fair or something to cover the remaining eight months.

Dir. of Sch. : This will be first on the agenda for the next meeting. I have some letters to read from the Department of Education and Department of Public Health. (Reads letters.) Adjourns meeting.

The dominating figure in this meeting is, of course, the administrator who assumed the role of unofficial moderator even though the school director was official moderator in the absence of the overseer, president of the P.T.A., who was absent. The absence of the overseer may be as important a sociological datum as his presence. It was noted in the popularity queen contest that the overseer, although a significant person in the drama, was absent from many of the

TABLE V

DECISIONS IN THE P.T.A. MEETING

DECISION	BY WHOM	SYSTEM OF ORIGIN
1. To define project for dining shed as outside P.T.A. jurisdiction.	administrator	administrative
2. To build stove and stove-shelter.	administrator	administrative
3. To hold a fiesta to raise funds for traditional school lunch program.	administrator	administrative
4. To defer matter of new school classroom to patron.	administrator	administrative

formal activities. It was previously mentioned that the final preparations for the fiesta in which the election of a popularity queen was a part could not be carried out until the overseer finally came to a meeting and gave the necessary orders. In his absence at the meeting just described, the administrator assumed his role, although the chief carpenter was Vice President. The skill with which the administrator manipulated the meeting so as to achieve goals which were compatible with the best interests of the estate as he conceived them illustrates one important aspect of his role which may be called into play to modify the behavior of others. His line of attack was consistent, while those of the chief carpenter and school director were contradictory at various times during the meeting. Contradiction of this sort appears to be a function of responding appropriately to an action originated by a person in a dominant system. It is also interesting to note that the school teachers and the encargado and colono all took minor roles and their contribution was to occasionally support or confirm a statement made by someone of higher rank. No person of peon status spoke during the meeting. Table V contains the salient decisions and decision-makers.

3. The Outhouse Campaign

The third decision-making event is presented to illustrate the juxtaposition of the roles of the patron,

administrator, and director of the school in an event which involved a reversal of the administrator's decision by the patron.

As a part of the training which he received while attending a summer extension course for rural teachers, the director of the school planned, among other things, to introduce a campaign for the construction of outhouses among the peones and colonos of the estate. Less than ten percent of the families had such facilities. The field worker had previously been assigned the role of giving counsel to the director of the school in the strategy of his plan.

Shortly before the beginning of the school year, the teachers took a census of the school population on the estate. The director planned to spread propaganda for his projects while taking this census since he would have contact with a large number of inhabitants at this time. The field worker advised against this and suggested the director wait until the patron arrived at which time he could present his ideas and seek support.

The enthusiasm of the director led him to disregard this suggestion and he went ahead spreading his propaganda. He organized the colonos and peones into neighborhood groupings and administered "sociometric" tests from which he derived "leaders". These leaders were delegated the responsibility of

gathering a group of their neighbors into teams. At that point, the program began to encounter difficulty. The school director had promised the natives that the outhouses could be constructed solely out of materials available at no cost locally. However, a wooden platform was needed, and the director of the school had neither wood, tools, nor nails. He went to the administrator and asked for cooperation. He returned to report that the administrator had given "unconditional support of the program". On this basis, he advised people in the groups to start digging pits and promised the platforms as soon as they accomplished this task. Soon orders for platforms began to arrive and the director of the school went to the chief carpenter with a list of persons who needed platforms. The chief carpenter requested an order from the administrator. When the director of the school went for the order, the administrator explained that the whole program would be too expensive and therefore would give no platforms.

The delays which followed resulted in a waning of enthusiasm among the people, and the director of the school began frequent consultations with a representative of the Institute. Counsel with the field worker had broken down for the program had failed on those points at which the latter had predicted, and the director of the school was in a position of having to save face. Meanwhile, the teachers themselves were beginning to question the soundness of the new "progressive"

TABLE VI

DECISIONS IN THE OUTHOUSE CAMPAIGN

DECISION	BY WHOM	SYSTEM OF ORIGIN
1. To initiate campaign for building outhouses.	school director	tangential
2. To enlist estate support for building materials.	school director	tangential
3. To give estate support.	administrator	administrative
4. To organize groups for building outhouses.	school director	tangential
5. To withdraw estate support.	administrator	administrative
6. To appeal to patron.	school director	tangential
7. To give estate support sought by school director.	patron	administrative

methods, for they too were encountering difficulties. Some ridicule of the program was beginning to manifest itself. Fortunately for the director of the school, the patron arrived on the estate, and the representative of the Institute advised that he see the patron. The patron listened to the proposal, reversed the decision of the administrator, and ordered that as soon as pits and huts were constructed platforms were to be made available. The sequence of decisions and those involved are presented in Table VI.

Whether or not the patron made this decision out of love for his people, fear of difficulty with sanitation authorities, or because he doubted whether many pits and huts would actually be completed is a matter of speculation of no special relevance here. The importance of reaching the highest locus of authority for introducing changes to affect the entire community on this type of agricultural organization is clear. This case, of the three cited, illustrates decision-making on the basis of authority or formalized, institutionalized rights to modify the behavior of others.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

In what ways is this particular agricultural system representative of large coffee-producing estates in Costa Rica? Aquiares resembles other coffee estates only in its more general features. It ranks as one of the larger estates. With the exception of the *colono* system, its general authority organization tends to duplicate that of other large estates in Latin America, whether coffee, cane, banana, or cacao producing. The presence of a small administrative group, a managerial set, and a large proportion of *peon* day laborers is common throughout Latin countries. Their presence is sufficiently widespread to constitute one of the main factors in the economy of most of these countries, and in many instances, may constitute one of the more pressing problems in the assessment of an efficient use of human and natural resources (see Chapter II, p. 1).

But any statement of the representativeness of Aquiares must be followed by immediate qualifications. Its geographic location places it in a position similar to other coffee estates in the Turrialba area with respect to climate, growing season, and the supply and utilization of labor.

Because of the relatively greater precipitation in the Turrialba area, coffee does not ripen at an even rate of speed as on the Meseta Central where the rainy season is brief and less intense. This fact seriously affects harvest activities on all the coffee farms, large or small, in the Turrialba area. Whereas estates on the Meseta Central enjoy the advantage of a uniform arrival of their coffee crop, those of the Turrialba area are forced to spread out their harvest activities over several months. Indeed, we have seen that it is not unusual for the latter area to have as many as thirteen pickings during the harvest season. This means that a labor force must be supported over a greater period of time. This factor, coupled with that of a generally inferior quality of crop, means greater labor cost and smaller income. Aquiares is the only estate in Turrialba which does not import labor. Other estates follow the policy prevalent in the Meseta Central with respect to labor supply. Laborers are secured for the harvest season from the urban center of Turrialba. For the rest of the year, only small skeleton crews are used. However, Aquiares maintains a full labor force for the entire year. This is made possible, as we have seen, by the colono system. Because there is a permanent labor supply residing on the estate, service facilities are more adequate than on most large agricultural operations. It is the only large plantation

in Turrialba with its own church. In addition, there are the school, meat shop, commissary, and bus services. Thus it is that Aquiares offers the most complete range of services to its inhabitants.

The population is organized primarily in terms of the requirements of coffee production. Three systems commonly found on large Latin American estates have been described, namely, the administrative, managerial, and peon systems. A fourth, the colono system, is basically a sharecropping operation, but this system is unique to Aquiares. Its importance lies in that almost half of the population on the entire estate is derived from the families of colonos. Furthermore, the curious circumstance that it has been successfully operated on the estate since 1915 to the advantage of the owner but has not been copied by other owners merits some consideration. Why, then, has not the colono system, conspicuously successful in Aquiares over a long period of time as an effective way of dealing with the serious problem of labor scarcity, been accepted and adopted in other estates in the Turrialba area? Several explanations seem to have been operative. First, there is a general mistrust of any system which is even vaguely or superficially suggestive of a share-the-profit philosophy. Of course, the owner of Aquiares would deny this, and is prepared to indicate in terms of money profit

how this system has worked to his advantage. Nevertheless, other owners remain extremely skeptical and among the members of the national coffee association there are those who regard it as "pinkishly collective." "I have even been called a communist," stated the patron. Secondly, few owners could be as selective in recruiting colonos if they should so desire. Traditional ties with the patron was an important element in populating Aquiares. Finally, the capital outlay for housing is a major factor. And once a population has been given housing, government rulings place extensive responsibilities upon the patron for their maintenance and for the provision of health and educational guarantees.

The rationale which accounts for the division of the labor force into systems such as administrative, managerial, peon, and colono is derived from the place which property occupies as that measure recognized by the population which creates these divisions. It would have been possible to devise a formula by which the members of the community could be separated into strata. But the problem with which this study is concerned makes such a procedure less meaningful than that of establishing the relation of the various segments of the population to possession or control of property.

The administrative system was so designated because its members maintain the greatest degree of control of and

possession of property, which in this case may be equated with means of production. Managerial status permits one, by a system of tips, bonuses, and higher salaries, to accumulate not only more property than peones or colonos but also certain kinds of property. Few of the latter can purchase a small farm, while this goal is within the grasp of managerial employees. This difference in status is reflected in the acquisition of certain prestige items such as radios, urban clothing, and iron stoves. That the administrative system is concerned that the managerial employees develop distinct standards of value is seen in the superior housing and the relationship of greater accessibility to social intercourse with members of the administrative system made available to those of managerial status.

The further test of the hypothesis that relationship to property is the determining factor in the status system of Aquiares is seen in the relatively higher status which accrues to the colono as compared to the peon. Thus, while a peon might have a greater gross family income in the course of a year, the colono tends to receive higher rank because he is in greater proximity to a control of property of the means of production. (see Appendix I) While the chances of the peon increasing his status are small, they are nevertheless present. The channel through which his status may be increased is

(1) by the acquisition of a colonia whereby he becomes a member of the colono system or (2) achievement as a specialist. In the latter case, opportunities are limited and may be conditioned by such factors as kinship or political alliances. Young men frequently expressed a desire to the field worker to pursue some skilled trade, such as carpentry. Their chief stumbling block was lack of capital with which to purchase the necessary tools. A strategic marriage might enhance their chances for the acquisition of the necessary capital or for appointment to a specialist position in which tools were furnished by the estate.

The relative emphasis given to the way in which decisions were made and to whom made them springs from the orientation of this study to problems in applied anthropology. The decision-making situation gives focus to the dynamics of the social change situation. Only some decision-making situations involve the modification of behavior patterns from their usual course. Such situations are particularly relevant for the change agent. Nevertheless, the change agent can gain added insight from a thorough knowledge of how decisions are normally made and by noting the patterns which recur in this process. Decision-making is a highly explicit procedure in a social structure in which the chain of authority and lines of communication stand out in bold relief. Aquiares is one such

structure. The three decisions used as illustrative material in the preceding chapter offer a clear indication of how patterns of dominance and submission within the hierarchy of the authority are elicited in different decision-making situations. They are situations which do not occur every day in Aquiares, and therefore are not "typical" in the sense that a decision on the part of the mandador or administrator to dispatch a crew of laborers to trim shade trees would be representative. On the contrary these three decisions involve unusual problems which occur with relatively low frequency in Aquiares. For this very reason, they are of interest to the change agent, because the innovations which he wishes to introduce will probably create a similar such decision-making situation.

The three decisions cited involve members of all the systems which have been discussed in this study. In the case of the P.T.A. meeting, the role of the administrator in setting the tenor of the meeting and in controlling its direction is conspicuous. The relations obtaining among positions of varying status in the general authority hierarchy of the estate were altered but slightly even though this was not a primary activity. Thus, there is something of a halo effect emanating from the general organization and influencing the conduct of decision-making situations in secondary activities. The outhouse

campaign in which an outside change agent attempted to institute certain innovations seemed doomed to failure until the change agent obtained the sanction of the highest administrative authority. Theoretically, it would not be necessary to obtain the sanction of the patron for innovations which did not involve the use of estate materials, equipment, or personnel, but the study has indicated that the imagery of the patron is sufficiently strong to warrant securing his approval on almost any matter which would involve persons living on the estate itself. The popularity queen contest gives some indication of the subtleties involved in inter-personal relations in a typical decision-making situation created by the members of the community. While members of the community are not ordinarily in competition with each other, especially as far as relations between systems are concerned, such situations do occur occasionally. The factor of competition may throw the normal channels for decision-making somewhat into the background, although they are never completely absent. In this case, however, the significant decisions were made as a result of consenses arrived at by members within the dominating system. The element of compromise is seen entering the picture here, and the change agent must grapple with this when he is operating in situations of this nature. Because predictability is lessened in such situations, the change agent may well decide to avoid introducing innovations on this level.

The dictum offered by Clyde Kluckhohn which was cited in connection with the problem of how the field worker can best enter the community seems relevant for the change agent here.[1] In a highly stratified society, it is almost always easier to enter through the top than through any lower levels for the simple reason that it is more difficult to work up the social scale. Furthermore, greater deference is usually paid to social superiors, and the weight which a sanction from a social superior carries is likely to influence considerably the success of a change agent's program.

The answer to the final query of the study, i.e., to discover which structural positions in each sub-system were most strategic in the decision-making process, is partially answered in the preceding paragraphs. Positions within each system are ordered by the general organization of the estate. In the administrative system, there is a unilinear chain of authority and line of communication between <u>patron</u> and administrator with the former holding the greater weight. This is in keeping with the hypothesis that position is determined by one's proximity to possession or control of the property. In the managerial system, the chain of authority is somewhat split up between the overseer, foreman of the <u>beneficio</u>, chief carpenter, and some specialists such as the chauffeur, commissary manager, and mail carrier.

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1. See page 5.

However, the overseer is in more direct control of the total labor force than his peers and he supplies them with the laborers who will fall under their supervision. For that reason, his position gives him somewhat greater control over the means of production. The tasks to which these men assigned are divergent and their specialized functions make for a minimization of conflict and a maximization of the autonomy of each of these managerial employees. Competition and conflict are minimized further since the group is bound by an ever-increasing network of kinship ties. The expectancies associated with these ties tend to make members of the managerial system wary of throwing their weight beyond their specified area of authority since familial repercussions in a crisis would be severe.

The colono, because he has something in the way of property, of only by contract, feels superior in his lot to that of the peon. In addition, the nature of his relationship to the estate gives him added independence which stands in sharp contrast to the situation in which the peon finds himself. This study has indicated, however, that even among the peones there are status differentials related to property. Because the role of father of the family places one in a position of legal ownership of household goods, however scant, a married peon has greater status than his wife, children, or unattached males or females. Males in general enjoy greater status than females if only because they are in the property line. Being in this position, they also

have certain obligations towards their spouses and offspring since privilege almost always involves responsibility and reciprocity.

This study has attempted to describe a social system and its components in terms of its relation to environment and in terms of the meaning which property-in-land has for the members of this social system. Those distinctions which the members of the system consider important and even vital for the maintenance and perpetuation of their ways of life have been outlined as perceived during field residence. In terms of the problems with which this study is concerned, the unique and distinct in Aquiares, especially the colono system and differing coffee production practices attributable to climatic peculiarities have been discussed along with those patterns of living which give stability and consistency to life. The economic system has been seen primarily as an instrument of adaptation, while the religious system has been seen primarily as an instrument of integration.

The central organizing theme of this study has been that proximity to ownership of land constitutes the criterion for social differentiation and rank. Systems were arranged on a continum with the administrative closest to the high end of the scale, and managerial, colono, and peon systems further removed, in that order.

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APPENDIX I

RANK STANDING OF SAMPLE OF HEADS OF HOUSEHOLDS OCCUPATIONALLY BY SYSTEMS AS DETERMINED BY AVERAGE RANK SCORES

Administrative Score	Managerial Score	Colono Score	Tangential Score	Peon Score
Patron - Administrator -				
	Foreman of Beneficio 1.5			
	Overseer 4.3			
	Chief Carpenter 4.5			
	Chauffeur 4.9			
			Police Agent 5.4	
			School Director 6.2	
				Lumberjack 8.6
			*Independent farmer 10.1	
				Assistant in Commissary 10.2
	Commissary Manager 14.0			
		Colono 14.0		
	Foreman in Colonias 15.3			
		Colono 21.8		
	Foreman in Cane fields 22.0			
		Colono 22.5		
	Stock Manager 24.0			
		Colono 24.1		
		Colono 27.1		
	Foreman, ox drivers 29.0			
				Carpenter 29.2
				Watchman 30.1
				Mail carrier 32.2
		Colono 33.7		

* Owns farm outside estate and works part-time peon.

Administrative Score	Managerial Score	Colono Score	Tangential Score	Peon Score
				Carpenter 35.7
			*Independent farmer 37.9	
		Colono 39.4		
		Colono 39.6		
				Assistant stockman 41.5
				Peon 41.7
		Colono 41.9		
		Colono 42.2		
		Colono 42.8		
		Colono 43.9		
		Colono 44.4		
				Ox driver 46.2
		Colono 46.3		
		Colono 46.9		
		Colono 47.1		
	Foreman, work crew 47.2			
		Colono 47.6		
		Colono 49.2		
		Colono 49.3		
		Colono 49.4		Peon 49.4
				Peon 50.5
				Peon 51.1
		Colono 51.2		
		Colono 51.2		
				Peon 54.9
				Peon 54.9
		Colono 55.9		
		Colono 55.9		
				Ox driver 56.3
				Peon 56.3
				Peon 57.3
				Domestic 57.4
				Peon 57.4
				Peon 60.1
		Colono 60.3		
				Ox driver 61.3
				Peon 61.7
				Peon 61.9
				Peon 62.8

* Was peon at start of study, but secured independent farm at the time ranking was done.

Administrative Score	Managerial Score	Colono Score	Tangential Score	Peon Score
		Colono 63.2		
				Peon 63.3
				Peon 63.4
				Peon 64.8
		Colono 65.3		
				Peon 65.5
		Colono 66.1		
		Colono 66.5		
		Colono 67.6		
		Colono 67.6		
		Colono 68.0		
		Colono 68.6		
				Peon 69.1
				Peon 69.1
				Peon 69.2
		Colono 69.6		
				Peon 69.7
				Peon 72.2
				Peon 73.2
		Colono 74.7		Peon 75.6
				Ox driver 76.0
				Peon 76.3
				Peon 78.0
				Peon 79.0
				Peon 80.2
				Peon 80.2
				Peon 80.3
				Domestic 83.5
				Domestic 83.7
				Peon 84.1
				Domestic 85.1
				Domestic 85.3
			*Independent farmer 86.7	
				Peon 91.6
				Domestic 91.7
				Domestic 93.0

* Working coffee lot independently, right to which was granted by patron as compensation for injuries sustained when working as a peon.

APPENDIX II

METHODOLOGICAL NOTE: THE USE OF JUDGES

Among the many systems used for ranking and stratifying social systems are levels of living indices, sociometric choices, single criteria, (occupation), and judges. In the study of Aquiares, judges were selected from the native population and asked to rank members of a sample.

If judges are to be used, the first problem with which the investigator is confronted is the selection of judges, and he must ask himself the question "What are the criteria by which judges may best be located?" There seems to be no standard formula for the selection of judges, nor is there consensus as to what qualities make the best judges. It may be entirely possible that such selection would be dependent upon the tasks which the judges were to perform, and what the investigator expected to elicit from the informants over and above a rank number or group location for the members of his sample. Also, it is not known what number makes an efficient panel of judges. However, since the technique of using judges is quite common, and since the technique is used in several Institute studies, the whole procedure merits critical study and further research. The following text represents what one investigator did, largely on the basis of trial, error, intuition and initial experiment. It is included here, not because it offers anything unique, but because further research may be aided by records of what other investigators have done.

Several arbitray decisions were made. First, there were to be ten judges, or ten percent of the sample. Second, they were to be residents of ten years or more tenure in the area to assure that they would be acquainted with most of the members of the sample. Third, they were to represent a variety of occupational positions of high and low prestige, show some dispersion as to age, and were to include at least one female. Once these decisions had been made, the investigator began looking for likely informants meeting these criteria. It was not difficult to find a large number of persons meeting these criteria, and to narrow down the possible choices, the further criterion of constant first hand contact with a wide range of persons in the community was added. The assumption was that such persons would be more likely to have intimate knowledge of the living conditions of a wide range of people. In the final selection, the rapport which the investigator enjoyed with informants was perhaps the single most influential factor.

The following judges were finally chosen:

Judge	Age	Sex	Length of Residence	Occupation
1.	54	Male	35 years	Overseer
2.	45	Male	40 years	Police agent
3.	27	Female	20 years	School teacher
4.	38	Male	19 years	Watchman
5.	40	Male	15 years	Commissary clerk
6.	30	Male	24 years	Carpenter
7.	48	Male	25 years	Colono
8.	43	Male	25 years	Colono
9.	24	Male	24 years	Peon
10.	65	Male	12 years	Peon

Each judge was interviewed separately. The judges went through several sessions in which they were asked chiefly about their jobs, coffee production, and the history of their families. The chief purpose of these preliminary interviews was to furnish a basis upon which the actual ranking sessions could be established.

It was thought that the interview in which ranking would take place should be as much in the hands of the informant as possible. The object was not only to get the informant to rank individuals, but also to verbalize the bases upon which he made differences. The investigator gave the informants one hundred 3 x 5 cards, each with the name of a member of the sample printed on it. He was then given the following instructions:

> "For some time now, we have been talking together about Aquiares. You know most of these people well. Now all people are alike in some respects, but we are also different in other ways. On these cards are the names of many people in Aquiares. You will recognize most of them immediately. I want you to go through the cards, one by one, and put the people who are more or less alike into groups."

If the informant asked "what kind of groups", he was given an evasive answer, such as, "Put them in groups according to the characteristics you think are important!" The informant was told that he could make as few or as many groups as he wished.

After the cards were arranged in groups, the informant was asked on what basis he had differentiated the cards into

groups, and these observations were recorded. The informant was then asked to rank the cards in each group. When this was done, the investigator selected every fifth card and checked it against cards above and below it to ascertain whether or not the informant was certain about his ranking.

The judges made from four to six groups. There was little consensus as to the breaking points between groups, and when put in an array, it became evident that while the order of ranking seemed relatively consistent, the goupings themselves were widely disparate.

In the attempt to resolve this dilemma, the investigator called the judges together in a single meeting. Ranking according to averages was shown and the problem of the groupings explained. Five of the judges agreed that the first eight persons constituted a distinct group, and one held out for the first six. The remaining judges who were unable to attend were consulted later, and asked again to establish the first group. Two of the judges drew the line to include the eighth, and the remaining two judges drew the lines to include the eleventh and seventh respectively. No effective concensus could be reached on the other possible groupings, although all the judges agreed unanimously that one would include at least the following sixteen persons in rank order.

While the use of a panel of judges at a single meeting was not completely successful, the technique seems to be sufficiently promising to warrant further experimentation with groups of judges acting in a body.

The rankings of the individual judges were submitted to some statistical analysis in order to determine the extent to which there was agreement and disagreement among the judges. A "concordance coefficient" expressed by the symbol "W" was applied to data from Aquiares as well as to rankings for judges in other communities in the Turrialba area.[1] "W" yielded a value of .65 for Aquiares. In San Juan Sur the same test yielded .58; in Atirro, .57; and Jesus Maria, .26. Thus, the agreement of judges in Aquiares, expressed by the value..65, was found to be significant at the .01 percent level. Furthermore, of the communities for which this statistic was computed, Aquiares judges were definitely in greater agreement as to the rank of the persons in the sample than in any of the other communities. This may have implications relative to the stability and integration in the social structure of Aquiares, although only by inference.

An attempt to evaluate the extent and possible explanations for disagreement among judges is found in "Appendix I" of The Anatomy of a Costa Rican Community.[2]

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1. The statistic "W" or concordance coefficient is found in Maurice H. Kendall's The Advanced Theory of Statistics, Vol. I, p. 411

2. Charles P. Loomis, et al, The Anatomy of a Costa Rican Community. "Appendix II" by Charles H. Proctor.

The following array for Aquiares has been abstracted from Table II of that Appendix:

Table II. FACTOR MATRICES FOR AN ANALYSIS OF AGREEMENTS AMONG JUDGES IN 1950.

Aquiares

Judge	Factor	
	I	II
1.	.83	-.26
2.	.71	-.30
3.	.82	.05
4.	.84	-.22
5.	.78	.20
6.	.73	-.09
7.	.77	.19
8.	.78	.12
9.	.67	.15
10.	.81	.25

Inspection of Factor II in the extreme right hand column indicates which judges are close together in their estimates of people's ranks. Judges no. 3. and no. 6 are close together and are centrally located in the distribution. Judges no. 7, no. 8, no. 9, no. 10, and no. 5 represent a tendency to agree on the rankings in one direction, and judges no. 1, no. 2, and no. 4 in the opposite direction. Case data which the author has on each of these judges revealed no information which might give insight into the criteria which the different groups might have been using, aside from the fact that the latter mentioned group are themselves high ranking managerial employees. The case data on those individuals about whom

judges were in extreme disagreement was examined and inspection seemed to indicate marital status, residence mobility, and errors by the judges in making the initial rankings may have some bearing. Many of the extreme cases were bachelors, one had recently passed from peon status to that of independent land owner and had moved to San Jose early in the residence of the field worker. The average score of one individual was affected considerably because one judge ranked him in the low eighties while all other judges ranked him among the first sixteen. This may have been an error. A tentative hypothesis is that judges tend to base their decisions on degree of conformity to certain ideal patterns, and individuals deviating from these patterns elicit disparate responses from the judges.

The age, sex, and occupational roles portrayed in Figure 5 gives some further insight into this explanation. The judges used in Aquiares were asked to rank different positions in the community, some time after the ranking of individuals. They were first questioned as to the kinds of people there might be in the community, and a list of thirty-two occupational and familial positions drawn up. The judges then ranked these positions and the averages computed. As Figure 5 indicates, there seems to be some basic status requisites contingent upon one's age and sex. After these have been met, differentiation seems then to be largely a function of occupation. This evidence

based on the evaluation of positions or "roles" rather than individual personalities suggests that this approach more directly elicits the distinctive status characteristics illustrative of a given position, and minimizes the idiosyncratic personal peculiarities which may operate when individuals themselves are ranked.

There are several advantages of the technique of using judges in ranking. First, the technique elicits from the judges the distinctions for social differentiation which the population itself considers important, assuming, of course, that the judges represent the opinion of the community. Second, it provides a wealth of verbal material indicating the kinds of criteria and attitudes involved in social differentiation. Third, it circumvents the difficulties in devising formulae for ranking people in terms of some kind of index based on material possession, etc. One is not forced to labor under the assumption that the items in a given index are meaningful social differentiae in the population with which he deals, nor with the problem of what items and how many are needed for a valid and reliable formula. Fourth, the technique is simple, direct, and rapid.

But the technique has a number of serious limitations. First, it is useful only in communities with a population small enough that the judges are intimately acquainted with most of

the members of the community. Second, judges may disagree to the extent that no systematic criteria for class differentiation may be perceived. This was not so in Aquiares, but was true of the community of Jesus Maria. Where there are definitely observable differences in styles of living in a community, the investigator is justifiably unwilling to assume that the failure of the judges to agree means that there are no systematic differences. Third, the use of cards is limited to literate populations unless the investigator wants to read the names. In Aquiares, most of the population can read and write. This was not so in San Juan Sur, where some of the judges were non-literate. In such cases, the investigator must handle the cards and he is not free for note-taking. Furthermore, the procedure then requires more time and is more tedious. Fourth, careful investigators may not be willing to accept the assumptions underlying the criteria used in the selection of judges. It is conceivable that five judges would be as adequate as ten. Or perhaps twenty would have been better than ten. It is also doubtful that length of residence can be used alone, for one frequently finds persons living in a community for a long period of time without knowing about many other persons, or without recognizing their names. While it may seem wise to use a wide range of positions im the occupational hierarchy, the investigator finds himself forced

to devise a technique which, by its very nature, may well be double-barreled. He may take status differentiation by occupation for granted and then use this distinction to explain it.