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METROPOLIS-SATELLITE RELATIONSHIPS IN SOUTHERN
HIDALGO, MEXICO: THE NON-NUCLEAR HOUSEHOLD AS
AN INDICATOR OF ECONOMIC DEPRIVATION.

The University of Michigan, Ph.D., 1972
Anthropology

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METROPOLIS-SATELLITE RELATIONSHIPS IN SOUTHERN
HIDALGO, MEXICO: THE NON-NUCLEAR HOUSEHOLD AS
AN INDICATOR OF ECONOMIC DEPRIVATION

by
Lembi Kongas

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
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PREFACE

This dissertation is the product of the effort and good-will of many people. Much appreciation goes:

To the people of the western Llanos de Maguey.

To Dr. Frank Miller, Dr. Frank Young and Jay Schensul for the generous use of their data; and to John Eizer, Charles Mundale and Timothy Roufs for their help.

To the many computer counselors at the Computer Center, at the Osiris program center, at the Statistical Laboratory and at the Department of Political Science.

To the members of my very "friendly committee".

To the women who helped put this dissertation together in its final form: Lisa Schiller, Nancy Talbot, and Shirley Jong.

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I dedicate this dissertation to all those for whom it is of importance.

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INTRODUCTION¹

Since the Revolution of 1910, the Mexican Government has consistently taken a strong stand in support of industrial development. It has done so at the expense of a similar devotion to agricultural growth with the brief exception of the Cardenas administration (1934-40). Capital expenditures are funneled into industrialization or into heavily capitalized commercial agriculture with the disastrous result that at least 40% of the national population--the rural underemployed and unemployed--is grossly neglected. The rapid population growth since the Revolution both in the rural and in the urban areas has aggravated the problem of the shortage of cultivable land. The industrial centers, in turn, are inundated with a heavy flow of rural migrants who have not been able to make ends meet in subsistence agriculture; most of these persons also cannot find any or sufficient employment in the urban centers due to a general shortage of jobs.

¹During July and August of 1969, three weeks were spent in the field in the western Llanos de Maguey in Cerro Grande, Benito Juarez and Serena as well as in the four other villages which comprise the basis for the 1967 Data. I spoke with ejido officials from each of the eight ejidos as well as with officials from the three municipios in which these villages are located. This field trip was funded by the Center for the Continuing Education of Women at the University of Michigan. Pseudonyms are employed for the communities under study as well as for the valley in which they are located.

Government-sponsored programs of rural industrialization, furthermore, have usually been attempts to deal with the gigantic rural problem in a miniscule fashion. A case in point is the southern region of Hidalgo where in 1953 the Mexican Government through the Office of Social Security fostered and is now administering a three-industry town. This industrial center was constructed with the specific aim of pulling the region out of the economic slump into which it had sunk during the 20th century. The government program, however, has been necessarily a social and economic failure since it was rent from the start with internal contradictions of policy. The program has been a superficial attempt to deal with the vast problem of rural stagnation in Mexico.

Economic imbalance between regions as well as between segments of a population is inherent in a capitalist system. For Mexico, this imbalance is evident both in its domestic and foreign economic policies. Pointing to Latin America, A. Gundar Frank (1967) speaks of such exploitation in terms of a metropolis-satellite imbalance in which economic resources such as land, labor and/or minerals are withdrawn from hinterland regions only to be channeled into metropolis areas for the latters' development. Such a withdrawal of resources is concomitant with a flow of manufactured products (not necessarily of the latest model) into the hinterland as the latter serves as a peripheral market for the metropolis. My contention is that the rural areas of Mexico are a font of economic resources for the metropolitan

regions, and that the process of economic depletion which the rural regions have undergone and are undergoing has been continuous in Mexico since the Spanish Conquest. Consequently, rural industrialization today serves as a partial and incomplete attempt to prevent the hinterland from completely collapsing economically while at the same time it avoids large capital expenditures on rural regions. The hinterland or satellite regions thus continue in their primary function as sources of surplus labor for the metropolitan regions.

Mexico's economic relations with the United States, moreover, are characterized by an economic imbalance with Mexico in the role of a satellite to the United States. In its relations with many Latin American countries, on the other hand, Mexico plays more the part of the extracting metropolis because of its relatively advantaged stage of industrialization.

I contend, furthermore, that the household is a window on the economics of the larger community of which it is a part. In rural industrializing areas in Mexico, the expanded and the lineal households especially are adaptations to economic exploitation suffered on the part of their constituents. Both household structures offer a modicum of economic protection to their respective members, however, because they operate as mutual aid networks.

Survey of Relevant Scholarly Literature:

Scholarly literature which deals with the household as an adaptive response to external economic pressures includes many of the Caribbean studies as well as specific works focusing upon the American Indian.

Classic Caribbean Research:

A major theme in Caribbean anthropological research over the past two decades has been the mother-child relationship in the context of a matrifocal household. In turn, matrifocal households occur usually in connection with low and insecure wages and a high emigration rate especially for males. Caribbean scholars have focused much of their attention on household composition, mating systems and on parental roles. Relevant to my work are the major arguments which have been offered to account for variation in Caribbean household types. The work of M. G. Smith (1962a, 1962b) has the least direct significance for my own interests since most of his explanations of social phenomena are in terms of mating choices. Household composition and parental roles, thus are functions of the mating system while the mating system is linked with historical factors and more vaguely with individual preference. It is only tangentially that Smith sees economic factors as affecting the nature of the household.

Otterbein (1966) writing about the Andros Islanders places greater emphasis on economic factors. He suggests that marriage and male-headed nuclear households are

associated with secure wages originating outside of the community; that extra-residential mating and female-headed mother-child households are linked with an uncertain income stemming from several males; that single persons, e.g., separated or widowed women and single-person households are often connected with old-age pensions issued by the government; and that elderly people--single, widowed, married or separated--and grandparent-grandchild households correlate with a low and usually insecure income. Otterbein, however, offers no explicit hypothesis which employs economic factors as a partial or full explanation for variation in mating and in household structures.

R. T. Smith (1956, 1957) also deals only peripherally with economic considerations. His treatment of household variation consists of a mixture of socio-economic explanations none of which fit into a consistent over-all system of analysis. Smith does suggest that the high incidence of female-headed households in British Guinea and in Caribbean communities, in general, is linked with insecure and low status sources of income to which adult males have access.

The work of Edith Clarke (1957) is specifically concerned with the association between land rights, on the one hand, and the family and household on the other. She is, however, also speaking about the relationship between the stability, amount and type of income and mating and household systems. With reference to Jamaica, Clarke connects

insecure seasonal wage labor and a high emigration rate for males with a high incidence of mother-headed or grandmother-headed households; a steady but low agricultural income with stable concubinage and a nuclear family household; and a high and regular agricultural income with marriage and a household emphasizing patrilineal kin. Only the last situation permits the development of father-child ties whereas mother-child as opposed to parent-child ties presuppose different types of households.

Marriage and a clear definition of legal heirs as well as an emphasis on patrilineally-linked males for purposes of inheritance, furthermore, are functions of significant property rights, e.g., rights over land. Where people are poor and have no important property, there is little economic reason to legalize male-female relationships nor to provide a legal framework for children which stem from a union. Extended family households, on the other hand, are stressed because they provide an opportunity for lineally related males to maintain close ties with each other in cases where they are already linked to each other through property rights.

When control over basic economic resources rests outside of the local community, e.g., wages come from the owner of a plantation, legal mating and stable male-female relationships do not occur. The physical mobility among plantation workers due to the seasonality of employment and of income emphasizes the need for flexibility in mating and

in household types. Female-headed households associated temporarily with a male and grandmother-headed households tend to predominate under these circumstances.

Nancie Gonzalez (1958, 1970) links the household type directly with its economic resource base when she discusses the neoteric society. In brief, a neoteric society is a section of a society or an entire society which is dependent upon industrialization but whose members are denied full admission to the larger industrial community of which the society is a part. Characteristics of a neoteric society relevant to our discussion are: an increase in the poverty of the home community as its primary labor resource--adult males--departs for outside communities in search of paid employment; a consequent increase in the economic importance of the women in the home community; an increase in the dependence of the community on wage labor as the basic source of income for the household; and an increase in the number of pre-marital and extra-marital ties along with the number of illegitimate children.

Within the neoteric society, the consanguineal household--a household whose members are related to each other through consanguineal ties only--and more specifically the matrifocal household--a household in which the consanguineal ties are those between females--is one of the primary adaptational techniques utilized by the members of a neoteric society in their attempt to adjust to the industrial society which encompasses them. Thus women who

remain in the home community need to ~~turn to their~~ female kin for economic aid in maintaining themselves and their children while most adult males are working for wages outside of the community. Among the Black Caribs, the matri-focal household is associated with an unstable and low household income.

North American Indian Research:

Recent research undertaken among North American Indian groups, specifically the work of Aberle (1967), Jorgensen (1970, 1971), Munsell (1967) and Robbins (1968) deal directly with the nature of the relationship between the structure of a household and the wider economic framework in which this household operates.

Munsell and Robbins (to be discussed below) are very strongly influenced by the earlier work of Joseph Jorgensen and of David Aberle. In 1964, Jorgensen (personal communication 1972) demonstrated in detail how among the northern Utes, livestock-owning extended families broke up, formed nuclear families and how when they lost their money, they formed composite family households. He in essence dealt with the direct relationship between economic resources and household structure.

David Aberle (1967), in turn, testified that among the reservation Navaho, the extended family household and the large network of kin which is maintained in general are a response to household logistics, equipment shortage, fluctuating income and crowding. He stated that the larger

household presents a better unit of labor resources than does a smaller household for exploiting the small and varied income sources available, for sharing equipment and tasks, and for dealing more efficiently with the use of limited space under conditions of crowding both for people and livestock. Where nuclear households occur, they are either associated with regular and permanent employment or they represent residual families where kin have died or where they have left to seek employment off the reservation.

Munsell (1967) offers the Pima-Papago Indians of southern Arizona as an example of a neoteric society. However, unlike the Black Caribs referred to earlier, these Indians adapt to the larger industrial society in which they exist (the United States) in a variety of ways rather than through migrant labor alone. Munsell examines the type of control exercised over the economic resources upon which a household is based in relationship to the nature of the household itself. He treats the amount and reliability of the household income as intervening variables.

Employing simple statistics such as Chi-Square for probability, Phi and Phi-Square as tests of two-way association and Partial Correlational Analysis for inferring causal relationships from synchronic data, Munsell suggests that there is a causal relationship between an income stemming from kin-controlled economic resources, such as land, and an extended household; individually-controlled income, such as wages from skilled labor, and a nuclear household;

and an income which is outside-controlled, such as welfare payments or income from unskilled labor, and a consanguineal household. Munsell's rationale is that in the case of the extended household, the composition of the household is produced by the dependence of the younger generation upon the elder which in turn controls the major resource of the community--land.

In the case of the nuclear family household, the income stems from an outside and non-kin unit, i.e., from the employer of skilled labor. It is to the advantage of the employer to have his laborers in nuclear households since the absence of extra-nuclear kin makes the household a more mobile and more easily manipulated unit. The head of the nuclear household and not the larger kin group is in control of the income which he receives since it derives from the sale of his skilled labor on the broader labor market.

Finally, government payments to particular qualifying households and income issued by employers outside of the control of the local kin group to unskilled laborers and thus indirectly to the households in which these unskilled laborers reside, permit the continuation of consanguineal households. The kin resident in consanguineal households might, otherwise, be required to band together in larger kin units for mutual economic support.

Lynn A. Robbins (1968) working with the Blackfeet Indians of northern Montana stresses more specifically some

of the ideas introduced but not pursued by Munsell. Employing Yule's Q for one-way associations, Eta-Square for correlation ratios and Chi-Square for probability estimates, Robbins demonstrates that among the Blackfeet--under conditions of rapid population growth and a lack of opportunity for migration--there are associations among low and unstable income and multi-family households, including kin clustered in cooperative households on the land of an elder relative. Robbins also demonstrates associations among high and stable income and the nuclear household. He suggests that for purposes of privacy and space, the nuclear household is the ideal. Departures from the ideal are then results of economic necessity; it is to the advantage of families with a low and unstable income to consolidate their resources with other families on a collective basis whether in one or in several cooperating households.

Complementing the work of Frank (1967), Jorgensen explains how the economically, socially and psychologically deprived position of American Indian groups within the larger United States is an economic necessity for the growth of metropolis regions within this capitalist system. Jorgensen views the economic exploitation of which he speaks from the standpoint of the means or the mode of production while Frank stresses the mode of exchange instead.

Specifically, Jorgensen (1970, 1971) demonstrates that the size of American Indian households is in inverse proportion to the amount and stability of income upon which

the household is based: the less stable and the lower the income, the larger the household. The assumption again is that people with few and small resources pool them in order to better provide for themselves; hence, the number of people in such households will be larger than in non-composite households in the same community because sharing of economic resources involves more persons. Where nuclear family households occur, they are usually male-headed and associated with stable income frequently from wages.

The work of Munsell, Robbins and Jorgensen with their emphasis on the relationship between the household and its determining economic base as well as the broader concern of these same researchers and that of Frank with the interaction of satellite communities with the metropoli or the centers of politico-economic power, provide the theoretical framework for this dissertation.

The Problem:

My dissertation centers on four major points:

- (1) that there is a direct relationship between the organization of a household and its economic resource base
- (2) that specific household types are adaptations to economic deprivation, and that among these, there are some household types which offer a modicum of protection (in the form of a mutual aid network) to their members against this deprivation
- (3) that the economic deprivation represented by the presence of certain types of households in the local

community reflects, in turn, the region's role as an economic satellite to a metropolis area

- (4) and that the metropolis, in turn, represents a nation which operates, respectively, as a satellite and as a metropolis on an international basis in its relations with different nations.

Specifically, I contend that in rural industrializing areas of Mexico, the higher the total income base is per household, the higher will be the number of nuclear households in the community. On the other hand, the lower the total income base is per household, the higher will be the number of declining nuclear and non-nuclear households within the community.

The nuclear household (consisting of parents and their children) speaks of the ability of the household head (usually without the aid of other household members) to market his labor skills and/or other resources over which he has control at such a scale that this enables him to support his nuclear family in a separate nuclear household. The declining nuclear household (consisting of elderly parents and their remaining resident children), on the other hand, speaks of economic trouble since the household is nuclear due to its economic unattractiveness; adult children are departing and non-nuclear kin have no economic incentive for moving in.

The matrifocal household (consisting of the mother and her children) is actually a denuded nuclear household

which reflects the ability of the mother and/or of her children to support themselves in a separate household primarily through their own labor. These households are usually temporary in duration since during the adult life of the mother, she and some if not all of her children will form part of one or more other types of households. For example, at the "re-marriage" of the mother, the matrifocal household becomes a nuclear household.

The expanded household (consisting of kin at least one of whom is a collateral kin) and the lineal household (consisting of consanguineal kin who are lineally related to each other) as does the declining nuclear household reflect an adaptation to economic deprivation on the part of their members. The expanding and the lineal households, however, also operate as mutual aid networks for their constituencies. Such networks offer the household members some protection against the economically precarious position in which most of them would find themselves outside of the household ; due to conditions of economic need, these members have turned to each other in order to pool whatever economic resources they do have in an effort to make ends meet.

When the lines of economic cooperation are collateral rather than lineal, moreover, it is assumed that a more severe degree of economic need is present. The rationale here is that within a community which is still at least partly subsistence-agriculture oriented, a lineal pattern of economic dependence emphasizes the more traditional

points of economic stress within the stages of the life crises through which the adult male members of the majority of peasant communities pass. Thus a young couple may be economically dependent on either set of more established parents, or an old couple may, in turn, require the assistance of established adult children. The lineal direction of dependence implies that control over land--the community's basic economic resource--is held by the elder generation which at infirmity or at death relinquishes such control to the younger generation. Resorting to collateral rather than lineal kin, especially collaterals of the same generation implies that the traditional lineal structure of assistance has proven inadequate.

Moreover, the economic deprivation in the local community of which the declining nuclear household and the expanded as well as the lineal households speak is a reflection, in turn, of the economic depression of the entire region. This deprivation has been generated by centuries of economic exploitation during which time the region has lost control of its primary human and non-human resources to a major metropolis, i.e., to Mexico City.

Mexico as a nation, furthermore, has operated as an economic satellite to the United States for at least 100 years. In its attempt to regain and maintain control over major portions of its national resources while at the same time expanding in capital growth, Mexico is well on its way

to operating as an industrial metropolis to other Latin American countries.

Methodology:

The methodology on which this dissertation is based consists of:

- (1) the use of frequency and percentage distribution tables on a non-computerized set of preliminary data from the community of Benito Juarez in the western Plains of Maguey in southern Hidalgo in order to generate a series of hypotheses (Chapter IV)
- (2) the use of simple statistical tests by which to test these hypotheses on five sub-sets of data stemming from the same region: a composite sample consisting of data from the communities of Benito Juarez, Cerro Grande and Serena; three separate community samples, one for each of these communities; and another composite sample of these three communities but at an earlier dateline. The statistical tests employed were: Chi-Square as a test of significance, Fisher's Exact Probability Test as a Test of significance for 2 by 2 tables for samples of under 40 units in size, Cramer's V as a measure of association for tables larger than 2 by 2; Phi as a measure of association for 2 by 2 tables; and Goodman and Krushkal's Lambda AB as a measure of association for nominal data (Chapter V)
- (3) and the indirect use of the sampling procedures according to which the information in the two major sets of data as well as in the preliminary sample were

collected. A detailed description of the major sets of data will be offered here whereas the preliminary sample will be discussed in Chapter IV.

1957-58 Data:

In 1957-58, Dr. Frank Young of the Department of Sociology at Cornell University gathered detailed information by survey questionnaires from twenty-two communities around the environs of a newly constructed industrial town in southern rural Hidalgo; these data were then computerized. He investigated the effects of this center on the surrounding countryside, and he also delineated a regional network of villages, the members of which were both in contact with each other and affected by this industrial town. The 1957-58 data were formulated in the following manner:

- (1) The intermontane basin which forms the Plains of Maguey served as a physical boundary for defining the social unit of study. Initially Young included twenty-five villages from this basin in his sample. Twenty-two of these formed one regional network.
- (2) Young employed a "key informant" technique of interviewing to obtain information necessary for the definition of the network. For small communities, the judge or the ejido commissioner served as the key informant while in the larger communities, the president of the community or his aid were interviewed.
- (3) In addition to the sample of twenty-two communities,

Young chose four villages as a sub-sample on which to conduct a household survey. These four communities were chosen because they represented a range of variation in the size of the community and in the complexity of a selected number of institutions. Of these four communities, three were chosen by me as a basis for a comparative study with the 1967 Data. These three communities in 1957-58 jointly formed a sample of 366 households. There is approximately a eight percent overlap of specific households between the 1957-58 Data and the 1967 Data.

- (4) Within each of the four communities, a fifty percent systematic random sample of households was taken in which the heads of every other household were interviewed. If after three calls on a particular household no one answered then the household next door was substituted and the sampling continued; in general, there was a very low case loss.
- (5) The household was defined by the investigators themselves as that group of persons who formed a cooking unit; I continue to adhere to this definition. As the sampling was underway, an informant from that particular community accompanied the investigators to ensure the correct identification of the boundaries of any specific household. These precautions made it possible to maintain the systematic randomness of the sample even in cases where a single physical compound

was shared or occupied by several separate households.

1967 Data:

The 1967 Data was collected and computerized under the auspices of Dr. Frank Miller of the Department of Anthropology at the University of Minnesota. The Minnesota research team for the 1967 project consisted of Dr. Perle Pelto, Dr. John Poggie and various graduate students. By 1967, the region around the aforementioned industrial town offered the opportunity for a further comparative study of the effects of industrialization. Fifteen years had elapsed since the initiation of the industrial center in 1953, and nine years had elapsed since the 1957-58 study. In an attempt to answer the question of what type of effect the center had exercised on its surrounding region by 1967, the Minnesota research team did the following:

- (1) A reconnaissance visit was made to the western Plains of Maguey to determine the eight specific villages to be studied.
- (2) Four villages were chosen for study on the basis of having been part of the 1957-58 Data set, hence as providing grounds for comparison. The other four villages were chosen on the basis of their distance from the industrial town, their contact with it, etc. An effort was made to have the eight villages represent a range of variation in their relations with the industrial town.
- (3) Employing data from the Mexican General Population

Census of 1960, a quick General Census was made by the research team of the eight chosen communities with respect to the distribution of the population within each according to age, sex and occupation. The assistance of Dr. Luis Leñero Otero of the Instituto de Estudios Sociales, A.C. in Mexico City was enlisted along with the help of about twenty students of sociology or of social work with whom Dr. Leñero worked.

- (4) A General Survey of the eight communities was undertaken by the research team along with the help of Dr. Lenero and his students. Pablo Pindas served as the field director. The General Survey provided the bulk of the 1967 Data and it was based on the following steps:

- (a) Employing questionnaires with approximately a total of 900 items, the students administered the questionnaires to a sample of households in each of the eight communities.
- (b) In the four small communities all households were included. In the four larger communities, quota or selective samples were employed. Each large community was divided into quadrants and within each quadrant, a 10:10:10 ratio of occupations was chosen. In an effort to maximize the number of factory workers, wherever the household head was not a factory worker himself but a member of his household was, this member was interviewed

instead. However, the position and the occupation of the household head was also noted. Thus, within each quadrant, the sample consisted of the basic proportions of 10 factory workers, 10 subsistence agriculturalists and 10 persons representing all other occupations. The 10:10:10 ratio of households was chosen randomly where there was a surplus of households for any one occupational type.

- (c) Within the quota samples, the heads or the factory worker-substitutes for these heads were interviewed as were their spouses. There were 100 households which were not complete since either the male or his spouse could not be contacted even though this person was claimed to exist. After a third unsuccessful visit, an incomplete household questionnaire was substituted for by a complete one. A total of 477 complete household questionnaires were received. The material from the 100 incomplete households was not computerized.
- (d) Within each complete household, the husband and wife were interviewed with separate questionnaires. Although many of the questions overlapped in subject matter, the male and female questionnaires were not identical.
- (e) The questionnaires had been pre-tested three times in an adjacent village to ensure their intelligibility to those interviewed.

- (f) Out-migration data for each of the villages were collected but at the time of my investigation, these data were not yet available.
- (g) The 1967 Data focused on a regionally-oriented study in which the village and not the household was a basic unit of comparison. This presented some difficulty for my own work since I concentrate on the household as the basic unit of information. During the General Survey, the head of the household defined his own status as such. Because of this self-definition, both the headship of the household and the household unit which he represented were necessarily latently defined. It remained unclear to what extent other households sharing the same physical compound with the interviewed household had been deleted. From having walked through the villages myself and having spoken with some of the household members, it became obvious that some compounds contained more than one household. Employing the size of the village population in conjunction with the average size of the household and the number of households in a village, it was possible to estimate that the majority of compounds appeared to be one-household compounds. Thus some households had inadvertently been deleted from the samples, but the damage was not severe enough to incapacitate

my work.

- (h) With respect to the occupation of the household head, again the occupation was left to be defined by the interviewer. The definition of what constituted a peasant or a factory worker was again dependent for its validity upon the standardized use of these occupational concepts among the local population. Secondary occupations were also not noted. Information on additional sources of income for the household, however, could be gleaned indirectly from questions such as "Do you make anything to sell at your house?"

Of the eight communities available from the 1957-58 Data and from the 1967 Data, I chose three for analysis, as mentioned, partly to ensure a comparative base for the two timelines, and partly to reduce the amount of information available to me. My initial attempt at statistical work with the enormous amount of computerized data available taught me that I had to narrow my focus if I expected to succeed. The three communities represent a range of variation in terms of size, concentration of occupational types and complexity of institutions.

CHAPTER II

Physical Setting:

The Llanos de Maguey is located 100 kilometers northeast of Mexico City on the Mexican central plateau. The communities of Benito Juarez, Cerro Grande and Serena under investigation are situated in the western section of this basin. The basin is a crescent-shaped tableland 20 miles in length, and it is surrounded by mountains rising 500 to 1500 feet above the level of the valley floor (Poggie, 1968:p. 24). The basin floor itself is at an elevation of 8000 feet. Historically the Llanos de Maguey has been important for communication and for transportation because it connects the Valley of Mexico with the Valleys of Puebla and Tlaxcala (Nietschmann, 1968:p. 6).

Today the eastern section of the basin has shallow lakes which are a remnant of a time when the entire valley floor was a lake bottom (Poggie, ibid.:pp. 24-25). During the 20th century, the Mexican government has undertaken several projects aimed at drainage improvement within the three basins which characterize the larger Llanos de Maguey: namely, the Apan Basin with the Laguna de Apan at its lowest end, the Tecocomulco Basin with the Laguna de Tecocomulco at its center and the Tochac Basin in which the Laguna de Tochac is located (Nietschmann, ibid.:p. 15). In 1948,

for example, dikes were built to divert the water of the Laguna de Apan into the Rio Papalote and then into the Valley of Mexico system due to a constant problem with flooding during the rainy season.

Climatically the region is semi-arid to sub-humid, and it is characterized by such vegetation as the maguery (a kind of agave plant used locally for the manufacture of the alcoholic beverage of pulque), and the nopal cactus. There are clearly distinguishable rainy and dry seasons with the former occurring between the months of June and October and the latter coming between the months of November and May (Poggie, ibid.:p. 27). The annual precipitation, however, is only 100 millimeters because this valley is in the rain-shadow of the Sierra Madre Oriental. Within the Llanos de Maguery itself, the northern and the southern regions receive more rain than does the western area because the former two face the Sierra slopes (Nietschmann, ibid.:p. 15). The major crop hazards to which this general area is susceptible are commonly occurring droughts, frosts in the months of September through June and, at times damaging, seasonal winds (Poggie, ibid.:pp. 27-28). In 1967, for instance, 80% of the major crops were lost in the region due to a drought.

The basin floor has alluvial deposits which at its center are several feet thick; thus agriculture is very feasible given an adequate supply of water (Nietschmann, ibid.). The soil gradually grades into thinly-covered hills and mountains of volcanic ash and tepetate, (an impervious

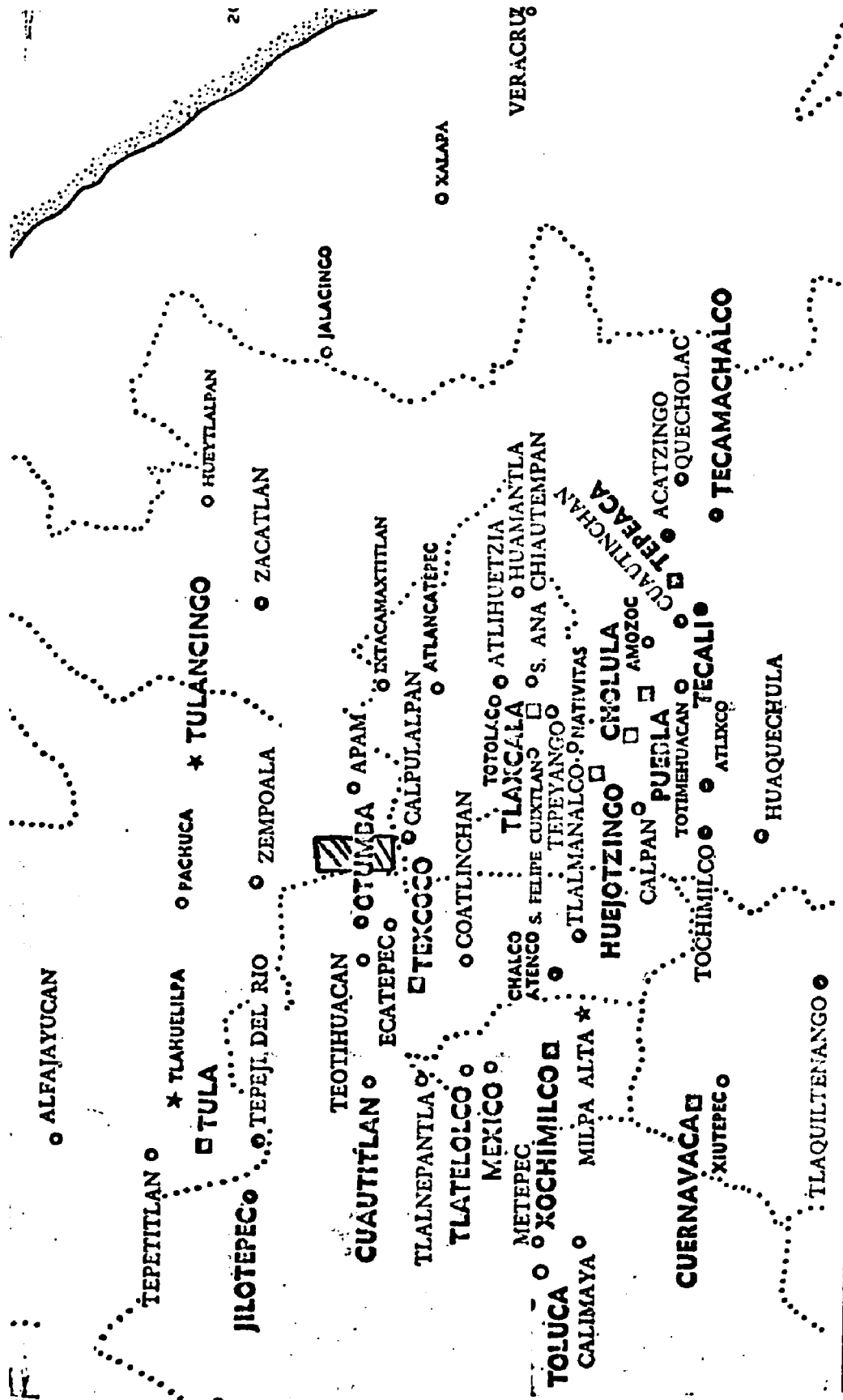


Figure 1. East-Central Mexico. Striped rectangular area indicates western Llanos de Maguey.

Source: Kubler, George. Mexican Architecture of the Sixteenth Century. 1948.

subsoil layer of ash), at the margins of the valley. The tepetate on the lower slopes of the valley can easily be exposed to the surface by erosion; but this area can be employed agriculturally with the aid of bancales or semi-terraces in which magueys serve as soil-support columns. Maize and maguey can be cultivated on the lower slopes while barley and wheat are cultivated on the valley floor. Finally, the higher slopes are best suited for pasturage because they are thinly-soiled, dry, rocky and easy prey to soil erosion.

Historical Background:

Within this valley which presents numerous climatic hazards for traditional, low-capital subsistence agriculture, we can trace a series of economic adaptations in its western region to both human and non-human sources on the part of a changing core of people who had contact with the area between the 14th and 20th centuries. The central characteristic of the changes through which the region has gone since the arrival of the Conquistadores has been the rapid loss of control on the part of first the native Indian population and then of the local mestizo population over the region's economics so that in actuality the "development" within this area has been in the direction of economic under-development. The proximity of the western Llanos de Maguey to Mexico City as the pulse of not only colonial New Spain but also of contemporary Mexico has been the region's downfall. Strong political control issuing from the capital

coupled with economic pressures for serving the needs of the population of Mexico City as one huge market transformed the western Plains of Maguey into an economic satellite for the capital city.

Early History: 13th Century Through the Early 16th Century

The main reasons for presenting a historical backdrop for the three communities under study is to demonstrate the exploitative process by which the region in which these communities are located arrived at its present economic crises. The region, in turn, offers a microscopic view of what happened on a larger scale through-out rural Mexico.

Of the three communities, namely Cerro Grande, Benito Juarez and Serena, only the first stems from a pre-Conquest origin. In fact, Cerro Grande and Llanos, a town located approximately 15 kilometers south east of Cerro Grande, are two of only a handful of contemporary communities in this region which can claim pre-Spanish roots. This area was not densely populated at the time of the arrival of the Spaniards.

Accordingly to largely legendary accounts told to the Spanish in 1580 A.D. by Indian officials concerning the nature of the region surrounding Cerro Grande, the town of Cerro Grande was originally settled by Chichimecs coming from Anahuac--the Valley of Mexico--after the fall of Tula (circa 600 A.D.) (Troncoso, 1580-1582:p. 292). The Chichimecs settled in Cerro Grande under the leadership of four principales (the native headmen of an Indian community) with a subsidiary group continuing on to Texcoco (Troncoso, ibid.:

pp. 292-293). Since the peoples of Cerro Grande and of Texcoco were apparently of the same "nation," they maintained close ties with each other serving as allies when it suited them, but also fighting against each other when this was more to the advantage of either one (Troncoso, ibid: p. 292).

It is very likely that the residents of Cerro Grande were predominantly Nahuatl-speakers because Mexica (a Nahuatl language spoken, for example, by the inhabitants of Tenochtitlan) was the major language in this town by 1580 (Troncoso, ibid:p. 294). Two other languages, Otomí and a "Chichimec" language other than Mexica (perhaps a Nahuatl language), however, were also represented. This admixture of linguistic groups (which I assume also indicates the presence of three different ethnic units) may have been a post-Contact phenomenon stimulated by the 16th century Spanish policy of congregación--a policy of centralizing declining Indian populations (Gibson, 1964:p. 283), or it may have been the result of pre-Contact power struggles among various Indian groups (Gibson, ibid.:p. 16). Gibson suggests, for example, that the Tlaxcalans employed Otomí groups as a buffer in their battles against the Mexica (Gibson, 1952:pp. 5-6); as a result of such battles, the Otomí could and may have been relocated in Nahuatl-speaking villages.

Between 1200 A.D. and 1500 A.D., a constantly shifting balance of power was apparent in the Valley of Mexico

and in such immediately adjacent areas as the Llanos de Maguey. Alliances were made and broken at a rapid pace between "chiefdoms" of approximately equal power (Gibson, 1964:pp. 16-19). The crucial power struggle was between the Tepaneca (of Azcapotzalco and later of Tacuba), the Acolhuaque (of Texcoco) and the Mexica (of Tenochtitlan).

In the conflict between the Acolhuaque and the Tepaneca during the 13th century, Ixtlilxochitl (an Indian chronicler working with the Spanish in the 16th century) suggests that Cerro Grande offered its support to the former against the latter (Troncoso, ibid.:p. 297). Apparently the Texcocans and the populace of Cerro Grande allied with each other fairly regularly after that even to the extent of intermarrying (Troncoso, ibid.:p. 297). For an uncertain period of time during the 15th century, however, Cerro Grande and Otumba (located about 15 km. southwest of Cerro Grande in the Valley of Teotihuacan which, in turn, is part of the Valley of Mexico) were under the rule of Teotihuacan (located about 30 kilometers southwest of Cerro Grande in the Valley of Teotihuacan). With the expansion of the Acolhuaque under Nezacayotl in the 15th century, Teotihuacan was subjugated, in turn, to Texcoco and presumably Cerro Grande passed under more direct Acolhua rule (Gibson, 1964:p. 18). The town, however, was also a tlatuani town, i.e., it had a native resident elite, in its own right with other communities subject to it (Kubler, 1948: vol. 2, p. 394); Troncoso, ibid.:pp. 297-298). The expansion of the Acolhuaque reflected a decline in the power of the

Tepaneca which, in fact, was eventually eclipsed by an Acolhua-Mexica alliance against the Tepaneca; in 1433 A.D., these three powers formed the Triple Alliance which by the late 15th century was dominated by the Mexica (Gibson, ibid.).

The reign of Nezacoyotl's son ended in 1515 A.D., and a dynastic dispute ensued between two brothers (Cacama and Ixtlilxochitl) both claiming to be the heir apparent (Gibson, ibid.:p. 19). The Mexica backed Cacama while such towns as Otumba and Cerro Grande supported Ixtlilxochitl. Cacama became the formal leader of the Acolhuaque while Ixtlilxochitl was granted part of the tribute due his brother. Ixtlilxochitl most likely continued his political influence over towns such as Cerro Grande.

With the arrival of the Spaniards, the break between Cacama and Ixtlilxochitl and between the latter and the Mexica was aggravated since Ixtlilxochitl and his supporters allied with the Spaniards against the Mexica (Gibson, ibid.:p. 19). The Spaniards were pulled directly into the power struggle within the Valley of Mexico, but almost immediately, of course, they clearly dominated the central plateau politically. At the dawn of the Conquest, Cerro Grande was a predominantly Nahuatl-speaking town with strong political ties extending to Texcoco, and hence it was probably on friendly terms with Texcoco-dependencies such as Teotihuacan and Otumba.

As little is known about the internal structure of Cerro Grande before the arrival of the Spaniards as is known

about its external affairs. On the basis of 16th century Spanish chronicles and contemporary climatic and geographic information, the following suggestions are offered as a description of what Cerro Grande was like before the arrival of the Spanish.

Cerro Grande had two major socio-economic groups which were probably incipient social classes: the tlatoni and his family or the ruling group and the maceguals or common people (Troncoso, ibid.:p. 294). The elite served as such not only within Cerro Grande proper, but also over its subsidiary communities as well. There may have been three different ethnic groups resident in the town each speaking a different language with the Mexica in particular as predominant (Troncoso, ibid.). Presumably the majority of people were at least bilingual. The strong regional influence of the Mexica was further evidenced by the adoption of Mexica gods on the part of the Texcocans and the Tepeapulcans (Troncoso, ibid.:p. 297).

The town had a largely agricultural population which also depended partly on the hunting of deer and on the gathering of varied vegetable materials (Troncoso, ibid.: pp. 297-298, 294). Maize, beans and chili were most likely the major cultigens (Troncoso, ibid.:p. 301). The main regional type of cultivation was apparently temporal (rain-dependent) slope agriculture with the use of the aforementioned bancales for semi-terracing (West, 1968:pp. 364-365). Thus, one or two rows of maguey were used to border a sloping

field on both sides simultaneously fastening and accumulating moisture in the thin and easily erodable soil. Semi-terra-cing was crucial in this area because of the frosts and droughts and the unpredictable nature of the water supply. The rows of maguey were often further bordered by a shallow ditch on either side which served to catch the rainwater and to help stop run-off during storms. West suggests that the bancales were employed for at least 100 years before the arrival of the Spaniards (West, ibid.:pp. 364-365).

In this region of little rain and of scarce water, the residents of Cerro Grande brought in their water for domestic purposes from a spring located a short distance outside of the town (Troncoso, ibid.:p. 292). Xaqueyes (man-made reservoirs for collecting rainwater) were employed in addition to tap the rain (Kubler, ibid.:p. 228; Troncoso, ibid.:p. 292); but, it is not clear whether this water served domestic or agricultural purposes.

Nietschmann (personal communication, 1971) suggests that before the arrival of the Spaniards, the area was characterized by a scattered settlement pattern in which villages were widely dispersed at the foothills of low mountains or on the lower half of mountain slopes. Such locations increased the access which the local population had to fuel and to water from streams. At the same time, the sites avoided the flooding to which the basin floor was subject during the rainy season due to its poor natural drainage structure.

In summary, the western Llanos de Maguey before the arrival of the Spaniards was characterized by an economy based mainly on a level of subsistence agriculture in which the majority of the labor force and the majority of the products from agriculture remained locally concentrated. To some extent, local agricultural staples must have been exchanged for other products through inter-regional trade. It is even more likely that the ruling group in Cerro Grande was linked to an inter-regional trade network involving the exchange of luxury items if not also of women in marriage; such trade would be class-specific and class-reinforcing in nature to the extent that incipient social classes were developing.

As a regional center, Cerro Grande may have been a petty chiefdom in its own right or it may have been within the economic and political sphere of influence of the Mexica who themselves by the 16th century formed either a chiefdom or an incipient state (see Fried, 1960 and Sahlins, 1963 for a discussion of different levels of socio-political stratification). Whichever, the economic system was largely under local or regional control. At least theoretically, the redistributive system at the core of a chiefdom is based on the political necessity of having the central redistributive unit respond in kind to the economic needs of its subsidiary units rather than just draw in resources from them; the key to political success here is economic balance and not economic underdevelopment. If the Mexica are viewed as an

expanding incipient state under whose influence Cerro Grande was, on the other hand, we see even then that for the Mexica a military victory when translated into economic terms took the form of tribute collection of a restricted amount of economic goods, at specified times and from specified groups. Such a procedure allowed the basic political, social and economic structure of the defeated power to remain intact. The result was not economic under-development on the part of the vanquished, but a siphoning off of a portion of the fruits of a viable economic system. The political level at which pre-Hispanic groups operated did not require the economic depletion of certain socio-political units for the economic growth of other politically more powerful groups; satellite-metropolis relationships between socio-economic units developed in Mexico with the onset of a capitalist economic system.

Cabecera and Sujeto: 16th Century

The arrival of the Spaniards in the New World was part of the larger mercantile policy under which western Europe, in general, was operating during the 15th and 16th centuries. Landing in New Spain in 1519, the Spanish rapidly proceeded to gain major military victories which then enabled them to launch what turned out to be the large-scale political, cultural and economic destruction of Indian institutions for the initial purposes of extracting native resources. In the western Llanos de Maguey this meant a religious and cultural proselytization on the part of the Catholic Church, a political and administrative manipulation

of local centers of power by the Spanish Crown through the establishment of puppet governments, a decimation of the Indian population through the introduction of diseases to which the natives had no resistance, the economic depletion of Indian communities through the collection of crippling tribute payments and the use of native labor for both private and public projects, and the seizure of Indian lands by private Spanish interests often openly supported by the Crown for livestock enterprises which geared the region's economy to meet the needs of the capital city as a market.

The Spanish imposed their own administrative units upon the earlier natives ones so as to manipulate the latter as political building blocks for their own purposes (Gibson, 1964:p. 34). The tlatoani town mentioned earlier became the cabecera (the head unit of a province) and its dependent units became sujetos. Cerro Grande with its subsidiary political units thus became the cabecera of this region with a series of subject sujetos. Llanos was a sujeto to Cerro Grande, for example, until it replaced Cerro Grande as the regional cabecera due to the decimation of half of Cerro Grande's population by a plague in 1576 (Kubler, 1948: vol. 2, p. 394).

The Fransiscans had priority in proselytizing the Llanos de Maguey. As a matter of fact, this region was among the earliest areas to receive any kind of missionary activity in New Spain. Kubler (ibid.:vol. 2, p. 475) states that Otumba, Cerro Grande and Texcoco, for example, experienced

a spree of Fransiscan building activity as early as the 1520's. By 1528-29, there was a Fransiscan monastary in Cerro Grande (Kubler, ibid.:vol. 2, p. 475) as well as a Fransiscan hospital which largely served the needs of travelers rather than those of its native population (Kubler, ibid.:vol. 1, p. 223). Walking through Cerro Grande today, it is obvious that the monastery was built on the ruins of the native religious and ceremonial center.

The Fransiscans manipulated and controlled the natives on religious and social matters, but political control in this region was ideally--whether directly or indirectly--focused in the hands of the Crown. Despite Cortez's early attempts to adopt Cerro Grande and Otumba as his private estates, these communities remained directly under Crown supervision or as corregimientos (Kubler, ibid.:vol. 1, p. 143). The corregimiento was a political tool employed by the Crown with little change from 1530 to 1786 as "an alternative to the encomienda system [and as such] as a system of government and tribute collection for Indians..." (Gibson, ibid.:p. 82). The encomienda system, in turn, referred to a generalized policy employed by the Crown in the early part of the 16th century to reward persons who had rendered services to the Crown by allowing them to collect tribute, in kind or in money, from a certain number of native communities; each community involved became the encomienda of a particular encomendero. Often the encomienda was misused, e.g., as a source of labor and not just of a tribute. After 1550, the

Crown converted expired encomiendas (they were not inheritable) into Crown estates or into the aforementioned corregimientos in a successful attempt to curb the power of the growing Spanish bourgeoisie (Gibson, ibid.:p. 63). In the midst of this political maneuvering between the Crown and private capitalists, Cerro Grande and Llanos were at least spared a shift in status from encomienda to corregimiento since they had been communities directly controlled by the Crown from the start.

Even the status of corregimiento did not protect these communities from exploitation by private Spanish interests. The Audiencia (a Crown judicial organ in the colony) assigned Cortez a group of workmen from Chalco, Otumba and Cerro Grande, for instance, to work on the construction of his palace in Mexico City (Kubler, ibid.:vol. 1, p. 143). Labor could be allocated, in this fashion, through a Crown institution called the repartimiento in which the Crown allocated A amount of men to B person for C amount of days for D task at E amount of pay (Gibson, ibid.:p. 223).

Cerro Grande and Llanos were Crown communities, and as such Cerro Grande had three Spanish Crown officials resident in 1580 (Troncoso, ibid.:p. 291). By this time, the Spaniards had also established an elected Indian government or cabildo in Cerro Grande which consisted of an Indian governor, two Indian alcaldes (judges) and 10 Indian principales representing the cabecera and all of its sujetos. The Crown undermined the power of the Indian nobility as a

resident elite in what used to be the tlatoani towns by placing non-nobles into Spanish-created government positions which then were responsible for operating the town (Gibson, ibid.:p. 171). By the 17th and 18th centuries, Indian governments were so thoroughly dominated by the Spaniards that they served solely to collect tribute for the Spaniards and to mete out punishment within their jurisdictions (Gibson, ibid.:p. 185).

Late in the 16th century, the Indian population of Cerro Grande was still geared toward subsistence cultivation of such staples as maize and chili. And subsistence agriculture continued to be temporal slope cultivation maximized through semi-terracing. Tribute to the Crown was also still paid in standard amounts of maize (Troncoso, ibid.:p. 302).

Local and regional markets or tianquezes still operated, but they clearly reflected a Spanish influence on the native economy. In addition to the basic staples, the markets also dealt in wool (Gibson suggests that livestock such as sheep were adopted by the local principales as a status symbol in emulation of the Spaniards), meat (geared for purchase by the principales and the Spaniards) and dyes (which suggest the cultivation of cochineal) (Troncoso, ibid.).

In fact early in the 16th century, the Llanos de Maguey began to be monopolized by Spanish commercial interests. Torquemada (Troncoso, ibid.) states that the earliest estancias de ganado (livestock enterprises) were around Cerro

Grande and its neighboring communities. The Spanish herds whether cattle or sheep polluted the water reservoirs utilized by the natives of Cerro Grande; the water became unusable, and the herds caused marshy areas to develop making it necessary for the Indians to bring in water from springs located outside of the town (Troncoso, ibid.:p. 294).

By the 16th century, cattle herds were vast in size in the western Llanos de Maguey. The Spanish grazed cattle in the valley basin to eventually serve the needs of the Mexico City market. The basin area had thus been expropriated as a vast land unit from the Indian population. Sheep were also present, and they may have been as important economically as were the cattle. Texcoco (50 km. southwest of Cerro Grande) was one of the major wool industrial regions of Spanish Mexico, for example, and the first wool loom, was established there in 1530. By the 17th century, Texcoco was second only to Mexico City in the number of wool textile sweatshops (obrajes) which it operated with the use of Indian labor (Gibson, ibid.:p. 244, p. 350).

Cattle, however, did predominate. The Spanish introduced cattle to the Plains on mercedes (Crown grants of pasture land given to Spaniards having rendered service to the Crown) (Nietschmann, ibid.:p. 24). By 1560 and 1570, these enterprises were referred to as estancias and the cattle herds grew at such a rate that Viceroy Velasco supported the Spanish officials and the Indians in driving out 10,000 head of cattle from this region in 1551 alone.

The size of the herd was temporarily arrested; by 1564, they had again reached vast proportions.

Smaller livestock such as pigs were also herded in the western Llanos de Maguey. Llanos was a major producer of pigs for Mexico City during the 16th century as was Calpulalpan (Gibson, ibid.:p. 347, p. 360).

The resident population of Cerro Grande had three separable ethnic groups by 1580 (Troncoso, ibid.:p. 294). Although the ethnic heterogeneity may have had a pre-Spanish origin, it is likely that these different groups were brought together as a result of the policy of congregacion. We know that the population of Cerro Grande had been decimated by the 1576 plague, thus making the town vulnerable to relocation policies initiated by the Spaniards. Nearby Otumba, moreover, was a congregacion at this time. Gibson (ibid.:pp. 283-284) points out that the policy of congregating several Indian communities into one was an extremely convenient administrative and political tool for controlling the native population. This policy was likewise employed to extract land from the Indians. Under pressure of depopulation and an accompanying socio-economic disorganization, the Indians were no match for the economically exploitative policies of the Conquistadores and their descendants.

Rancho, Hacienda and Pueblo: 17th Century through the 19th Century:

By the 17th century, the earlier Crown policy of employing administrative units which were structured on native ones, i.e., the Spanish cabecera and sujeto was abandoned for a policy which utilized the pueblo (a village unit of Castillian origin) as the basic organizational building block (Gibson, ibid.:p. 57). Former cabeceras and sujetos now became pueblos or towns (if they had a larger population). The process of Hispanization continued full-scale.

The hacienda and the rancho--private agricultural and/or livestock enterprises--became the major socio-economic institutions utilized by Spanish capitalists for organizing Indian labor and former Indian land into profitable Spanish concerns. The initial political, religious and economic interference of the Spaniards in the western Llanos de Maguey was clearly dwarfed by the total domination of this area by the pulque haciendas which followed. In the western Llanos de Maguey these haciendas began in the 17th century, they were fully developed by the 18th century and they terminated in the 20th century after the Mexican Revolution of 1910.

Excellent secondary sources dealing with the Mexican hacienda are: Whettan (1948), Wolf (1959) and Gibson (1952, 1964). McBride (1923) provides a wealth of first-hand information. An important source offering detailed information

on the Llanos de Maguey area specifically is Nietschmann (1968); hence, much of the material to be cited below derives from his work.

The development of the hacienda in Mexico as a primary socio-economic institution was in response to

- (1) a desire on the part of colonial Spaniards to profit by providing commodities for sale at a price beneficial to themselves
- (2) the opportunity to do so through the expanding needs of urban markets and of the northern silver mining communities, especially a need for items of clothing and food
- (3) and a decline in the Indian population during the 16th century so that Spaniards could no longer obtain an adequate amount of laborers for their private projects through Crown regulated labor recruitment programs.

The hacienda was established on a base of private property in the form of land owned by individual Spanish colonists. This land had been extracted from Indian communities through the manipulation of various ploys: by the purchase of land from Indian communities or from individual Indians whether through persuasion or through the use of force; by the application of pressures on the Indian for this land through the political power which the hacendado (the owner of the hacienda) possessed; and by the use of legally attained Crown land grants as a base from which to further accumulate land whether through legal or illegal means (Gibson, ibid.:pp. 274-275). Land speculation had

already been rampant in the 16th century, and it continued to be so in the 17th century (Gibson, ibid.:p. 289).

By the middle of the 17th century, the hacendado often had four or five different haciendas under separate titles of ownership to avoid the appearance of huge land monopolies (Gibson, ibid.:p. 290). Having been successfully maneuvered of their land, the Indian fell easy prey to serving as part of a cheap labor force on the actual hacienda itself. It had become extremely difficult for an Indian to support himself on the small parcels of land to which some still had access. With the general population increase in the late 17th century and in the 18th century, the landless status of the Indians was further aggravated. And the hacienda, however, was insured of an even greater and cheaper supply of labor at the same time (Gibson, ibid.: p. 298).

The procurement of labor for the hacienda by the hacendado through the private enterprise system had been preceded by the inadequacy of Crown institutions to respond quickly enough to the economic needs of the bourgeoisie. The encomienda, for example, was never formally a labor consignment institution although it may have been misused as one. The repartimiento, on the other hand, was subject to an overload of Crown restrictions which were meant to protect the Indian (Gibson, ibid.:p. 246). The expanding estates (in areas such as the western Llanos de Maguey) geared to meeting the needs of a rapidly increasing market

in Mexico City could not obtain an adequately large labor supply fast enough through Crown-regulated institutions.

The hacienda developed its own labor recruitment policies bereft of Crown impediments. The hacendado acquired his labor source by offering laborers a salary and/or work conditions equal to or more attractive than the situation they found themselves in as residents of Indian communities. Although labor was scarce in the initial years of the hacienda, this type of private estate was able to flourish because it provided the best economic alternative from those among which the Indian had to choose (Gibson, ibid.:p. 253). As a resident worker on the hacienda, for example, the Indian received a regular or irregular wage depending upon whether or not he was a full-time worker; and housing and credit from the company store (Gibson, ibid.:p. 255). At times, the peon (the hacienda worker) also received a plot of land for subsistence crops such as maize and beans. Such economic incentives were taken advantage of by the Indian since communal obligations to his own community had often become unbearable.

To meet the monetary needs of the Spanish Crown in Europe, Indian communities were required to make tribute payments to the Crown. After the number of natives in such communities had decreased drastically, the residents were still required to pay as if their numbers had not decreased. Thus any specific resident Indian family was responsible for an ever increasing share of the tribute his community had

to pay as the population of the village decreased whether through death or through the abandonment of the village by some of its inhabitants (Gibson, ibid.:p. 248). An Indian resident on the hacienda was not so directly subject to Crown policies since the hacendado acted as a buffer between him and the Crown, e.g., the hacendado made the tribute payments for his resident workers. Once a large number of Indians had abandoned their community, the Spanish colonists found it yet simpler to procure the remaining communal lands; this, in turn, guaranteed the hacendado more laborers.

The growth of the hacienda in the western Llanos de Maguey, in particular, began with the cattle ranches in the 16th century (Nietschmann, ibid.:pp. 24ff). Since cattle herding required relatively few laborers, little pressure was applied initially by the hacendado on the Indian communities. Pressures on the Indian to surrender his land, however, were already operative. The need for laborers increased when the hacienda added small livestock such as pigs and sheep to its capital assets as a part of its livestock-subsistence crop orientation.

In the late 17th century, however, the Spanish discovered that pulque--a local native beverage--was marketable in Mexico City as well as in regional markets such as Pachuca. Such a realization provided the impetus for the hacendado to change his commercial orientation to that of the cultivation of magueys for pulque. The basic factors which permitted such a switch in orientation were

(Nietschmann, ibid.:p. 29 ff.):

- (1) The hacendado controlled a large enough expanse of land to allow for the cultivation of magueys at a profit, i.e., the maguey plant requires eight to ten years to mature, hence only an enterprise with enough capital to have not only a large number of plants producing at any one time but also a reserve of plants for future use could produce pulque on a large enough scale to make it a financially profitable enterprise.
- (2) The local Indian communities provided a cheap source of labor; the maguey as a year-round plant requires a constant supply of laborers.
- (3) Mexico City and Pachuca served as markets which could be reached within 24 hours; speed of delivery was important since pulque spoils quickly.
- (4) The semi-arid climate of the Llanos de Maguey was suitable for the maguey plant; the plant can flourish both on poor soil and under conditions of little water.

With its conversion to pulque, the hacienda's labor requirements became substantial and the accompanying pressures on the Indian communities increased. Certainly by the 18th century if not already in the previous century the pulque hacienda had resident laborers or peones acasillados working in the fields and day laborers or peones alquilados as a surplus labor force. Once the peon was dependent on the hacienda for all of his basic needs, e.g., housing, food and credit, the hacienda was in

full-scale operation.

A network of paternalistic patron-client relationships in which the patron acted as a father-figure to his clients or "children" was the psychological counterpart of the hacienda as a socio-economic unit (Wolf, 1958:pp. 207-208). The economic dependence and to a lesser degree the psychological dependence of the resident peon were factors from which the day laborer did not escape. His non-residency on the hacienda was more a reflection of the hacienda's lack of need for his labor on a permanent basis than it was of any ability on the Indian's part to shield himself against the encroachment of the hacienda.

The geographic distribution of the hacienda and of the rancho in the western Llanos de Maguey was initially similar to the pattern which native communities had followed previously, i.e., these private enterprises controlled most of the land on the lower slopes which had formerly served as the subsistence base for Indian villages. Access to fuel and to water, thus was again a crucial factor in deciding the choice of a location. Once prime sites on the lower slopes were occupied, new cascos (the major complex of buildings with which the hacienda was associated) had to be situated on the valley floor; for reasons mentioned earlier, the valley floor was a less favored location.

The Spanish had early found a use for the open valley floor in terms of pasturage for cattle, as mentioned. With the advent of the pulque hacienda, the valley floor

was utilized for maguey cultivation for the eventual production of pulque. Control by the Spanish colonists of the flat land in the basin, however, also continued to be important for transportation reasons. Already in the 16th century, a network of roads had been developed at the initiative of the colonists connecting Mexico City with the east coast and with areas west of the capital. The Spanish, built an important road to Veracruz--their major port--from the capital, for instance, which passed through Otumba, Cerro Grande and Llanos. Yet another road connected Mexico City with Calpulalpan and with Texcoco (Nietschmann, ibid.: p. 29). These roads were crucial for the capitalists in Mexico City since they provided access to areas of raw materials as well as to the major colonial port. The loss of control over the economics of the western Llanos de Maguey by the local population was due to the importance of this region as a producer for the urban market and to its function as a viaduct for Mexico City.

The Modern Pulque Hacienda: Early 20th Century

By the 20th century, the Llanos de Maguey was the major national source of pulque in Mexico. The pulque hacienda was in control of the region's land and its labor. By 1910, in the municipio of Llanos alone, 25 haciendas controlled 61.2% of the area's population, 25 ranchos controlled 12.6% of the population while the only two towns in existence here has a total of 26.2% of the local population. Likewise, 83.3% of the land in the western

part of the Plains of Maguey fell under the jurisdiction of these haciendas, 14.3% was held by the ranches and only 2.3% was controlled by the villages. The average hacienda had as much as 2000 to 4000 hectares of land (Nietschmann, ibid.:p. 41 ff.).

The pulque hacienda was itself strongly tied to Mexico City through its monocrop--maguey. Barley and wheat, however, were becoming important as additional commercial crops, and they were interspersed with maguey plants in the fields. Some haciendas, furthermore, even devoted a portion of their best valley land to subsistence crops. Land not employed in any of these above-mentioned ways was rented out or divided up as subsistence plots for use by the resident laborers (Nietschmann, ibid.:p. 46).

The hacienda of the 20th century continued to operate on the basis of the large-scale use of cheap mestizo or Indian labor. Very little capital was funneled toward the maintenance of this labor force. The hacienda continued to be a rural version of the larger class system of capitalist Mexico. The absentee hacendado represented the upper class. The resident administrative staff which operated the hacienda on a daily basis represented an amorphous middle section; they were often mestizo and acted as a link between the hacendado and the peon. And the mass of peons formed the lower class; the peons were themselves hierarchically arranged according to their category of work. The lot of the majority of people in the western Llanos de Maguey was

poor. A peon was entitled to a hut, a weekly ration of corn, a small subsistence plot, a pulque ration, 25 to 30 centavos a day often as tokens exchangeable only at the hacienda store, credit, the use of equipment and seed to be paid for in labor or in money, church services, possibly some years of schooling, hacienda fiestas, year-round employment and welfare in one's old age (Nietschmann, ibid.:p. 63). These "benefits" were markers of a system in which a native population had long ago been subdued to serve as a labor pool for upper class economic interests.

Major capital outlays made by the hacendado went instead to the purchase of maguey plants and to the regional transportation system which carried pulque and grains to the Mexico City market. Thus, Ferrocarriles Interoceanico went from Mexico City to Calpulalpan and then on to Pachuca. Ferrocarriles Mexicano, on the other hand, went from Mexico City to Puebla with sidelines from Ometusco to Pachuca (Nietschmann, ibid.:p. 46 ff.). The up-keep of the casco, moreover, absorbed another portion of what capital was available to the hacendado. The absentee hacendado extended his metropolitan upper class lifestyle to his provincial home which he visited on week-ends. The hacendado, nevertheless, withdrew the bulk of resources whether in the form of agricultural produce or profit from the local area and channeled these into the metropolis. In his values, his orientation and his access to as well as his use of capital, the hacendado of the western Llanos de Maguey was part of the

metropolitan elite. The pulque hacienda of the 20th century clearly exhibited the economic unbalance characteristic of metropolis-satelite relationships. The hacienda had near dictatorial powers within the western Llanos de Maguey; in turn, the hacienda bowed to the needs of Mexico City.

The Ejido: Mid-20th Century:

Unlike many other areas of the central plateau, the ejido (the major politico-economic institution established as a result of the 1910 Mexican Revolution as a method for redistributing land both to the landless and to those with insufficient amounts of land) was introduced into the western Llanos de Maguey relatively late. Land had been allocated to some ejidos as early as the 1920's, but these groups consisted mostly of village residents. The majority of this area's population was not eligible for ejido land until 1937 when resident peons on haciendas were entitled to file for ejido land (Nietschmann, ibid.:p. 83).

Once the agrarian reform became fully effective, the local hacienda lands were reduced by 80 to 90% (Nietschmann, ibid.:p. 84)., and the ejido became the predominant land tenure system. In 1930, for example, there were 57,350 hectares of private land and 2,200 hectares in villages or in ejidos; in 1950, the figures were, respectively, 17,518 hectares and 38,631 hectares. The larger haciendas and those closest to established villages were early targets for expropriation.

To protect as much of his property as possible from

expropriation, the hacendado resorted to legal and illegal means, or he sold what part of his estate remained after expropriation rather than attempt to operate a residual estate (Nietschmann, ibid.:p. 100). The hacienda which continued as a residual estate became a highly capitalized and mechanized enterprise operated by a new landlord class whose wealth stemmed from non-traditional sources (Nietschmann, ibid.:p. 104). The orientation of the new owner and of the new estate continued to be toward Mexico City since pulque remained their major crop. Briefly, some of the characteristics of the new estate were (Nietschmann, ibid.:pp. 139 ff.):

- (1) a land base reduced by 80% from its former size
- (2) an absentee owner who continued to reside in the capital city and who was a member of the urban elite
- (3) a traditional hierarchy of social classes inherited from the earlier hacienda
- (4) resident workers who had previously worked on the hacienda or who were descendants of peons; they now felt that their lot was much worse than that of the ejidatario
- (5) economic ties with the ejido in which the ejidatarios brought their pulque for processing at the estate, or the estate manager contracted with the ejidatarios for access to their magueys
- (6) an intensified level of production as a compensation for the reduction in labor and in land; more pulque

was produced now on less hectarage than had been true earlier

- (7) and the use of a wider transportation network with which to get pulque to the market; trucks and railroads were both utilized.

Unlike the residual estate, the ejido focused on the production of short-term commercial and subsistence crops largely ignoring magueys (Nietschmann, ibid.:p. 113 ff.). The members of the ejido followed such a policy because:

- (1) Commercial pulque production was economically unfeasible on small, separate parcels of land which were not coordinated in production, processing and in marketing the pulque.
- (2) The ejidatario lacked the know-how to operate such an integrated enterprise; he also lacked necessary capital.
- (3) The ejidatario did not replace old magueys with new ones, hence he increasingly lost the option of cultivating magueys for pulque; also his lack of capital made it impossible to wait eight to ten years while the maguey plants were maturing.
- (4) The ejidatario often did not possess formal title to his plot of land, hence the insecurity of the land tenure system encouraged him to cultivate short-term crops.
- (5) And the ejidatario associated pulque production with the servility of hacienda life; psychologically he

was set against the cultivation of magueys.

Thus the ejidatario initially turned to the production of maize, beans, broad beans and peas to provide him with a secure subsistence base. As he became more secure in his new status, he added barley as a commercial crop. A government campaign in favor of beer as a status beverage did much to stimulate the market for beer and thus for barley. The ejidatario, however, still cultivated barley within a framework of traditional technology, limited capital, poor land and a lack of irrigation. A significant portion of the agricultural produce was marketed in towns such as Calpulalpan, Cerro Grande and Llanos. The excellent bus service, the continued rail service and trucks also funneled much of this produce, however, to non-local markets.

The ejido was originally intended to serve in some capacity at least theoretically as a measure for redistributing the wealth which had been so grossly monopolized by the traditional landed aristocracy before the Mexican Revolution. In the western Llanos de Maguey, the ejido became instead the basis for new class distinctions among ejidatarios themselves as a result of the limited amount of land which was available for redistribution and as a result of the continued persistence of an authority- and class-oriented outlook by a population which had been the foundation of the hacienda system. Simon (1971) states that in Benito Juarez, for example, the traditional landed aristocracy was replaced by a local or regional power clique at the

center of which was a cacique (leader) who often had gained his power by the misuse of his position as an ejido official. The cacique accumulated land and power which he shared with his supporters and which were at the expense of those who opposed him. The patron-client orientation inherited from the hacienda was not broken over-night. In conclusion, by the late 1930's the majority of people in the western Llanos de Maguey were ejidatarios operating on a subsistence level, or they were among the rural under- and unemployed. The Mexican Revolution and the agrarian reform had released a tremendous amount of labor from the hacienda without providing new institutions which would absorb this labor. As a result, the western Llanos de Maguey became a vast pool of reserve labor for the industrial metropolis of Mexico City.

CHAPTER III

Regional Ethnographic Background: Post-1940

By the mid-20th century--approximately 25 years after agrarian reform was initiated in the western Llanos de Maguey--this region was considered an economically depressed zone. The limited amount of ejido land available combined with the fact that the land is near its carrying capacity under the present systems of technology and cropping has created a situation in which there is no future in agriculture for the younger generation. For centuries, the Llanos had been dependent on its specialty-- the cultivation of maguey. In the 20th century, the foundations for this economic specialization collapsed, and so did the economy of the area. The immediate factors which caused the depression were the agrarian reform and later the dissipation of the pulque market after World War II due to the spread of the beer and soda industries (Mundale, personal communication, 1970). The more basic reasons leading up to the depression have already been outlined. Namely that since the colonial period, the western Llanos de Maguey increasingly had become oriented toward one crop, the use of a large supply of cheap labor and one urban market. The land base for the crop and the source of cheap labor were removed through agrarian reform while the rise to

dominance of other products removed the market for pulque. Regional specialization in the form of the pulque hacienda was a boon for the metropolis, but it was at the expense of the satellite; Mexico City grew economically while the Llanos de Maguey shrank.

In 1953, an industrial town--Ciudad Industrial--was constructed in the western Llanos de Maguey by the Mexican government as an attempt to stimulate economic activity in this region. The town as well as the three villages under study are all members of the same regional network of communities. These communities form a network because together they are a "functional unit...having more frequent and varied group level relations with each other" than with communities outside of the network (Poggie, 1967: p. 43). The regional network was first defined as such by Young in 1957-58, and it was re-investigated by Poggie in 1966. At both times, Cerro Grande, Llanos and Ciudad Industrial were the primary pivotal points within the network which consists mainly of ejidos created as recently as the 1920's and 1930's.

Ciudad Industrial began as a response by the Mexican government to a request for economic aid made by the state of Hidalgo (Mundale, personal communication, 1970). The goal of the federal program was to induce economic activity by creating 5,000 industrial jobs and by attracting other firms and businesses to the area.

Constructora Nacional de Carros de Ferrocarril,

S.A. was constructed in 1953 under the sponsorship of Nacional Financiera (Mexico's official bank for industrial development) for the production of railroad cars. Also Diesel Nacional, S.A. was set up jointly on Mexican and Italian capital; this factory was to produce Fiats. Both of these operations began to produce in 1955. Carros became a success, and it provides Mexico, the United States, Canada and even Europe with what is referred to as rolling capital. Dina, on the other hand, ran into financial difficulties because it was not protected against foreign capital and because it was tied to a third factory--Sidena--which was also in financial trouble.

Sidenurgica Nacional, S.A. or Sidena began to function on Japanese capital as Toyoda of Mexico, S.A. but because the enterprise proved to be financially unfeasible, in 1960 it was converted to its present name and form with the financial backing of Nacional Financiera. Sidena produces mainly intermediary parts for the other two factories.

In essence, Ciudad Industrial was built by Nacional Financiera through a branch, namely Constructora Industrial Ir., S.A. de C.V. The residential part of the town as opposed to the actual factories is administered by the Banco Nacional de Transportes on behalf of the Instituto del Seguro Social (IMSS); IMSS is totally responsible for the community in which the majority of the obreros live. The Secretaria del Patrimonio Nacional, however, is responsible for the factories all three of which are directed by it as one enterprise. Because the directorship of the town and

of the factories is held separately by two different branches of the federal government, very strong conflicts have developed between the Secretaria and IMSS over whose policies dominate; the two deal with different aspects of the same population of workers. The policies formulated by the Secretaria for the factories have dominated those made by IMSS for the residential community of Ciudad Industrial.

The nature of the regional network of which Ciudad Industrial as well as Benito Juarez, Cerro Grande and Serena are all members has changed between the time of its initial study in 1957-58 and that of the re-study in 1966 (Poggie, 1971). Ciudad Industrial has increased in status and in importance at the expense of Cerro Grande and Llanos which have served the western Llanos de Maguey as religious, economic and political centers since before the arrival of the Conquistadores. By 1966, Ciudad Industrial had established itself as the focal point for jobs, for sports and for medical consultations. The industrial town, however, had not become as centrally important as had been expected. Rather this regional network of communities today is characterized by the "dispersed city" effect in which several cities provide the goods and services within an area rather than by the "central place" effect in which one major locale controls the distribution of goods and services. Thus, the attraction of Llanos as a commercial center stems from at least early colonial times and continues today since the town is a focus for daily and weekly shopping as well as

for the sale of barley--an important commercial crop. Cerro Grande, on the other hand, continues to operate as the center for political and religious affairs as it did before the 16th century. Mexico City, located outside of this immediate region, moreover, serves as a major residence for the consanguineal and ritual kin of people in the local area. This region has long had a steady flow of traffic with Mexico City, and today it is important as a potential source of employment.

One major reason behind the limited functional importance of Ciudad Industrial after over 15 years of existence is the relative failure of the industrial town as a project of government planning (Poggie, 1971). The project has been considered a failure by Mexican social scientists who have worked as administrators in the town itself. The conflict between town and factory interests has featured centrally in the downfall of this project (Camara Barbachano, 1971). The factories themselves, moreover, are now in economic trouble; two out of the three are on the decline (Schensul, 1971).

Ciudad Industrial has provoked severe power struggles, furthermore, within the local area (Mundale, 1971). Mundale points out that the over-night creation of a town of over 5,000 inhabitants and the centralization of the major source of jobs adjacent to Cerro Grande juxtapositioned Ciudad Industrial and Cerro Grande with respect to each other. The latter is the municipal cabecera for the municipality

in which the former is located. Obreros (industrial workers) from Ciudad Industrial unsuccessfully attempted to wrest power away from the political office-holders in Cerro Grande with the result that bitter feelings arose between the two groups. The conflict was more basically one between a metropolis and its satellite area; the office-holders represented the provincial area or the satellite while the obreros represented the metropolis because there were a nationally-oriented group of skilled industrial workers.

Obreros resident in Benito Juarez, on the other hand, have been incorporated successfully into local civic programs largely because Benito Juarez although a municipal cabecera, it is not the cabecera of the municipality in which Ciudad Industrial is located. A political clash has thus been avoided. The potential occupational conflict between obreros and those in traditional occupations such as subsistence agriculture never rose to the surface in Benito Juarez whereas the political ambitions of a nationally-oriented group of industrial workers from Ciudad Industrial aggravated an open clash in Cerro Grande between blue collar and white collar workers; those in traditional occupations in Cerro Grande were not even included in the political arena.

The introduction of the factories into the region temporarily opened up an ascribed system of status, power and wealth which had not only been here prior to the agrarian reform but which had been re-established, as mentioned,

shortly after that reform (Simon, 1971). Access to land and affinity with the landhold were criteria at the base of the power-status-wealth structure. Whereas prior to agrarian reform these rewards were controlled by the pulque hacendado, after the 1930's an ejido official acting as a cacique illegally controlled the land base of the ejido and hence the political power in that ejido--if not also in a wider section of the region as well. The arrival of the factories and their establishment in the region initially created an open system where occupational achievement in the form of the acquisition of a factory job became the basis for attaining high status in the region. The factory worker receives a high salary in comparison to the amount of cash to which a subsistence agriculturist had access and in comparison to the national level of industrial wages. He also receives union protection once he has become a permanent worker, subsidized housing if he lives in Ciudad Industrial, and a wide program of fringe benefits such as free transportation to work, and a school supply allowance for his children. Obreros are clearly an economically privileged group.

The factories initially required 5,000 industrial laborers; since many skilled workers were needed, a good portion were brought in from other regions to avoid spending time on training men from the local population. A significant number of obreros, however, were also locally based. In the case of Benito Juarez, for example, these local

obreros tended to come from the wealthier peasant families (Simon, ibid.)

The economic failure of Ciudad Industrial in its own right no less as a catalyst for the regional economy has meant that the number of factory jobs has not expanded. The unions within the factories protect their own workers which means that new jobs or job availabilities through death or retirement are passed on to the kin of obreros. Due to the scarcity of factory jobs primary education has become a prerequisite for factory work. Secondary education may well be on its way to supplementing the primaria (the primary school) in this capacity (Schensul, 1971). It is the factory worker who not only passes on factory jobs to his kin, but who can also afford some secondary schooling for his children. Thus, both avenues to factory employment--schooling and personal contacts--are monopolized by obreros. Those in traditional occupations or in non-factory wage work are locked into their occupations within the regional economy.

Not only does the economic situation lend itself to class differences based on an unequal distribution of power, wealth and privilege, but there is also a strong degree of alienation on the part of those in traditional occupations from their own occupation (Cone, 1971). In 1957-58, for example, agriculturalists, merchants and obreros each rated their own occupation highest on a variety of positive criteria. In 1967, however, the

agriculturalists and the merchants rated their own occupation low on the majority of these criteria while along with the obreros they rated factory work high. A frightening degree of dissatisfaction with one's life's work has developed for which there is little hope of alleviation within the near future. Subsistence agriculturalists and merchants no longer have access to factory jobs for themselves nor for their children. Emigration to Mexico City features as an important escape, but Roufs (1971) suggests that a high percentage of those emigrating find the job situation no better in the capital city. They return--an added economic and social weight on their kin and on the regional economy.

Primary and secondary school children, moreover, have developed extremely unrealistic educational and occupational goals for themselves (Roufs, ibid.). The majority of the children regardless of the occupation of their parents want at least a college education and professional work, e.g., jobs as engineers. Such goals may be the result of policies initiated by the Mexican government in an attempt to assimilate ethnic and rural populations into the national industrial culture, or of a government attempt to channel labor into occupations which it considered to be inadequately staffed at one time. The goals may also reflect a desire to acquire status and/or economic rewards which the local people feel they can obtain through the acquisition of a formal education and a professional job since these are traits associated with the regional and the national

elites. High educational and occupational aspirations are now ingrained as the future hopes of the next several generations in this region. Roufs (ibid.) suggests that a certain number of these children may maintain these aspirations as fantasies divorced from reality, and that another portion may change their intermediary educational and occupational goals into actual contemporary plans; however, a large number of these young people may very well place the blame for their aspirational gap on the established order of power-holders. Such is the manner in which the seeds for revolution are sown.

Local Ethnographic Background: Post-1940

The communities of Cerro Grande, Benito Juarez and Serena have much in common with each other because they all participate in the same regional economy and in the same regional network of communication. They are all either ejido communities or have a portion of their population as ejidatarios (members of an ejido); this means that these communities are subject to the same laws which underlie the ejido as a government institution. These communities also differ from each other.

The Ejido of Benito Juarez:

The Hacienda de Benito Juarez the remains of whose casco dominates the physical lay-out of this town is the major hacienda from which the land and the population of the present ejido come. Located on a piedmont three to three and one-half km. south, respectively, of Ciudad

Industrial and of Cerro Grande and about one km. southeast of Serena, Benito Juarez is characterized by a grid system of streets which is divided into two parts by a paved highway. This highway leads immediately into Ciudad Industrial and Cerro Grande to the north and into Calpulalpan and Llanos, respectively, to the south and the southeast. The urban lots to one of which each ejidatario is entitled are confined within the urban zone while the fields of the community surround the town. The administrative buildings, the school and most of the stores are spread in a lineal fashion along both sides of the highway. The casco and the railroad which passes through Cerro Grande as it does through Serena flank the town on its southwestern side. Benito Juarez has had electricity since 1957 and potable water since 1963. The town also has an elementary school.

The ejido was created in 1930-31 which is the same year in which it received its original endowment of land. In 1935 and in 1937, the ejido received two ampliaciones bringing the total amount of temporal land to 2,785 hectares.

This land base is associated with a total population of 4,013 people according to the preliminary figures of the Mexican Population Census of 1970. This population, in turn, is fairly evenly divided between males--2,017 and females--1,996. The number of people in Benito Juarez has doubled since the 1960 Census when there were only 2,059 persons of whom 1,039 were males and 1,020 were females. This increase in numbers is primarily due to the influx of

factory workers from outside of the community.

As of 1966 according to a preliminary census taken by the University of Minnesota research crew, the population is very young: 44% of the people were 14 years or younger while 54% were between the ages of zero and 19 years. Many families have a large number of young children; this is also the case in Serena and in Cerro Grande.

Although the community is officially an ejido, there are only about 445 ejidatarios; in 1970 this accounted for approximately 50% of the adult males. Of these, only 387 ejidatarios are titled while the remainder are provisional members which means that they are entitled to land when it becomes available. The chances for this occurring are slim since there are no more local estates from which the land can be expropriated. The ejido plots range in size from three to six hectares with the majority of ejidatarios holding three to four hectares each. In addition to a plot, the ejidatario is entitled to a house lot of 25 by 50 meters in the urban zone. The ejido provides few material benefits to its members other than the house lot and some land; and not even all members have access to land.

Benito Juarez is distinguishable from many of its neighboring communities because although largely agricultural, it has a large number of obreros who have moved in from outside as well as a significant number of native villagers who are obreros. The paved highway which passes through the community provides frequent daily bus

transportation to all nearby towns which includes Ciudad Industrial. Other major occupations which are represented in Benito Juarez are shopkeepers, artisans and railroad wage workers. The significant number of obreros with their relatively ready cash accounts at least partly for the many shops which line the highway. There is a high rate of turnover in these businesses, moreover, because of the constant flow of new people into the town. The scarcity of housing in Ciudad Industrial as well as in communities which are conveniently located with respect to the factory town, furthermore, places a high priority on the rental or sale of urban lots; such transactions are widely practised although they are illegal since ejido property is inalienable.

Benito Juarez is a rapidly changing community in which the flow of money and people creates a mobility in personnel and in commercial enterprises, an element of modernity as represented by new appliances and new homes and an element of impersonality because of the many newcomers.

Serena:

Serena is located two kilometers southwest of Ciudad Industrial and approximately one kilometer northwest of Benito Juarez. Although it is closer in actual miles to Ciudad Industrial than is Benito Juarez, Serena is less conveniently located since it is two kilometers off of the paved highway. A dirt road connects this town with the highway.

Situated on the same piedmont as Benito Juarez, this town also is dominated by the casco of a former

hacienda; in this case, the hacienda was Hacienda de Serena. The former hacienda is now a pequena propiedad or a private landed estate. The town has an urban zone which follows a grid pattern. A wide dirt road divides the grid into two parts, and the administrative buildings and the school flank the road on both sides. The agricultural lands associated with the ejido and the lands of the residual estate surround the town. Potable water was introduced to Serena in 1945 and electricity was installed in 1950. The town also has an elementary school.

Serena became a pueblo (a village) in 1939. The pueblo is composed of two separate ejidos, that of Serena and that of Plata. The former received its original land endowment in 1937 from the Hacienda de Serena. Its ejidatarios are thus former hacienda peons. The original grant consisted of 106 hectares of temporal land for 22 ejidatarios.

The Ejido de Plata was also created in 1937 receiving 373 hectares of temporal land from the same hacienda; its population likewise consists of former hacienda peons. A few years later, the Ejido de Plata received an ampliation of 126 hectares again of temporal land. Plata is the larger of the two ejidos with an ejido membership of 68 persons. It is unclear, however, how many of the ejidatarios in either ejido are titled as opposed to provisional members. The average ejido plot is approximately four hectares according to local ejido officials.

The total population of the pueblo of Serena has decreased over the last ten years from 888 persons in 1960 to 836 in 1970. At both times, there were slightly more males: 468 males to 420 females in 1960 and 423 males to 403 females in 1970. The population of this village also is young: in 1966, 50% of the people were 14 years or younger while 60% were between the ages of zero and 19 years. The population decrease is very likely due to the limited future of agriculture in this region linked with the greater inaccessibility of this town to Ciudad Industrial. A greater portion of the people here are subsistence agriculturists than is the case in Benito Juarez.

Cerro Grande:

Cerro Grande which is immediately adjacent to Ciudad Industrial is located on the lower slope of San Salvador peak; the town and its fields are sprawled down a relatively steep slope. The town has a pre-Hispanic history, and it also served as a major Spanish center, as mentioned earlier. As a result, its physical lay-out differs from that of the recently created ejido communities. Following the Spanish tradition, Cerro Grande has a central plaza which is fringed by shops, the market, administrative buildings and the church. A grid system of streets radiates out from this plaza, but it has somewhat of a haphazard appearance due to the steep east-west gradient on which the town is situated. The streets are of dirt except for the major circuit around the plaza which was being paved

in 1970. Drainage pipes were also being laid on those streets immediately adjacent to the plaza; previously these streets as well as others were a sanitation problem since during the rainy season, garbage flowed freely down their slopes. The town has had electricity for at least 50 years, but it still depends for drinking water on the well which the Franciscans installed during the 16th century. There is also an elementary school in the community.

Cerro Grande is the cabecera for the municipality of Cerro Grande, and it also serves as an important religious and economic center for the region. Moreover, the town is a transportation center since all of the major bus lines in the region pass through it.

As of 1970, Cerro Grande has 7,156 people with slightly more males--3,593 than females--3,563. The population increased slightly from 1960 when there were 3,076 people with 1,535 males and 1,541 females. The major increase in population probably occurred between 1950 and 1960 since Ciudad Industrial was initiated in 1953 and Cerro Grande served as a residence place for its first workers. The population likewise here is young. In 1966, 50% of its people were 14 years or younger while 60% were between the ages of zero and 19 years. The town has a great variety of occupations represented within it. The major ones are: subsistence agriculturalists, small landowners, merchants, artisans, obreros and government bureaucrats.

Not all of the people in Cerro Grande belong to the

Ejido de Cerro Grande. There are 830 ejidatarios as of 1970 of whom 570 are titled. The ejido received its first endowment--1,988 hectares--as early as 1928 since it had been an established community before the Conquest. Thus Cerro Grande was not affected as much as was Serena, for example, by the 1937 law which for the first time permitted hacienda peons to apply for ejido land.

The Ejido de Cerro Grande received its land from four haciendas which surround it, but the major portion came from the Hacienda de Gino. In 1938, the ejido received an additional grant of 4,035 hectares and again in 1942 of 1,440 hectares. The town has a total of 3,428 hectares of temporal ejido land, 991 hectares of small private holdings and 655 hectares for its residential and commercial area. The average plot is about three to four hectares, but there is a greater variance in plot size here than in the other two communities because the first distribution of lands in 1928 involved relatively few ejidatarios so that each received a larger parcel than was the case in later distributions of land.

Benito Juarez is the most modern of the three communities because of the ready cash which the high number of resident obreros have brought into the community. Cerro Grande is the oldest community, and it is the most complex institutionally as a result. Serena, on the other hand, is the simplest institutionally and it is most strongly oriented toward agriculture. Perhaps not coincidentally, Serena also has a declining population.

CHAPTER IV

As of 1960, the state of Hidalgo had 2.8% of the total Mexican population or 994,598 people and 1.1% of the total area of Mexico or 20,987 square kilometers (Censo General de Poblacion, 1960). Of this population, 78% was in the rural region, i.e., in communities of under 2,500 persons. Sixty-eight percent of the population was engaged in agriculture, forestry or fishery. And of males 12 years and older in age, three percent were unemployed at least one week to over 13 weeks of the year. Hidden rural underemployment, furthermore, takes a treacherously high toll although it is difficult to gauge from statistical reports.

The subsistence level at which most of the population lives is obvious. The average family income in pesos in urban centers in Hidalgo in 1958 was 847 or 70 U.S. dollars while it was even lower in the rural areas, 386 pesos or 32 U.S. dollars (Freithaler, 1968:p. 22). More specifically, 47% of the population in the rural area earned under 300 pesos or under 25 U.S. dollars a year while 30% received between 301 and 500 pesos or between 25 and 41 U.S. dollars. Even by 1972 standards Hidalgo is still a poor region.

The purpose of this particular chapter is to demonstrate by the use of two Preliminary Samples of households from the Ejido of Benito Juarez in the western Llanos de Maguey in this state of Hidalgo:

- (1) the relationship between the economic base of a household and the form which that household takes, and by this indicate the significant number of households which are suffering from poverty
- (2) and to demonstrate the presence of secondary indicators of the internal economic condition of a household, and thus indicate this same poverty again but this time indirectly.

The Preliminary Samples, in general, will be employed to generate specific hypotheses which will be tested by the 1967 data. The importance of employing the Preliminary Samples to demonstrate in some detail the relationship between household types and economics stems from the lack of reliable income data for the 1967 Data set. Once such specific relationships have been shown to operate in the Preliminary Samples, they will be assumed to hold for all three communities in the 1967-Data, but they will necessarily be gauged indirectly in this later package of data.

Preliminary Samples: Benito Juarez, 1970

Methodology:

In the summer of 1970, Jay Schensul of the Department of Anthropology at the University of Minnesota conducted a

survey of 107 households in the Ejido of Benito Juarez employing a basic survey questionnaire as part of her year's field work in this village (personal communication, 1970). Schensul included questions which touch points vital to my own work, e.g., the composition of the household and of the family, the main sources of income per household, and the major occupations available locally for males. She herself concentrated on problems of formal education.

Her data are arranged in what for my purposes form two Preliminary Samples: Sample A with 45 households and Sample B with 62 households. The two are separate because the sampling criteria upon which each is based differ.

In Sample A, each of the 45 households has one child attending the sixth grade class in the primaria in Benito Juarez. The sixth grade was chosen because of the willingness of its instructor to cooperate with Schensul in her work. And of the total possible number of households represented in this class, 45 were chosen because of the willingness of the mothers of these children to be interviewed.

In Sample B, on the other hand, the information for the 62 households was collected by a house-to-house survey. The households are all located in the center of town, they have been in this community for at least seven years and each household has at least one resident child between the ages of 14 and 23 years. Thus, the Preliminary Samples are alike in that each household has at least one child

with some formal education. Childless households, e.g., conjugal or single-person households as well as those excluded in some other way by the sampling techniques described are obviously not included in these samples. Sample A and Sample B are, therefore, judgmental in nature.

Analysis:

Level of Formal Education:

Samples A and B were chosen to represent differences in the level of formal education received on the part of at least one resident child in each household. Of the total of 107 households, 66% (71 cases) have children who lack secondary schooling while 34% (36 cases) have at least one child with some secondary education (Table I). Of this latter 36 households, 24% (26 cases) have the head of the household dependent on a wage income instead of being traditionally occupied, for example, as a subsistence agriculturalist. A subsistence agriculturalist is a small-scale producer who operates within the framework of limited capital and traditional technology. He cultivates his own food and markets the surplus; he may in addition cultivate commercial crops. Moreover, 11% (three cases) of these 26 households have fathers who are factory workers. Schensul states, as mentioned, that within Benito Juarez, the children of obreros (as well as of wage-earners, in general) tend either to go into factory work, or they tend to continue with their education after primary school.

TABLE I. LEVEL OF FORMAL EDUCATION OF CHILD BY OCCUPATION OF HOUSEHOLD HEAD PER HOUSEHOLD. SAMPLES A AND B. BENITO JUAREZ, 1970. *

OCCUPATION	SAMPLE A			
	SOME SECONDARY EDUCATION**		NO SECONDARY EDUCATION***	
	<u>FREQUENCY</u>	<u>PERCENTAGE</u>	<u>FREQUENCY</u>	<u>PERCENTAGE</u>
WAGE-EARNER	4	8.89	20	44.44
NON-WAGE EARNER	3	6.67	18	40.00
	<u>7</u>	<u>15.56%</u>	<u>38</u>	<u>84.44%</u>
TOTAL: 45 cases 100 percent				

OCCUPATION	SAMPLE B			
	SOME SECONDARY EDUCATION**		NO SECONDARY EDUCATION***	
	<u>FREQUENCY</u>	<u>PERCENTAGE</u>	<u>FREQUENCY</u>	<u>PERCENTAGE***</u>
WAGE-EARNER	22	35.48	18	29.03
NON-WAGE EARNER	7	11.29	15	24.19
	<u>29</u>	<u>46.77%</u>	<u>33</u>	<u>53.22%</u>
TOTAL: 62 cases 99.99 percent				

OCCUPATION	SAMPLES A AND B			
	SOME SECONDARY EDUCATION**		NO SECONDARY EDUCATION***	
	<u>FREQUENCY</u>	<u>PERCENTAGE</u>	<u>FREQUENCY</u>	<u>PERCENTAGE</u>
WAGE-EARNER	26	24.30	38	35.52
NON-WAGE EARNER	10	9.36	33	30.84
	<u>36</u>	<u>33.66%</u>	<u>71</u>	<u>66.36%</u>
TOTAL: 107 cases 100 percent				

*Information was supplied by the mother or another adult in the household. This is true for all of the tables except as otherwise specified.

**Some years of secondary education on the part of at least one child in the household.

***No years of secondary schooling on the part of any children in the household.

The children of those heads of household with a non-wage income, on the other hand, tend to discontinue their education while in primary school or after graduation from the primaria. These children enter mostly non-factory work. The two occupational groups, i.e., the wage workers and the non-wage workers or more specifically, the obreros and the subsistence agriculturalists are insulated from each other as are their children in terms of the educational and occupational alternatives available to them. Attention will be focused mainly on the differences between wage workers and subsistence agriculturalists since these are the two major occupational groups in this region. In only 16% of the households (seven cases) is there at least one child with some secondary schooling. Of these 16%, nine percent (four cases), in turn, have a household head who brings in a wage income while for seven percent of the households (three cases), the household head has a non-wage occupation. Of the total 84% of the households in which the children lack secondary education, as much as 40% (18 cases) have a household head who has a non-wage income. Forty-four percent (20 cases) of those households in which no child has any secondary education, however, have a household head who is a wage-earner, and therefore who can afford some secondary schooling for his children. Sixty percent of those households which do have a wage income but whose children lack secondary education, none-

theless, are households in which the children are too young to attend secondary school.

For Sample B, in 53% (33 cases) of the households the children lack a secondary education despite the fact that all 62 households in this sample have at least one child of secondary school age (Table I). In 22% (15 cases) of these households, the household head has a non-wage occupation; he cannot afford secondary education for his children. On the other hand, in 29% (18 cases), of the households, the children have no secondary education, but the household head does have a wage income; presumably he can support his children in secondary school. As Schensul points out, factory work operates as an alternative to secondary school for the children of obreros. Thus in 36% (22 cases) of the households in which the household head has a wage income, there is at least one child who has some secondary schooling; this compares with only 11% (seven cases) of the households in which the household head has a non-wage income.

Occupation:

Before analyzing the crucial relationship between household type and the economics of the household, background information is needed about other aspects of these two Preliminary Samples. An occupational break-down of Sample A and Sample B is in order since the occupation of the head of the household is the primary indicator of the

TABLE II.OCCUPATION OF HOUSEHOLD HEAD.SAMPLES A AND B.BENITO JUAREZ.1970.

OCCUPATION	SAMPLE A FREQUENCY	SAMPLE A PERCENTAGE	SAMPLE B FREQUENCY	SAMPLE B PERCENTAGE	SAMPLES A AND B FREQUENCY	SAMPLES A AND B PERCENTAGE
SUBSISTENCE AGRICULTURALIST	15	41.67	17	31.48	32	35.56
WAGE-EARNER (OBRERO)	16 (6)	44.44 (16.67)	30 (19)	55.56 (35.17)	46 (25)	51.11 (27.78)
ARTISAN	4	11.11	4	7.41	8	8.89
MERCHANT	1	2.71	3	5.56	4	4.44
	<u>36</u>	<u>99.93%</u>	<u>54</u>	<u>100.00%</u>	<u>90</u>	<u>100.00%</u>

MISSING DATA: Sample A has nine cases of missing data. Sample B has eight cases. Samples A and B together have 17 cases of missing data.

TABLE III. TYPES OF HOUSEHOLDS. SAMPLES A AND B. BENITO
JUAREZ, 1970.

HOUSEHOLD TYPE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>
NUCLEAR HOUSEHOLD	18	40.00	46	74.19	64	59.81
DECLINING NUCLEAR HOUSEHOLD	5	11.11	0	00.00	5	4.67
LINEAL HOUSEHOLD	8	17.78	6	9.68	14	13.10
MATRIFOCA HOUSEHOLD	8	17.78	7	11.29	15	14.02
EXPANDED HOUSEHOLD	5	11.11	0	00.00	5	4.67
GRANDPARENT- GRANDCHILD HOUSEHOLD	0	00.00	1	1.61	1	.93
NON-KIN HOUSEHOLD	1	2.22	2	3.23	3	2.80
	<u>45</u>	<u>100.00%</u>	<u>62</u>	<u>100.00%</u>	<u>107</u>	<u>100.00%</u>

economic status of the household. As we have already witnessed, the level of formal education attained by the children is another such indicator.

Table II shows that for Sample A and Sample B together, wage-earners predominate over the other major occupational category--that of subsistence agriculturalists: 51% (46 cases) of the household heads are wage-earners while 36% (32 cases) are subsistence agriculturalists. In Sample B, 56% (30 cases) of the household heads are wage-earners and 32% (17 cases) are subsistence agriculturalists. And in Sample A, 44% (16 cases) of the household heads are wage-earners while 42% (15 cases) are subsistence agriculturalists. A significant portion of the wage-earners, in turn, are obreros: 28% (25 cases) in the two samples together; 35% (19 cases) in Sample B and 17% (six cases) in Sample A. The major occupational difference between Samples A and B is not only that Sample B has more wage-earners, but also that it has more obreros. The impact of Ciudad Industrial on the region is clearly evident.

Household Type:

A household, to reiterate, is defined as that unit of persons who shares a common cooking area. Of the 107 households in the Preliminary Samples, as many as 60% (64 cases) are nuclear households (Table III). Sample B has as high a frequency of nuclear households as 74% (46 cases)

while Sample A has as low a frequency as 40% (18 cases). The greater frequency of wage-earners in Sample B and their concomitant higher economic status, manifests itself here in the structure of the household. The high percentage of nuclear households can be accounted for by:

- (1) the early disruption of the agricultural pattern of this region by the arrival of the Spaniards and their introduction of the hacienda to the western Llanos de Maguey.

It is assumed that peasants in a traditional agricultural setting are most likely to operate through extended family households consisting of at least three generations of lineal kin within a larger lineage kinship structure. This is so since the older generation controls the land which is inherited by the younger generation. The introduction of the hacienda to the area and along with it the conversion of a large part of the native population from peasants into peons must have broken the pattern of extended family households among the peons. There is no direct information available indicating the types of households in which peons resided on the hacienda. The expanded, the lineal and the nuclear households are three possibilities.

- (2) the proximity of the region to Mexico City as an urban center, and therefore the region's susceptibility to influence by urban patterns of social organization.

This influence has been at least partly in the

direction of non-extended households because of the obvious non-agricultural nature of Mexico City.

- (3) and more recently, the direct introduction of modern industrial values into the region through the presence of Ciudad Industrial.

Kahl (1968:pp. 132-134) emphasizes the isolating influence which industrialization has had on the family in rural Mexico. This influence can be understood in terms of the type of control exercised over the economic resources on which a household is founded. In the case of the nuclear household, the household head rather than a kin group, for instance, controls his source of income. In an industrial area, the industrial worker offers his labor as a skill in exchange for a wage; he can maintain a separate household apart from extra-nuclear kin because they do not control the income upon which his household is based. Nimkoff (1965) and Goode (1967), in turn, stress the ideality of a nuclear household for an industrial society in terms of the easy manouverability of the labor force which it offers for the industrial employer, both as physical and social mobility, and in terms of the large number of consumer units which it provides for a consumer-oriented society through the encouragement of separate nuclear family households. Kahl (ibid.) states that modern industrial values have even become embedded in provincial towns in Hidalgo (towns of 10,000 persons or less) where economic opportunities are

still very limited. Two of the values which are relevant for this study are: a de-emphasis on kinship relationships and a concomitant emphasis on individualism. Modern industrial attitudes favor the promotion of the nuclear household. They help explain the high frequency of nuclear households in Benito Juarez--an agricultural community currently in contact with a nearby industrial center. The people in Benito Juarez state that when a child marries and establishes his/her own family of procreation as a separate household, for example, he/she no longer has any financial obligations toward the household of orientation. Economic aid offered to members of the household of orientation is above and beyond what is expected of non-resident married children.

Forty percent (43 cases) of all households in Sample A and in Sample B together are non-nuclear households (Table III). In Sample B, as few as 26% (16 cases) of the households are non-nuclear while in Sample A as many as 60% (27 cases) are the same. Specifically, 13% (14 cases) of the households in Sample A and B consist of lineal households; this true for only 10% (six cases) of the households in Sample B and for as many as 18% (eight cases) of the households in Sample A. In turn, five percent (five cases) of all households in Samples A and B are expanded or collateral households while as many as 11% (five cases) are so in Sample A; Sample B has no collateral households. Five percent (five cases) of all households in Samples A and B are declining

nuclear households: this is the case for 11% (five cases) of the households in Sample A; Sample B has no such households. Again 14% (15 cases) of all households are matrifocal while as few as 11% (seven cases) are in Sample B and as many as 18% (eight cases) are in Sample A. Only one grandparent-grandchild household (consisting of one set of grandparents and a grandchild with the absence of any intervening generations) occurs and this is in Sample B; it comprises one percent of the sample. Finally, three percent (three cases) of all households are non-kin-households in that within one physical compound these households have direct economic relationships with households of non-kin. Three percent (two cases) of the households in Sample B are non-kin while only two percent (one case) of the households are in Sample A.

The distribution of household types between Sample A and Sample B shows a consistent pattern in that Sample B which has the higher frequency of wage-earners and of obreros, in particular, also has the lower frequency of lineal, declining nuclear and expanded households--households which are signs of economic stress. Sample B likewise has fewer matrifocal households; these reflect a middle as opposed to a high economic status. And Sample B has two out of the three non-kin households which reflect economic well-being and a profit-orientation. The sampling procedure upon which the two Preliminary Samples are based exclude,

as mentioned, single-person and conjugal households. The socio-economic explanations for the significant number of non-nuclear households which occur in these Preliminary Samples will be discussed in further detail along with an analysis of the relationship between household type and its economic foundations.

Age of Household Head:

Figure 2 relates only to Sample A. It shows an association between the economic status of a household and the age of the household head as gauged indirectly from the age of the spouse; the husband is assumed to be at least five years older than his spouse. There is an inadequate amount of relevant information both for Sample B and for the male spouses in Sample A.

There is an inverse relationship between the age of the spouse and the economic viability of the household. Specifically, the lower the economic status of the household, the greater is the age of the spouse. Thus the mean age of the wife is 36 years in households of high economic status while the mode is 35 years (the economic status of different households will be discussed later in this chapter). In households of middle economic status, on the other hand, the mean and the mode are both at 38 years. And in households of low economic status, the mean age of the wife is 62 years; there is no mode. The main reason for such an inverse relationship is that wage-work and factory work,

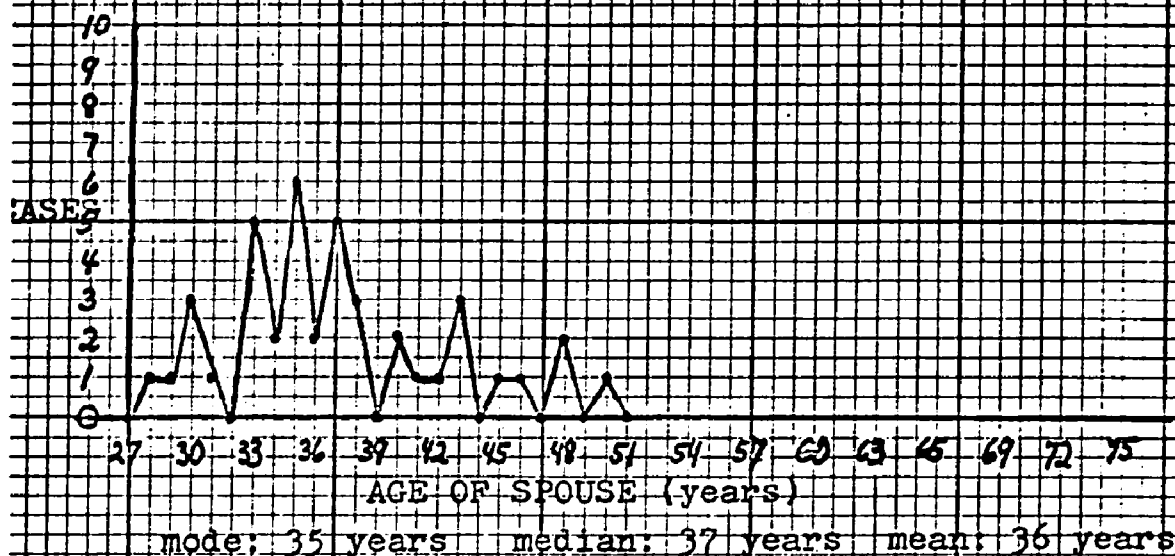
in particular, are highly sought after in this region. And younger people are favored for employment since it is assumed that they can adapt quicker and better to a work environment which frequently requires new skills and attitudes. Old people are locked into their traditional occupations.

Work Status of the Wife or of the Mother:

Tables IV through VIII deal with the work status of the wife and/or of the resident children; the work status of the wife will be discussed first. In the case of matri-focal households, the work status of the mother is considered instead. Table IV shows that 43% (40 cases) of all households have the wife or the mother working for pay. Sample A has slightly more women working than does Sample B: 44% (20 cases) as opposed to 41% (20 cases), respectively. The operation of a shop (most often as part of the home) is the primary activity in which these women engage. Table V shows that 18% (17 cases) of the total number of households in Samples A and B have women as full-time comercias (store-keepers); in Sample B this figure is as high as 22% (11 cases) while in Sample A it is as low as 13% (6 cases). Six percent (6 cases) of all households in Sample A and B, have the woman working part-time in the shop; this is true for eight percent (four cases) of the households in Sample B but for only four percent (four cases) of the households in Sample A. The slightly greater preponderance of commercial activity for women in Sample B as compared with Sample A is

FIGURE 2. AGE OF SPOUSE OF HOUSEHOLD HEAD BY CATEGORY OF ECONOMIC STATUS OF HOUSEHOLD. *SAMPLE A. **BENITO JUAREZ. 1970.

I-HOUSEHOLDS OF HIGH ECONOMIC STATUS:***



I-HOUSEHOLDS OF MIDDLE ECONOMIC STATUS:

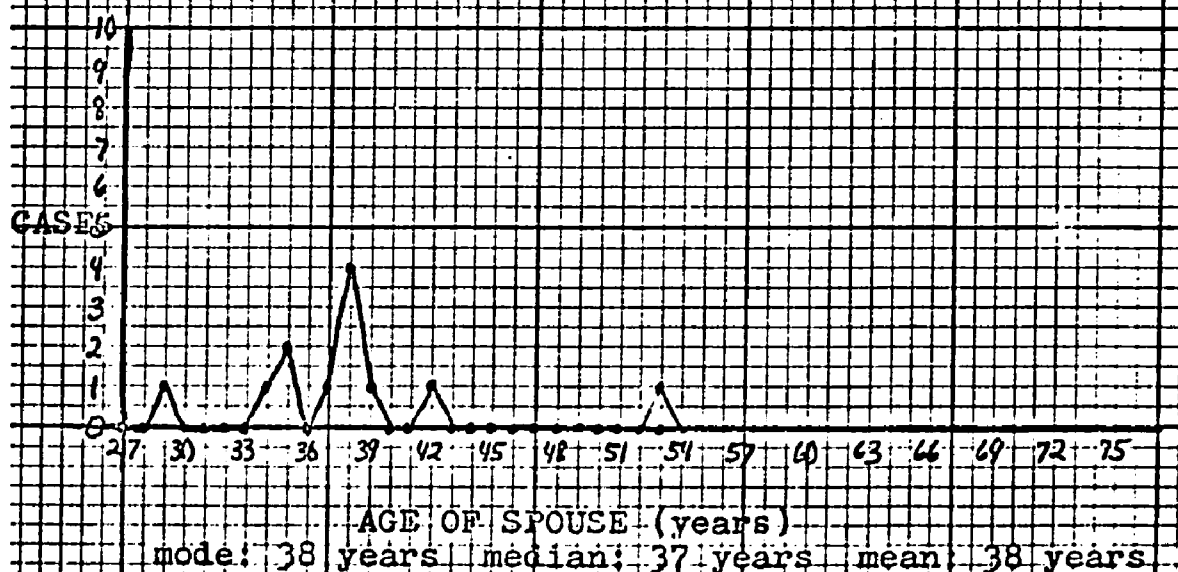
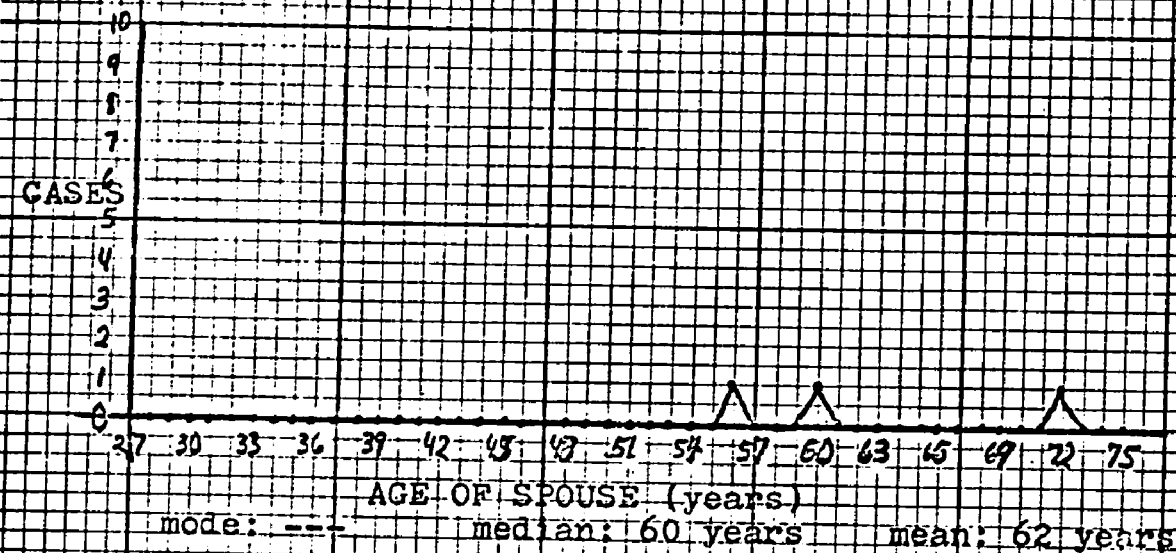


FIGURE 2 (continued)

III-HOUSEHOLDS OF LOW ECONOMIC STATUS:



*Spouse's age is estimated as five years younger than her husband's.
 **Sample A has 25 cases of missing data.
 ***Category I has 10 cases; Category II has 12 cases and Category III has three cases.

a reflection of the greater availability of ready cash to be invested in a shop in the former sample. Such an availability of cash is implied in the higher frequency of wage-earners in Sample B.

Doing paid domestic work ranks next in importance. Seven percent (seven cases) of all households in Samples A and B have women who regularly do domestic work for money such as cleaning or laundering; this is true for eight percent

TABLE IV. WORK STATUS OF WIFE OR OF FEMALE HEAD OF HOUSEHOLD, SAMPLES A AND B, BENITO JUAREZ, 1970.

WORK STATUS	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
HOUSEWIFE	25	55.55	29	59.18	54	57.44
WORKING-- FULL OR PART TIME	20	44.44	20	40.81	40	42.54
	45	99.99%	49	99.99%	94	99.98%

MISSING DATA: Sample B has 13 cases of missing data, and thus so do Samples A and B together.

TABLE V. OCCUPATION OF WIFE OR OF FEMALE HEAD OF HOUSEHOLD, SAMPLES A AND B, BENITO JUAREZ, 1970.

OCCUPATION	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
HOUSEWIFE	25	55.55	29	59.18	54	57.44
COMERCIA	6	13.33	11	22.44	17	18.08
DOMESTIC	3	6.66	4	8.16	7	7.44
HOUSEWIFE- COMERCIA	2	4.44	4	8.16	6	6.38
SEAMSTRESS	2	4.44	0	0.00	2	2.13
HOUSEWIFE- DOMESTIC	3	6.66	0	0.00	3	3.19
WAGE -EARNER	2	4.44	0	0.00	2	2.13
AGRICULTURALIST	1	2.22	0	0.00	1	1.06
DOMESTIC- COMERCIA	1	2.22	0	0.00	1	1.06
PROFESSIONAL	0	0.00	1	2.04	1	1.06
	45	99.96%	49	99.98%	94	98.97%

MISSING DATA: Sample B has 13 cases of missing data, and therefore so does Sample A and B as a unit.

(four cases) of the households in Sample B and for seven percent (three cases) of the households in Sample A. In addition, three percent (three cases) of all households have the women undertake paid domestic work on a part-time basis. This is true for seven percent (three cases) of the households in Sample A; there are no such cases for Sample B. Other types of work in which women engage are of only minor importance since they occur infrequently. They include: piece-meal sewing, wage work, agriculture, professional work and a combination of domestic work and shop-keeping.

The higher percentage of working women in Sample A than in Sample B can be accounted for partly by the slightly higher percentage of matrifocal households in Sample A: 19% (eight cases) in the former and 11% (seven cases) in the latter (Table III). Mothers in all matrifocal households work for pay. The difference between Sample A and Sample B can also be partly accounted for by the higher percentage of non-wage earning household heads which occurs in Sample A. More women work in Sample A than in Sample B because there is a greater economic need within their household for them to do so.

It is clear from Table IV and Table V, nonetheless, that in the majority of households, the adult woman is a full-time housewife. This is true in 57% (54 cases) of the households in Samples A and B, in as much as 59% (29 cases)

of the households in Sample B and in a lesser 56% (25 cases) of the households in Sample A. The primary explanation for this large number of non-working women is the traditional institution of machismo which has its roots in an agricultural society. Machismo refers to a system of values and behavior accepted by males and females alike in which it is granted that it is largely a man's world in which males exert their masculinity vis-a-vis other males often employing females as one avenue of expression. Some anthropological works which discuss machismo are: Foster (1967: pp. 130-131), Adams (1965:pp. 272-273), Gillin (1965:p. 509) and Lewis (1961).

The machismo cult operates as if women were a form of property over which a man has power and for whose care a man is responsible. How well he "cares" for his women whether wife, sister or daughter reflects upon his reputation among other males. A woman's virginity, for example, is considered as an asset to the male who is responsible for her since it implies that no other male has had access to her outside of such institutions of property-exchange as marriage. A male attempts to confine the women for whom he is responsible to the home to reduce the access which other males have to them, and thus to protect his own reputation. Machismo concomitantly means that there is a clear division of labor in which domestic tasks and the care of the children is almost strictly a female duty. Locally

this institution manifests itself, furthermore, in the need for a woman to earn money to support any children which she has brought into the household from a previous union.

Another reason for the high percentage of full-time housewives is the preference given to males in hiring in all jobs which are not specifically linked to the home. A few women work in the factories in Ciudad Industrial. And the small-scale cosmetics factory in nearby Calpulalpan hires a significant number of women (Schensul, personal communication, 1970). However, as mentioned, women who do work are largely confined to home-oriented and home-connected jobs. The factories of Ciudad Industrial, for example, have an explicit policy of hiring males in preference to females; a woman is also not hired in addition to her husband. The rationale behind this latter policy is that it is easier to fire one than two persons; this makes it possible, in turn, to maintain a flexible work force. If the husband alone were fired, for example, he would still retain indirect access to factory-provided housing and to union-provided benefits through his wife. This access would be viewed as a financial liability by the factory.

It is possible for a woman to earn money only if her participation in the labor force is socially sanctioned. The proximity of Mexico City to Benito Juarez as well as the presence of Ciudad Industrial in its neighborhood have promoted the spread of ideal universalistic values connected

with the employment of labor. All persons regardless of age, sex and race are viewed as potential laborers. The larger the pool of labor is from which an industrial employer can choose, the greater will be the competition between the laborers within this pool for the limited number of jobs available and the cheaper will the labor cost be for the employer. In practice, one segment of the population is played off against the other for the economic gain of the capitalist depending upon the labor needs of an industry at any specific point in time. Thus, in a male-dominated society, males are hired in preference to females if the labor needs of industry do not require the services of both. Within the western Llanos de Maguey, the consideration of all persons as potential laborers^s has made inroads into the cult of machismo. Many women work albeit not at privileged factory jobs.

There is a definite order of priorities within the household itself, furthermore, in terms of who is the first and who is the last to undertake paid employment. Ideally, the order is as follows: the male household head is first, his children come next and then lastly his wife. Table VI corroborates this in that in 33% (34 cases) of all households, the children work for pay while the mother does not; in 32% (33 cases) of all households, both the mother and the children do not work; in only 21% (22 cases) of all households both the mother and the children work for pay;

TABLE VI. PAID WORK STATUS OF WIFE OR OF FEMALE HEAD OF HOUSEHOLD AND/OR OF RESIDENT CHILDREN PER HOUSEHOLD. SAMPLES A AND B. BENITO JUAREZ, 1970.

WORK STATUS	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
MOTHER WORKS- CHILDREN DO NOT	7	15.56	8	13.56	15	14.42
CHILDREN WORK- MOTHER DOES NOT	11	24.44	23	38.98	34	32.69
MOTHER AND CHILDREN WORK	12	26.67	10	16.95	22	21.15
MOTHER AND CHILDREN DO NOT WORK	15	33.33	18	30.51	33	31.73
	45	100.00%	59	100.00%	104	99.99%

MISSING DATA: Sample B has three cases of missing data. Therefore Samples A and B as a unit have three cases of missing data also.

and finally, in as few as 14% (15 cases) of all households the mother works while the children do not. Sample A as compared with Sample B has a higher percentage of mothers working whether in combination with at least some of the the children -- 27% (12 cases) as opposed to 17% (10 cases), respectively -- or in place of the children -- 16% (seven cases) rather than 14% (eight cases), respectively. The explanation for this difference between Sample A and Sample B is again that Sample B has a higher percentage of household heads who are wage-earners, and therefore who are in an economically privileged position as compared with those household heads who are traditionally employed. There are

TABLE VII. PAID WORK STATUS OF WIFE OR FEMALE HEAD OF HOUSEHOLD AND/OR OF RESIDENT CHILDREN BY OCCUPATION OF HOUSEHOLD HEAD, SAMPLES A AND B, BENITO JUAREZ, 1970.

OCCUPATION	SAMPLE A	
	WIFE AND/OR CHILDREN DO WORK	WIFE AND/OR CHILDREN DO NOT WORK
	<u>FREQUENCY</u> <u>PERCENTAGE</u>	<u>FREQUENCY</u> <u>PERCENTAGE</u>
OBRERO	2 4.44	5 11.11
SUBSISTENCE AGRICULTURALIST	10 22.23	4 8.89
WAGE-EARNER (NOT OBRERO)	5 11.11	5 11.11
ARTISAN	3 6.67	0 00.00
MERCHANT	0 00.00	1 2.22
NO HUSBAND	10 22.22	0 00.00
	<u>30</u> <u>66.67%</u>	<u>15</u> <u>33.33%</u>

TOTAL: 45 cases
100 percent

OCCUPATION	SAMPLE B	
	WIFE AND/OR CHILDREN DO WORK	WIFE AND/OR CHILDREN DO NOT WORK
	<u>FREQUENCY</u> <u>PERCENTAGE</u>	<u>FREQUENCY</u> <u>PERCENTAGE</u>
OBRERO	6 9.84	11 18.03
SUBSISTENCE AGRICULTURALIST	13 21.31	3 4.92
WAGE-EARNER (NOT OBRERO)	10 16.39	2 3.28
ARTISAN	5 8.20	0 00.00
MERCHANT	2 3.28	1 1.64
NO HUSBAND	8 13.11	0 00.00
	<u>44</u> <u>72.13%</u>	<u>17</u> <u>27.87%</u>

TOTAL: 61 cases
100 percent

TABLE VII (CONTINUED)

MISSING DATA: There is one case of missing data in Sample B.

OCCUPATION	SAMPLES A AND B			
	WIFE AND/OR CHILDREN DO WORK		WIFE AND/OR CHILDREN DO NOT WORK	
	<u>FREQUENCY</u>	<u>PERCENTAGE</u>	<u>FREQUENCY</u>	<u>PERCENTAGE</u>
OBRERO	8	7.55	16	15.09
SUBSISTENCE AGRICULTURALIST	23	21.70	7	6.60
WAGE -EARNER (NOT OBRERO)	15	14.15	7	6.60
ARTISAN	8	7.55	0	00.00
MERCHANT	2	1.89	2	1.89
NO HUSBAND	18	16.98	0	00.00
	<u>74</u>	<u>69.82%</u>	<u>32</u>	<u>30.18%</u>

TOTAL: 61 cases
100 percent

MISSING DATA: There is one case of missing data in Samples A and B together.

more household heads in Sample B who can afford to follow the dictates of machismo and to keep the wife out of paid employment.

In Table VII, in addition, it is apparent in rough form that more subsistence agriculturalists have their wives working for pay than do obreros; these figures deal with the work status of the mother and/or of the children. Thus, 22% (23 cases) of the households headed by subsistence agri-

culturalists in Samples A and B have the wife working whereas 7% (seven cases) do not. Fifteen percent (16 cases) of those households headed by obreros, on the other hand, have the wife as a full-time housewife whereas only 8% (eight cases) do not. The work status of a wife is thus another indirect indicator of the economic status of the household. This same pattern is repeated for Sample A and for Sample B separately. In Sample A, 22% (10 cases) of the subsistence agriculturalists have the wife and/or children working while only nine percent (four cases) do not (Table VII). As much as 11% (five cases) of the obreros, on the other hand, do not while only four percent (two cases) do. For Sample B, 21% (13 cases) of the subsistence agriculturalists have their wife and/or children working for pay while only five percent (three cases) do not. Eighteen percent (11 cases) of the obreros have the wife and/or children not working while only 10% (six cases) do not.

Work Status of Resident Children:

Table VIII shows that 53% (56 cases) of all households have one or more resident children working for pay. Sample B has as many as 56% (34 cases) of the households with resident working children while Sample A has a lower 49% (22 cases). Thus resident children form another source of cash income for the household. Sample B has a higher frequency of resident working children than does Sample A because of the greater concentration in the former of house-

**TABLE VIII. RESIDENT CHILDREN CONTRIBUTING CASH TO
HOUSEHOLD PER HOUSEHOLD. SAMPLES A AND B. BENITO JUAREZ, 1970.**

NUMBER OF CHILDREN	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
ONE OR MORE CHILDREN	22	48.88	34	55.73	56	52.83
NO CHILDREN	23	51.11	27	44.26	50	47.16
	45	99.99%	61	99.99%	107	99.99%

MISSING DATA: Sample B has one case of missing data, and therefore so does the combination unit Samples A and B.

hold heads who are obreros. As a reminder, factory jobs are monopolized by obreros and their kin. If a father holds a factory job, he will be the major avenue to factory work for his sons. Thus the presence in a household of working children may imply an economic need on the part of the household to have children bring in an additional income, or it may imply the opportunity to obtain a highly prized factory job on the part of a member of a household which already has access to such work through another member. The occupation of the household head is a clue as to which of these two is the more likely in any particular case.

Migration:

Since the Preliminary Samples were geared toward questions of formal education, it is taken for granted that data on migration are incidental. Migration as an indicator of the economic status of the household, however, is of enough importance to warrant a consideration of whatever

**TABLE IX. ORIGIN AND RESIDENCE OF HOUSEHOLD HEAD BY
OCCUPATION. SAMPLE B. BENITO JUAREZ, 1970.**

OCCUPATION	SAMPLE B			
	I-HOUSEHOLD HEAD IS FROM AND HAS ONE RESIDENCE IN TOWN		II-HOUSEHOLD HEAD IS FROM OUTSIDE TOWN BUT HAS ONE RESIDENCE IN TOWN	
	<u>FREQUENCY</u>	<u>PERCENTAGE</u>	<u>FREQUENCY</u>	<u>PERCENTAGE</u>
OBRERO	5	10.63	10	21.27
SUBSISTENCE AGRICULTURALIST	10	21.27	3	6.48
WAGE-EARNER (NOT OBRERO)	3	6.48	9	19.14
MERCHANT	2	4.26	0	00.00
ARTISAN	3	6.48	2	4.26
	<u>23</u>	<u>49.10%</u>	<u>24</u>	<u>51.01%</u>
TOTAL: 47 cases 100 percent				

MISSING DATA: Sample B has 15 cases of missing data.

data are available. There is some information on migration for Sample B.

Table IX shows that when Sample B is sub-divided according to the origin of the head of the household, the household head originates from outside of Benito Juarez in 51% (24 cases) of the households in this sample. In 49% (23 cases) of these households, the household head originates from within Benito Juarez. The origin of the household head is linked to his occupation. In 21% (10 cases) of those households in which the household head originates

from outside of the community, the household head is an obrero. In 21% (10 cases) of those households in which the household head originates from within the community, the household head is a subsistence agriculturalist whether on a full-time or part-time basis. Among wage-earners, in general -- 26% (12 cases) of the households in Sample B-- in 19% (nine cases) of the households, the household head originates from outside of Benito Juarez. These data suggest that a significant percentage of factory workers have immigrated into the town. This point was made earlier in a discussion of the initial hiring policy of the factories in Ciudad Industrial according to which skilled workers were brought in from outside regions. These data also suggest that factory work and wage-labor, in general, dispose a person to physical mobility. Subsistence agriculture with its roots in the land disposes a person to greater physical stability in terms of residence. Immigration into Benito Juarez on the part of the household head implies that the household head is a wage-earner. Immigration further implies the economic well-being of the household in question because of the relative high economic status of wage-earners in question in comparison to subsistence agriculturalists.

Information on emigration from Benito Juarez is almost non-existent for the Preliminary Samples. From among 75% (47 cases) of the households in Sample B, it is

apparent that 34% (16 cases) of the households have either an absentee household head (he works outside of the region and comes home on week-ends), or have adult children who have left the community because of marriage or employment elsewhere. (No table provided).

Furthermore, there is wide spread feeling on the part of the local population in the western Llanos de Maguey that there is no future in agriculture, and hence that economic opportunities must be sought outside of local agricultural communities. The population of Serena declined between 1960 and 1970, for example, as young people left the community for exactly this reason. Emigration from the community on the part of some of the members of a household is indicative of the economic status of that household. Members of households in which the household is dependent on an income from a traditional non-wage source have a greater economic need to seek out economic opportunities outside of the local area. Members of households in which the household head is an obrero or wage-earner, in general, have less of a need to emigrate in search of better economic opportunities. The rationale behind this contention is that the wage-earner is in an economically better position than is the man who depends on a traditional non-wage income such as traditional agriculturalist.

Economic Aid From Outside of the Household:

Tables X through XV deal with the economic ties which exist between household members and persons or agencies outside of the household. Such a consideration is crucial because it clarifies whether mutual aid networks do operate, and if they do whether they operate primarily within the structure of the household, or whether they involve extra-household agencies instead of or in addition to household members.

There is evidence for some economic interaction between the household and outside sources in only 24% (26 cases) of the total number of households in the Preliminary Samples. This information will be employed, therefore, only to indicate the direction which further analysis should take.

There are five types of economic interaction which affect this group of 26 households, namely: property and/or money which is channeled into the household by kin who are members of other households (these kin are either married children, grandparents or parents-in-law and thus lineal kin); money which is sent into the household by absentee children or an absentee father (these absentees are still considered to be members of the household); money and rights of usufruct to property which is provided, respectively, by absentee children to their parents, and by the railroad company to its employees; and the right to the

use of company housing which is offered by this above-mentioned railroad company to its employees (few employees appear to take advantage of this right since the housing is sub-standard); and money which is channeled out of the household by parents for the education of their children.

The most frequently occurring type of economic assistance is that given by lineal kin who are not members of the household (Table X): 38% (10 cases) of the 26 households in Samples A and B receive such aid while 50% (seven cases) of the households under consideration in Sample A do and as few as 25% (three cases) do in Sample B. The greater dependence of households in Sample A on this aid compared with Sample B is understandable considering the greater number of households in the former sample in which the household head has a traditional occupation; he is therefore more likely to require economic assistance.

Table XI is primarily important because it shows that 60% (six cases) of the households receiving aid from outside kin are non-nuclear households. Matrifocal households account for 40% (four cases) of these cases. Nuclear households account for another 40% (four cases). Thus, most households which receive aid from non-household members are types of households which lack an internal mutual aid network (to be discussed). It is likely that of the four instances of nuclear households, at least some are declining nuclear households.

TABLE X. ECONOMIC TIES OF MONEY AND/OR PROPERTY BETWEEN HOUSEHOLD MEMBERS AND PERSONS OR AGENCIES OUTSIDE THE HOUSEHOLD. SAMPLES A AND B. BENITO JUAREZ, 1970.

TYPE OF ECONOMIC TIE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>
ECONOMIC AID FROM KIN OUTSIDE HOUSEHOLD	7	50.00	3	25.00	10	38.40
POTENTIAL ECONOMIC AID FROM RAILROAD	4	28.00	3	25.00	7	26.90
ECONOMIC AID FROM ABSENTEE MEMBER	2	14.00	4	33.30	6	23.00
ECONOMIC AID FOR ABSENTEE MEMBER	0	00.00	1	8.00	1	3.80
ECONOMIC AID FROM RAILROAD AND FROM ABSENTEE MEMBER	1	8.00	1	8.00	2	7.70
	<u>14</u>	<u>100.00%</u>	<u>12</u>	<u>99.30%</u>	<u>26</u>	<u>99.80%</u>

MISSING DATA: Sample A has 41 cases with missing data while Sample B has 50 cases. Samples A and B together have 91 cases of missing data.

Only 20% (two cases) of the 26 households in Samples A and B which receive assistance are lineal or collateral households, i.e., households which have internal networks of aid. It is significant that the two cases of lineal and collateral households occur within Sample A -- again emphasizing the greater number of households among economically less rewarding occupations in Sample A as compared with Sample B.

Potential economic aid from the railroad to its

employees in the form of a usufruct to a house is next in frequency of occurrence: 27% (seven cases) of the households in Samples A and B could theoretically receive such assistance (Table X). This is true for 25% (three cases and 28% (four cases) of the households, respectively, in Sample B and in Sample A. All of these households are nuclear households (Table XII). The wage level of a railroad worker is sufficiently high for him to support a nuclear household. Such economic viability is indicated by the fact that there is clear evidence for only two households (understandably in Sample A) exercising this usufruct.

In 23% (six cases) of the households in Samples A and B economic assistance is received from absentee household members and thus from outside of the household (Table X); this is true for 33% (four cases) of the households in Sample B and for a lesser 14% (two cases) in Sample A. Lineal and affinal kin are again involved -- either children or a spouse. Table XIII shows that 50% (three cases) of these households in Samples A and B are matrifocal households. We are dealing with households which lack internal networks of economic assistance. Because these helpers are absentee, they do not form part of such a network.

The two remaining categories are of minor importance since together they involve 12% (three cases) of the 26 households in Samples A and B (Table X). The one household in which aid is channeled out from the household is a nuclear

TABLE XI. ECONOMIC AID TO HOUSEHOLD FROM KIN WHO ARE NOT
HOUSEHOLD MEMBERS BY HOUSEHOLD TYPE. SAMPLES A AND B.
BENITO JUAREZ, 1970.

HOUSEHOLD TYPE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
NUCLEAR HOUSEHOLD	3	42.76	1	33.33	4	40.00
MATRIFOCA HOUSEHOLD	2	28.57	2	66.67	4	40.00
LINEAL HOUSEHOLD	1	14.29	0	00.00	1	10.00
EXPANDED HOUSEHOLD	1	14.29	0	00.00	1	10.00
	7	99.91%	3	100.00%	10	100.00%

MISSING DATA: Tables XI-XV form a group of 26 households with specific economic data. Sample A has 31 cases of missing data, Sample B has 50 cases, and Samples A and B together have 81 cases of missing data.

TABLE XII. POTENTIAL ECONOMIC AID TO HOUSEHOLD FROM RAIL-
ROAD COMPANY BY HOUSEHOLD TYPE. SAMPLES A AND B. BENITO
JUAREZ, 1970.

HOUSEHOLD TYPE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
NUCLEAR HOUSEHOLD	4	100.00	3	100.00	7	100.00
	4	100.00%	3	100.00%	7	100.00%

TABLE XIII. ECONOMIC AID TO HOUSEHOLD FROM ABSENTEE HOUSE-
HOLD MEMBER BY HOUSEHOLD TYPE. SAMPLES A AND B. BENITO
JUAREZ, 1970.

HOUSEHOLD TYPE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
NUCLEAR HOUSEHOLD	1	50.00	2	50.00	3	50.00
MATRIFOCA HOUSEHOLD	1	50.00	2	50.00	3	50.00
	2	100.00%	4	100.00%	6	100.00%

TABLE XIV. ECONOMIC AID TO HOUSEHOLD FROM RAILROAD COMPANYRY AND FROM ABSENTEE CHILDREN BY HOUSEHOLD TYPE. SAMPLES A AND B. BENITO JUAREZ. 1970.

HOUSEHOLD TYPE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
NUCLEAR HOUSEHOLD	1	100.00	1	100.00	2	100.00
	<u>1</u>	<u>100.00%</u>	<u>1</u>	<u>100.00%</u>	<u>2</u>	<u>100.00%</u>

TABLE XV. ECONOMIC AID FROM HOUSEHOLD TO ABSENTEE HOUSEHOLD MEMBER. SAMPLES A AND B. BENITO JUAREZ. 1970.

HOUSEHOLD TYPE	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
NUCLEAR HOUSEHOLD	0	00.00	1	100.00	1	100.00
	<u>0</u>	<u>00.00%</u>	<u>1</u>	<u>100.00%</u>	<u>1</u>	<u>100.00%</u>

household (Table XV) which occurs in Sample B; the father supports his child in boarding school. The economic viability of the household is apparent in the nature of the economic assistance which is involved, in the fact that the household is nuclear and in that it occurs in Sample B.

In the remaining eight percent (two cases) of the relevant households in Samples A and B (Table X), the important factor is that the households are nuclear households (Table XIV), i.e., that the money received from working children and the potential right to usufruct of company housing involve a household which lacks an internal network of economic protection.

Within the framework of the two Preliminary Samples whose sampling procedures were by intention primarily oriented toward non-economic data, we can still state that

- (1) There is no evidence for the concentrated involvement of the majority of households in economic interactions with persons or agencies outside of the household.
- (2) Of those households which are economically involved with such outside sources, nuclear and matrifocal households dominate. Although these households have not been defined as having low economic status, some of the households in this small sub-sample may in actuality represent a minority of economically troubled households, e.g., declining nuclear households. Since nuclear and matrifocal households lack internal networks of aid, outside persons or agencies become a possible alternative to which to turn in case of economic need.
- (3) And few lineal or collateral households receive outside economic assistance. These households rely on internal mechanisms of aid.

Economic Basis for Household Variation:

The seven household types apparent from the Preliminary Samples are sub-divided among three economic categories. The two criteria utilized to separate these categories from each other are:

- (1) the estimated portion of the financial burden of

the household which the household head bears; i.e., half or more than half as compared to less than half of the burden.

- (2) and the estimated income level of the household: High economic status (200 to 600 pesos a week), middle economic status (80 to 200 pesos a week) and low economic status (80 pesos or less a week).

Those households of high economic status cover a huge range of variation in their own right particularly since they include all types of factory work, tenured and untenured obreros and within the untenured category, varying types of temporary contracts. Stability and length of contract for factory work are not controlled for. There is a large difference, therefore, between this first category--in terms of level and range of income--and the other two categories. Also the wide range of income and the lack of control over the stability of employment make it probable that a significant number of households are included which are less than of high economic status. An estimate of the number of households which are either of middle or low economic status, thus is extremely conservative. Since our special interest is in the internal mechanics of specific low income households, it is more cautious to underestimate rather than to over-estimate the occurrence of such households. It is possible, furthermore, to lump all the categories of factory work together and to combine these, in turn, with other high

TABLE XVI. ECONOMIC GROUPING OF HOUSEHOLDS. SAMPLES A AND B. BENITO JUAREZ, 1970.*

ECONOMIC STATUS OF HOUSEHOLD	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>
HOUSEHOLDS OF HIGH ECONOMIC STATUS- 200-600 pesos weekly income	21	46.67	49	79.03	70	65.42
HOUSEHOLDS OF MIDDLE ECONOMIC STATUS- 80-200 pesos weekly income	11	24.44	9	14.52	20	18.69
HOUSEHOLDS OF LOW ECONOMIC STATUS- under 80 pesos weekly income	13	28.89	4	6.45	17	15.89
	<u>45</u>	<u>100.00%</u>	<u>62</u>	<u>100.00%</u>	<u>107</u>	<u>100.00%</u>

* This table is based on information provided by the mother in the household or by some other resident adult.

income occupations because the level of income involved is clearly much higher than that of those groups having a middle or low economic status. Such lumping, in turn, simplifies the analysis of these data.

The varying income levels are roughly associated with occupational categories as represented by the predominant occupation within each economic category: wage-earners (obreros, railroad workers and employees), recipients of a non-wage cash income (domestics, small-scale food vendors, small shop-keepers) and traditionally employed persons

(subsistence agriculturalists, artisans and merchants) are associated, respectively, with households of high economic status, households of middle economic status and those of low economic status.

Households of High Economic Status:

Table VI shows that as much as 65% (70 cases) of the households are of high economic status in Samples A and B while 19% (20 cases) are of middle status and 16% (17 cases) are of low status. This is probably an over-estimation of the first category and an under-estimation of the other two. Nevertheless, as many as 35% (37 cases) of the households are of less than high economic status. The economic categories should be considered as indicative of broad trends; their relative relationship to each other holds even though the absolute divisions may differ once more detailed income data is obtained. This economic break-down, furthermore, should be considered within the context of the western Llanos de Maguey which differs from poorer regions in Hidalgo because of the money introduced into the region through industrialization. The population here is economically more privileged than in most other parts of Hidalgo. The population of Benito Juarez may be in a similar position, likewise, with respect to Cerro Grande and Serena.

Sample B has more households of high economic status, moreover, than does Sample A (Table XVI): 79% (49 cases) as compared with 47% (21 cases). And Sample A, on the other hand, has more households of middle and low status than does

Sample B: 24% (11 cases) as compared with 15% (nine cases), respectively, and 29% (13 cases) as compared with six percent (four cases), respectively. This difference between the two samples has been commented upon repeatedly.

Table XVII shows that within the category of households of high economic status, 49% (34 cases) of the households in Samples A and B are supported by a single high cash income which is brought in by the household head; he is often an obrero although he may also be a white-collar employee or a railroad worker.

Sample B has 47% (23 cases) of such households while Sample A has a lesser 43% (nine cases).

Next, 39% (27 cases) of all households in Samples A and B have a household head who is traditionally employed most often as a merchant or a middle peasant (one who owns land and does not need to hire out as an agricultural laborer). Although the household head provides the major income for the household, his wife and/or resident children contribute in addition. It is the combined income from all contributing members which makes these households of high economic status. Sample A has 43% (nine cases) of such households while Sample B has a lesser 41% (20 cases).

Finally 13% (nine cases) of all households in Samples A and B have a household head who is a wealthy peasant (one who owns land and hires others to work it for him) or a merchant. The wife and children do not work for pay. This

TABLE XVII: ECONOMIC STATUS OF HOUSEHOLD BY SUB-CATEGORY. SAMPLES A AND B. BENITO JUAREZ. 1970.

ECONOMIC STATUS OF HOUSEHOLD	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
<u>HOUSEHOLDS OF</u> <u>HIGH ECONOMIC</u> <u>STATUS: 200-600</u> <u>pesos weekly</u>						
A-SINGLE WAGE INCOME	9	42.85	23	46.93	34	48.57
B-INCOME FROM COMBINED CASH SOURCES	9	42.85	20	40.82	27	38.57
C-SINGLE INCOME FROM WEALTHY PEASANT OR MERCHANT	3	14.29	6	12.24	9	12.86
	21	99.99%	49	99.99%	70	100.00%

SUB-TOTAL: 70 cases

ECONOMIC STATUS OF HOUSEHOLD	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
<u>HOUSEHOLDS OF</u> <u>MIDDLE ECONOMIC</u> <u>STATUS: 80-200</u> <u>pesos weekly</u>						
A-INCOME FROM MOTHER AND POSSIBLY FROM RESIDENT CHILDREN	8	72.73	6	64.44	14	70.00
B-TRADITIONAL INCOME COMBINED WITH LOW CASH INCOME	3	27.27	3	33.33	6	30.00
	11	100.00%	9	97.77%	20	100.00%

SUB-TOTAL: 20 cases

TABLE XVII: (CONTINUED)

ECONOMIC STATUS OF HOUSEHOLD	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>	<u>FREQ.</u>	<u>%</u>
<u>HOUSEHOLDS OF</u> <u>LOW ECONOMIC</u> <u>STATUS: under 80</u> <u>pesos weekly</u>						
A-TRADITIONAL INCOME COMBINED WITH LOW INCOME FROM CHILDREN	6	46.15	1	25.00	7	41.18
B-TRADITIONAL INCOME COMBINED WITH INCOME FROM COLLATERAL KIN POSSIBLY	4	30.77	1	25.00	5	29.41
C-TRADITIONAL INCOME COMBINED WITH INCOME FROM LINEAL KIN POSSIBLY	3	23.08	2	50.00	5	29.41
	<u>13</u>	<u>100.00%</u>	<u>4</u>	<u>100.00%</u>	<u>17</u>	<u>100.00%</u>
SUB-TOTAL: 17 cases	TOTAL: 107 cases 100 percent					

is true in 14% (three cases) of the households in Sample A and in a fewer 12% (six cases) in Sample B.

Table XVIII shows that the nuclear household predominates among the households of high economic status: 91% (64 cases) of the households in Samples A and B; as much as 94% (46 cases) in Sample B and only 86% (18 cases) in Sample A. The lineal households comprise only six percent (four cases) of the households in Samples A and B, four percent (two cases) in Sample B and as much as 10% (two cases)

TABLE XVIII: ECONOMIC STATUS OF CATEGORIES BY HOUSEHOLD TYPE, SAMPLES A AND N, BENITO JUAREZ, 1970.

HOUSEHOLD TYPE BY ECONOMIC STATUS CATEGORY	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
<u>HOUSEHOLD TYPES OF HIGH ECONOMIC STATUS</u>						
NUCLEAR HOUSEHOLD	18	85.71	46	93.78	64	91.42
LINEAL HOUSEHOLD	2	9.52	2	4.02	4	5.71
NON-KIN HOUSEHOLD	1	4.76	1	2.20	2	2.86
	<u>21</u>	<u>99.99%</u>	<u>49</u>	<u>100.00%</u>	<u>70</u>	<u>100.00%</u>
SUB-TOTAL: 70 cases						

HOUSEHOLD TYPE BY ECONOMIC STATUS CATEGORY	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
<u>HOUSEHOLD TYPES OF MIDDLE ECONOMIC STATUS</u>						
MATRIFOCAI HOUSEHOLD	8	72.72	7	77.78	15	75.00
LINEAL HOUSEHOLD	2	18.18	1	11.11	3	15.00
EXPANDED HOUSEHOLD	1	9.09	0	00.00	1	5.00
GRANDPARENT- grandchild household	0	00.00	1	11.11	1	5.00
	<u>11</u>	<u>99.99%</u>	<u>9</u>	<u>100.00%</u>	<u>20</u>	<u>100.00%</u>
SUB-TOTAL: 20 cases						

in Sample A. The non-kin households are also of minor importance since they occur as only three percent (two cases) of the households in Samples A and B, two percent (one case) in Sample B and 5% (one case) in Sample A.

TABLE XVIII (CONTINUED)

HOUSEHOLD TYPE BY ECONOMIC STATUS CATEGORY	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
<u>HOUSEHOLD TYPES OF LOW ECONOMIC STATUS</u>						
DECLINING NUCLEAR HOUSEHOLD	5	38.46	0	00.00	5	29.41
EXPANDED HOUSEHOLD	4	30.77	1	25.00	5	29.41
LINEAL HOUSEHOLD	4	30.77	3	75.00	7	41.18
	13	100.00%	4	100.00%	17	100.00%
SUB-TOTAL: 17 cases	TOTAL: 107 cases 100 percent					

The correlation between economic base and type of household can best be viewed in terms of: the property base of a household, the social values which underlie the household as a form of social organization, and the presence or absence of extra-nuclear family kin in the household.

Property Base:

The property base for the household or the urban lot on which it is situated within this group of households of high economic status is essentially ejido property since Benito Juarez is an ejido community. Access to this property is through membership in the ejido (whether by first-generation or by later generations since ejido property can be inherited), or through the purchase or rental of the lot

from an ejidatario. Such economic transactions are illegal, as mentioned. Since all obreros are within this economic category, and many, in turn, come from outside of Benito Juarez, it is likely that many of the lots are purchased or rented. Those households headed by subsistence agriculturalists occupy their lot through membership in the ejido. Wealthy merchants have either purchased or inherited their lot.

Social Values:

The social norms which bolster the occurrence of the nuclear household are basically those referred to earlier--values emphasizing individualism and non-dependence on extra-nuclear kin. Basically these values reflect the competitiveness, acquisitiveness and achievement-orientedness of modern industrial capitalism. The nuclear family household is the ideal according to such values. It is viewed as desirable by the local population, moreover, because of the privacy and independence which it affords the nuclear family. In the majority of cases, departures from the nuclear household are of economic and social necessity, rather than by preference.

The three percent (two cases) of non-kin households which occur in Samples A and B are examples of households in which achievement-motivation rather than traditional kin-orientedness preside. In each case, the household head has rented out half of his urban lot to non-kin in preference

to employing the lot in some form of association with his kin. If his kin are located in other regions, and therefore are not locally available, this physical distance between kin is in itself a reflection of both the physical mobility and the social distance between kin which an industrial setting promotes. Although the nuclear household is basically an industrial ideal, it tends to spread to non-industrialized segments of the population where it operates as a status symbol. It functions as a status symbol because of its initial association with the economic solvency of the industrial worker. This solvency is especially appealing in cases of rural industrialization where the industrialization was preceded and is surrounded by a poorer agricultural realm. Thus the households of wealthy merchants or households based on a combination of wage incomes not necessarily from factory work also may be nuclear households. The ability to establish and to maintain a nuclear household is dependent upon the acquisition of an income of high level. The six percent (four cases) of the households which are lineal and of high economic status indicate that the nuclear household is the major though not the sole expression of economic well-being.

Extra-Nuclear Kin:

Extra-nuclear kin are by definition lacking from a nuclear household, and from the non-kin household. They are absent because the members of the household in both cases

can afford to ignore extra-nuclear kin without fear that they themselves would soon need the help of these from whom they have severed themselves. This is clear in those cases in which the household head or the other household members depend upon a wage income. The source of the income, as mentioned, is not controlled by a kin group even if hiring is influenced by nepotism. Even in cases of wealthy merchants, the wage-orientedness of this region decreases any hold which persons wish to have over their kin.

The presence of lineal kin (children and children's children) in the lineal household bespeaks of the persistence in a small minority of cases of a kinship structure of an earlier agricultural setting in which the passage of property through a lineal line of kin encouraged the co-residence of these kin. The difference between the extended household and the lineal household is basically that the former occurs within a traditional society in which the lineage system is still intact while the latter occurs in an industrializing society in which the lineage network has been dissembling.

Households of Middle Economic Status:

Seventy percent (14 cases) of all households in Samples A and B are based on a cash income from the mother with or without an added income from resident children (Table XVII). The mother carries the main portion of the economic responsibility of the household. She works as a domestic,

a food vendor or she operates a small shop part or full time. Contributions which are made to the household by resident children come mostly from daughters who work as servants and/or sons who are obreros. Sample A has 73% (eight cases) of such households while Sample B has a lesser 64% (six cases).

Thirty percent (six cases) of the households in Samples A and B, furthermore, are those in which the household head--the husband--has a traditional occupation. These are also households in which one or more of the other residents contribute financially to the up-keep of the household. The household head, nevertheless, bears at least half of the financial burden. Thirty-three percent (three cases) of the households are of this type in Sample B while a lesser 27% (three cases) are so in Sample A. These households represent a state of economic symbiosis in that there is an economic exchange (usually of property for cash) among those within the household. The symbiosis takes the form of one member--often the head of the household--contributing the urban lot and possibly an agricultural plot while the other (in the case of only one other) contributed part of a cash income; for example a subsistence agriculturalist provides the property and his resident married son brings in money from his factory job. Or a merchant who has purchased an urban lot provides the lot and his income from his commercial ventures in exchange for an additional income which a resident brother brings in. Such

an exchange is profitable for the property owner since it provides him with access to a base or to an additional amount of cash. It is also profitable for the other participant because it provides him with a place to live. Such access to property is especially important for those seeking factory employment considering the shortage of living quarters in and around Ciudad Industrial. The exchange is of an equal nature rather than one in which any of the participants is economically dependent on the other.

Table XVIII shows that 75% (15 cases) of the households of middle economic status are matrifocal households. As much as 78% (seven cases) are in Sample B and 73% (eight cases) are in Sample A. Fifteen percent of the households (three cases) are lineal households in Samples A and B together. In Sample B, this is true for 11% of the households (one case), while it is the case for 18% (two cases) in Sample A. Furthermore, there is only one expanded or collateral household; it occurs in Sample A. It forms five percent of the households in Samples A and B and nine percent of those in Sample A. And there is also only one grand-parent-grandchild-household, and it appears in Sample B. This household is also five percent of the cases in Samples A and B and 11% of those in Sample B.

Property Base:

The property base for all of these households is an urban lot in the ejido community. In the case of the

TABLE XIX. TENTATIVE TYPES OF MATING PATTERNS. SAMPLES A AND B. BENITO JUAREZ. 1970.

TYPES OF MATING RELATIONSHIPS	SAMPLE A		SAMPLE B		SAMPLES A AND B	
	FREQ.	%	FREQ.	%	FREQ.	%
<u>FOR ADULT MALES</u>						
<u>TWO OR MORE SIMULTANEOUS MATES*</u>	2	16.66	8	53.33	10	37.03
<u>TWO SERIAL AND TWO SIMULTANEOUS MATES</u>	2	16.66	0	00.00	2	7.41
<u>SUB-TOTAL:</u>	<u>4</u>	<u>33.32</u>	<u>8</u>	<u>53.33%</u>	<u>12</u>	<u>44.44%</u>
<u>FOR ADULT FEMALES</u>						
<u>TWO SERIAL MATES</u>	1	8.33	1	6.66	2	7.41
<u>THREE SERIAL MATES</u>	0	00.00	1	6.66	1	3.70
<u>NO MATES ABANDONED</u>	0	00.00	1	6.66	1	3.70
<u>MATE DIED</u>	0	00.00	4	26.66	4	14.81
<u>UNCERTAIN</u>	7	58.33	0	00.00	7	25.93
<u>SUB-TOTAL:</u>	<u>8</u>	<u>66.66%</u>	<u>7</u>	<u>46.64%</u>	<u>15</u>	<u>55.55%</u>
<u>TOTAL:</u>	<u>12</u>	<u>99.98%</u>	<u>15</u>	<u>99.97%</u>	<u>27</u>	<u>99.99%</u>

*Potential of simultaneous mates.

MISSING DATA: Sample A has 33 cases of missing data while Sample B has 47 cases and Samples A and B together have 80 cases.

matrifocal households, the lot often has been inherited by the mother from her husband or from a parent. The lot may also have been rented from an ejidatario. In the single case

of the grandparent-grandchild household, the property stems from the grandfather's membership in the ejido. This is also true for the lineal households. In the three cases of the expanded household, access to property is through rental, purchase or membership in the ejido.

Social Base:

The social values which underlie the presence of matrifocal households are closely tied to economic considerations. Firstly, matrifocal households are usually temporary in nature. This is true because there is a strong bias against mateless female households unless the household head is an old woman. Most of these households are not the result of extra-marital relations on the part of a male.

With respect to mating patterns, there is evidence for possible multiple unions on the part of the adult male or female for only 25% (27 cases) of the total number of households in Sample A and B together. In 44% (12 cases) of these households, the husband is or was at one time an absentee household head (Table XIX). Absenteeism encourages the simultaneous maintenance of multiple households -- one in Benito Juarez and the other near the place of employment. Although there is no direct information available for extra-marital unions, such affairs are accepted as common practice for the male. They are unacceptable for the female. In only two cases, 17% of the households in Sample A, the husband

is in his second marriage and he may at the same time be maintaining two separate households. These households are seven percent of all households in Samples A and B.

For 56% of the 27 households, the woman in the household has had a previous mate. In 11% (three cases) of these households, the woman is now in her second or third serial mating. In the remaining 45% (12 households) of the cases, the household lacks adult males other than sons; these are the matrifocal households. In as much as 26% (seven cases) of the matrifocal households, it is not clear what the woman's previous union was like. In 15% (four cases) of these households, on the other hand, the husband died. In the remaining four percent (one case), the mate abandoned the household. The sketchiness of the data permit only the tentative suggestion that some males are simultaneously in households which are the result of marital as well as of extra-marital unions respectively. Females, on the other hand, are in households which are the result of marital unions. Or they may be temporarily in mateless households some of which are the result of extra-marital affairs on the part of the male.

According to the tenets of machismo, furthermore, matrifocal households are socially incomplete units. The adult woman who heads such a household falls prey to sexual jokes as well as to social discrimination. She may appoint an adult resident son to be the nominal head of her household,

for example, because household units are expected to be headed by males since they have dealings with persons and agencies external to the household. The extra-domestic arena of activity is clearly male-dominated. After varying lengths of time, therefore, the woman in a matrifocal household usually rejoins with an adult mate; this union, in turn, may or may not be temporary.

The temporary nature of these units is also due to the physical mobility of much of the adult male population. This mobility stems from the short-term nature of much of industrial employment in Ciudad Industrial, and from the economic stagnation of agriculture in the region. Thus the instability of matrifocal households is mainly due to the under-employment and unemployment within the area which causes males to shift between regions in search of better economic opportunities.

Finally, matrifocal households are more likely to occur instead of patrifocal households (consisting of the father and his children). Children are the responsibility of women as are all domestic tasks connected with the rearing of children. In the case of a household in which the wife has died or she is not present, for some other reason, the children will most likely be placed in a household in which an adult woman is resident. It is socially more acceptable for a woman to enter the male realm of activity by undertaking paid employment to support her children than it is

for a male to undertake female tasks. The physical mobility of the male population yet again makes the occurrence of a patrifocal household unlikely.

The reason for the existence of matrifocal households in terms of their economic feasibility has already been discussed. Basically, it stems from the subsidence of the machismo cult to universalistic values associated with the on-set of industrialism.

The presence of matrifocal households among the households of middle economic status rather than among those of high economic status is due to the economic discrimination which operates against women. In the western Llanos de Maguey, the cult of machismo functions to support the inherently discriminatory nature (in operational terms) of a capitalist industrial society in which universalistic ideology is spouted to ensure industry of potential access to all groups of people as laborers. In actuality, industry hires only in proportion to its need to gain a profit. This means that certain groups of people are discriminated against in terms of employment. According to machismo, women belong in the home. When there is an over-abundance of male laborers, women are in the home due to the lack of jobs for them in industry.

It is difficult to say much regarding the grand-parent-grandchild household since there is only one case. It appears to be an alternative way of handling the problem

of what to do with children from previous unions if the mother does not wish to incorporate them into her new household. In this particular case, both parents re-married and the grandchild was their only off-spring in common. There is no evidence for financial support being issued to the grandparents from the parents in support of the grandchild.

The relationship between the grandparents and the grandchild, however, is one of economic symbiosis in which the latter brings in a cash income and the former provides at least the living quarters. The grandparent-grandchild household is socially acceptable and necessary in some instances.

Lineal households are reminiscent of the traditional extended household, as a reminder, because both involve lineal kin. Lineal households are thus sanctioned by tradition.

Finally, little can be said for the single case of the collateral household based on a backbone of economic symbiosis since the majority of expanded households symbolize a condition of economic dependence. Such a household is socially acceptable.

Extra-Nuclear Kin:

The absence of a spouse in the matrifocal household has already been explained. The lack of extra-nuclear kin, moreover, may be attributed to:

- (1) the economic feasibility of a matrifocal household and

thus the possibility of obtaining privacy and independence for the members of such a household. Privacy and independence are values which are generally accepted ideals.

- (2) the members of a matrifocal household may be able to support themselves economically, but the household offers limited economic incentives for others to join. The type of occupations which the mother undertakes promote economic instability in the long run.
- (3) and the socially incomplete nature of the household may also contribute to its unattractiveness to others.

The household may be economically attractive to a potential mate, however, because of its economic viability. This attractiveness is tempered by considerations of the age of the woman and the number of children in the household, etc.

The presence of collateral kin in the expanded household, of lineal kin in the lineal household and of the grandchild in the grandparent-grandchild household are all explained by the economic advantages of their presence to the other members of the household. The economic advantage is mutual, since the relationship is one of economic symbiosis.

Households of Low Economic Status:

Among those households in Samples A and B which are of low economic status 41% (seven cases) are lineal households (Table XVIII). In Sample B, as many as 75% (three

cases) are lineal households while in Sample A as few as 31% (four cases) are. Twenty-nine percent (five cases) of the total number of households in Samples A and B, on the other hand, are declining nuclear households. All of these occur in Sample A, and they form 39% (five cases) of the households in that sample. Finally, another 29% (five cases) in Samples A and B are expanded or collateral households. Within Sample A, they are 31% (four cases) of the households while in Sample B, there is only one such case -- it is 25% of the sample.

All of the households in this economic category exemplify economic dependence on the part of at least one adult in the household; that adult is other than a dependent wife. Moreover, in this group, the household head may carry less than the major portion of the responsibility for the financial support of the household. In 41% of the households (seven cases) in Samples A and B, the economic dependence is that of elderly parents on their resident children who are either married or single (Table VII). The economic interaction is basically one of property for a low cash income. The advantages of such an interchange have already been discussed; in these households, however, the advantages for the property-providing partner are exaggerated because of his economically deprived position. The parents are subsistence agriculturalists, artisans or small-scale merchants whose traditional occupation in combination with old age is

responsible for their economic dependence. These households are primarily declining nuclear households; in some cases, they are lineal households. The cash income -- low in amount -- which is brought in by the children is of great assistance to the parents. The property-base in terms of the living quarters and also of the agricultural plot (where this exists), in turn, are important to the children because they themselves are often situated in an economically precarious position. The traditional occupation of their parents has thwarted their range of economic opportunities, e.g., factory work is unlikely for them. In the case of the declining nuclear households, children are gradually departing from the household in search of economic opportunities elsewhere. In the case of lineal households, the economic exchange between the married resident children and the parents is illustrative of a mutual insurance network.

In 29% (five cases) of the households which are of low economic status, the economic dependence is on the part of a collateral kin, for example, the husband's unemployed brother (Table XVII). This is true for one household (25% of the cases) in Sample B while it is the case for four households (31% of the cases) in Sample A. No clear exchange of property and/or of service is evident; rather these are obvious cases of economic dependence within the framework of mutual assistance network. The household head in these cases also is traditionally employed.

Finally, in 29% (five cases) of all households in Samples A and B, the economic dependence is on the part of some lineal kin, e.g., on the part of an elderly mother (Table XVII). The household head is again traditionally employed. These households, in turn, exemplify the operation of an internal mutual aid network within the household.

The basis of the mutual insurance network is an implied contract between lineal and/or collateral kin resident within a common household. The contractees agree to offer each other economic assistance over an unspecified period of time. Whatever economic resources are available at any one point in time are pooled into the household for the common benefit of all of the household members.

The backbone of the network, however, is the assurance of economic aid over a period of time. Thus, at one particular point, some members will be clearly economically dependent on other household members. At some future date, those who formerly did the supporting may need economic assistance themselves. The traditional orientation and occupational skills (aggravated at times by old age) make the members of such networks susceptible to economically precarious conditions, and hence to the need for a mutual aid network. Declining nuclear households are examples of units in which economic need on the part of the adults is clear but which as households do not have any

effective internal protective mechanisms.

Property Base:

The urban lot with which the household in this economic category is associated is once again ejido property--since the majority of persons involved in property holding positions in households of low economic status are in traditional occupations such as subsistence agriculture, access to property is most often through ejido membership. It may also be through the right of usufruct granted by an old relative who is an ejidatario; such property will be inherited by those exercising the right upon the demise of the ejidatario.

Social Values:

The declining nuclear household is economically the reverse of the nuclear household. It is also the result of socially sanctioned and economically induced behavior. As mentioned earlier, upon marriage and the establishment of a separate household of procreation, children are no longer expected to offer any assistance to members of their natal household. Such a norm clearly exemplifies and complements the values of independence, competitiveness and individualism already mentioned. The members of declining nuclear households are not able to afford themselves any protection against their own economically marginal position in an industrializing country.

The lineal household is socially sanctioned in its structure as a familiar form of organization stemming from

the extended household of an agricultural society. Traditionally economic aid given within the extended household manifests itself at two points in the life crises cycle: the support for a brief period of time of a newly married couple by established parents, or the support of an elderly couple by established adult children. Under conditions of economic deprivation the support offered by lineal kin to each other within the lineal household goes beyond its traditional form. Thus, a young couple may be supported for a long period of time by parents. Or, parents may require economic assistance from their children long before old age. The lineal structure of aid is still extant in this changing society but it now occurs outside of a larger lineage kinship system and usually represents economic deprivation on the part of its members.

The expanded household has no specific social principles or precedents which sanction it. Rather, it is an expression of economic need within a kinship unit. It is socially sanctioned to the degree that kin-orientedness is the fiber of social relationships in a traditional agricultural society. The need of collateral kin to turn to each other for economic assistance, moreover, is an expression of unusually great economic need since the structure of relationships which it reflects is in other than the more familiar lineal form.

Extra-Nuclear Kin:

The lack of extra-nuclear kin in the declining nuclear household is obvious because of the economic unattractiveness of this unit. The lineal and expanded households, of course, have extra-nuclear kin present. The presence of lineal kin in the lineal households and of at least one collateral kin in each expanded household is clearly due to the economic advantages which these people offer to each other from their mutual association in a network of mutual aid.

Summary:

A significant portion of the population in Benito Juarez has made it economically in an industrializing region. These people are mostly in nuclear households. The number of economically successful households in Benito Juarez as a town and in the western Llanos de Maguey as a region may be unusually high because of the comparative economic solvency of the two in comparison to other local communities and to the rest of Hidalgo, respectively.

Another segment of the population is economically viable although under conditions of social and economic discrimination. These are mostly the members of matri-focal households.

There is also a third segment of the population; this group of people is in poor economic shape largely because of old age and the obstacles to economic advancement

which membership in a traditionally oriented agricultural group accrues to its members. These persons depend on their kin to help them. Channels of economic assistance operate within the structure of a household, and they are lineal, or under more severe economic pressure, collateral in nature. When such channels are not available, these persons are economically unprotected; they are the members of declining nuclear households.

Samples A and B are illustrative of the basic association between household type and its economic foundation. The consistent difference between Sample A and Sample B has been that the former has a greater preponderance of non-wage workers and thus of households of middle and low economic status while the latter has more wage-earners, especially obreros, and thus more households which are of high economic status. This difference has also been apparent in a series of indirect indicators of the economic status of the household which have been analyzed.

The non-kin household, the grandparent-grandchild household and the matrifocal household are treated only peripherally in the next chapter. There is no information for the first, and only limited data for the other two. It was considered important, however, to discuss all types of households for which there was information in the Preliminary Samples because such a discussion helps to clarify the relationship which operates between economics and household type.

CHAPTER V²

On the basis of the discussion in Chapter IV, thirteen clusters or units of hypotheses have been formulated for testing. These clusters deal with the relationship between household structure and its economic base. The latter variable is gauged indirectly through:

- (1) the occupation of the household head
- (2)& the work status of his spouse and/or of resident
- (3) children
- (4) the number of children living away from the household of the parents.

²The 1967 Data and the 1957-58 Data were obtained through the Department of Anthropology at the University of Minnesota in the form of a magnetic computer tape. The information on this tape was made appropriate for use by the computer system of the University of Michigan--the MTS system. Next, the data were prepared for use by a package of programs issuing from the Department of Political Science called Osiris. Originally, it had been decided to utilize the Osiris programs since they were designed to handle large sets of survey data. These programs proved to be expensive and time-consuming. Sub-sets of the data on the Osiris data files were, therefore, transferred onto data cells. Two programs from the Statistical Laboratory at the Rackham School of Graduate Work were finally utilized; these programs are N-Way and Chi-Tab. Over the past two years of work with these computer data, I have required the assistance of the Osiris programmers, the advisors at the Computer Center, the computer counsellors in the Department of Political Science and the advisors at the Statistical Laboratory mentioned above. Funds for the computer work came through the Department of Anthropology at the University of Michigan

- (5) the age of the household head
- (6) the frequency of contact with non-resident kin
- (7) the location of non-resident kin
- (8) the number of non-resident kin other than children
nearby the household of the parents
- (9) the frequency of contact with friends
- (10) the origin of the household head
- (11) the location of the first job held by the household
head
- (12) the possession of a secondary income for the household
head
- (13) and the type of household in which railroad workers
live

The first four indices are among those discussed in Chapter IV. The last eight are measures added in this chapter to suit the particular nature of the information in the 1967-Data set. The relevance and limitations of each new economic index are discussed hypothesis by hypothesis.

The series of 59 hypotheses to follow are tested against:

- (1) the 1967 Data as a composite unit
- (2) and the 1967 Data as three separate information sets
namely for Serena, Cerro Grande and Benito Juarez.

Frequency and percentage figures stemming from the 1957-58 Data, in addition, provide a time depth for this analysis.

The following non-parametric statistics were applied to the 1967 Data:³

Chi-Square: as a test of significance for the acceptance or rejection of the Null Hypothesis.

Fisher's Exact Probability: as a test of significance for two by two tables for samples under 40 units in size.

Cramer's V: as a measure of association for tables larger than two by two. It is valid when Chi-Square is valid for the table.

Phi : as a measure of association for two by two tables. Phi and Cramer's V are identical for tables larger than two by two.

Goodman-Kruskal's Lambda AB: as a measure of association for nominal data. This measure is useful since it indicates the strength of association when one or the other of two variables is treated as the independent variable.

³A discussion of the non-parametric statistics employed in this dissertation is found in:

- (1) Statistical Reasoning in Sociology. Mueller, John H., and Karl F. Schuessler and Herbert L. Costner. Second Edition. 1970.
- (2) Non-Parametric Statistics for the Behavioral Sciences. Siegel, Sidney. 1956.
- (3) Elementary Applied Statistics. Freeman, Linton C. 1968.

In the probability tests, scores of $P=.20$ and lower are significant. For measures of association, values of $CV=.10$ and $\Phi=.10$ or higher are significant. For Λ , values which show a reduction of prediction error by 10% or more are significant. Scores other than these are indicated as N.S. or "not significant."

1967-Data: the Composite Sample

Initially, the following groupings of households were formulated for the 1967 Data:

- (1) nuclear vs. non-nuclear households
- (2) nuclear, matrifocal and grandparent-grandchild households vs. expanded, lineal and declining nuclear households
- (3) and nuclear households vs. matrifocal and grandparent-grandchild households vs. expanded, lineal and declining nuclear households.

On the basis of an analysis of the Preliminary Samples, it is assumed that there are multiple ways in which the nuclear household--a symbol of high economic status--differs from the other households as a single category--those of middle and low economic status. This is the basis for the sub-division of household types in the first grouping.

Likewise, for the second grouping, it is assumed that the households of high and middle economic status differ in major ways from those of low economic status.

Finally, the third grouping simply isolates each

economic category according to the household types which correspond to it. It became apparent, however, that matrifocal and grandparent-grandchild households could only be dealt with peripherally in the 1967 Data. Of the sample of 300 households, there are only six cases of each. It was pointed out initially, moreover, that 100 households had been deleted from the 1967 Data since only one (the wife) of a couple could be located for interviewing. In view of these two factors, the third grouping of households is de-emphasized while the first two groupings are emphasized instead. Matrifocal and grandparent-grandchild households are, hence dealt with only incidentally. Insights into the operation of these household types are restricted to the Preliminary Samples.

The occupational break-down which holds throughout the analysis of the 1967 Data is Between:

- (1) obreros and subsistence agriculturalists
- (2) and wage-earners and subsistence agriculturalists.

Essentially the obreros and the wage-earners are inter-changeable categories, and they are treated as such here. This simplifies analysis. In the clear majority of cases, wage-earners are obreros. Also there are no statistically significant differences evident when the two are treated as a unit as compared with their treatment separately. Obreros and subsistence agriculturalists once again form the two major categories of occupation.

Finally, there is the problem of a high case loss

through missing data for many of the secondary variables. This places severe restrictions on how finely any one dependent variable can be controlled for in analysis. It was decided to sacrifice secondary and tertiary controls over specific variables and thus to deal with very rough measures of trends in favor of maximizing the number of cases available for statistical testing. An increase in the number of cases in a sample reduces the chances for a random association between any two variables.

Hypotheses:

There are the major clusters of hypotheses to be analyzed:

Cluster One deals with the relationship between occupation as the independent variable--the major indirect indicator of the economic status of the household--and household type as the dependent variable. The assumptions underlying such a relationship have been discussed in Chapter IV; this is also the case for the assumptions which underlie Clusters II through V.

Cluster one contains two hypotheses:

- (1) Subsistence agriculturalists are heads of non-nuclear households while wage-earners are heads of nuclear households (GH-1).
- (2) Subsistence agriculturalists are heads of declining nuclear, collateral and lineal households while wage-earners are heads of nuclear households (GH-2).

Cluster Two deals with the relationship between

occupation as an independent variable and the age of the household head as a dependent variable. In turn, the age of the household head is the independent variable in relationship to the type of household which serves as the dependent variable. Thus the age of the household head is actually an intervening variable between occupation and household type. Age as a variable is subdivided into categories: 20-29 years in age; 30 to 49 years in age and 50 years and older in age.

The cluster contains three hypotheses:

- (1) Heads of household who are subsistence agriculturalists are older than those who are wage-earners (H-1).
- (2) Heads of non-nuclear households are older than heads of nuclear households (H-2a).
- (3) Heads of declining nuclear, collateral and lineal households are older than heads of nuclear households (H-2b).

Cluster Three deals with the relationship between occupation as the independent variable and the paid-work status of the wife as the dependent variable; and in turn, the paid-work status of the wife becomes the independent variable in relationship to the household type. The wife's work status is thus an intervening variable.

The cluster consists of three hypotheses:

- (1) Households headed by subsistence agriculturalists have wives who work for pay while households headed by wage-earners have wives who do not work for pay (H-3).

- (2) The wife in non-nuclear households works for pay while the wife in nuclear households does not (H-4a; SA,0).
- (3) The wife in declining nuclear, collateral and lineal households works for pay while the wife in nuclear households does not (H-4b).

According to the Preliminary Samples, the majority of wives are housewives regardless of the occupation of the household head. These hypotheses, therefore, speak to those less frequent cases in which wives do work for pay; these cases are then analyzed according to the occupation of the household head and the household type.

Cluster Four deals with the relationship between occupation as the independent variable and the paid-work status of resident children as the dependent variable. In turn, the latter variable becomes the independent variable when related to the household type--the dependent variable. The paid-work status of resident children is an intervening variable.

The cluster consists of two hypotheses:

- (1) Households headed by wage-earners have resident children working for pay while households headed by subsistence agriculturalists do not (H-5).
- (2) Resident children in non-nuclear households do not work for pay while those in nuclear households do (H-6).

The assumption here is that subsistence agriculturalists cannot provide employment opportunities for their

children in the local area while obreros can. This ties in with Cluster Five below in that the children of subsistence agriculturalists are forced to emigrate far more often than are those of obreros. The economic need of subsistence agriculturalists for an additional income in the form of pay brought in by working children is a given.

The paid-work status of resident children is age dependent. In 1967, 44% of the people in Benito Juarez were in the age category of 14 years and younger. Children of this age are assumed to be too young for paid employment. Thus, it is assumed that the majority of households have children who are too young for paid work. If at least one child works for pay in the household, the household is considered to have working children. Since heads of household who are subsistence agriculturalists are assumed to be older than obrero heads of household, furthermore, it is more likely that the former rather than the latter will have resident children who are old enough for paid employment. Even under these circumstances, if households do have working children and these are households headed by obreros, this speaks strongly of the job opportunities with which obreros can provide their children, and it suggests the pressure to emigrate on the part of adult children in those households headed by subsistence agriculturalists. The age of children is not specifically controlled for due to the aforementioned problem with missing data. The work

status of resident children is a rough measure of the economic status of a household.

Cluster Five deals with the relationship between occupation as the independent variable and the number of non-resident children as the dependent variable. In turn, this latter variable is the independent variable when viewed in relationship to household type. As such the number of non-resident children is an intervening variable.

The number of non-resident children is sub-divided into the following units: zero, one to three, and four to 15 non-resident children. It is assumed that non-resident children are indicative of emigrated children. This is a rough measure of emigration, however, since the variable potentially includes non-resident children who reside elsewhere in the same town as the parents. The measure is rough, moreover, since it is again age-dependent. If heads of households who are subsistence agriculturalists are older than their obrero counterparts, then it is more likely that they have children old enough to emigrate than the obreros do. However, considering only those cases in which there is at least one non-resident child per household, hence a child old enough to emigrate, the non-resident status of the child is assumed to be motivated by economic considerations rather than by those of age. The age of children is not directly controlled.

Cluster Five has three hypotheses:

- (1) More households headed by subsistence agriculturalists

have non-resident children than do households headed by wage-earners (H-7).

(2) More non-nuclear households have non-resident children than do nuclear households (H-8a).

(3) More declining nuclear, collateral and lineal households have non-resident children than do nuclear households (H-8b).

Cluster Six deals with the relationship between occupation as the independent variable and the frequency of contact with non-resident kin as the dependent variable. More specifically, the kin referred to is the first-listed non-resident child. The frequency of contact is measured as: visits made less than every other month; those made every other month to once a month; or visits made more frequently than once a month. Finally, the visits are both made by the child to the parents and vice versa.

This association is also gauged in terms of the frequency of visits to non-resident kin--a general category--excluding children. Visits are distinguished as: "rare to less than rare" visits (zero to five times a year) and "more than rare visits" (six or more times a year). The infrequency of contact with kin is reflected in the choice of sub-divisions within this variable. This dependent variable is an indicator of the potential on the part of household members for utilizing non-resident kin for economic assistance. It is reasoned that there is a

greater chance for such aid being offered in cases where there is more frequent contact with kin. Thus, frequent contact means the potential acceptance of assistance whereas infrequent contact implies the lack of it.

The frequency of contact operates as the independent variable in relationship to household type; but, it is an intervening variable when linked with occupation and household type. Here visits by and to the first- and second-listed non-resident child as well as to non-resident kin other than children are included. The frequency of visits is measured in terms of categories already discussed initially under Cluster Six.

The cluster consists of three hypotheses:

- (1) Households headed by subsistence agriculturalists have more frequent contact with the first-listed non-resident child than do households headed by wage-earners (H-9a,b).
- (2) Heads of non-nuclear households have more frequent contact with the first-listed and the second-listed non-resident child, respectively, than do those of nuclear households (H-10a,b).
- (3) Heads of delining nuclear, collateral and lineal households have more frequent contact with the first- and the second-listed non-resident child and with non-resident kin other than children, respectively, than do members of nuclear households (H-10c,d,e,f).

Cluster Seven refers to the relationship between occupation and the location of non-resident children as measured by the first-listed non-resident child. Occupation is again the independent variable and location is the dependent variable. Location is sub-categorized as: the three towns under study; local towns excluding these three; and towns outside of the local area. It is assumed to be unlikely that persons resident within one of the subject towns will have moved to either of the other two communities; therefore, the three towns have been lumped together as a single unit.

The location of non-resident children is treated as a measure of emigration. Children are judged to have emigrated if they reside outside of the three research communities. A household is considered to have children who have emigrated when at least one child from the household resides outside of Benito Juarez, Cerro Grande or of Serena. Remarks made concerning the relevance of age as an intervening criteria in Clusters Five and Six are applicable here also.

This cluster also deals with the location of non-resident children (the independent variable) in relationship to household type. Location serves as an intervening variable between occupation and household type. Specifically, the children involved are the first- and second-listed non-resident children. Location refers

to: the three local towns, or to all places other than these.

This cluster includes two hypotheses:

- (1) More households headed by subsistence agriculturalists have children who reside outside of the local towns than do households headed by wage-earners (H-11).
- (2) More declining nuclear, collateral and lineal households have children who reside outside of the local towns than do nuclear households (H-12a,b).

Cluster Eight focuses on the relationship between occupation (as the independent variable) and the number of nearby non-resident kin (other than children). "Nearby" is taken to refer to towns within 10 kilometers of the communities under study. Also the number of kin is sub-divided according to three groups: zero to five; six to 10; or 11 to 25 kin.

The cluster also relates to the relationship between the number of nearby kin (the independent variable) and household type. Thus, number of kin is an intervening variable between occupation and household type.

The cluster contains three hypotheses:

- (1) More heads of household who are subsistence agriculturalists have more kin nearby than do those who are wage-earners (H-13).
- (2) More heads of non-nuclear households have more kin nearby than do those of nuclear households (H-14a).

- (3) Heads of declining nuclear, collateral and lineal households have more kin nearby than do those of nuclear households (H-14b).

A high frequency of kin nearby is indicative of physical permanence. Due to a lack of future as well as of present economic opportunities, the children of subsistence agriculturalists are forced to emigrate. However, the collateral and lineal kin of subsistence agriculturalists of the same or of older generations because of their age are more likely to be tied to the area through their connection to the land. The fluctuating labor requirements of industry, however, make it likely that obreros are physically mobile, and therefore that they have less nearby kin. It is assumed that occupation tends to be similar within a community of kin. Occupational stratification in the western Llanos de Magüey has already been stressed.

Cluster Nine deals with the relationship between occupation (the independent variable) and the frequency of contact with friends. Contact is measured by: "rare" visits (made five times yearly or less), and visits which are "more than rare" (made over five times yearly). Again the sub-categories have been formed in response to the distribution of visits found in the sample, and as such they reflect the infrequency of contact with friends. Where the male instead of the female informant responded,

contact is measured in terms of visits made: "rarely" (zero to five times yearly), those made "at times" (six to 156 times yearly) or those made "often" (over 157 times yearly). Comparability between these last two units of measurement enters with the reduction of the categories of "at times" and "often" to visits which are "more than rare".

The cluster also focuses on the relationship between frequency of contact with friends (independent variable) and household type. As such contact with friends serves as the intervening variable between occupation and household type. Here the frequency of contact is measured by: visits which are "infrequent" or "rare"; visits made "at times" or those made "often". Their specific values have been given above.

The cluster consists of three hypotheses:

- (1) Heads of household who are wage-earners visit friends more frequently than do heads of household who are subsistence agriculturalists (H-15a,b).
- (2) Heads of nuclear households visit friends more frequently than do heads of non-nuclear households (H-16a,b).
- (3) Heads of nuclear households visit friends more frequently than do heads of declining nuclear, collateral, and lineal households (H-16,c).

Frequent contact with friends is treated as an indicator of potential economic assistance which may be

channeled to household members from friends. This variable explores the possibility of an extra-household source of assistance which is other than kin. Friends may be gaining favor over kin in terms of their importance in interpersonal relationships due to the influence of industrial values.

Cluster Ten deals with the relationship between occupation (the independent variable) and origin of the household head (the dependent variable). Origin is measured in terms of: the three communities under study, or towns outside of these three.

The cluster also focuses on the relationship between origin (the independent variable) and household type (the dependent variable). Origin of the household head thus becomes an intervening factor between occupation and household type.

The two hypotheses in this cluster are:

- (1) Heads of household who are wage-earners originate non-locally while those who are subsistence agriculturists originate locally (H-17).
- (2) Heads of declining nuclear, collateral and lineal households originate locally while those of nuclear households originate non-locally (H-18).

Origin as a variable is utilized as a sign of potential economic assistance from kin who are outside of the household but who reside in the local area.

Subsistence agriculturalists are assumed to be of local origin because most were villagers or hacienda peons in this same region before land reform. The majority of obreros, on the other hand, migrated into the area from other regions. Subsistence agriculturalists presumably have nearby kin from whom they could receive assistance; obreros would lack such kin.

Cluster Eleven which is actually a unit of one hypothesis stresses the relationship between the location of the household head's first job (the independent variable) and household type (the dependent variable). Location is noted to be either: the three locale communities, or places other than these three.

The single hypothesis is:

- (1) Heads of declining nuclear, collateral and lineal households held their first job in the local towns while those of nuclear households first worked in communities outside of these towns (H-19).

The physical mobility of obreros as compared with subsistence agriculturalists is re-emphasized. It is assumed that obreros are represented by nuclear households while subsistence agriculturalists are signaled by declining nuclear, collateral and lineal households. Physical mobility minimizes the opportunity to gain financial aid from kin since these kin are supposedly not locally situated.

Cluster Twelve --a unit of one hypothesis--deals

with the relationship between occupation (the independent variable) and a secondary source of income (the dependent variable).

The single hypothesis is:

- (1) More heads of household who are subsistence agriculturalists have an extra source of income than do those who are wage-earners (H-20).

The assumption is that factory work provides a high enough income so that the obrero needs no extra income while the much less favorable economic situation of the subsistence agriculturalist forces him to seek secondary employment.

Cluster Thirteen--a unit of one hypothesis--focuses on the relationship between occupation--railroad work--and household type. Occupation serves as the independent variable.

The hypothesis goes as follows:

- (1) Railroad workers are heads of nuclear households (GH-1a).

As discussed earlier, railroad workers have usufruct rights to housing provided by the railroad company. The presence of railroad workers in nuclear households, however, is assumed to indicate that their recourse to economic assistance from an agency is not utilized. Nuclear households connote high economic status:

Hypotheses: Descriptive Statistics and Analysis--Tables XX and XI contain the results of the statistical tests run for the 1967 Data Composite Sample.

Table XX. Chi-Square and Fisher's Exact Probability as Tests of Probability and Cramer's V as a Measure of Association, 1967 Data Composite Sample.*

<u>Hypotheses</u>	<u>Chi-Square</u>	<u>Level of Significance</u>	<u>Fisher's**</u>	<u>Cramer's*** V</u>
<u>Cluster One</u>				
GH-1	4.63	.03		.14
GH-2	3.12	.08		.12
<u>Cluster Two</u>				
H-1	45.54	.00		.44
H-2a****	5.17	.08		.22
H-2a	6.85	.03		.27
H-2b	5.18	.08		.22
H-2b	4.20	.12		.21
<u>Cluster Three</u>				
H-3	.006	N.S.	N.S.	.16
H-4a	.70	N.S.	N.S.	.25
H-4a	.31	N.S.	N.S.	.66
H-4b	.05	N.S.	N.S.	.41
H-4b	.31	N.S.	N.S.	.17
<u>Cluster Four</u>				
H-5	1.81	N.S.		N.S.
H-6	3.20	N.S.		.18
H-6	6.16	.05		.26
<u>Cluster Five</u>				
H-7	22.30	.00		.31
H-8a	5.47	.07		.23
H-8a	4.53	.10		.22
H-8b	6.47			.25
H-8b	13.92	.0009		.39
<u>Cluster Six</u>				
H-9	3.52	.17		.24
H-9b	.39	N.S.		N.S.
H-10a	2.53	N.S.		.24

Table XX continued p.2

<u>Hypotheses</u>	<u>Chi-Square</u>	<u>Level of Significance</u>	<u>Fisher's</u>	<u>Cramer's</u>
				<u>V</u>
<u>Cluster Six</u> (continued)				
H-10a	1.59	N.S.		.38
H-10b	1.18	N.S.		.24
H-10b	3.75	.15		.79
H-10c	5.94	N.S.		.27
H-10c	3.30	N.S.		.43
H-10d	.79	N.S.		.17
H-10d	3.73	.16		.73
H-10e	3.75	.15		.75
H-10e	1.40	N.S.		.22
H-10f	1.64	N.S.		.21
H-10f	2.53	N.S.		.24
<u>Cluster Seven</u>				
H-11	3.27	.07		.29
H-12a	22.69	.0003		1.00
H-12a	3.51	.06	N.S.	1.00
H-12b	4.70	.03	.14	.61
H-12b	.000	N.S.	N.S.	.58
<u>Cluster Eight</u>				
H-13	9.31	.01		.21
H-14a	2.82	N.S.		.17
H-14a	10.08	.007		.34
H-14b	6.62	.04		.26
H-14b	.82	N.S.		.10
<u>Cluster Nine</u>				
H-15a	1.16	N.S.	.14	.18
H-15b	6.41	.04		.23
H-16a	3.38	.19		.53
H-16a	2.25	N.S.		.35
H-16b	4.23	.04	.20	.39
H-16b	.03	N.S.	N.S.	N.S.
H-16c	.74	N.S.		.20
H-16c	1.29	N.S.		.31

Table XX continued p.3

<u>Hypotheses</u>	<u>Chi-Square</u>	<u>Level of Significance</u>	<u>Fisher's</u>	<u>Cramer's V</u>
<u>Cluster Ten</u>				
H-17	3.73	.05		.13
H-18	5.14	.08		.23
H-18	1.27	N.S.		.12
<u>Cluster Eleven</u>				
H-19	3.00	N.S.		.23
H-19	2.39	N.S.		.14
<u>Cluster Twelve</u>				
H-20	1.64	N.S.		N.S.
<u>Cluster Thirteen</u>				
GH-1a	.74	N.S.		N.S.

* The null hypothesis is rejected when P .20 or less.

**The null hypothesis is rejected according to Fisher's Exact Probability when P .20 or less.

*** The association is significant according to Cramer's V at values of CV .10 or higher. Phi scores for two by two tables are included under this category also since Phi and Cramer's V are identical for two by two tables. The significance of Phi and Cramer's V values is dependent on Chi-Square.

**** The first of a set of two hypotheses deals with subsistence agriculturalists while the second deals with obreros.

Table XXI. Goodman and Kruskal's Lambda as a Measure of Association and Sample Size, 1967 Data Composite Sample.

<u>Hypotheses</u>	<u>Lambda AB*</u>	<u>Lambda A</u>	<u>Lambda B</u>	<u>Sample Size**</u>
<u>Cluster One</u>				
GH-1	N.S.	N.S.	N.S.	235
GH-2	N.S.	N.S.	N.S.	235
<u>Cluster Two</u>				
H-1	.26	.19	.34	2234
H-2a	N.S.	.13	N.S.	103
H-2a	N.S.	N.S.	.11	92
H-2b	N.S.	N.S.	N.S.	103
H-2b	N.S.	N.S.	N.S.	92
<u>Cluster Three</u>				
H-3	N.S.	N.S.	N.S.	33
H-4a	N.S.	N.S.	N.S.	5
H-4a	.5	.5	.5	5
H-4b	N.S.	N.S.	N.S.	5
H-4b	N.S.	N.S.	N.S.	5
<u>Cluster Four</u>				
H-5	N.S.	N.S.	N.S.	229
H-6	N.S.	N.S.	N.S.	100
H-6	N.S.	N.S.	N.S.	90
<u>Cluster Five</u>				
H-7	.14	N.S.	.22	235
H-8a	N.S.	N.S.	N.S.	103
H-8a	N.S.	N.S.	N.S.	93
H-8b	N.S.	.16	N.S.	103
H-8b	N.S.	.15	N.S.	93
<u>Cluster Six</u>				
H-9	N.S.	N.S.	N.S.	62
H-9b	N.S.	N.S.	N.S.	56
H-10a	N.S.	N.S.	.10	44

Table XXI continued p.2

<u>Hypotheses</u>	<u>Lambda AB</u>	<u>Lambda A</u>	<u>Lambda B</u>	<u>Sample Size</u>
<u>Cluster Six</u> (continued)				
H-10a	N.S.	N.S.	.10	11
H-10b	N.S.	N.S.	.17	24
H-10b	.40	.33	.50	6
H-10c	N.S.	N.S.	.10	42
H-10c	.33	.25	.40	9
H-10d	N.S.	N.S.	N.S.	28
H-10d	.33	.50	.25	7
H-10e	N.S.	N.S.	N.S.	6
H-10e	.50	.67	.33	24
H-10f	N.S.	N.S.	N.S.	36
H-10f	N.S.	.10	N.S.	44
<u>Cluster Seven</u>				
H-11	.16	.26	N.S.	40
H-12a	1.00	1.00	1.00	27
H-12a	1.00	1.00	1.00	7
H-12b	.33	N.S.	.50	20
H-12b	.33	N.S.	.50	4
<u>Cluster Eight</u>				
H-13	N.S.	N.S.	N.S.	220
H-14a	N.S.	N.S.	N.S.	96
H-14a	.11	.12	N.S.	86
H-14b	N.S.	N.S.	.11	96
H-14b	N.S.	N.S.	N.S.	86
<u>Cluster Nine</u>				
H-15a	N.S.	.13	N.S.	36
H-15b	N.S.	N.S.	N.S.	117
H-16a	.20	N.S.	.40	12
H-16a	.13	.10	.17	18
H-16b	.19	.27	N.S.	39
H-16b	N.S.	N.S.	N.S.	60
H-16c	N.S.	N.S.	N.S.	20
H-16c	N.S.	N.S.	N.S.	28

Table XXI continued p.3

<u>Hypotheses</u>	<u>Lambda AB</u>	<u>Lambda A</u>	<u>Lambda B</u>	<u>Sample Size</u>
<u>Cluster Ten</u>				
H-17	N.S.	N.S.	N.S.	229
H-18	N.S.	N.S.	N.S.	98
H-18	N.S.	N.S.	N.S.	92
<u>Cluster Eleven</u>				
H-19	N.S.	N.S.	N.S.	28
H-19	N.S.	N.S.	N.S.	65
<u>Cluster Twelve</u>				
H-20	N.S.	N.S.	N.S.	291
<u>Cluster Thirteen</u>				
GH-1a	N.S.	N.S.	N.S.	102

* Values of Lambda at 10% or higher are significant.

**Sample size is in terms of household units.

Cluster One:

Subsistence agriculturalists are heads of non-nuclear households while wage-earners are heads of nuclear households (GH-1)

Forty percent (41 cases) of the subsistence agriculturalists are heads of non-nuclear households while this is true for only 26% (34 cases) of the wage-earners. The majority of heads of household for both occupations, however, are in nuclear households: 60% (62 cases) for subsistence agriculturalists and as much as 74% (98 cases) for wage-earners.

Only four percent of the prediction error is reduced by Lambda; there is as much as a seven percent reduction of error, however, when occupation serves as the independent variable.

Moreover, Cramer's V is significant at .14.

The null hypothesis between occupation and household type is rejected at $P=.03$.

Subsistence agriculturalists are heads of declining nuclear, collateral and lineal households while wage-earners are heads of nuclear households (GH-2).

Thirty-four percent (35 cases) of the subsistence agriculturalists are heads of declining nuclear, collateral and lineal households while this is so for a lesser 23% (30 cases) of the wage-earners. As much as 77% (102 cases) of the wage-earners are heads of nuclear households, on the other hand, as compared with a lesser 66% (68 cases) of the subsistence agriculturalists. Again the majority of heads of households in both occupations are in nuclear households.

Lambda is only three percent, but the amount of prediction error reduced is increased to five percent when occupation is the independent variable.

Cramer's V is significant at .12.

The null hypothesis between occupation and household type is rejected at $P=.08$.

Both hypotheses in this cluster attest to the fact

that the majority of subsistence agriculturalists and wage-earners reside in nuclear households. The explanations rest both in the long-term up-rootedness of the western Llanos de Maguey, in its proximity to Mexico City, and in the strong industrial influences which this region has experienced directly and indirectly. Thirty-four to 40% of the subsistence agriculturalists and 23 to 26% of the wage-earners, nevertheless, reside in non-nuclear households. This high figure among the former attests to the economic deprivation to which low-capital, traditional subsistence agriculturalists are subjected, especially in a region which has recently been emphasizing the importance of industrial skills. The kin-orientedness of a traditional agricultural community is utilized by subsistence agriculturalists in their economic need to ensure themselves of a modicum of economic protection; collateral and lineal households are social instruments for pooling economic resources and for providing their members with a degree of economic insurance in the future. Economically deprived traditionalists have no such protection in declining nuclear households.

The significant percentage of wage-earners in non-nuclear households attests to the fact that a section of the local population--of a hacienda peon/ejidataric background--has entered the industrial labor force; but, whether due to unstable employment or to heavy ties to

economically less-privileged kin, these wage-earners are in household which bespeak economic trouble.

Sixty to 66% of the subsistence agriculturalists and 73% to 77% of the wage-earners are in nuclear households which have been taken to be rough measures of high economic status.

Cluster Two:

Heads of household who are subsistence agriculturalists are older than those who are wage-earners (H-1).

Forty-eight percent (49 cases) of the subsistence agriculturalists who are heads of household are 50 years or older while only 15% (19 cases) of those heads who are wage-earners are equally old. But, 68% (89 cases) of the heads of household who are wage-earners are 20 to 29 years old while only 25% (26 cases) of the heads of household who are subsistence agriculturalists are equally young. The remaining percentages for either occupation are heads of household who are between 30 to 49 years old.

Lambda is significant at 26% while it is even more significant (at 34%) when occupation is the independent variable.

Cramer's V is highly significant at .44.

The null hypothesis between occupation and the age of the household head is rejected at $P=.0003$.

Heads of non-nuclear households are older than heads of nuclear households (H2a).

Controlling for Subsistence Agriculturalists:

Sixty-one percent (25 cases) of the subsistence agriculturalists who are heads of non-nuclear households are 50 years or older; this is true for only 39% (24 cases) of the subsistence agriculturalists who head nuclear households. Fifty percent (31 cases) of such heads of nuclear households, on the other hand, are between 30 and 49 years old while 29% (12 cases) of such heads on non-nuclear households are equally young. The remaining cases for both household categories consist of heads of household who are between 20 and 29 years old.

Lambda is significant at 13% with the age of the household head serving as the independent variable.

Cramer's V is significant at .22.

The null hypothesis between age of household head and household type is rejected at $p=.08$.

Controlling for Obreros:

Nineteen percent (five cases) of the obreros who are heads of non-nuclear households are 50 years or older while only three percent (two cases) of those who head nuclear households are equally old. Sixty-five percent (42 cases) of the obreros who head nuclear households, on the other hand, are between 30 and 49 years of age while only 48% (13 cases) of the heads of non-nuclear households are equally young. The remaining cases of both household types have a household head who is between 20 and 29 years

old.

Cramer's V is highly significant at .27.

The null hypothesis between age of household head and occupation is rejected at $P=.03$.

Heads of declining nuclear, collateral and lineal households are older than heads of nuclear households (H-2b; SA,0).

Controlling for Subsistence Agriculturalists: Sixty-three percent (22 cases) of subsistence agriculturalists who are heads of declining nuclear, collateral or lineal households are 50 years or older while only 40% (27 cases) of those who head nuclear households are equally old. Only six percent (two cases) of the heads of declining nuclear, collateral or lineal households are between 20 and 29 years old while as much as 13% (nine cases) of the heads of nuclear households are this young. Forty-seven percent (32 cases) of the heads of nuclear households are between 30 and 49 years in age; this is true for 31% (11 cases) of the heads of declining nuclear, collateral or lineal households.

Cramer's V is significant at .22.

The null hypothesis between age of household head and household type is rejected at $P=.08$.

Controlling for Obreros:

Seventeen percent (four cases) of the obreros who head declining nuclear, collateral or lineal households are 50 years or older while this is the case for only four

percent (three cases) of the heads of nuclear households. In turn, 33% (23 cases) of the heads of nuclear households are as young as 20 to 29 years while only 30% (seven cases) of the heads of declining nuclear, collateral and lineal households are equally young. Fifty-two percent (12 cases) of the obreros who are heads of non-nuclear households are between 30 and 49 years old; this is true for 62% (43 cases) of the heads of nuclear households.

Cramer's V is significant at .21.

The null hypothesis between age of household head and occupation is rejected at $P=.12$.

All three hypotheses in this cluster speak of the greater age of subsistence agriculturalists in comparison to wage-earners. Likewise, when occupation is controlled for, heads of non-nuclear households are older than those of nuclear households.

Thus 48% of the subsistence agriculturalists as compared with only 15% of the wage-earners are 50 years or older. And among subsistence agriculturalists, 61% of the heads of non-nuclear households as compared with 39% of the heads of nuclear households are this old. Obreros are younger in general so that as much as 65% of the heads of nuclear households are between 30 and 49 years old while only 48% of the heads of non-nuclear households are equally young.

Again as much as 63% of the subsistence agriculturalists who are heads of declining nuclear collateral and

lineal households are 50 years or older; this is so for only 40% of the heads of nuclear households. Among obreros, 62% of the heads of nuclear households are as young as between 30 and 49 years of age while only 52% of the heads of non-nuclear households.

Old age is part of the cause for the economically precarious position of the subsistence agriculturalists, and it also aggravates this condition. Old age or an older age is again associated with economic precariousness in its link to non-nuclear households. Age intervenes between economics and household type.

Cluster Three:

Households headed by subsistence agriculturalists have wives who work for pay while households headed by wage-earners have wives who do not work for pay (H-3).

A high case loss due to missing data provides a very small sample--33 cases out of a possible 100. The results here indicate that within the confines of these 33 households, 93% (26 cases) of the households headed by wage-earners have wives who work for pay while a lesser 80% (four cases) of those headed by subsistence agriculturalists are similarly situated. The rest of the cases are households in which the wives do not work for pay. The importance of the trend suggested here, i.e., that the majority of wives work for pay, is undermined due to the small sample size.

The null hypothesis between paid-work status of the wife and occupation is accepted at $P=.94$. It is also accepted by Fisher's Exact Probability at $P=.40$.

The wife in non-nuclear households works for pay while the wife in nuclear households does not (H-4a).

Controlling for Subsistence Agriculturalists:

Again due to missing data, this sample consists of only five cases. In three-quarters of the non-nuclear households headed by subsistence agriculturalists, the wife works for pay; this is true for the single case of the nuclear household headed by a subsistence agriculturalist. In one-quarter of the cases of non-nuclear households, the wife does not work for pay. The small size of the sample undermines the significance of this trend.

The null hypothesis between paid-work status of the wife and household type is accepted at $P=.40$; it is also accepted by Fisher's Exact Probability at $P=.80$.

Controlling for obreros:

This sample consists of only five households. For the two cases of nuclear households, which are headed by an obrero the wife works for pay. On the other hand, in only one-third of the non-nuclear households headed by an obrero is the wife similarly situated; in the other two-thirds of such non-nuclear households, the wife is a housewife. The importance of this trend is again undermined by the small size of the sample.

Lambda is significant at 50%.

The null hypothesis between paid-work status of the wife and household type is accepted at $P=.58$. It is also accepted by Fisher's Exact Probability at $P=.30$.

The wife in declining nuclear, collateral or lineal households works for pay while the wife in nuclear households does not (H-4b).

Controlling for subsistence agriculturalists:

The wife in two-thirds of the declining nuclear, collateral and lineal households which are headed by subsistence agriculturalists works for pay; this is true for both cases of nuclear households. Thus in one-third of the above-listed non-nuclear households, the wife is a housewife.

The null hypothesis between paid-work status of the wife and household type is accepted at $P=.82$. It is likewise accepted by Fisher's Exact Probability at $P=.60$.

Controlling for Obreros:

Again dealing with a sample size as small as five households, in one-half of the declining nuclear, collateral and lineal households which are headed by obreros, the wife does work for pay; in the other one-half of these households, she does not. In two-thirds of the nuclear households, on the other hand, the wife does work for pay; in one-third of such households, she does not.

The null hypothesis between the paid-work status of

the wife and household type is accepted at $P=.58$. It is also accepted by Fisher's Exact Probability at $P=.70$.

The results of these three hypotheses in this cluster suggest that the majority of wives work for pay; that more wives of wage-earners than subsistence agriculturalists work; and that among subsistence agriculturalists as well as among obreros more wives in nuclear households work for pay than in non-nuclear households. As such, these trends contradict the findings of the Preliminary Samples. However, their importance is undermined since the null hypothesis is accepted in each hypothesis (H-3; H-4a; H-4b), and since the sample size is very small in each case.

It remains unclear whether the wives of obreros (hence the wives in nuclear households) are housewives because the economically solvent position of their spouse permits the maintenance of the traditional ideal of machismo, or whether these women work for pay because of the influence of industrial values on the regional population and especially on their spouses who are factory workers. And in turn, it is unclear whether the wives of subsistence agriculturalists (and thus the wives in non-nuclear households) work for pay due to the economic need of their household, or whether they do not work because of a combination of a lack of economic opportunity to do so and the maxim of machismo which stresses that the place of adult women is in the home.

Cluster Four:

Households headed by wage-earners have resident children working for pay while households headed by subsistence agriculturalists do not (H-5).

The clear majority of households in both occupational groups have resident children not working for pay: in 94% (121) cases of the households headed by wage-earners and in 93% (93 cases) of the households headed by subsistence agriculturalists. Thus, only seven percent (seven cases) of those households headed by subsistence agriculturalists have resident children who do paid work; this is true for only six percent (six cases) of the households headed by wage-earners. The two occupational categories cannot be distinguished from each other on the basis of the work status of resident children.

Lambda is insignificant at two percent; however, two percent of the prediction error is reduced when occupation is the independent variable as compared with a zero percent reduction of error when occupation operates as the dependent variable.

The null hypothesis between occupation and paid-work status of resident children is accepted at $P=.41$.

Resident children in non-nuclear households do not work for pay while those in nuclear households do (H-6).
Controlling for subsistence agriculturalists:

In the clear majority of both types of households

headed by subsistence agriculturalists resident children are not employed for pay: in 90% (35 cases) of the non-nuclear households and in a higher 95% (58 cases) of nuclear households. Thus there are slightly more non-nuclear households which have resident children work for pay than is the case for nuclear households: 10% (10 cases) for the former and a lesser five percent (five cases) for the latter household type.

Cramer's V is significant at .18.

The null hypothesis between paid work status of resident children and household type is rejected at $P=.20$.

Controlling for obreros:

Again in the clear majority of both types of households, this time headed by obreros, the resident children do not work for pay: in 92% (24 cases) of the non-nuclear households and in 95% (61 cases) of the nuclear households. Thus, in a slightly higher percentage of non-nuclear households as compared with nuclear households, resident children are employed for pay: in eight percent (two cases) of the former household type while in only five percent (five cases) of the latter.

Cramer's V is significant at .26.

The null hypothesis between the paid-work status of resident children and household type is rejected at $P=.05$.

The null hypothesis is accepted for H-5 while it is

rejected for H-6. The two hypotheses, nevertheless, manifest similar trends. The youthful character of the local population especially of factory workers pointed out in earlier chapters is thus re-emphasized as is the pressure for the children of subsistence agriculturalists to emigrate; over 90% of the households in all categories of household and in both occupational groups have resident children who do not work for pay.

In those households which do have children working for pay, the households headed by subsistence agriculturalists as well as the non-nuclear households predominate slightly. This may be due both to age and to economic standing. The older age of subsistence agriculturalists makes it more likely that they as opposed to obreros have children old enough to work. On the other hand, the economically troubled condition of subsistence agriculturalists and of those in non-nuclear households (in either occupational group) suggests the greater need of such people to have an extra income brought into the household by resident children. An additional reason for the majority of households which are headed by subsistence agriculturalists to have resident children who do not work for pay is that older children have already left the household if not also the local area.

Cluster Five:

More households headed by subsistence agriculturalists

have non-resident children than do households headed by wage-earners (H-7).

The majority of households in both occupational groups have zero non-resident children; this is so in 84% (111 cases) of the households headed by wage-earners and in a lesser 57% (59 cases) of those headed by subsistence agriculturalists. In 16% (21 cases) of the households headed by wage-earners, there are non-resident children: in 13% (17 cases) of these cases, the children number between one and three per household while in the other three percent (four cases) of the households, there are between four and 15 non-resident children. The number of households with non-resident children is much higher among subsistence agriculturalists: 43% (44 cases) of these households have children who reside elsewhere. In 26% (27 cases) of the households headed by subsistence agriculturalists, there are between one and three non-resident children; in the remaining 17% (17 cases) of such households, there are between four and 15 children who reside elsewhere.

Lambda is significant at 14%. When occupation is the independent variable, as much as 22% of the prediction error is reduced.

Cramer's V is highly significant at .31.

The null hypothesis between occupation and the number of non-resident children is rejected at $P=.0003$.

More non-nuclear households have non-resident

children than do nuclear households (H-8a).

Controlling for subsistence agriculturalists:

In 57% (23 cases) of the non-nuclear households headed by subsistence agriculturalists, there are non-resident children; in as many as 25% (10 cases) of these, the non-resident children number between four and 15 while in 32% (13 cases) of such households, there are between one and three non-resident children. In only 44% (21 cases) of the nuclear households headed by subsistence agriculturalists are there non-resident children. In 11% (seven cases) of these households, there are as many as four to 15 non-resident children while in a lesser 23% (14 cases) of such households, there are between one and four non-resident children.

Cramer's V is significant at .23.

The null hypothesis between number of non-resident children per household and household type is rejected at $P=.07$.

Controlling for obreros:

The clear majority of households headed by obreros have zero non-resident children. In as much as 91% (60 cases) of the nuclear households headed by obreros, there are zero non-resident children; this is true in only 74% (20 cases) of the non-nuclear households headed by factory workers. Thus, in nine percent (six cases) of the nuclear households there is at least one non-resident child; the

identical situation exists in as much as 26% (seven cases) of the non-nuclear households.

Cramer's V is significant at .22.

The null hypothesis between the number of non-resident children and household type is rejected at $P=.10$.

More declining nuclear, collateral and lineal households have non-resident children than do nuclear households (H-8b).

Controlling for subsistence agriculturalists:

In 66% (41 cases) of the nuclear households headed by subsistence agriculturalists, there are zero non-resident children while this is the case for a lesser 40% (14 cases) of the declining nuclear, collateral or lineal households. Thus, in as much as 60% (21 cases) of the non-nuclear households headed by subsistence agriculturalists, there is at least one non-resident child; this is the case for only 34% (21 cases) of the nuclear households.

In addition, for four-sixths of matrifocal and grandparent-grandchild households, there are zero non-resident children; in two-sixths of these households, there is at least one non-resident child.

For Lambda, 16% of the prediction error is reduced when the number of non-resident children per household is the independent variable. This is significant.

Cramer's V is significant at .25.

The null hypothesis between the number of non-

resident children and household type is rejected at $p=.04$.

Controlling for obreros:

Among obreros the clear majority of all types of households have zero non-resident children. In 83% (19 cases) of the declining nuclear, collateral or lineal households headed by obreros and in a higher 91% (60 cases) of the nuclear households, there are zero non-resident children. However, there are more declining nuclear, collateral or lineal households which have at least one non-resident child than is the case for nuclear households: 17% (four cases) for the latter and as few as nine percent (six cases) for the former.

Three-fourths of the matrilineal and grandparent-grandchild households have at least one non-resident child; thus, one-fourth of such households have no non-resident children.

Lambda is highly significant since 15% of the prediction error is reduced when the number of non-resident per household is the independent variable.

Cramer's V is highly significant at .39.

The null hypothesis between number of non-resident children and household type is rejected at $P=.0009$.

The results of all three hypotheses (H-7; H-8a; H-8b) demonstrate again the young nature of the local population; the majority of households--whether viewed by occupation or by household type--have zero non-resident children.

However, there are significantly more non-resident children in households headed by subsistence agriculturalists than by wage-earners, and in non-nuclear households (of either occupational group) as compared with nuclear households. Again the explanation rests on the twin supports of age and economics. The non-nuclear households demonstrate economic need (whether among obreros or agriculturalists) and the households headed by subsistence agriculturalists symbolize such need in addition to the greater age of the household head. The older age makes it more likely that at least some children are old enough to emigrate, and the economically precarious position of such households stresses emigration as an alternative to an economically stagnant situation at least for some of the children in such households.

Cluster Six:

Households headed by subsistence agriculturalists have the first-listed non-resident child visit more frequently than do households headed by wage-earners (H-9a).

In fifty-nine percent (26 cases) of the households headed by subsistence agriculturalists, the first-listed non-resident child visits frequently--more than once a month (13 times yearly or more); this is true in only 39% (seven cases) of the households headed by wage-earners. On the other hand, in as much as 44% (eight cases) of the households headed by wage-earners, this child does not

visit at all; this is the case for a lesser 36% (16 cases) of the households headed by subsistence agriculturalists. The remaining cases are households in which the child visits every other month to once a month.

Only four percent of the prediction error is reduced by Lambda; this figure is increased to six percent when occupation is the independent variable.

Cramer's V is significant at .24.

The null hypothesis between occupation and frequency of contact with non-resident child is rejected at $P=.17$.

Households headed by subsistence agriculturalists have the household head visit the first-listed non-resident child more frequently than do households headed by wage-earners (H-9b).

In as much as 36% (19 cases) of the households headed by subsistence agriculturalists, the household head visits the first-listed non-resident child frequently--more than once monthly. This is true for only 29% (four cases) of the households headed by wage-earners. On the other hand, in the majority of households in both occupational groups, there is no visiting by the household head; this is true for 64% (nine cases) of the households headed by wage-earners, but only for 41% (23 cases) of those headed by subsistence agriculturalists. The remaining cases are those in which the household head visits the above-mentioned child every other month to once a month.

The null hypothesis between occupation and frequency of contact with the first-listed non-resident child is accepted at $P=.82$.

Heads of non-nuclear households have the first-listed non-resident child visit more frequently than do heads of nuclear households (H-10a).

Controlling for subsistence agriculturalists:

In 65% (15 cases) of non-nuclear households headed by subsistence agriculturalists, the first-listed non-resident child visits frequently--more than once a month. This is the case for a lesser 52% (11 cases) of nuclear households headed by subsistence agriculturalists. Also, in only 35% (eight cases) of the non-nuclear household, does this child visit infrequently--zero to five times yearly; this is true for a greater 38% (eight cases) of the nuclear households. The remaining cases are households in which the child visits every other month to once a month.

The null hypothesis between frequency of contact with the first-listed non-resident kin and household type is accepted at $P=.28$.

Controlling for obreros:

In 67% (four cases) of the non-nuclear households headed by obreros, the first-listed non-resident child visits infrequently--less than every other month; this is true for only 40% (two cases) of the nuclear households headed by obreros, this child visits frequently--more than

once a month; this is so for a lesser 33% (two cases) of the non-nuclear households. The remaining households, have the child visits every other month to once a month. The small size of the sample--11 cases--decreases the importance of these trends.

Ten percent of the prediction error is reduced by Lambda AB.

The null hypothesis between frequency of contact with the first-listed non-resident child and household type is accepted at $P=.45$.

Heads of non-nuclear households visit the second-listed non-resident child more frequently than do heads of nuclear households (H-10b).

Controlling for subsistence agriculturalists:

In 67% (eight cases) of the non-nuclear households headed by subsistence agriculturalists, the household head visits the second-listed non-resident child infrequently--less than every other month; this is true for a lesser 50% (six cases) of the nuclear households. Thus, in as much as 42% (five cases) of the nuclear households, the heads of the household visit the above-mentioned child frequently--more than once a month; this is the case for only 33% (four cases) of the non-nuclear households. The remaining cases are households in which the household heads visit every other month to once a month.

The null hypothesis between frequency of contact

with the second-listed non-resident child and household type is accepted at $P=.55$.

Controlling for obreros:

Heads of non-nuclear households visit the second-listed non-resident child more frequently than do heads of nuclear households (H-10b).

In one-half of the nuclear households headed by obreros, the household head visits the second-listed non-resident child frequently--more than once a month; this is true for only one-fourth of the non-nuclear households. On the other hand, in three-fourths of the non-nuclear households, the household head visits this child infrequently--less than every other month; this is true for none of the nuclear households. In the single remaining case--a nuclear household--the household head visits every other month to once a month.

Lambda is significant at 44%.

Cramer's V is highly significant at .79.

The null hypothesis between frequency of contact with the second-listed non-resident child and household type is rejected at $P=.15$.

Heads of declining nuclear, collateral and lineal households visit the first-listed non-resident child more frequently than do heads of nuclear households (H-10c).

Controlling for Subsistence Agriculturalists:

In 58% (11 cases) of the declining nuclear, collateral

and lineal households headed by subsistence agriculturalists, the household head visits the first-listed non-resident child infrequently--less than once every other month. This is true for only 48% (10 cases) of the nuclear households. Or, in 52% (11 cases) of the nuclear households, the household head visits this child every other month to once a month, or more frequently than this; this is the case for only 42% (eight cases) of the declining nuclear, collateral and lineal households.

In addition, in both cases of matrifocal and grandparent-grandchild households, the household head visits infrequently--less than once every other month.

Cramer's V is significant at .27.

The null hypothesis between frequency of contact with the first non-resident child and household type is rejected at $P=.20$.

Controlling for Obreros:

In three-quarters of the declining nuclear, collateral and lineal households headed by obreros, the household head visits the first-listed non-resident child infrequently--less than once every other month. This is the case for only one-fourth of the nuclear households. On the other hand, in only one-fourth of the declining nuclear, collateral and lineal households does the household head visit this child frequently--more than once a month. This is so for as many as two-quarters of the nuclear households; in one-

quarter of the nuclear households, the household head visits once every other month to once a month.

There is only one case of a matricocal or grandparent-grandchild household; the household head visits the non-resident child infrequently--less than once every other month.

Lambda is significant at 25%.

The null hypothesis between frequency of contact with the first-listed non-resident and household type is accepted at $P=.51$.

Heads of declining nuclear, collateral and lineal households are visited less frequently by the second-listed non-resident child than are heads of nuclear households (H-10d).
Controlling for Subsistence Agriculturalists:

In 71% (10 cases) of the declining nuclear, collateral and lineal households, headed by subsistence agriculturalists the household head is visited once every other month to more often than that; this is true for only 62% (eight cases) of the nuclear households. On the other hand, in as many as 38% (five cases) of the nuclear households, the second-listed non-resident child visits as infrequently as less than once every other month; this is so for only 29% (four cases) of the declining nuclear, collateral and lineal households.

In addition, there is only one case of a matrifocal or grandparent-grandchild household; the child visits more than just infrequently.

The null hypothesis between frequency of contact with

the second listed non-resident child and household type is accepted at $P=.67$.

Controlling for Obreros:

In two-thirds of the declining nuclear, collateral and lineal households headed by obreros, the second-listed non-resident child visits the household head less than once every other month. This is true for none of the nuclear households. In as few as one-third of former group of households, the household head is visited by the child more than once every other month; this is so for both cases of nuclear households.

The seven cases which comprise this sample are too few to stress the significance of these trends.

In both cases of matrifocal and grandparent-grandchild households, the child visits more than once every other month.

Fifty percent of the prediction error is reduced by Lambda when the frequency of contact is the independent variable.

Cramer's V is significant at .73.

The null hypothesis between frequency of contact with the second-listed non-resident child and household type is rejected at $P=.16$.

Heads of declining nuclear, collateral and lineal households visit the second-listed non-resident child more frequently than do heads of nuclear households (H-10c).

In 64% (seven cases) of the declining nuclear, collateral and lineal households which are headed by subsistence agriculturalists, the household head visits the second-listed non-resident child as little or less than once every other month; this is true for only 50% (six cases) of the nuclear households. In as few as 36% (four cases) of the declining nuclear, collateral and lineal households, on the other hand, the household head visits this child more than once every other month; this is so in as much as 50% (six cases) of the nuclear households.

In the single case of a matrifocal or grandparent-grandchild household, the household head visits less than once every other month.

The null hypothesis between frequency of contact with the second-listed non-resident child and household type is rejected at $P = .15$.

Controlling for Obreros:

In two-thirds of the declining nuclear, collateral and lineal households headed by obreros, the household head visits the second-listed non-resident child less than once every other week; this is the case for none of the nuclear households. On the other hand, in only one-third of the former group of households, does the head visit more than once every other month; this is true for both cases of nuclear households.

In the single case of the matrifocal or grandparent-grandchild household, the household head visits the child less than once every other month.

Sixty-seven percent of the error is reduced by Lambda A, i.e., when frequency of contact is the independent variable. This is highly significant.

The null hypothesis between frequency of contact with the second-listed non-resident child and household type is accepted at $P = .50$.

Heads of declining nuclear, collateral and lineal households visit non-resident kin (other than children) more frequently than do heads of nuclear households. (H-10f).

In 64% (seven cases) of the declining nuclear, collateral and lineal households in which subsistence agriculturalists are heads, the household head visits non-resident kin (other than children) less than once every other month. This is also the case for 64% (14 cases) of the nuclear households. Thus in 36% of both groups of households--in four cases and eight cases, respectively--the household head visits more often than once every other month.

In all three cases of matrifocal or grandparent-grandchild households, the household head visits less than once every other month.

The null hypothesis between frequency of contact with non-resident kin (other than children) and household type is accepted at $P = .44$.

Controlling for Obreros:

In 63% (five cases) of the declining nuclear, collateral and lineal households headed by obreros, the household head visits non-resident kin other than children less than once every other month; this is the case for only 47% (16 cases) of the nuclear households. Thus, only in 37% (three cases) of the first group of households, does the household head visit more than once every other month; this is true for as much as 53% (18 cases) of the nuclear households.

Moreover, in both cases of matrifocal or grandparent-grandchild households, the household head visits less than once every other month.

Ten percent of the prediction error is reduced by Lambda when the frequency of contact with kin is the independent variable.

The null hypothesis between frequency of contact with non-resident kin (other than children) and household type is accepted at $P = .26$.

The eight hypotheses in this cluster all suffer from having a small sample size--a range of six to 62 households per sample. The high rate of acceptance of the null hypothesis within this cluster is very likely a function of small sample size. Contact with kin appears to be infrequent.

From among those samples in which the null hypothesis is rejected (H-9a; H-9b for obreros; H-10c for subsistence agriculturalists; H-10d; H-10e for subsistence agricultural-

ists), the following trends are evident:

- (1) The first-listed non-resident child visits frequently in households headed by subsistence agriculturalists; she does not visit frequently in households headed by obreros (H-9a).
- (2) The household head who is an obrero visits the second-listed non-resident child infrequently in both non-nuclear and nuclear households (H-10b for obreros).
- (3) The household head who is a subsistence agriculturalist visits the first-listed non-resident child infrequently in non-nuclear households; this is less true for nuclear households (H-10c for subsistence agriculturalists).
- (4) The second-listed non-resident child visits infrequently among subsistence agriculturalists in non-nuclear and in nuclear households. She also visits infrequently among obreros in non-nuclear households; this is not true for nuclear households (H-10d).
- (5) The heads of household who are subsistence agriculturalists visit the second-listed non-resident child infrequently both in non-nuclear and in nuclear households (H-10e for subsistence agriculturalists).

The suggestion from the Preliminary Samples was that contact with non-resident kin is infrequent in general, but that due to the more traditional background of subsistence agriculturalists, they in comparison with obreros have more frequent contact with their non-resident kin. These kin are

other than non-resident children who are likely to have emigrated from the area.

The five points listed above suggest that contact with non-resident children is infrequent in both occupational groups and in all categories of households with one exception. The first-listed non-resident child does visit frequently in households headed by subsistence agriculturalists. Economic assistance to subsistence agriculturalists from outside the household, thus, may enter through this child. The cases in which the nuclear households appear to have some contact with non-resident children (H-10c for subsistence agriculturalists; H-10d), the number of households involved is so small, that the trend is tentative. These five points offer no information on non-resident kin other than children.

From among those samples in which the null hypothesis is accepted (H-9b; H-10a; H-10b for subsistence agriculturalists; H-10c for obreros; H-10e for obreros; H-10f), nevertheless, the following tentative trends are evident:

- (1) The wage-earner and obrero heads of household visit the first-listed non-resident child infrequently if at all. (H-9b).
- (2) The first-listed non-resident child in non-nuclear and nuclear households headed by subsistence agriculturalists visits frequently. (H-10a for subsistence agriculturalists).
- (3) The first-listed non-resident child visits infrequently

in non-nuclear households among obreros; this is less true in nuclear households (H-10a for obreros).

- (4) The household head in non-nuclear and in nuclear households headed by subsistence agriculturalists visits the second-listed non-resident child infrequently (H-10b for subsistence agriculturalists).
- (5) The household head of non-nuclear households who is a subsistence agriculturalist visits the first-listed non-resident kin infrequently; this is not the case in nuclear households (H-10c for obreros).
- (6) The household head of non-nuclear households who is an obrero visits the second-listed child infrequently; this is not so in nuclear households (H-10e for obreros).
- (7) The household head--regardless of occupation--visits kin infrequently in non-nuclear households; this is strongly the case also in nuclear households headed by subsistence agriculturalists while it is so though less strongly in nuclear households headed by obreros.

There is a consistent trend throughout all of the hypotheses in this cluster. Contact with non-resident children is infrequent except for the first-listed non-resident child among subsistence agriculturalists, especially in non-nuclear households; this child visits frequently. There is also some suggestion that the first-listed non-resident child may have contact with the obrero head of household in nuclear households; these obreros very likely originate from the

local area and previously were ejidatarios or ex-peons who had not received ejido land.

Regarding kin other than children, contact with non-resident kin is generally infrequent.

It was suggested that the explanation for the relative unimportance of kinship ties stems from the long-term disruption of the traditional agricultural pattern of this region, the suggested high rate of emigration, the influx of obreros from other areas who have left their kin elsewhere and the general de-emphasis on kin which is associated with industrialism. However, economically deprived persons--mostly subsistence agriculturalists--continue to utilize kinship channels for economic assistance. They incorporate non-nuclear kin into the household, and they also continue a certain amount of contact with at least one non-resident child.

Cluster Seven:

More households headed by subsistence agriculturalists have children who reside outside of the local towns than do households headed by wage-earners (H-11).

In 77% (10 cases) of the households headed by wage-earners, the non-resident child resides in the local area but outside of the three communities under study; this is true for only 41% (11 cases) of the households headed by subsistence agriculturalists. On the other hand, the majority of households headed by these agriculturalists--59% (16 cases)--

have this child living in the home village; this is the case for only 23% (three cases) of the households headed by wage-earners. There are zero non-resident children who are recorded as living outside of the local area; however, the sample includes only 40 cases of a possible 300.

Sixteen percent of the prediction error is reduced by Lambda. This is significant.

Cramer's V is also very significant at .29.

The null hypothesis between the residence of the child and household type is rejected at $P = .07$.

More declining nuclear, collateral and lineal households have the first-listed non-resident child live outside of the three local towns than do nuclear households (H-12a).
Controlling for Subsistence Agriculturalists:

The sample size is small--27 households. As such it is difficult to judge whether the trend which it emphasizes would hold in a much larger sample. In all nine cases of declining nuclear, collateral and lineal households headed by subsistence agriculturalists, nevertheless, the non-resident children live outside of the three communities under study. In contrast, in all 18 cases of nuclear households headed by subsistence agriculturalists, this child resides within the above-mentioned local towns.

Lambda is highly significant since all of the prediction error is reduced by having the residence of the child as the independent variable.

Cramer's V is highly significant at 1.

The null hypothesis between the residence of the first-listed non-resident child and household type is rejected at $P = .0003$.

Controlling for Obreros:

Again there is the difficulty of a very small sample--seven households. All three cases of declining nuclear, collateral and lineal households headed by obreros have the non-resident child living outside of the three studied towns. In contrast, all four cases of nuclear households headed by obreros have this child living within one of the communities under investigation.

Lambda is highly significant since all of the prediction error is reduced; the location of the non-resident child is the independent variable.

Cramer's V is highly significant at 1.

The null hypothesis between the location of the non-resident child and household type is rejected at $P = .06$.

More declining nuclear, collateral and lineal households have the second-listed non-resident child live outside of the three local towns than do nuclear households (H-12b).
Controlling for Subsistence Agriculturalists:

The sample size is only 20 cases in four-eighths of the declining nuclear, collateral and lineal households headed by subsistence agriculturalists, the second-listed non-resident child lives outside of the three communities under

investigation; there are no such cases of nuclear households. In the other four-eighths of declining nuclear, collateral and lineal households, this child resides within the three local towns; this is also so for the nuclear households.

Lambda is highly significant at 33%.

Cramer's V is also highly significant at .61.

The null hypothesis between the location of the second-listed non-resident child and household type is rejected at $P = .03$. It is also rejected by Fisher's Exact Probability at $P = .14$.

Controlling for Obreros:

The sample size is only four households. Little can, therefore, be said about any trend. In one-half of the declining nuclear, collateral and lineal households headed by obreros, the second-listed non-resident child lives outside of the three local towns; in the other one-half of these households, the child lives within one of these communities. In both cases of nuclear households headed by obreros, the child lives in one of the three local communities.

Again 33% of the prediction error is reduced by Lambda.

The null hypothesis between the location of the second-listed non-resident child and household type is accepted at $P = 1$. It is also accepted by Fisher's Exact Probability at $P = .5$.

Except for the undecided cases, it is apparent that heads of non-nuclear households have some non-resident children

while heads of nuclear households have zero non-resident children; this is true both among subsistence agriculturalists and obreros (H-12a; H-12b for subsistence agriculturalists). The suggestion that non-nuclear households are mostly of low-economic status emphasizes the need of members of such households to depart from an area of limited economic opportunities in search of jobs elsewhere. Even in the case of H-12b for obreros, where the null hypothesis is accepted, the trend is similar. Nuclear households have zero non-resident children.

In as much as 41% of the households headed by subsistence agriculturalists, there are non-resident children. This figure is highly significant in view of the fact that the majority of all households are nuclear; this includes households headed by subsistence agriculturalists. A significant number of subsistence agriculturalists have children who have emigrated from the local community. It is suggested that this emigration is economically motivated.

The surprisingly high percentage--77%--of households headed by wage-earners in which there are non-resident children is understandable since these children reside in the local area although outside of the three research communities. The fathers who are factory workers may well have served as a link to factory work for their children; these children may thus be obreros, and hence resident in a community closer to the factories, for example, in Ciudad Industrial.

Cluster Eight:

More heads of household who are subsistence agriculturalists have more non-resident kin nearby than do those who are wage-earners (H-13).

In the majority of households in both occupational groups, the household head has only a small number of kin nearby--zero to five kin; this is so in 58% (72 cases) of the households headed by wage-earners and in as much as 77% (74 cases) of the households headed by subsistence agriculturalists. Thus, in 39% (48 cases) of the households headed by wage-earners, there are between six and ten kin nearby; only 20% (19 cases) of the households headed by subsistence agriculturalists are similarly situated. The remaining cases are households the head of which has between 11 and 25 nearby kin.

Cramer's V is significant at .21.

The null hypothesis between the number of nearby kin and household type is rejected at $P = .0095$.

More heads of non-nuclear households have more non-resident kin nearby than do heads of nuclear households (H-14a).

Controlling for Subsistence Agriculturalists:

In 86% (31 cases) of the non-nuclear households headed by subsistence agriculturalists, the household head has only between zero and five kin nearby; this is true for a lesser 72% (43 cases) of the nuclear households. Thus, in

only 11% (four cases) of the non-nuclear households does the household head have between six and ten kin nearby; this is so for a much higher 25% (15 cases) of nuclear households. The remaining households have between 11 and 25 nearby kin. Thus, in both groups of households the household head has few nearby kin.

The null hypothesis between the number of nearby kin and household type is accepted at $P = .24$.

Controlling for Obreros:

In 67% (16 cases) of the non-nuclear households headed by obreros, the household head has few kin nearby--between zero and five kin. This is so in a much lesser 45% (28 cases) of the nuclear households. So then as much as 54% (33 cases) of the nuclear households have household heads who have between six and ten nearby kin; only 21% (five cases) of the non-nuclear household are in an identical situation. The remaining cases are households the head of which has as many as 11 to 25 nearby kin.

Twelve percent of the prediction error is reduced when the number of kin nearby is the independent variable. This is significant.

Cramer's V is highly significant at .34.

The null hypothesis between the number of kin nearby and household type is rejected at $P = .007$.

Heads of declining nuclear, collateral and lineal households have more non-resident kin nearby than do those

of nuclear households (H-14b).

Controlling for Subsistence Agriculturalists:

In the clear majority of all types of households, the household head has at least one kin nearby or between two and 25 kin. Thus, this is the case for 69% (22 cases) of the declining nuclear, collateral and lineal households and for a much higher 90% (54 cases) of the nuclear households. In reverse, on as much as 31% (10 cases) of the declining nuclear, collateral and lineal households the household head has zero kin nearby while this is true for as few as 10% (six cases) of the nuclear households. Most people have few kin nearby, in general, the households of greater economic need have incorporated non-nuclear primary kin into the household structure itself. The members of the households of better economic standing maintain these kin outside of their household.

In three-fourths of the matrifocal and grandparent-grandchild households, the household head has between one and five kin nearby. In the other one-fourth of such households, there are zero non-resident kin nearby.

Cramer's V is significant at .26.

The null hypothesis between the number of non-resident kin nearby and household type is rejected at $P = .04$.

Controlling for Obreros:

Again in the clear majority of all household types headed by obreros, the household head has at least one non-

resident kin nearby, or between two and 25 such kin. In 91% (19 cases) of the declining nuclear, collateral and lineal households this is the case while this is evident in a higher 95% (59 cases) of the nuclear households. Thus, in nine percent (two cases) of the declining nuclear, collateral and lineal households, the household head has zero non-resident kin nearby; this is so for only five percent (three cases) of the nuclear households.

In all three cases of matrifocal or grandparent-grandchild households, moreover, the household head has between one and 25 non-resident kin nearby.

The null hypothesis between the number of non-resident kin nearby and household type is accepted at $P = .66$.

The trend apparent throughout the above three hypotheses is consistent within itself even though the null hypothesis is accepted for two samples (H-14a; H-14b for obreros). The majority of households headed by wage-earners and those headed by subsistence agriculturalists have only between zero and five non-resident kin nearby (H-13). This is also true for both nuclear and non-nuclear households in both occupational categories (H-14a; H-14b). Thus not only are most non-resident kin unimportant as gauged by the infrequency of contact with them, but most people have few such kin in their local area.

On the basis of the Preliminary Samples it had been suggested that most people lack nearby kin; but that

subsistence agriculturalists have more non-resident kin nearby than do obreros though these kin were other than children.

The results in Cluster Eight substantiate the contention that most people lack many non-resident kin nearby; the reasons for this have already been discussed. However, wage-earners have more kin nearby than do subsistence agriculturalists (H-13), and the heads of nuclear households do also as compared with those of non-nuclear households (in both occupational categories) (H-14a; H-14b).

The explanation for this is that not only the children but also other types of kin of subsistence agriculturalists have emigrated from the local area due to economic need. On the other hand, although the majority of wage-earners have most of their kin other than children in outside regions, a significant number of their kin find it economically feasible to remain in the local area because of their ties to the factories. It was already pointed out, nevertheless, that contact with these kin is infrequent. The presence of these kin reflects access to paid employment; the infrequent contact with these kin reflects the industrial ideal.

Cluster Nine:

Heads of household who are wage-earners visit friends more frequently than do heads of household who are subsistence agriculturalists (H-15a).

In 67% (16 cases) of households headed by wage-earners, the household head visits friends more than once every other

month. This is true for a lesser 42% (five cases) of those households headed by subsistence agriculturalists. Thus, in only 33% (eight cases) of the households headed by wage-earners does the household head visit friends as infrequently as less than once every other month; this is true for as much as 58% (seven cases) of the households headed by subsistence agriculturalists.

Cramer's V is significant at .18.

The null hypothesis between frequency of contact with friends and household type is rejected at $P = .28$. It is also rejected by Fisher's Exact Probability at $P = .11$.

Heads of household who are wage-earners visit friends more frequently than do heads of household who are subsistence agriculturalists (according to the male informant)
(H-15b).

In the majority of households in both occupational groups, the household head visits friends infrequently--less than once every other month. This is so for the households headed by wage-earners more than it is true for those headed by subsistence agriculturalists: 55% (43 cases) for the former and 62% (24 cases) for the latter. Thus in as much as 45% (35 cases) of the households headed by wage-earners, the household head visits friends more than once every other month. This is true for 39% (15 cases) of the households headed by subsistence agriculturalists.

Cramer's V is significant at .23.

The null hypothesis between frequency of contact with friends and household type is rejected at $P = .04$.

Heads of nuclear households visit friends more frequently than do heads of non-nuclear households (H-16a).

Controlling for Obreros:

Again the sample size is only 18 cases. In two-sixths of the non-nuclear households headed by obreros, contact with friends is infrequent--less than once every other month. This is so for as much as six-twelfths of the nuclear households. In four-sixths of the non-nuclear households, on the other hand, the household head visits friends frequently, i.e., more than once a month. This is true for only six-twelfths of the nuclear households.

Thirteen percent of the prediction error is reduced by Lambda.

The null hypothesis between frequency of contact with friends and household type is rejected at $P = .33$.

Heads of nuclear households visit friends more frequently than do heads of non-nuclear households (according to the male informant) (H-16b).

Controlling for Subsistence Agriculturalists:

In a sample of 39 cases, it is apparent that in 67% (eight cases) of non-nuclear households headed by subsistence agriculturalists, the household head visits friends once every other month or more; this is the case in only 26% (seven cases) of the nuclear households. Thus, in as little

as 33% (four cases) of the non-nuclear households does the household head visit less than once every other month. This is so, however, in as much as 74% (20 cases) of the nuclear households.

Twenty-seven percent of the prediction error is reduced by Lambda when the frequency of contact with friends is the independent variable.

Cramer's V is highly significant at .39.

The null hypothesis between frequency of contact with friends and household type is rejected at $P = .04$. It is also rejected by Fisher's Exact Probability at $P = .20$.

Controlling for Obreros:

The heads of non-nuclear households who are obreros visit kin more than once every other month in only 39% (seven cases) of these households; the identical situation exists in as much as 45% (19 cases) of the nuclear households. Thus in the majority of both types of households headed by obreros, the household head visits friends infrequently, i.e., less than once every other month; this is the case for 61% (11 cases) of the non-nuclear households and in 55% (23 cases) of nuclear households. This trend is opposite to that manifested in the three previous samples.

The null hypothesis between frequency of contact with friends and household type is accepted at $P = .87$. It is, moreover, accepted according to Fisher's Exact Probability at $P = .43$.

Heads of nuclear households visit friends more frequently than do heads of declining nuclear, collateral and lineal households (H-16c).

Controlling for Subsistence Agriculturalists:

The sample size is only 20 cases so any trend evident here is tentative. In one-sixth of the declining nuclear, collateral and lineal households headed by subsistence agriculturalists, the household head visits friends more than once every other month; this is so for two-fourteenths of the nuclear households. Thus the frequency of contact with friends does not really distinguish household types from each other among subsistence agriculturalists. In five-sixths of the declining nuclear, collateral and lineal households, the household head visits friends less than once every other month; this is likewise so in twelve-fourteenths of the nuclear households. Infrequent visits to friends characterize both types of households.

The null hypothesis between frequency of contact with friends and household type is accepted at $P = .69$.

Controlling for Obreros:

Dealing with a small sample of 28 cases, in the majority of all types of households headed by obreros, the household head visits friends infrequently--less than once every other month. This is so for 89% (eight cases) of the declining nuclear, collateral and lineal households and for only 58% (11 cases) of the nuclear households. In the remaining

cases for both household types, the household head visits friends more than once every other month.

The null hypothesis between frequency of contact with friends and household type is accepted at $P = .52$.

The choice of categories of frequency of contact with friends reflects the infrequent nature of such contact; the categories were constructed on the basis of univariate distributions for this variable. Most people, thus, have infrequent contact with friends. However, within the range of contact which is maintained, the wage-earners supersede the subsistence agriculturalists; the former visit their friends more frequently (H-15a; H-15b).

Likewise, in cases other than those which show no clear trend (H-16c for subsistence agriculturalists; H-16a for obreros in nuclear households; H-16a for subsistence agriculturalists in non-nuclear households), it is evident that subsistence agriculturalists in nuclear households have infrequent contact with friends (H-16a; H-16b). This is also the case for wage-earners in both nuclear and non-nuclear (H-16c; H-16b for obreros). There is the suggestion, however, that both obreros and subsistence agriculturalists who are heads of non-nuclear households have more frequent contact with friends than do their counterparts in nuclear households (H-16a for obreros; H-16b for subsistence agriculturalists).

The explanation for the infrequency of contact with

friends stems from the emphasis on the isolation of the nuclear household in an industrial society, from the lack of emphasis on friends in a traditional agricultural society, from the mobile nature of the local population as well as from the transitional economic state of the region as a whole. It is not clear why greater contact with friends is associated with the non-nuclear household.

It is unlikely, moreover, that those household heads who do see their friends fairly frequently utilize them for financial help since these household heads are in the economically privileged category of factory workers.

Cluster Ten:

Heads of household who are wage-earners originate non-locally while those who are subsistence agriculturalists originate locally (H-17).

In the majority of households for both occupational groups, the household head originates from outside of the three communities under study. This is the case in as much as 79% (103 cases) of the households headed by wage-earners and in a lesser 66% (65 cases) of those headed by subsistence agriculturalists. Thus, in 21% (28 cases) of the households headed by wage-earners, the household head comes from his town of residence. This is true for a higher 34% (33 cases) of the households headed by subsistence agriculturalists.

Lambda is insignificant at three percent, but five percent of the prediction error is reduced when occupation is the independent variable.

Cramer's V is significant at .13.

The null hypothesis between the origin of the household head and household type is rejected at $P = .05$.

Heads of declining nuclear, collateral and lineal households originate locally while those of nuclear households originate non-locally (H-18).

Controlling for Subsistence Agriculturalists:

In the majority of households of both types headed by subsistence agriculturalists, the household head originates from outside of the three communities under study. This is so for as much as 71% (24 cases) of the declining nuclear, collateral and lineal households and for a lesser 68% (40 cases) of the nuclear households. Thus, in 29% (ten cases) of the former group of households, the household head comes from one of the three communities under study. The same situation exists in as much as 32% of the nuclear households. Origin of household head does not clearly distinguish household types from each other among subsistence agriculturalists.

In four-fifths of the matrifocal and grandparent-grandchild households, the household head originates from within the local community; in one-fifth of such households, he comes from outside of the three local towns.

Four percent of the prediction error is reduced by Lambda; this figure is raised to nine percent when the origin of the household head is the independent variable.

Cramer's V is significant at .23.

The null hypothesis between origin of household head and household type is rejected at $P = .08$.

Controlling for Obreros:

In the clear majority of households headed by obreros, the household head comes from outside of the three towns under investigation. Thus, this is so for 77% (17 cases) of the declining nuclear, collateral and lineal households and for a lesser 71% (47 cases) of the nuclear households. In 23% (five cases) of the latter group of households, the household head originates from within the local towns under study; this is true for 29% (19 cases) of the former group of households.

In two-fourths of the matrifocal and grandparent-grandchild households, the household head originates from within one of the three local towns; in the other two-fourths of these households, he comes from outside these communities.

The null hypothesis between origin of household head and household type is accepted at $P = .53$.

The results of the two hypotheses in this cluster show that the clear majority of household heads regardless of occupation or household type originate from outside of the three research communities (H-17; H-18). The reasons for this are the major economic and political changes which have swept through this region within the last 40 years, namely, land reform and the introduction of rural industrialization, and the historically important role of the Llanos de Maguey as a viaduct for Mexico City.

Within those cases in which the household head does come from outside these three communities, wage-earners and nuclear households predominate. This is understandable considering the large number of obreros who entered from the other areas.

The origin of the household head is an indirect gauge of the possibility for outside economic assistance to household members, as mentioned. From a discussion of previous cluster of hypotheses, it is already apparent how many kin are nearby and how frequent contact is with them. Cluster 10 re-emphasizes the suggestion that due to the mobility of much of the local population, ties with kin (who can potentially be of economic assistance) are limited; hence it is unlikely that non-resident kin serve as an important source of help.

Cluster Eleven:

Heads of declining nuclear, collateral and lineal households held their first job in the local towns while those in nuclear households held theirs in communities outside of these towns (H-19).

The sample consists of only 28 cases. In 38% (three cases) of the declining nuclear, collateral and lineal households, headed by subsistence agriculturalists the household head had his first job within one of the three towns under study; in another 25% (two cases), he worked in the local area but outside of these towns, and in the final

38% (three cases) of the households, the household head held his first job outside the local area. Among the heads of nuclear households, only 21% (four cases) of the subsistence agriculturalists had their first job in the three local towns; 32% (six cases) had theirs in the local area but outside of these communities, and in the remaining 47% (nine cases) of nuclear households, the household head had his first job outside of the local area.

In the single case of the matrifocal or grandparent-grandchild household, the household head worked first within the local area but outside of the three communities under study.

Only four percent of the prediction error is explained by Lambda; this is increased to six percent when the location of the first job is the independent variable.

The null hypothesis between location of first job and household type is accepted at $P=.56$.

Controlling for Obreros:

The single highest category of cases of households headed by obreros, is that in which the first job of the household head was outside of the local region. This is so for 46% of the nuclear households as well as for the declining nuclear, collateral and lineal households: 22 cases and six cases, respectively. In 31% (four cases) of the latter category of households, nevertheless, the household head held his job within one of the three local towns.

This is true for a lesser 19% (nine cases) of the nuclear households. The remaining cases are those in which the household head's initial job was within the local area but outside of the three towns studies.

Two-fourths of the matrifocal and grandparent-grandchild households are those in which the household head worked initially outside of the local area; in the other two-fourths of such households, the household head's initial job was within the local area but outside of Benito Juarez, Serena or Cerro Grande.

The null hypothesis between location of first job and household type is accepted at $P=.66$.

As an indirect measure of potential economic aid to household members from outside the household, H-19 shows that both subsistence agriculturalists and obreros had their first job outside of the three local towns; in the case of obreros, these jobs were mostly outside of the region. Comments made under Cluster 10 apply here also since the trend evident here is consistent with the rest of the data even though the null hypothesis holds for H-19.

Cluster or Unit Twelve:

More heads of household who are subsistence agriculturalists have an extra source of income than do those who are wage-earners (H-20).

In the clear majority of households of both occupational groups, the household head lacks a secondary income.

This is so for 79% of the households headed by wage-earners as well as for those headed by subsistence agriculturalists. Thus in 21% of both household types, the household head does have an extra income.

Only two percent of the prediction error is reduced by Lambda. This figure is increased to three percent when occupation is the independent variable.

The null hypothesis between occupation and extra-income is accepted at $P=.44$.

The lack of a secondary income may indicate the lack of regional opportunities for such an income. Thus, economic assistance to households in the form of a double-income for the household head is unlikely. Again although the null hypothesis applies to H-20, the trend evident in this hypothesis is consistent with the rest of the data in the 1967 Data set.

Cluster or Unit Thirteen:

Railroad workers are heads of nuclear households
(6H-1a).

Controlling for Occupation Other Than Subsistence Agriculturalists and Obreros:

of the 102 households in this sample, 17 households are those of railroad workers. Eighty-five percent (11 cases) of the railroad workers are heads of nuclear households while the other 15% (two cases) are heads of non-nuclear households.

The null hypothesis between occupation and household type is accepted at $P=.39$.

The presence of the clear majority of railroad workers in nuclear households--households of high economic standing--bespeaks of the likelihood of the non-acceptance of institutional aid in the form of sub-standard housing from an extra-household source by these households heads. Again the results of GH-1a are consistent with the rest of the data even though the null hypothesis holds for this hypothesis.

In Summary:

The western Llanos de Maguey is an economically privileged area in comparison to most of Hidalgo; it experienced a limited and artificial degree of economic growth for approximately a decade after the introduction of rural industrialization into the area in 1953. Although this growth has since stopped, its repercussions on the local area as well as those of other factors not directly of an economic nature are still evident today.

The majority of households are nuclear households both among factory workers and among subsistence agriculturalists. These households are assumed to represent a high economic status. The heads of these households have made it in economic terms in an industrializing area. Within nuclear households, the major source of income stems from the household head who, in turn is dependent on a single

source of income. In the majority of cases, the spouse and resident children do not bring in an additional income; this is also the case for non-nuclear households.

A significant portion of the population, however, serves as a pool of surplus labor; its economic position is unstable. This population is resident in non-nuclear households.

The flux of the local population of which the people in nuclear as well as in non-nuclear households are a part in the 20th century is evident in the fact that the majority of the heads of household are neither of immediate local origin nor did they hold their first job in any of the three research communities. Physical mobility on the part of one's kin decreases the frequency of contact with them; in turn, chances for obtaining economic assistance from kin are thus minimized.

The isolation in household units of most of the population is evident in the infrequent contact which the heads of households have with friends as well as with non-resident kin. The majority of heads of household not only do not see non-resident kin frequently, but they have only a limited number of such kin nearby. The economically better position of wage-earners in comparison to subsistence agriculturalists offers them a reason to remain in the western Llanos de Maguey for at least a time. Since jobs and job opportunities are channeled along family lines,

wage-earners have more nearby kin. Most of the kin of subsistence agriculturalists, on the other hand, have had to emigrate in search of jobs.

The economically precarious situation of these small-scale agriculturalists in such an industrializing zone is clear. Not only do these people lack the skills, the orientation and the youth to have access to factory work, but they also lack the opportunity for receiving economic support from most of their non-resident kin; many kin have left the area.

There is also no evidence for financial assistance filtering into the household of subsistence agriculturalists from outside agencies of a non-kin nature.

Rather, a degree of economic assistance comes to such people from non-nuclear kin who have been incorporated into the household itself. These kin together operate in mutual support of each other. The first-listed non-resident child is the only non-resident kin who potentially may be directing some finances into such households because of the frequent visits this child pays to the heads of household who are subsistence agriculturalists. The likelihood of even this extra-household source of income is minimized by the operation of a cultural norm which emphasizes the right to economic isolation on the part of a child from his household of orientation upon his marriage.

A small portion of the population, moreover, lacks

even the degree of economic protection which the collateral and lineal households offer their members. This part of the population is resident in declining nuclear households, as mentioned.

The future of the western Llanos de Maguey looks bleak. Agriculture on mini-plots offers no real prospects, and factory jobs are fixed and limited in number. Thus, the number of non-nuclear households--a sign of economic precariousness on the part of its residents--is sure to increase over the next 10 years.

Hypotheses: 1967 Data, Three Village Samples

The original intention had been to test the clusters of hypotheses just discussed for the 1967 Data Composite Sample against three separate village samples, namely for Cerro Grande, Serena and Benito Juarez. Every hypothesis was thusly tested; however, the test results proved to be largely inconsequential. The cause of the problem was three-fold.

- (1) the high case loss per sample due to missing data
- (2) the need to sub-divide the sample size for each village in order to adhere to the occupational stratification according to which the original data were collected; this aggravated the problem of missing data.
- (3) and the relative smallness of each village sample to begin with since each is only a segment of the Composite Sample of 33 households; this, in turn, compounded the

other two problems.

Thus, the clear majority of tests produced results which are N.S. or not significant. Clear trends for each unit of hypotheses which would distinguish one village from the other two were also not discernable. The data from the villages, however, in no way seriously contradict the conclusions reached on the basis of the 1967 Data Composite Sample. The results of the tests for the towns have not been included in this dissertation in the interest of maintaining conciseness; however, this information can be obtained from the author in the form of three appendices.

1957-58 Data: Composite Sample

The original intention had been, furthermore, to run the same set of statistical tests on the 1957-58 Data as had been run on the 1967 Data. The incomparability of some of the major units of measurement between these two sets of data, however, made it advisable to instead utilize the 1957-58 Data as descriptive background material largely based upon bivariable frequency tables.

Cerro Grande, Serena and Benito Juarez form a composite unit for the 1957-58 Data; they constitute a total of 366 cases. The economic status of the household--a major concern in this dissertation--is again gauged by the occupation of the household head. Several variables had to be combined, however, in order to arrive at the distribution of household types in these communities. The

variables which were utilized are: the total number of persons in the household; the number of other people in the household aside from the informant's immediate family, the number of kin in the household aside from the informant's immediate family, the size of the informant's immediate family and the marital status of the household head. The single variable--the number of other persons in the household aside from the immediate family--is the basis for distinguishing nuclear and non-nuclear households from each other; in the bivariate frequency tables. The distribution of household types, however, deals with the entire range of household types found in the 1957-58 Composite Sample:

	<u>Frequency</u>	<u>Percentage</u>
Nuclear Household	185	51
Matrifocal Household	24	7
Patrifocal Household	6	2
Single-Person Household	18	5
Conjugal Household (the couple without any children)	4	1
Households with Extra- Nuclear Family Kin	109	30
a) Nuclear Family Plus Extra-Nuclear Kin	(61)	(17)
b) Denuded Nuclear Family Plus Extra- Nuclear Kin	(48)	(13)
Household with Non-Kin Present	20	5
Total:	366 cases	101 percent (rounded to nearest whole number)

The 1957-58 Data substantiate the picture of the western Llanos de Maguey drawn earlier in this dissertation as an area in which the population is in flux and households are largely isolated from each other. However, some significant changes can be seen to have occurred over the nine to ten year period separating the 1957-58 and the 1967 studies from each other.

In 1957-58, although as many as 49% (154 cases) of the heads of household were subsistence agriculturalists, already 30% (95 cases) were obreros; 21% (68 cases) of the heads of household were in other occupations. If the more general category of "wage-earner" is utilized in place of "obrero," we find that 38% (120 cases) of the heads of household were wage-earners; thus only eight percent of the heads of household were in wage-paying occupations other than factory work. The significance of the high percentage of factory workers is magnified when it becomes apparent that these earlier data form a random rather than an occupationally stratified sample. Four to five years after the initiation of Ciudad Industrial, thus surrounding towns such as Cerro Grande, Serena and Benito Juarez were already dependent upon this factory town in terms of the significant number of households which had members who had become factory workers.

Examining the types of households which predominate in this three-village unit in 1957-58, 51% (185 cases) of the households were nuclear while the other 49% (181 cases) were non-nuclear in nature, as already mentioned. Among subsistence

agriculturalists, 48% of the households were nuclear households and 52% were non-nuclear. Among obreros, 51% of the households were nuclear while a lesser 49% were non-nuclear. The number of nuclear households increased significantly between 1957-58 and 1967; by 1967, among subsistence agriculturalists, as much as 60% of the households had become nuclear while among obreros, this figure had reached a high of 74%. Such an increase in nuclearity can at least partly be attributed to the greater rate of emigration from local communities by 1967 as well as to the wider impact which industrial values had had on the area by this later date.

Based on the above percentages, it is clear that in 1957-58 obreros and subsistence agriculturalists were more similar to each other in terms of household composition than was the case later on. In the early years of Ciudad Industrial, although skilled industrial workers had been imported from outside regions, a significant number of local people also had the opportunity of becoming obreros. It was this local element of the population which bridged the occupational categories of obreros and subsistence agriculturalists; many of the people in both groups, thus stemmed from a similar hacienda-ejido background. By 1967, occupational categories had rigidified due to the limited number of factory jobs available. Obreros and subsistence agriculturalists had become members of two very different groups each occupying a separate socio-economic niche.

In 1957-58, 40% (145 cases) of the heads of household were middle-aged, i.e., they were between 31 and 50 years old; 24% (86 cases) were between 20 and 30 years old, while as much as 36% (132 cases) were 50 years or older. Viewed in terms of the two major occupational groups, subsistence agriculturalists were older than obreros; this is also true in 1967. Only 20% (19 cases) of the obreros were 50 years or older while as many as 32% (49 cases) of the subsistence agriculturalists were equally as old. Thus, only 18% (28 cases) of the subsistence agriculturalists were between the ages of 20 and 29 years, while as much as 40% (38 cases) of the obreros were this young. The remaining cases included heads of household who were between the ages of 30 and 49 years. By 1967, 48% of the subsistence agriculturalists who were heads of household were 50 years or older as compared with 15% of the wage-earners. Between 1957-58 and 1967, thus, the number of subsistence agriculturalists who were 50 years or older increased. The explanation for this is that younger people have moved into other occupations within the local region, or they have left the region altogether due to the bleak future of agriculture in the western Llanos de Maguey.

With respect to the composition of non-nuclear households, it is unlikely that extra-nuclear family kin resident within the non-nuclear household were either immediate lineal kin, i.e., parents, or immediate collateral kin, in particular,

brothers. In 49% (120 cases) of the households, the husband had no brothers resident in the town while in 51% of the households (125 cases), he had one to seven brothers living in the town. In households headed by subsistence agriculturalists, furthermore, these heads of household had slightly more brothers in town than did the obreros who were heads of household. Thus, in 58% (66 cases) of the households, the head of the household who was a subsistence agriculturalist had brothers resident in town while this was the case for a lesser 49% (37 cases) of the households headed by obreros. In 42% (49 cases) of the households headed by subsistence agriculturalists, the household head had no brothers in town while this was the case for as much as 51% (38 cases) of those households headed by obreros. The difference evident here between factory workers and small-scale agriculturalists can be explained in terms of the greater local orientation of the members of the latter group in comparison to the former. More subsistence agriculturalists originate from the local region and many of them are now tied to the area by their ownership of small plots of land.

The same also applies to the location of the spouse's brothers: in 49% (55 cases) of the households, the spouse had zero brothers resident in town while in 51% (58 cases) of the households, at least some of her brothers lived in town. Among both subsistence agriculturalists and factory workers considered as separate occupational groups, in 63% of the

households (in 90 and 58 cases, respectively), the spouse's brothers lived outside of the town. In 37% of the households (52 and 34 cases, respectively), at least some of the spouse's brothers lived in town. The more frequent absence of the wife's as compared with the husband's brothers can be attributed to the tendency of wives to follow the residence of their husbands after marriage, and thus to leave the community of their parents.

Regarding the residence of the husband's or of his spouse's father, the clear majority of households lack the presence of either party's father in the town. In 74% (225 cases) of the households, the husband's father was not in the town; in 26% (277 cases) of the households, he was. Again by occupation, slightly more subsistence agriculturalists had their father resident in town than did obreros: 28% (41 cases) for the former and 20% (19 cases) for the latter. The clear majority of subsistence agriculturalists and obreros, however, did not have the father present: 72% (106 cases) and 80% (74 cases) respectively.

Again in 85% (271 cases) of the households, the wife's father was not in town; in 15% (47 cases) of the households, he was. By occupation, in 86% (109 cases) of the households headed by subsistence agriculturalists as compared with 84% (74 cases) of those headed by obreros, the wife's father did not reside in town. In 14% (18 cases) and in 16% of the households (13 cases), respectively, he did. The much higher number of households lacking a resident father as compared with

a resident brother both for the husband and for his spouse can be attributed to the greater physical mobility of the brother and to the higher number of fathers who were likely to be deceased (at least among those households in which the household head was 50 years or older). More husbands had a resident father than did spouses--again this is explained in terms of post-marital residence (see above).

The 1957-58 Data do not deal with questions concerning the residence of the husband's or of his spouse's mother or sisters. nor with that of collateral or lineal kin such as grandparents, nieces, nephews and grandchildren. The extra-nuclear kin who reside in non-nuclear households are thus most probably from among these categories of primary or secondary kin.

Contact with kin resident outside of the household was limited. According to the male informant, "other families" were visited "rarely" (in 44% of the households or in 136 cases) or "seldom" (in 49% of the households or in 151 cases). Of the visiting which was done, in 72% (215 cases) of the households, it was with kin rather than with friends; in 26% (7 cases) of the households, visits were made both to friends and to kin.

The wife's contact with her parents was infrequent or non-existent. In 65% (156 cases) of the households, the wife did not visit her parents at all; in the remaining 35% (86 cases) of the households, she visited one to several times yearly. She visited mostly one to two times a month (in 21%

of the households or in 51 cases). The wife in households headed by obreros, visited her parents less than did the wife in households headed by subsistence agriculturalists. Thus, in 86% (74 cases) of the households headed by subsistence agriculturalists, the wife did not visit her parents at all as compared with 69% (33 cases) of the households headed by obreros; in 14% (12 cases) of the former category of households, she visited once to twice a month while in 31% (15 cases) of the households headed by obreros, the wife also visited this infrequently. The greater frequency of contact with parents on the part of the factory worker's wife as compared with the wife of the subsistence agriculturalist can be accounted for in terms of the greater physical mobility of industrial workers. Subsistence agriculturalists are oriented more toward the community in which their land is located; this is assumed to affect visiting patterns as well.

Contact with sibs, especially with brothers, however, was frequent on the part of the wife. In 63% (216 cases) of all households, the wife visited her sibs mostly once a week or more frequently; this was true in 25 % (81 cases) of the households. In 37% (127 cases) of the households, she did not visit at all.

The primary ties of the wife thus were with her sibs; this is further emphasized by the fact that in 73% (251 cases) of the households, the wife visited no kin other than her parents or her sibs. In 27% (94 cases) of the households she

did. Unlike the wife's contact with parents or with sibs, when she visited kin other than parents or sibs, the wife of the subsistence agriculturalist did so slightly more frequently than did the wife of the obrero. Overwhelmingly though, the wife in both occupational groups, as mentioned, had no contact with "other" kin, respectively in 74% (113 cases) of the households headed by subsistence agriculturalists as compared with 76% (68 cases) of those headed by obreros.

Friends were an even less likely source of contact than were kin since in 91% (286 cases) of all households, the wife did not visit friends at all; in 9% of the households (29 cases), there was some visiting. Within the range of visits which were made, however, the wife of obrero heads of household visited friends more frequently than did the wife of the subsistence agriculturalist. Thus, in as much as 11% (9 cases) of the households headed by obreros, the wife visited friends once a year to once a month while this was the case in a lesser 7% (10 cases) of the households headed by subsistence agriculturalists.

Contact between godparents and godchildren was also very limited. In 82% (172 cases) of all households, the household head had only one to two godchildren. In only 18% (38 cases) of the households did he have more than two godchildren.

Thus the major tie with persons outside of the household was in the form of the wife's contact with her sibs; this contact was frequent. By 1967, the tie with the wife's sibs had been lost. The major contact with kin outside of the

had become that with the first-listed non-resident child. This was so only among subsistence agriculturalists and contact was of average frequency. The 1957-58 Data provides no information on contact with non-resident children. It is therefore assumed that such contact did occur. The change which occurred between 1957-58 and 1967 was, therefore, one in which the range of non-resident kin with whom one had contact was constricted. Such a constriction in kinship ties has probably been due to a higher rate of emigration and the greater influence of industrial values of nuclearity and individuality on the area. In some cases, however, the wife's sibs may have been incorporated into the household as part of a mutual aid system. Such a change would have been inspired by economic need.

Although the wife visited her sibs often, the husband claimed that he visited all kin "seldom" or "rarely." To what extent then did economic assistance enter the household from kin who were resident outside of the household? Who were the relatives who could potentially offer economic aid? Obreros were economically best situated to help their kin financially. In 87% (299 cases) of all households, however, the husband had no kin resident in Ciudad Industrial (this residence is employed as one indirect measure of potential financial assistance for the household). Of those households in which the household head had kin who did reside in this industrial town, in 6% (19 cases) of the households, the kin were either brothers or cousins, i.e., they were collateral kin. There were no

fathers or sons living in Ciudad Industrial. Thus, collateral kin were more in a position to help than were lineal kin, but most households had no direct ties with Ciudad Industrial in terms of residence. Again in 91% (136 cases) of the households headed by subsistence agriculturalists, the household head had no kin resident in Ciudad Industrial; this was true for a lesser 86% (80 cases) of the households headed by factory workers. The greater percentage of obreros who had kin in the industrial town indicates the start of an occupational stratification which had become much clearer by 1967.

According to the husband, primary kin (the wife, the father or the brother, in particular) were turned to first for help; this was true for 80% (235 cases) of the households. In 11% (31 cases) of the households, professionals such as doctors were important instead. In five percent (15 cases) of the households, fictive kin were depended upon. And in the remaining four percent (12 cases) of the households, the household head turned to persons other than those already mentioned.

The heads of household who were subsistence agriculturalists claimed more often that their kin helped than did those who were factory workers. Thus, in 49% (72 cases) of the households headed by subsistence agriculturalists, the kin "always" helped; this was true for a lesser 40% (36 cases) of the households headed by factory workers. In the remaining cases, 51% (75 cases) of the subsistence agriculturalists had kin who helped "sometimes" or "rarely" while this was true

for 60% (55 cases) of the household headed by obreros. Thus, subsistence agriculturalists were slightly more dependent on their kin than were obreros. The difference between the two occupational groups was so small, however, that this is another indication of how much more similar members of these groups were in 1957-58 than later in 1967.

Focusing on the question of the internal financial resources of the household, in 49% of all cases, the household head was a subsistence agriculturalist, as mentioned. In 38% of the cases, he was a wage-earner. In 52% (130 cases) of all cases, furthermore, the husband had been a subsistence agriculturalist earlier as opposed to 34% (85 cases) of the households in which he had been a wage-earner, mainly an obrero. In 14% (35 cases) of the households, he had been in an occupation other than agriculture or factory work. Both the majority of subsistence agriculturalists and obreros had been subsistence agriculturalists earlier, respectively, in 72% (67 cases) and 57% (45 cases) of the households. In 28% (26 cases) of the households headed by subsistence agriculturalists, the household head had been an obrero earlier; this was true for 43% of the factory workers. Thus, in the main portion of the households, the household head had been engaged in agriculture. Factory work, however, had been featuring as an important occupation for quite some time.

In 1957-58, the majority of households were land-based, or, put another way, a significant portion of the factory workers were first-generation obreros. In 59% (200 cases) of all

households, the household head had between one and 60 hectares of land. In 41% (137 cases) of the households, he worked his own land while in 13% (27 cases) of the households, he rented or loaned out his land to kin or non-kin.

Occupationally divided, only 21% (120 cases) of the subsistence agriculturalists were landless, while as much as 54% (50 cases) of the obreros were. Also subsistence agriculturalists had more land than did obreros; 54% (81 cases) of the subsistence agriculturalists had five to ten hectares of land, while five percent (14 cases) had 11 to 60 hectares. Only 19% (18 cases) of the obreros had five to ten hectares of land, and three percent (three cases) had five to 60 hectares. The remaining percentages include those households in which the household head had one to four hectares of land. It must be emphasized that as much as 43% (43 cases) of the obreros had land, mostly between one and four hectares.

Most households were dependent on the single income brought into the household by the household head. In 62 cases or in 17% of all households, the household head had a secondary income. The second income for 36% (22 cases) of the households came from agriculture; for 27% (17 cases) of the households, this income came from wage-work mainly from factory work. In 37% (23 cases) of the households, the income was from occupations other than agriculture or factory work. Thus the main combination of occupations held by some of the heads of household reported no secondary income. It was suggested that this was due to the lack of economic opportunities for

such an income. What secondary income there was probably came from small-scale commercial ventures.

In only 44 households or in 12% of all households, did the wife work for pay. In 1967, 12% of the households had the wife working for pay. Thus, there has been little change in the work status of the wife. Of the 44 cases in which she worked for pay in 1957-58, in 39% of the households (17 cases), the wife operated a shop. In another 36% (16 cases) of the households, she undertook paid domestic work. In 23% (six cases) of the households, the wife held a wage job. The distribution of types of work to which a woman had access, thus, had not changed in the course of nine to 10 years.

Among subsistence agriculturalists, moreover, the wife worked mostly in the shop; the shop was attached to the home itself. The wife was a shop-keeper in 64% (seven cases) of the households in which there was a working wife. Among obreros, the jobs in which the wife was engaged were equally divided between shop-keeping, wage-work and paid domestic tasks; this was true for 33% of the households or for two cases each. The more traditional orientation of the subsistence agriculturalist with his emphasis on machismo explains the difference in distribution of jobs between the two occupational groups. The obrero, on the other hand, is more likely to have been influenced by modern industrial values which emphasize the role of the wife as a potential wage-laborer.

Children also did not bring in an income in most households. In 1967, there were only six to seven percent of the households which had resident children who worked for pay. In 1957-58, in 82% (299 cases) of all households, the first son who is 16 years or older did not work for pay. In 83% (303 cases) of the households, the second son of the same age also did not work for pay. In 18% (63 cases) and in 17% (60 cases) of the households in which a son did work, for the first and the second son respectively, the son worked at a traditional occupation. Of those households in which the first son worked for pay--whether or not this son was resident in the household is unclear--households headed by obreros had sons who worked as obreros more often than did those headed by subsistence agriculturalists. Thus, 70% (14 cases) of the households headed by obreros had the first son as an obrero; in five percent (one case) of the households, he was a subsistence agriculturalist. In 25% (5 cases) of the households, this son was involved in work other than agriculture or factory work. In contrast, in only 43% (28 cases) of the households headed by subsistence agriculturalists, did the first adult son work as an obrero. In as much as 43% (28 cases) of the households, he was a subsistence agriculturalist. And in 14% (nine cases), he was in another occupation. Occupational stratification was thus well on its way to developing in 1957-58.

Moreover, 88% (300 cases) of the informants had daughters who did not work for pay. In 12% (41 cases) of

all households, one to four of the daughters worked for pay. Although clearly both subsistence agriculturalists and obreros had non-working daughters, this was more true for obreros. In 90% (78 cases) of the households headed by obreros as compared with 86% (126 cases) of those headed by subsistence agriculturalists, the daughters did not work. Or, in 14% (21 cases) of the households headed by subsistence agriculturalists as compared with 10% (nine cases) of those headed by obreros, one to four daughters did work for pay. The need of the subsistence agriculturalist was greater for an additional income.

By 1957-58, two of the more recent waves of population movement in this region had already occurred. The first occurred between 1928 and 1940, the period when most of the ejido grants were allotted. This movement largely involved people within the region itself. The second movement of people in the western Llanos de Maguey began in 1953, and it involved the arrival of skilled industrial workers from outside regions for work in Ciudad Industrial.

The movement of people in and out of the local area and in and out of the region, however, still continues to the present date. In 1957-58, in 71% (242 cases) of the households, some of the husband's kin were resident in Mexico City; in 29% (99 cases) of the households, the husband had no kin there. In 65% (148 of the cases), the husband had a brother who resided in a city such as Mexico City, or Pachuca (Hidalgo). In 35% (78 cases) of the households, he did not. More obreros

had brothers in the city than did subsistence agriculturalists, respectively 70% (53 cases) and 59% (68 cases). This difference can be partly accounted for in terms of the greater number of obreros without land. The implication is that households headed by obreros had more kin without land than did those headed by subsistence agriculturalists. Without land, kin are more likely to be physically mobile.

In 67% (206 cases) of the households, moreover, the husband had no kin in town; in 33% (103 cases), he did---mainly one to five kin. The non-resident kin were thus in other towns or outside of the region altogether. Subsistence agriculturalists and obreros were not distinguishable from each other on this account.

Another gauge of the contact which people in this region had with outside areas is the visits paid to Mexico City on the part of the wife. In 56% (196 cases) of all households, the female visited Mexico City; she did so mostly once a month or less. In 44% (153 cases) of the households, she did not visit the capital at all. The wife of the subsistence agriculturalist visited Mexico City less often than did the wife of the obrero, respectively in 53% (79 cases) as compared with 57% (51 cases) of the households. This small difference between the two occupational groups can be attributed to the greater physical mobility of the factory worker, and thus of the members of his family.

In Summary:

The western Llanos de Maguey by 1957-58, was in the

midst of significant changes, stimulated or aggravated by the on-set of industrialization. Subsistence agriculturalists were becoming obreros; skilled workers had moved in from other regions; and many kin were dispersed in communities outside of the local towns and even outside of the region itself. The majority of the households were still land-based, and they depended upon the single income of the household head. Although there were significant numbers of obreros, subsistence agriculturalists and factory workers were largely similar to each other in terms of circumstances of their life. They shared a common recent agricultural background.

The majority of households were nuclear, but a significant portion of the population was also in non-nuclear households. In 1957-58, few kin resident outside of the household were depended upon for financial assistance. The wife's sibs if not also a non-resident child featured most importantly among those few with whom frequent contact was maintained. Any economic alliance network of kin which was in operation was confined to primary kin; friends and fictive kin were unimportant. By 1967, contact with kin outside of the household had become even more limited. Networks of aid within the households had concomitantly increased in importance.

Changes which occurred between 1957-58 and 1967 were in the direction of occupational stratification, the continued or increased dispersal of the population, the constriction of kinship networks which involved kin resident outside of

the household, and the greater dependence on the part of a segment of the population on systems of aid internal to the household. These processes had already begun in 1957-58.

The local economic expansion from which a portion of the population benefitted with the initial arrival of the factories in this area was short-lived. By 1967, the future prospects of the region were once again dim. The educational and occupational aspirations of many of the people, however, were now much higher than they had been in 1957-58. There seems no way in which these aspirations can be satisfied in the next decade within the confines of the western Llanos de Maguey.

CHAPTER VI

One aspect of the concept of power is the ability of socio-political units to control their growth and development for their own economic benefit. Centers of power or metropolis areas are, therefore, those which have the ability to do exactly this. Centers lacking power or satellite areas are those whose economic and hence socio-political welfare at any particular time is a reflection of what they can give to, or of how they can be used by the centers of power for the latter's economic benefit. Once the ability of a political center to control its means of production as well as its mode of exchange is lost that center is crucially dependent upon one or more "powerful" center outside of itself; the economic well-being of a "powerless" center fluctuates in accordance with its economic usefulness to centers of power. Within a capitalist system, powerlessness on the part of certain socio-political units is necessary for the economic development of other such units. In turn, the metropolis-satellite imbalance is a reflection of the class nature of capitalist society; the upper class of the metropolis accrues the benefits of the system.

Over the last 300 years, the economic development

within the western Llanos de Maguey has been controlled from outside. Most of the control has issued out of Mexico City more recently in the form of market demands for pulque and/or for beer, or as government programs of rural industrialization meant to stave off large-scale political revolt. The result in this region has been a very temporary diversion from the gross problem of rural under- and unemployment.

Within a capitalist system, metropolis-satellite relationships between various socio-political units appear on all levels of organization: international, national, inter-regional, regional and local. They also operate over long periods of time. On the local level, the minimal unit of social organization in which this unbalanced relationship of power is reflected is the household: the basic unit of labor and of consumption. Within Mexico, in rural industrializing communities, the non-nuclear household is a statement of economic exploitation which is reflected in the local level of political organization.

The non-nuclear household consists of persons some or all of whom are in or capable of being in an economically precarious position because of their role in the larger industrial nation as a source of surplus labor. They are economically expendable most of the time, i.e., they are not required as a labor source. However, at particular times depending upon the economic fluctuations of the larger capitalist system, their labor may be necessary for national

industrial growth. Within the lifetime of these particular laborers, thus, their labor may be required at certain times or not at all. The type of labor which is most likely to be surplus in an industrial or industrializing nation is unskilled and semi-skilled labor. From an industrial viewpoint, subsistence agriculturalists are unskilled. Inadequate amounts of land and/or of supportive facilities such as credit in conjunction with a high rate of population growth produce high numbers of under- and unemployed people in the rural area. These persons form one huge pocket of surplus labor. This labor is often resident in particular types of non-nuclear households which provide a modicum of protection for its members against larger economic, political and social forces beyond their control. This protection is in the form of a mutual-aid network in which the household members pool whatever economic resources they have over a period of time for their joint survival. Declining nuclear households or single-person households headed by old persons are examples of households whose members are often in economically precarious positions but which as households offer built-in economic protection for their members.

The nuclear household as distinguished from the declining nuclear household is a statement of the non-surplus quality of the household head's position in the larger society. In an industrializing society this usually means the household head is a skilled or at least a semi-skilled industrial

worker, i.e., he is able to economically maintain the members of his nuclear family because the particular skills which he himself possesses are economically valuable at this particular time in terms of the needs of the larger industrial society. There is no economic necessity on his part to ally his nuclear family with other kin. The economic sanctions upon which he is dependent stem from non-kin sources, i.e., from the industry in which he works. This household head is, therefore, able to maintain a household which is not only the local ideal in that it maximizes the privacy of the nuclear household, but it is also the industrial ideal since it facilitates the physical and social control of the labor force.

An industrializing nation, however, is a nation in transition frequently from an agricultural background. It is in the process of becoming industrial. Hence, heads of nuclear households may also be comerciantes and agriculturalists who are indispensable to the centers of industrial control during this period of transition. A wealthy agriculturalist is wealthy and can maintain a nuclear household because the products which he produces and/or the scale of which he produces these still find a profitable market. Likewise, wealthy merchants are wealthy and in nuclear households because the services or products they offer are of economic value to the larger society. Such non-industrial heads of nuclear households may, furthermore, find themselves in an economically high status household because they cater to the

needs of the mass of rural people though at a high rate of profit for themselves--whether as loan sharks or as landlords. One basic function which they perform for the industrialist is the maintenance of the masses--though at a minimal level--and thus of the pool of surplus labor.

The non-nuclear household in which many under- and unemployed persons reside, is helpful to the larger industrial society in that it provides for the self-maintenance of these persons as they form a reservoir of labor for industry. People who serve as surplus labor and are resident in declining nuclear or in single-person households are much more likely to need to be cared for by the state, e.g., through welfare payments.

From the point of view of the industrial capitalist, a surplus labor corp though detrimental to the members of this corp in terms of the wide margin of human waste of which it speaks is, nevertheless, profitable to the capitalist. It allows for labor to be had at a cheap price because there is so much of it around. And a surplus labor corp provides additional labor during periods of economic expansion. Those non-nuclear households which possess an internal mutual aid network are useful to the capitalist in that they remove the problem of the daily (minimal) survival of a large number of people from the hands of the government or of the corporation. If and when persons from this surplus labor pool move into the industrial labor pool, they will

most probably establish nuclear households. These households come under more direct manipulation by industrial capitalists.

The matrifocal household is a more complicated phenomenon. As a type of temporary and denuded nuclear household, it bespeaks of the ability of a woman with or without the aid of her children to maintain an independent household. The matrifocal household as such tends to be transitional in nature. The woman usually links up with a male to form a nuclear or non-nuclear household depending upon the economic circumstances of the male with whom she joins up. There is no indication that it is matrifocal in the sense of being a joint household of several adult women lineally or collaterally related to each other with or without their children which is only peripherally and temporarily associated with adult males. As a denuded nuclear household, it reflects the rapidly changing nature of the larger society around it from agricultural and traditional to industrial and modern. The woman is accepted as part of a paid though non-industrial labor force because the society is industrial and modern. She is temporarily (if not too old) without a male because of the physical mobility of males due to their status as industrial workers or as part of the floating rural surplus labor force. The woman eventually joins with a male because of machismo which still questions the position of a manless adult woman on moral grounds. She is employed at traditional work because though employable

and hence potentially part of the industrial labor force, due to the sexist nature of the capitalist society, she is even more "surplus" than the male; hence she is very rarely an industrial worker.

However, she may actually have an economic advantage over the male due to the double nature of the discrimination against her--through machismo and through job discrimination. Although she will not be considered in place of a male for jobs crucial in terms of formal economics to either the industrial or to the agricultural parts of the society, i.e., as an industrial worker in the former or as a landholder in the latter, she has access to employment which is peripheral to the male-dominated realms of both systems, i.e., as domestic labor (Bentley, 1971). It is the economically peripheral role of the female in a money-economy at a time of rapid economic change during which the importance of the male's role in the most traditional sections of the society is undermined which allows her to find employment when a male may not be able to do so. She continues her traditional women's work--domestic tasks--which have been restricted to females by males; she carries them on not only in her own household without pay, but in or for other households for pay. The matrifocal household as a denuded nuclear household is a product of a rapidly changing and industrializing society. The rapid change has unintendedly attributed a temporary economic advantage or adaptive flexibility to

the adult female on sexist ground which she formerly lacked and may not have again at a later stage in the region's and/or in the nation's economic development.

Colonial Period: Review

We discussed the prevalence of a high number of non-nuclear households over a nine-year period in an industrializing rural area of the western Llanos de Maguey, Mexico. We suggested that their prevalence is due to the economic protection which they offer to their constituent members through an internal mutual-aid system; the members of these households largely form the surplus labor force in an industrializing area which itself, in turn, is a satellite to an economically central area, namely Mexico City.

The satellite status of the western Llanos de Maguey in relationship to Mexico City was established early in the colonial history of Mexico. To briefly summarize, the Spaniards arrived in New Spain with the intention of collecting both souls for the Catholic Church and economic resources mostly in the form of gold and silver for the Spanish Crown. Through the mercantile system then operating in most of western Europe, Mexico became a colony to Spain. In Mexico, itself, the initial military stage quickly evolved into a settlement-oriented stage in which the goal was not only the exploration of minerals for the Spanish Crown from the land with the aid of the natives, but it was also the exploitation of local resources and labor for the benefit

of the burgeoning colonial population. Through a series of complex edicts and decrees which reflected the various organs of power back in Spain, e.g., the Church, the Crown and the private landed elite, Indian land was expropriated and awarded to Spaniards as rewards for services rendered to the Crown; in turn, Crown policy under pressure of colonial economic interest groups consigned Indian labor crews not only to build public and Church monuments, but also to fulfill the agricultural needs of the civilian colonists. The encomienda and the repartimiento were the primary Crown tools utilized for the extraction of native resources both human and non-human. Mexico City was the metropolis, the seat of political, economic, religious and cultural activities, to which the rest of New Spain was a satellite. The capital, in turn, was the representative of the colony of New Spain to its metropolis, namely to Spain.

With the burgeoning of the population in Mexico City, and hence with the growth of this city as a market, the Crown's attempt (under pressure of the Church) to offer some protection to the Indian against private colonial interests withered. The opportunity to make a profit by supplying the needs of the population in the capital city were too great for private capitalist interests to depend upon Crown regulated mechanisms for the acquisition of land and labor. By the late 16th century and certainly by the 17th century, private capitalists had accumulated

estates through legal and illegal means on which they grew commercial crops and gathered huge herds of livestock--all to meet the needs of the capital city. These enterprises were the early haciendas.

The hacendados side-stepped slow and cumbersome Crown institutions for the allocation of native laborers in order to have access to a cheap labor force; they accumulated laborers through the free enterprise system, i.e., they paid wages and side benefits to "free" laborers in exchange for their labor. Debt peonage, however, was more correctly the backbone of their free enterprise system with respect to labor. The hacendado was successuully able to attract laborers because the Indian communities had by this time been successfully undermined by a multitude of Crown policies, private tactics and natural disasters. The Indian had no land or very little land; he had no strong native institutions upon which to fall back for protection; but he still needed to maintain himself economically. The hacienda became the mechanism through which a large segment of the Indian population could continue to subsist. The Crown, the Church and private enterprise had successfully positioned the Indian so that he had no alternative but to offer himself "freely" (to the haciendas) as full-time or part-time labor. The capitalists had their land, their market and a guaranteed source of cheap labor. The Indians had lost their minerals, their land and control over their own lives.

1810 and Independence:

With Mexico's independence from Spain in 1810, the United States was gradually substituted as a metropolis upon which Mexico depended economically in place of Spain. Within Mexico, Mexico City was now controlled by a Mexican elite rather than by one which was oriented toward Spain. Mexico City continued to dominate the entire economy of the country. The fragmented Indian population continued to lose whatever remnants of land it still possessed. Juarez' liberal tactics formally aimed at the expropriation of Church lands also deprived Indian communities of their land. Individual titles to individual plots of land were ideally meant to strengthen the Indian's control over their land. In actuality, the Indian communities were unable to protect themselves against the intricate manouvers of the government which essentially worked for the economic interests of the capitalist property-owning class. The hacendados as well as the owners of workshops in Mexico City and elsewhere were again guaranteed a continuing source of cheap labor.

1910 and Revolution

At the height of the Diaz administration on the eve of the 1910 Mexican Revolution, Mexico was a land of haciendas geared mostly to the market needs of Mexico City; four percent of the population owned over 90% of the land. The country retained a small number of internal

colonies in the form of Indian communities which were administered as colonies (Stavengagen, 1970).

Mexico was a satellite to the United States in terms of the massive exportation of its raw materials to the United States in return for the huge importation of finished products manufactured in the United States. Exports and imports, thus overwhelmingly focused upon the United States. Modernization, industrialization and capitalization began under Diaz; the basis for industrialization was laid and it was to be elaborated upon as well as expanded over the next sixty years.

The 1910 Revolution was a bourgeois revolution which utilized the agricultural mass of people as cannon fodder in order to break the hold which a traditional landed aristocracy had over the country; this aristocratic rule was exchanged for a rule by the capitalist middle-class interests. Socialist ideals and jargon were emphasized for the benefit of the masses as a way of guaranteeing their participation in the revolution. The revolution could not have been a success without the support of the majority of the population. The intention was never the redistribution of national power and wealth in favor of the majority which was rural and agricultural in nature.

Post-1910 government administrations with the possible exception of the Cardenas administration have shown that land distribution has been a policy of appeasement

regulated in a fragmentary and half-hearted fashion. In actuality, the interests of the government have been in the promotion of highly capitalized enterprises whether in agriculture or in industry. The beneficiary of such development is a small group of magnates which possesses capital and which is concerned with the further accumulation of capital, and hence of political power. In a matter of 450 years, Mexico has been transformed from a colony blatantly leached of its resources to a class-based capitalist nation which not only leaches specific segments of its own population of their economic vitality but which, in turn, is struggling against the economic domination of the United States--the satellite--metropolist relationship replicated on several levels.

A Regional View: The Western Llanos de Maguey

The western Llanos de Maguey has experienced in microcosm the larger economic fluctuations through which Mexico has gone as a nation. Early contacted by the Spaniards, this region was transformed from a subsistence based area with a relatively low population density in which the people focused upon a native religious, economic and political center into a dependent mestizo population at the mercy of the economic and political manouverings of its occupying forces: first the Spaniards and then Mexican as well as foreign capitalists. Though early serving as a base for mendicant economic and religious

interests and therefore experiencing exploitation in the subtler form in which the Church mediated this out, the population of Cerro Grande and of Llanos were manipulated of their land and of control over themselves as a labor force by the late 16th century. Initially employing the vast basin floor for livestock concerns (for which the market was Mexico City), private Spanish interests expanded to include the land on the hillsides for the formation of huge pulque haciendas. The Indians became full-time or part-time peons for these haciendas. The entire basis economy was dominated by the pulque haciendas as early as the 17th century. This domination continued into the 20th century. The now heavily mestizoized local population was almost entirely dependent on the pulque haciendas, which, in turn, were entirely dependent upon the fluctuations of the market for pulque in the capital city. The region's mono-commodity orientation became its downfall with the disappearance of the outlet for pulque after World War II. Through various political and economic manouvers which were government supported, beer was advocated as a replacement for pulque as the national beverage. Land reform which hit this area between 1928 and 1940 was another blow to the regional economy.

Early 20th Century to Mid-Century: Ejidos and Residual Estates

Between the beginning of the 20th century and mid-century, the western Llanos de Maguey was converted from a mono-commodity economy focused upon the hacienda into a two-

system economy in which the majority of people floundered about in economic stagnation. Residual estates which had been mechanized to produce barley for the beer market in Mexico City replaced the former haciendas. The hacienda peons, on the other hand, were transformed by the government into ejidatarios, i.e., into minifundistas -- subsistence agriculturalists with three to four hectares of unirrigated, eroded semi-arid land from which they attempted to produce barley for the commercial market and to grow their own food.

The economic stagnation of this region whose foundation was kicked from under it with the removal of its market reflects the worst consequences of an economy in which the economic benefit of certain central areas, such as the federal district, is gained at the expense of peripheral areas, such as the western Llanos de Maguey. Not only was this area deprived of its economic health through mono-cropping, but it was gradually also sapped of its other resource, --labor. Migration to Mexico City increased with the continued poor economic conditions in the local area; mostly the young and the able-bodied left. Few resources in any form entered the area. Income accruing to the owners of the residual estates from their estates was partly reinvested in these elite estates to benefit the owners while any profit left over after reinvestment was taken out of the area for the personal life-style or other economic enterprises in which these people were involved; these were mostly

in Mexico City.

Mid-Century to the Present: Industry

Alarmed by the extreme poverty of the area and by its growing population even after emigration, the government funneled a limited amount of resources into the area in the form of capital and industrial expertise in a last minute attempt to patch-up satellite underdevelopment. Ciudad Industrial was created. But just as the ejidos had been created by the government and were strictly regulated by the government so also was this new attempt at economic appeasement a product of and by the government; it was metropolis-oriented from the start.

Ciudad Industrial serves to demonstrate, however, how much the western Llanos de Maguey is an arena strictly for the economic and political interests of the capitalist class whether in or outside of the government structure. Within the framework of establishing and regulating a three-industry town, the government brought in expertise in the form of government paid bureaucrats and professionals and a skilled industrial labor force which was also government paid. Only a segment of the local agricultural population found any direct access to the industries, and hence to direct economic help in the form of salaries. Local people were unskilled, and the profit-motivation of the industrial managers did not allow for any extensive training period during which these economically deprived agriculturalists could be

provided with industrial skills. Furthermore, any opportunity for members of the local population to move from agriculture into industry was short-lived due to the limited number of workers which these industries could hire. Families who had obreros passed factory position on to their own kin while those without obreros remained outside of the privileged realm of factory workers.

As with agriculture so also with industry, the products of these local industries moved out of the region and into national and even international markets. By 1967, local government officials connected with the Ciudad Industrial project openly declared it a social and economic failure. The industries had not expanded at the rate hoped for, their markets had reached their limit and the industries had not stimulated secondary economic growth in the area. The town and the industries had grown essentially to their full capacity. The most that Ciudad Industrial had offered the local area and its resident ejidatario population had been a brief opportunity for some of its members to become members of the middle class.

On the other hand, the government had subtly removed or greatly reduced the potential of the area for long-range change by reducing its revolutionary potential. The government created the illusion of opportunity and progress by allowing a small segment of the lower class to move into the middle class. The government broke up the large potentially

revolutionary mass by introducing into the area not only some members of a different and privileged class (skilled industrial workers), but also members of the upper middle class--the professionals and bureaucrats. Thus the previous homogeneity of the area was splintered. Whatever potential the area had had in the form of its extreme poverty--a relatively homogenous poverty--was greatly thwarted by the introduction into the area of some industries and of elements of a non-local middle class. The region's economy has changed little from the point of view of economic benefits accruing to the population which was resident here before the arrival of the industries; it just appeared to have changed briefly. The government paid a relatively cheap price for fragmenting and appeasing a region, for sapping it of its revolutionary potential and for gaining a stronger control over it by introducing into the area more of its own personnel.

The class structure of the western Llanos de Maguey changed during the 20th century in the following fashion:

1910-1928

Upper Class: Landed elite
Middle Class: Merchants and artisans
Lower Class: Agricultural peons

1929-1957

Upper Class: Neo-capitalists (absentee)
Middle Class: Government bureaucrats (from other regions)

Government-salaried professionals (from other regions)

Government-salaried skilled obreros (from other regions)

Government salaried semi-skilled and unskilled laborers (mostly from local area)

Merchants and artisans (mostly from local area)

Lower Class: Ejidatarios (from within the region)

Minifundistas with private land (from within the region)

Unemployed rural people (from within the region)

1958-1967

The same class structure as for the 1929-1957 period, but now the divisions between the strata are more entrenched.

Between 1900 and the start of land reform in 1928, the class system in this region consisted of a small upper class of absentee landowners, a very small middle class of artisans and commercial people, and a massive lower class of agricultural peons.

The period between 1928 and 1957 was a time of economic flux during which people came into the local area to obtain land as well as factory work. The class structure became much more complex, and it reflected the larger economic and population changes occurring in the region. The upper class continued to be small, but it was now composed of absentee capitalists who operated modern, highly capitalized agricultural and non-agricultural enterprises for profit. The middle class

showed the greatest transformation changing from a tiny group of traditionally occupied people to a large and more intricate class consisting of various very different strata: at the top were government paid bureaucrats who operated the town of Ciudad Industrial as well as the government industries; next came the local bureaucrats; then government salaried professionals who managed the factories; next a small group of traditional commercial people; then the skilled industrial workers imported from other regions; and finally the newly created obreros who were mostly semi- or unskilled and from the local towns. The lower class continued to contain the largest portion of the population; it was composed mostly of minifundistas (mainly ejidatarios) and unemployed rural persons economically dependent either upon the obreros or upon the ejidatarios.

Between 1958 and 1967, the class structure remained that which had been established during the immediately earlier period. However, the lines dividing the various strata from each other solidified. The open quality of the lower border of the middle class for members of the agricultural lower class was temporary, and it shut as the limited number of jobs at the factories were filled. The border between the lower class and the middle class rigidified as did those within the middle-class separating its various strata from each other. The contemporary picture of the western Llanos de Maguey is that of a three-layered class system with firm

class divisions and a high degree of complexity and diversity within the middle strata. The middle class is complex because it represents different regions, incomes, backgrounds, skills and value systems. The economic benefits to the region from Ciudad Industrial and before this from the government's ejido program have been minimal in comparison to the vast structural complexity which has been introduced into the area. The illusion of progress and of upward mobility has been created which itself serves to sap the strength from an organized opposition on the part of the oppressed majority. The area has been made to exchange homogenous rural poverty for lower middle class complexity with the illusion of progress for many but actual economic rewards for only a relatively few. Not only has revolutionary potential been decreased in the region, but whatever occurs economically or politically within the area is now even more strictly under government surveillance and control.

National Picture:

Agriculture:

As with many of the people in the western Llanos de Maguey so also with the majority of people in all of Hidalgo, they form a large reservoir of labor for the nation's industrial interests--a reserve which barely manages to provide for its own subsistence needs.

Mexico's economic exploitation of certain of its own regions and of specific segments of its population is reflected

in key national statistics. The Mexican population has grown at an average annual rate of between three percent and 3.9% in the years between 1960 and 1970 (Review of the Economic Situation of Mexico, December, 1971:p. 441). Meanwhile its annual rate of economic growth has been close to six percent a year (Mexico: A Statistical Survey, 1965:p. 9) until 1970 when this figure briefly dropped to four percent--the lowest it had been since mid-century (Riding, 1972:p. 58). Only certain highly capitalized segments of the entire population have benefited from this national growth. In 1970, 65% of the total Mexican population was resident in rural towns (of under 20,000 people) (Review of the Economic Situation of Mexico, April, 1971:p. 155). As late as 1960, the Mexican Population Census showed that over 50% of the Mexican labor force was in agriculture; by 1969, this figure had dropped slightly to 40% (Riding, ibid.), but large numbers of rural persons are unemployed or under-employed instead. Continuing to refer to the 1960 Census due to the lack of access to the details of the 1970 Census, it is apparent that of all farm units in Mexico, over 50% consisted of minifundios controlled by ejidatarios; they controlled over 40% of all cultivated and irrigated land (Stavenhagen, 1970:p. 241). Chevalier (1967:p. 178), points out that in 1960, 83.8% of registered ejidatarios had under 10 hectares of land each. Considering ejidatarios together with private farms of under five hectares, 84% of all farm units had only 49% of the cultivated land in

Mexico. The area of cultivable land has not kept up with population growth; in 1940 there were 3.9 hectares of cultivable land per person, in 1950, 4.3 hectares and in 1960 again 3.9 hectares per person (Stavenhagen, ibid.:pp. 243-245).

Furthermore, between 1930 and 1960 there was an increase in the rural population in terms of absolute numbers: from 11 million persons to 17 million. Likewise, in absolute terms, the number of persons in agriculture among the economically active population increased from 3.6 million in 1930 to 6.1 million in 1960--a 70% increase (Stavenhagen: ibid.). These figures are significant when we realize that land is limited in absolute terms.

The Mexican government's lack of support of non-capitalized agriculture can clearly be seen in the following census data: between 1940 and 1960, there was a 60% increase in the agricultural labor force, and while the number of ejidatarios increased by only 22.6%, the number of private farmers increased by as much as 81.6% and the number of landless agricultural laborers increased by 74% (Stavenhagen: ibid.). The rural occupational structure of Mexico demonstrates that in 1960 there were more landless agricultural laborers than either in 1930 or even at the time of the revolution in 1910.

Stavenhagen (ibid.:pp. 258-264) furthermore, points out that in terms of the rural class structure, the change in Mexico has been from a two-class system of large private landowners and agricultural peons (in pre-Revolutionary

days) to a three-class system of a rural regional capitalized bourgeoisie; a group of medium to large private landowners who are linked to the rural bourgeoisie; and the mass of the people who are minifundistas (either on private land or on ejidos) or landless agricultural laborers. This last class encompasses what Chevalier refers to as the floating rural population of the under- and unemployed (Chevalier: ibid.). Industries and urban areas have been unable to absorb the increasing numbers of rural people as has the land itself.

The rural situation appears to be worsening since latifundias now in the form of neo-latifundias controlled by a modern upper elite are continuing to increase in size (Stavenhagen, 1970, p. 263). As Chevalier (ibid.:pp. 169-170) points out, as late as 1950, there were 708 agricultural estates with over 800 hectares of land each, totaling three and one-half million hectares of cultivable land. In turn, there were 10,519 cattle-raising, forest or grazing estates with over 1,000 hectares totaling 80,974,000 hectares. Even excluding communal and public estates, today there are several thousand estates in Mexico which represent a total of 60 million hectares. Chevalier emphasizes the extreme difficulty of obtaining formal statistical information about highly capitalized and irrigated private estates; their growth is purposely obscured from the public view.

Government support of private capitalized agriculture which is controlled by a small elite is obvious. According

to the 1960 Census, private farms of over five hectares, have 28% of the labor force but as much as 62% of all capital in agriculture while ejidos which contain as much as 45% of the agricultural labor force have only 30% of such capital. Again government agencies offering rural education and agricultural extension service programs cater to the middle and large land-owners as is evidenced by the fact that in 1960, 62% of the land with fertilizer belonged to private farms of over five hectares while only 38% belonged to ejidos. Likewise, of the credit extended by the National Ejido Credit Bank, only 17% went to ejidos in 1960. According to Chevalier (ibid.: p. 174), the Ejidal Bank gives over 50% of its credit for rich irrigated lands, especially for those growing export products. Since private banks will not deal with ejidatarios because they are considered a financial risk, ejidatarios are forced to lose whatever meager capital they do possess to moneylanders charging high interest rates. Chevalier (ibid.) points out that only two to three percent of the ejidatarios are involved in capitalized agriculture; whatever capital the government does place in ejidos, funnels down to these privileged farms, e.g., the ejidos in the Yaqui Valley which produce over 40% of Mexico's wheat and eight percent of its cotton.

Federal expenditure has definitely been regionally concentrated in Mexico so that the development of areas of either heavily capitalized agriculture or of industry have

been favored over the rest of the nation (Wilkie, 1967:p. 254). Thus, federal expenditure between 1959 and 1963 in the Federal District--the major industrial area in Mexico--greatly outdistanced that in all other areas of Mexico; 31% of government investment went to 14% of Mexico's total population (1960), or this represented 2.2% of federal investment in relation to population. The northern region (Baja California, Chihuahua, Coahuila, Nuevo Leon, Sonora and Tamaulipas)--an area of capitalized agriculture--received 16.5% of federal investment for 15.8% of the total Mexican population, or one percent of the investment in relation to population. In the entire nation, the east-central region (Hidalgo, Puebla, Queretaro, San Luis Potosi, Tlaxcala and Zacatecas) was the most neglected receiving 7.6% of federal investment for 16.8% of Mexico's total population, or .5% of investment in relation to population. Hidalgo received 1.2% of federal investment for 2.8% of the total population, or .4% of federal funds in relation to the population. Hidalgo is among the poorest of regions in Mexico.

Federal expenditure for irrigation and water resources repeats the same story (Wilkie, ibid.:p. 253). Between 1926 and 1958, the north received 36.9% of federal funds--the highest expenditure in any region; the east-central area received only 7.6%--the lowest expenditure per region. Judging the aridity of this latter region from that on the Llanos de Maguey, water for irrigation is just as vital to agriculture

here as it is in the north; however, the north produces highly capitalized commercial crops while the east-central area supports subsistence agriculturalists.

In 1971, although 40% of the economically active population was in agriculture, agriculture contributed only 10% of the Gross National Product (Riding, ibid.). The government is not investing in that part of the economy which contains the largest single segment of the population. It is apparent that the rest of the nation serves as an economic satellite to the federal district which forms a metropolis. Likewise, the agricultural sector of the nation functions economically as a satellite to the industrial sector of the country.

Industry:

Wilkie(ibid.:p. 201) states that this lack of balance between the sectors of the Mexican economy has increased steadily since 1940 in favor of industry. These industrial activities were concentrated in three manufacturing cities in 1965 which produced 57.5% of Mexico's industrial output; the sectorial unbalance in Mexico is complemented by a regional unbalance in terms of major economic activities (New York Times, January 28, 1972:p. 51). In terms of the Gross National Product, Wilkie (ibid.:p. 202) states that on a per capita basis, industrial activities contributed over 50% higher than the average of all sectors to the Gross National Product until 1940 after which time, the contribution

of the industrial sector on a per capita basis doubled the average of all economic sectors.

Between 1960 and 1971, the labor force in agriculture decreased from 54% to 40%. The labor force in industry, however, increased from 21.9% in 1940 to 27% in 1960 to 31.8% in 1971 (Riding, ibid.). Hidden unemployment and underemployment in the rural areas are not reflected in official statistics. In general, underemployment in Mexico is a major problem since in 1971 (Riding, ibid.), 1.6 million people were employed less than six months of the year; 839,706 million worked seven to nine months of the year while 10.5 million worked 10 to 12 months of the year. The estimate is that 15 million persons and their dependents are economically marginal in Mexico today (Review of the Economic Situation of Mexico, April, 1971:p. 157).

In terms of the Gross Domestic Product, agriculture decreased its contribution from 24.3% in 1940 to 17.4% in 1965. On the other hand, industrial activities increased their share of the Gross Domestic Product: manufacturing from 18% in 1940 to 25.3% in 1965; electrical energy from 1% in 1940 to 1.4% in 1965; and petroleum from 2.9% in 1940 to 3.2% in 1965 (Reynolds, 1970:p. 74). Moreover, in terms of the rural share of the Gross Domestic Production, in 1965 the rural area was responsible for 16% of the Gross Domestic Product out of a total agricultural contribution of 17.4%; the rural share in the extractive industries'

contribution to the Gross Domestic Product was six percent out of a total of 30% while its share of the contribution to the Gross Domestic Product through manufacturing and construction was zero out of a total contribution of 30.2%. In fact, the total rural share of the Gross Domestic Product decreased from 36% in 1950 to 32% in 1960 while that of the urban share increased from 64% in 1950 to 68% in 1960. Between 1950 and 1960, there has been a 4.8% growth in the labor force engaged in manufacturing, an 8.1% growth in capital stock involved in manufacturing and an actual growth of 7.3% in manufacturing as a whole.

While non-capitalized agriculture is stagnating in Mexico due largely to government neglect, a statistical survey of Mexican economic growth put out by Nacional Financiera (Mexico's government bank for industrial development) in 1965 hoped to attract United State's private investment into Mexican business by assuring capitalists that the Mexican government supports private enterprise; the government and private corporations work in complementary fashion as witnessed by the fact that Mexico's 100 leading private corporations increased their profits on the average by 15% in the fiscal 1963 and boosted their sales by 13% over the same time period. The capital in these companies expanded from 19.25 billion current pesos to 20.92 billion in 1963. Mexico's top private corporation, Telefonos de Mexico, for example, increased its profits by 10% between 1962 and 1963. (Mexico: A Statistical Survey, *ibid.*:p. 25-28).

Mexico: Economic Satellite to the United States:

President Echevarria assumed office December, 1970, and he is now serving his presidential term in Mexico. Echevarria's stated official intention while in office is to redistribute the wealth of the nation both geographically and in terms of the various segments of the population. His primary tools for this redistribution are: a decentralization of government activities; the termination of land redistribution in favor of the organization of existing ejidos and small farms into groups to encourage modernization of production methods and to increase the power of these units in negotiations; and an increased taxation of private and corporation incomes to the level of 42% while at the same time protecting the poor by raising the level of individual and family minimum deductions (New York Times, ibid.:p. 52). Unlike his predecessors with the exception of Cardenas, Echevarria's economic policy is strongly socially-oriented. Although the president and his treasury minister are all-powerful in Mexico with respect to the federal budget (Wilkie, ibid.:p. 30), Echevarria can do no more than put a good face on capitalism at home; the satellite-metropolis dependency which is not only entrenched into the Mexican domestic economy but also reflected in Mexico's economic relations with other nations is beyond the control of any one administration.

Considering the size of the United States' economy in

comparison to that of Mexico and considering Mexico's close economic ties with the United States, it is understandable that the economic fluctuations within the economy of the United States strongly effect Mexico (Reynolds, ibid.:p. 239). Echevarria himself has had that demonstrated to him in terms of the low four percent annual economic growth rate in Mexico in 1970, the year he assumed office--and in terms of the unfavorable balance of trade of \$1.087 billion in that same year. Part of the national economic dilemma which Echevarria inherited was due to the economic policies of the previous administration (Riding, ibid.). However, the major causes of this 1970 crisis in Mexico were the severe economic measures taken by the Nixon administration to protect the economy of the United States (New York Times, ibid.:p. 52); these measures were at the expense of nations which operate as satellites to the United States. Two major steps among these measures taken were the devaluation of the United States dollar--which meant that United States money entering Mexico through tourism or through United States imports of Mexican products was worth much less than it had been formerly; and the reduction in United States imports which meant that not only was the United States dollar worth less but Mexico was getting less of this dollar since the United States was importing less from Mexico (New York Times, ibid.:p. 51).

By 1971, Echevarria had resorted to tactics which

brought the drop in the Mexican economy in 1970 to heel so that the expected economic growth at the end of 1971 was estimated again at five to six percent (New York Times, ibid.:p. 55). A major move in Echevarria's tactics was necessarily to direct Mexico's export drive away from the United States in order to reduce Mexico's trade imbalance; Mexico also sharply reduced its imports (Riding, ibid.). Mexico's protective economic steps immediately affected other Latin American countries which, in turn, are in a satellite position to Mexico--and so the capitalist "buck" is passed on down the line.

Mexico in International Economics: Mexican and United States Trade:

A broader view of Mexico's economic role in relation to other nations shows us a country which since the 1910 Mexican War of Independence has been a clear economic satellite to the United States and which since the Mexican Revolution of 1910 has attempted to change its role more to that of a metropolis in its own right albeit not in relation to the United States. Mexico continues to be heavily dependent on the United States in economic terms. However, Latin American countries are now beginning to serve Mexico as Mexico has served the United States, i.e., in a satellite capacity.

The United States became Mexico's chief trade partner after the 1810 War of Independence (Reynolds, ibid.:p. 239).

Mexico reached its height of dependence on the United States as a recipient of its exports (at 90%) during World War II while between 1937 and 1960, an average of 75% of Mexican exports went to the United States. The United States' average share in Mexican imports was 80% until 1955 after which this rate declined slightly; however, if trade in invisibles were added, the United States' share in Mexican trade would be even higher.

National Financiera (Mexico: A Statistical Survey, ibid.) provides slightly more recent data which show that in 1963, Mexico received 68.5% of its imports from the United States and another 21.7% of its imports from western European countries--which are themselves heavily involved economically with the United States. Thus a clear 91% of Mexican imports come from the United States or from United States-linked economies. In 1964, of these imports, 50% were capital goods while 40% were industrial raw materials. Moreover, in 1963, 70.7% of Mexico's exports were to the United States; together with those to western European nations, this totalled 81% of Mexico's exports. In 1963, the top exports were agricultural products such as raw cotton, sugar, prawns and coffee; minerals such as sulphur, lead, zinc and copper were also exported but in much smaller amounts. Mexico is heavily dependent on the United States for importing its agricultural resources and, in turn, for importing raw and finished capital goods from the United States. Echevarria has made temporary

adjustments in Mexico's export-import policies to counter United States changes in its trade policy; this is a sign of that dependence.

Mexican-Latin American Trade:

In attempting to wrest itself from a position of extreme dependence on the United States economy to one in which Mexico has more of an ability to develop itself in its own favor, the Mexican government has undertaken and is now undertaking a program of nationalization and diversification. The nationalization of basic resources such as petroleum, and the limitation of private United States investments in Mexican corporations began as early as the 1930's. Diversification in exports and in trade partners continues today. Mexico understands the satellite-metropolis infra-structure of capitalism since it both suffers from it and practices it, in turn, on the less industrialized Latin American nations; in this manner, Mexico replicates its own dependence on the United States in its relations with Latin American nations.

Mexico's interest in a Latin American common market was stimulated in the 1950's by its stagnating economy (Mexico: A Statistical Survey, ibid.:pp. 29-31). Mexico was searching for an outlet for its exports, and Latin America appeared the perfect market since many Latin American countries were less industrialized than Mexico. In 1958, the Latin American Free Trade Association or LAFTA was formed in

which Mexico and nine other Latin American countries participated. Because of Mexico's greater economic advantage evident in its more advanced industrial state, its trade increased much more rapidly with these other countries than was the case vice versa; Mexico gained most from LAFTA. The other Latin American countries were importing more from Mexico than she was from them. Between 1961 and 1964, the balance of trade was always in favor of Mexico, namely +3.8 million dollars in 1961 and by 1964 as much as +16 million dollars. Mexico's imports were worth 4.1 million dollars in 1961 as compared with 16 million dollars in 1964 while its exports totalled 7.9 million dollars in 1961 and as much as 32 million dollars in 1964.

With CACM (Central American Common Market) also, Mexico had a balance of trade in its favor: +96.9 million current pesos in 1961 and +126.4 million current pesos in 1963 (Freithaler, 1968:p. 62). Finally, in Mexico's trade with all of Latin American the balance of trade was again strongly in Mexico's favor: +206.3 million current pesos in 1961 and as much as +392.6 million current pesos in 1963.

Mexico is shipping over 50% of its manufactured exports to Latin America; she is, furthermore, making heavy private direct investment in these countries (Freithaler, ibid.). Mexico's unfavorable balance of trade in 1970 has been countered by a 1.5% reduction in Mexican imports

and a three percent increase in exports--exports directed away from the United States and mostly to Mexico's southern neighbors. Regarding Mexican exports, there was a 5.4% reduction of agricultural exports and a 19% increase in its manufactured exports; this is understandable in the light of the less industrialized condition of these other Latin American nations in comparison to Mexico (New York Times, ibid.: p. 55).

United States Private Investment in Mexico:

As Urquidi (1965:p. 91) points out, foreign capital "for an underdeveloped area like Latin America...means financial liability to non-residents" whether these be private individuals, governments or agencies. Liabilities, in turn, are either in the form of loans and bond issues or as direct investment. Mexico's satellite status to the United States can further be gauged in terms of the amount of direct private investment which United States' businessmen make in the Mexican economy. The Mexican government encourages United States' business investments in secondary and tertiary activities since basic resources have been nationalized. Thus foreigners can invest up to 100% in an enterprise as long as they consider themselves Mexican with respect to investment and will not invoke the protection of their own government. Exceptions to this policy are corporations of mixed capital which require that the majority of the invested stock be Mexican. The Mining Law, for example, states that

all new mining concessions are to be given to Mexican companies or to those with 51% Mexican stock (Mexico: A Statistical Survey, ibid.:p. 21). The difficulty of estimating the amount of private United States investment in the Mexican economy is great when we realize that corporations with majority Mexican stock are considered to be Mexican even though as much as 49% of the stock may be foreign. Nevertheless, about 80% of the total direct foreign investment in Mexico originates from the United States--the rest stemming from western countries such as Canada, France, Britain and Sweden (ibid.). Put in a less impressive way, about 10% of the total private investment in Mexico is "foreign private" investment; of this 10%, about two-thirds goes into manufacturing. United States businessmen are not interested in investing in Mexico's agricultural stagnation. Mexico is attempting to encourage foreign investment in its securities as well as in its industries. Between 1929 and 1960, American direct investment in Mexico increased in absolute terms from \$683 million current dollars to \$795 current million dollars; this represents an increase of 116% (Wilkie, ibid.:p. 265).

United States loans to Mexico:

Foreign capital in Mexico also means foreign loans. Between 1942 and 1954, 80% of Mexico's foreign credit came from the United States. (Mexico: A Statistical Survey, ibid.: Pp. 25-28). In step with Mexico's attempt to become less

dependent on the United States, her foreign credit from the United States decreased to 63% in 1958 and during the first nine months of 1963, to 30%; the other 70% of the foreign credit in 1963 was received from international agencies and from western European countries. Foreign loans through Nacional Financiera go primarily for the manufacturing industry, electricity and transportation (La Cascia, 1969: p. 62). As with private foreign investment so also with foreign institutional loans, capital is pumped into industry at the expense of agriculture. United States government loans in relative terms appear to have decreased in Mexico since the 1950's. Nevertheless, Urquidi (ibid.:p. 102) assures us that although foreign investment as direct private investment has largely failed to make a viable industrial network out of Latin American, the United States is shifting its policy so that the bulk of United States aid will be public investment ostensibly for "broad social progress". Blatant economic opportunism is exchanged for a more subtle brand of economic persuasion.

Conclusion:

Capitalism requires economic underdevelopment on the part of some sectors--the satellites--within its sphere of influence for the benefit of its central sectors--the metropoli. Mexico has been and continues to be economically bound to the United States economy. In turn, major Latin American countries are becoming satellites to the more highly

industrialized nation of Mexico. Within Mexico itself, the industrial sector has developed at the expense of the agricultural sector. Specifically within one particular agricultural zone--the western Llanos de Maguey--into which a limited amount of industrialization has been introduced to appease the under- and unemployed rural poor, specific forms of the non-nuclear household are signs of economic trouble; these households speak of efforts on the part of their constituents to make ends meet under conditions of economic deprivation.

In the light of this analysis, it is justified to state that "the Mexican Revolution...has sacrificed agriculture to industry, and the countryside to the city" in that "the government has maintained the facade of a peasants' and workers' revolution whereas the country's economic development confirmed the capitalist nature of the Mexican Revolution" from the start (Navarro, 1965:p. 225). Or as viewed from the cold-blooded perspective of a United States capitalist offering Mexico as a blueprint for successful capitalistic development: the Mexican Revolution was (apparently as any bourgeois revolution can be) merely "an institutional rupture prerequisite for the fuller and more effective utilization of the material and technical inheritance from the" (the Diaz administration) (Glade, 1968:p. 99). Once such a view is adopted, socio-economic institutions within the Mexican economy such as "the land distribution policy, the

labor security measures and the health, education and welfare programs" -- accepted by the mass of poor in good faith as statements of the government's intention of abiding by its revolutionary jargon -- are actually instruments for "building that intangible but vital agent of production in the absence of which the other factors (of capitalist development) are unable to operate effectively--industrial good will"; without this good will "the efficiency of the economy is substantially lowered by disunity and industrial strife, by 'soldiering,' strikes and sabotage"...by "passive but noncreative acquisition of rural labor to a traditional scheme of things, (by) agrarian revolt and disorder and domestic uncertainty." (Glade, *ibid.*:pp. 95-97).

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