

AN ECOLOGICAL APPROACH TO THE DEVELOPMENT
OF A STRATIFIED POLITY IN MICHOACAN

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Robert Staley
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ABSTRACT

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Sometime prior to 1200 A.D. a group of people later known as the Tarascans settled in the central lake area of Michoacan. This group developed a stratified society in which the ruling elite was supported by a system of tribute produced by a subordinate class of agriculturalists or peasants. Although by 1400 A.D. the Tarascans were the second most powerful group in Mexico, they peacefully capitulated to the Spanish in 1522 and were rapidly assimilated into the sixteenth century colonial society of Michoacan.

Although the sequence of events in the development, florescence, and eventual incorporation of the Tarascans into Spanish colonial society is known, no researcher has investigated the processes that brought about this particular sequence of cultural development. Basic questions as to how a populous stratified society arose in this region, why their particular cultural adaptation was so successful as to make them the second most powerful cultural group in pre-hispanic Mexico, and why such a powerful group was peacefully and rapidly absorbed into sixteenth century Spanish colonial society are left unanswered. It is to these questions of process that this study was directed.

I have argued that the explanation of the rise of the Tarascans and their successful domination of an area the size of present day Michoacan lies in their successful exploitation of three differing ecological zones. The application of a basically horticultural technology to extract the diverse resources provided by tierra fria, tierra templada and tierra caliente was associated with an increase in population density as well as greater economic surpluses. These two factors in turn created the necessity for the development of increasingly complex institutions associated with organizing the population and distributing surpluses. The sociopolitical system which evolved to cope with these needs gave the Tarascans an advantage over the less organized peoples of Michoacan and led to their expansion to the organizational level of a large chiefdom or state.

I have also shown that the very fact of this complex sociopolitical organization is the key to the explanation of the rapid assimilation of the Tarascans into the sixteenth century Spanish colonial society. By substituting their own functionally equivalent institutions for those of the Tarascans--such as the encomienda for the tribute system--the Spanish were able to gain a measure of control over the Tarascans not possible with less complexly organized peoples. Once these new institutions became established in areas of Tarascan culture such as economics, the very embeddedness of such systems practically guaranteed the eventual substitution of other aspects of Spanish culture; assimilation into colonial society rapidly followed.

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CHAPTER I

INTRODUCTION

A. The Problem

Anthropological research in Michoacán has concentrated on the contemporary Tarascan Indians of the central lake and western highland areas. The populations of Tzintzuntzan, Ihuatzio, Quiroga, and Cherán, to mention just a few, have all been the subject of basic ethnography (cf. Foster 1948a, Van Zantwijk 1967, Brand 1951, Beals 1946, 1969) as well as applied community development programs such as CREFAL, the United Nations Center for Fundamental Education in Latin America (cf. CREFAL 1959). With the exception of Brand's work on the extent of the pre-contact Tarascan state, most attempts to add some kind of information about the pre-hispanic period in Michoacán are relegated to the status of background information to contemporary ethnography (Brand 1943a; 1971). In addition, even these brief compilations are based on a few ethnohistoric sources and some rather scattered archaeological remains; there is neither a chronicler of the stature of Sahagun for this area, nor well-worked out archaeological sequences of cultural development characteristic of other areas of Mexico.

The colonial period in Michoacán has also received little attention. Information concerning this period is drawn mainly from one document--the Relacion de Michoacan, a few histories of religious orders in the area such as Baselenque's work on the Augustinians, and from

scattered passages in general works of discovery and conquest such as Herrera or Oviedo. Again, as was the case in the pre-contact period, information concerning the colonial period is included as background material to contemporary ethnography (Foster 1948a; Brand 1951; West 1948, Van Zantwijk 1967). Even very recent works such as Brand's synthesis of the ethnohistory of western Mexico for the Handbook of Middle American Indians is limited to comments on the sources and to defining the extent of the pre-contact Tarascan state (Brand 1971).

Despite these shortcomings it is assumed that sometime prior to 1200 A.D. a group of people later known as the Tarascans settled in the central lake area of Michoacán. This group developed a stratified society in which the ruling elite was supported by a system of tribute produced by a subordinate class of agriculturalists or peasants. Although by 1400 A.D. the Tarascans were the second most powerful group in Mexico, they peacefully capitulated to the Spanish in 1522 and were rapidly assimilated into the sixteenth century colonial society of Michoacán.

Although the sequence of events in the development, florescence, and eventual incorporation of the Tarascans into Spanish colonial society is known, no researcher has investigated the processes that brought about this particular sequence of cultural development. Basic questions as to how a populous stratified society arose in this region, why their particular cultural adaptation was so successful as to make them the second most powerful cultural group in pre-hispanic Mexico, and why such a powerful group was peacefully and rapidly absorbed into sixteenth century Spanish colonial society are left unanswered. It is to these questions of process that this study is directed.

I will show that the explanation of the rise of the Tarascans and their successful domination of an area the size of present day Michoacán lies in their successful exploitation of three differing ecological zones. The application of a basically horticultural technology to extract the diverse resources provided by tierra fria, tierra templada and tierra caliente was associated with an increase in population density as well as greater economic surpluses. These two factors in turn created the necessity for the development of increasingly complex institutions associated with organizing the population and distributing surpluses. The sociopolitical system which evolved to cope with these needs gave the Tarascans an advantage over the less organized peoples of Michoacán and led to their expansion to the organizational level of a large chiefdom or state.

I will also argue that the very fact of this complex socio-political organization is the key to the explanation of the rapid assimilation of the Tarascans into the sixteenth century Spanish colonial society. By substituting their own functionally equivalent institutions for those of the Tarascans---such as the encomienda for the tribute system---the Spanish were able to gain a measure of control over the Tarascans not possible with less complexly organized peoples. Once these new institutions became established in areas of Tarascan culture such as economics, the very embeddedness of such systems practically guaranteed the eventual substitution of other aspects of Spanish culture; assimilation into colonial society rapidly followed.

B. Theoretical Orientation

While the fragmentary nature of archaeological and ethnohistorical data on Michoacán has no doubt hampered the production of an ethnohistorical synthesis of Tarascan culture, a more serious obstacle is presented by the theoretical perspective employed by previous researchers. This approach, basically historical-particularist in orientation, viewed culture as a group or complex of traits that were the result of numerous historical processes involving the diffusion and borrowing of traits from other antecedent cultures. Thus, anthropological research into Tarascan culture and the colonial period in Michoacan has been dominated by an attempt to discuss particular traits or elements that are distinctively Tarascan or sixteenth century Spanish and to trace these traits to their historical antecedents.

A consideration of archaeological investigations of pre-hispanic Tarascan culture reflected this concern with traits and trait complexes. Archaeologists have stressed the destructiveness of architectural styles such as the stepped pyramids or yacatas which are so common throughout the Tarascan region as well as artifact types--mainly ceramic--as diagnostic features of Tarascan culture. Influenced by a concern for the origin of these traits, several unsuccessful attempts have been made to relate architectural features and ceramic types to other areas of Mesoamerica and even South America (Chadwick 1971-691).

The concern with traits permeated cultural historical studies of the Spanish colonial period as well. Although not specifically concerned with Michoacán but with the effects of Spanish contact in general, Foster's Culture and Conquest exemplifies the historical-particularist theoretical orientation. This was evident in its assumptions that to

understand the colonial period it was necessary to trace elements of Latin American culture back to their European origin. Spanish culture in America was classified as a "conquest culture" upon which certain forces had acted to produce a simplified New World version (Foster 1960).

A conquest culture was defined as:

. . .the totality of donor influences, whatever their origin, that are brought to bear on a recipient culture, the channel whereby the dominant ways, values, and attitudes of the stronger group are transmitted to the weaker. A conquest culture is the result of processes that screen the more dynamic, expanding culture. winnowing out and discarding a high percentage of all traits, complexes, and configurations found in it and determining new contexts and combinations for export. It is the result of a process in which the new face of the donor culture is precipitated out of the infinite variety of original forms and enriched by the elements produced by the contact situation itself (Foster 1960:12).

A conquest culture was formed by a stripping down or reduction process in which parts of the donor culture were eliminated or transformed in some manner. This reduction process was either formal, which Foster defined as planned activity on the part of institutions and individuals in positions of authority, or informal, which referred to "unplanned mechanisms whereby the personal habits of emigrants. . .are selected and maintained in the new country" (Foster 1960:12).

The nature of the process that selected the traits of a conquest culture was historical. Foster described the variety of sources which contributed to sixteenth century Spanish culture and isolated five regional cultural-political-linguistic foci. These were Galician, Asturo-Leonese, Castilian, Navarro-Aragonese, and Catalan. Foster assumed that those areas which had large numbers of emigrants to the New World would have more cultural traits represented there than those which had not. The nature of Spanish culture in the New World was seen as proportional to its sources in Europe (Foster 1960:32).

The historical particularist theoretical perspective that has been employed by Foster is ill-suited to answering the questions of process proposed earlier. Questions concerning the cultural adaptations that fostered population growth, political complexity, and eventual conquest are never formulated because cultural differences are seen only as divergences in cultural history. Therefore, the presence of a particular complex of traits over another is never explained.

I submit that a theoretical orientation which stresses an ecological view of culture can further research on the Tarascans and the colonial period in Michoacán by encouraging the study of questions of process. Because it views culture against the background of the natural environment and emphasizes the systemic nature of man's relationship to his surroundings, it transforms the nature of the research effort. Where the historical-particularist view emphasized the cultural trait, the ecological view is concerned with the nature of relationships. Traits, in this view, are important not just in themselves but as mediators between man and his environment.

For the purpose of this study, ecology may be defined as the study of the interrelationships between living organisms--including man--and their environment (Odum 1971:3). While these interrelationships with the environment are determined by biological needs and genetic makeup in the lower organisms man has developed culture to supplement these. Culture is man's extra-somatic means of adaptation to his environment (White 1959:8). Cultural ecology, then, stresses "the adaptive and exploitative relations, through the agency of technology, of the human group to its habitat, and the demographic and sociopolitical consequences of those relations" (Helm 1962:630).

Although such a definition assumes both functional and causal relationships between culture and environment, it is the idea of a causal relationship that has received the most critical attention. This is especially true when this relationship has been seen as deterministic. Environmental determinists such as Huntington (1945) with their rigid formulations asserting that in a given environment a given culture develops have been criticized for disregarding both the complex nature of environments and the interaction of cultures with other cultures (Watson, LeBlanc, and Redman 1971:91).

Because of these criticisms a modification of the determinist position has been incorporated into the cultural ecological theoretical orientation employed here. The environment is seen here as setting opportunities and limits rather than determining the development of culture. These opportunities and limits are not seen in absolute terms but as relative to the cultural means available for exploiting the environment. Culture and environment are seen as relatively independent parts of a single interacting system (Kaplan and Manners 1972:78).

When the environment is always seen as culturally modified, an element of circularity is involved in the theoretical orientation--i.e., the environment modifies the culture which in turn modifies the environment. This relationship has been expressed as reciprocal causality or feedback. But as Kaplan and Manners point out:

to accept the operation of reciprocal causality is not the same as saying that all the elements in the system have equal causal impact. For when one looks at the interrelationship between cultural systems and their environments over time, it is clear that many features which constitute impediments or limitations for simpler technologies are often surmounted, or even turned into opportunities, by cultures with more advanced systems (1972:79).

Technology and its relationship to the environment has been a continual focus of cultural ecology. Steward, for example, regarded the productive arrangements of a culture as determinative of the cultural core or "the constellation of features which are most closely related to subsistence activities and economic arrangements" (Steward 1955:37). This would include such key cultural features as demography, settlement patterns, kinship, land tenure, and land use--in short such "social, political, and religious patterns as are empirically determined to be closely connected with these arrangements" (Steward 1955:37).

Steward saw changes in cultural patterns as arising from innovations in technology. While in simple hunting and gathering societies group size and social structure was limited:

When agricultural techniques are introduced man is partially freed from the exigencies of hunting and gathering and it becomes possible for aggregates of people to live together. Larger aggregates, made possible by increased population and settled communities, provide a higher level of socio-cultural integration (Steward 1955:39).

Steward's concern with the relationship between technology and environment and its effect on the development of culture has recently been restated by Harris as the principle of techno-environmental and techno-economic determinism:

This principle holds that similar technologies applied to similar environments tend to produce similar arrangements of labor in production and distribution, and that these in turn call forth similar kinds of social groupings, which justify and coordinate their activities by means of similar systems of values and beliefs (Harris 1968:4).

Empirical support for this position is furnished by Sahlins' study of Polynesia which related variations in social stratification to variations in both technological and environmental conditions.

Sahlins found that the "high islands"--which had numerous ecological zones--produced greater economic surpluses. These surpluses generated higher levels of social stratification and more politically complex structures (Sahlins:1958).

Because of Sahlins' cultural ecological orientation and his focus on a particular genetically related group--the Polynesians--his work contains much that is useful for the study of the development of Tarascan culture in Michoacán. By looking at the technology of the Tarascans in relation to ecological zonation in much the same way as Sahlins did for the Polynesians, it is possible to re-interpret the existing archaeological and ethnohistorical data in such a way as to ask questions of process.

The cultural ecological orientation employed here will synthesize the available data on the development, florescence, and final assimilation of the Tarascans of Michoacán. It will explain how a relatively dense and politically complex population grew to become the second most powerful indigenous group in Mexico and yet was so easily assimilated into Spanish colonial society.

C. Research Strategy

The data that the present study is based on consists of primary and secondary ethnohistoric documents dealing with the pre-hispanic and Spanish colonial periods in Michoacán. Numerous secondary source material was found in the collections of the Elizabeth Dafoe Library of the University of Manitoba, The Garcia Icazbalceta Collection of the University of Texas, the library of El Museo Nacional de Antropología e Historia in Mexico City and El Antiguo Archivo del Obispado de Michoacán in Morelia provided primary source materials.

The most valuable of these materials for the reconstruction of Tarascan environment throughout Michoacán were the Relaciones Geograficas. Initiated by Philip II of Spain in 1577, these documents were original reports in question and answer format. They included information on all facets of native life including the local flora and fauna, mineral and other resources, as well as the suitability of Spanish crops and domestic animals to the region with which they dealt. Although seventeen of these documents deal with what is now Michoacán during the period 1579-1582, the problems of overlap in political jurisdiction, omissions to some of the questions asked, lost items, and difficulties of access to some unpublished materials, meant that not all of the Relaciones Geograficas could be utilized.

The most important source for the study of pre-hispanic Tarascan society and the events of the conquest period is the Relacion de Michoacán. Reportedly compiled in 1542 by the Franciscan Fray Jesus de la Martin from the elements of a native informant, this document presents a history of the development of the Tarascan state as well as basic information on economic, sociopolitical and religious patterns during the sixteenth century. The manuscript consulted for this study is an English translation of the 1903 Morelia edition.

Unpublished manuscript sources housed in El Antiguo Archivo del Obispado de Michoacán represented one resource that has not been tapped by previous researchers. Records of marriages, cappelianias (transfers of land to the Church), accounts of cofradías (religious organizations), hacienda records, and receipts of Church tithes, while not researched in depth, provided information concerning the colonial period in Michoacán.

The importance of field experience from May to August, 1972 in Michoacán and Mexico City cannot be overstressed. Actual examination of the Tarascan ruins at Tzintzuntzan and of the artifact collections of El Museo Michoacáño provided additional information against which to evaluate the generalizations made about Tarascan culture by archaeologists and ethnohistorians. Actual travel through what was the heartland of prehispanic Tarascan culture--from the lake regions surrounding Pátzcuaro to the more tropical cities of Uruapan and Tacámbaro--acquainted the researcher with the diversity of ecological conditions that exist in Michoacan. Again, visual confirmation of phenomena noted in the literature reinforced the arguments made in this study.

Not all of the data collected in the course of my research could be utilized in the body of the study. Information which documents or elaborates upon some of the generalizations that appear in the section dealing with archaeology in Chapter II were more effective as a separate section. Appendices I and II--"History of Archaeological Research in the Tarascan Area" and "Cultural Synopsis of Major Archaeological Regions of Michoacán, respectively, save the reader from wading through lists of descriptive material in the body of the text yet still provide the necessary documentation for Chapter II. Appendix III, "Unpublished Documents With Information on the Pre-Contact Tarascan State" is a compilation of unpublished material to which some bibliographic reference has been made in the literature but which was not examined in the course of the present study. It is included in the hope that it will provide the basis of additional research into Tarascan culture.

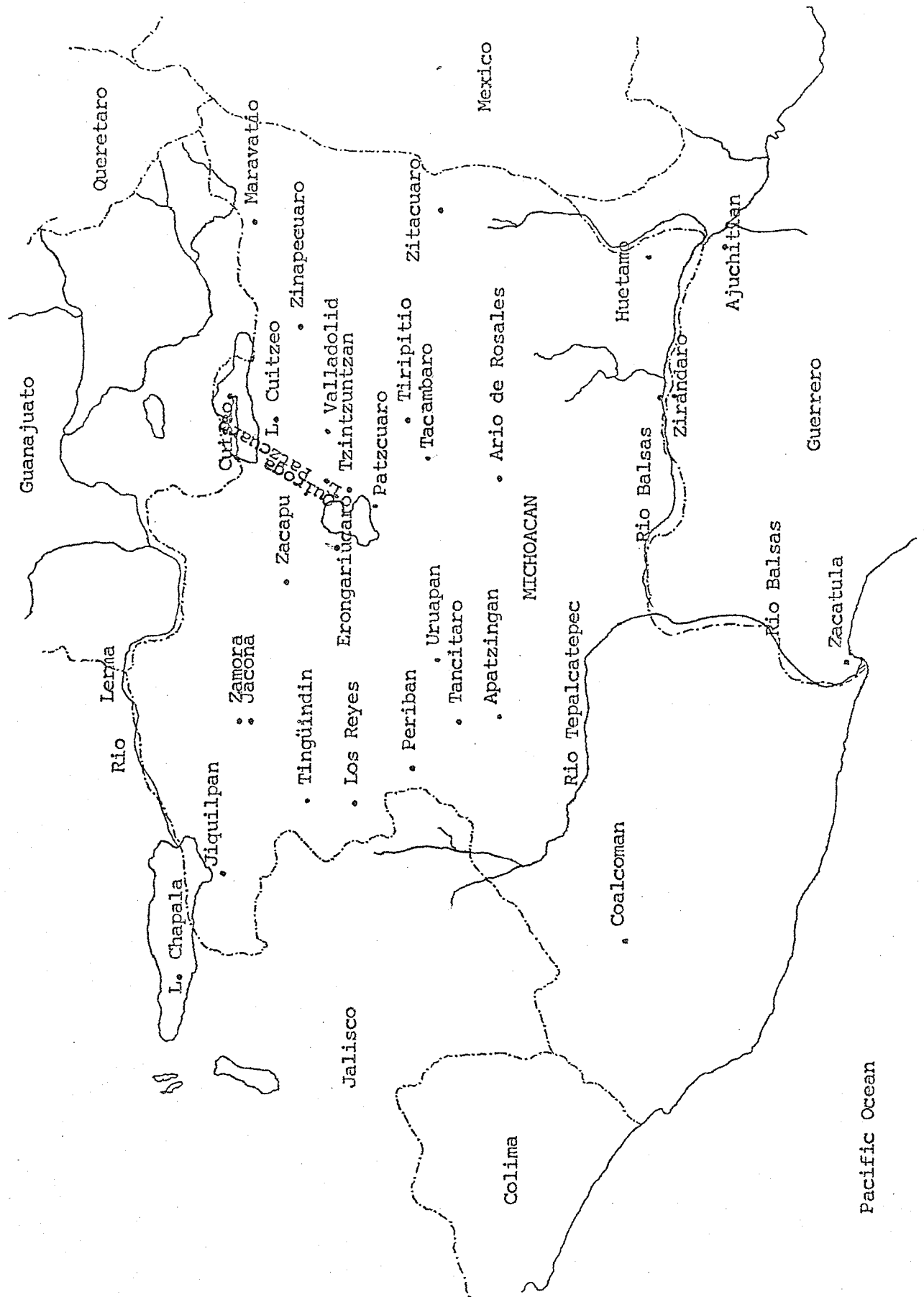
CHAPTER II

THE PRE-CONTACT TARASCAN STATE

A. The Environment

1. Physiography. The area under consideration corresponds to the contemporary state of Michoacan, the fourteenth largest Mexican state which occupies some 59,684 square kilometers at approximately 17° to 20° North Latitude and 100° to 103° West Longitude. It is bounded by the states of Queretaro, Guanajuato, and part of Jalisco on the north, the remainder of Jalisco and Colima to the west, the Pacific Ocean to the south, and the states of Guerrero and Mexico to the east. Today it is one of the most densely populated rural states; according to the census of 1960 it is inhabited by 1,815,876 people or 30.9 people per square kilometer (Romero Flores 1967:8).

West (1948:1-4) identifies four physiographic regions in Michoacan. The first of these, the Sierra, extends from just west of Lake Patzcuaro eastward to a north-south line drawn between the communities of Zamora and Los Reyes. Its northern boundary is the Guadalajara--Mexico City highway; on the south it is bounded by the escarpment which defines the northern edges of the Balsas-Tepalcatepec Basin. The second area is composed of Lakes Patzcuaro and Zirahuén and their environs. The third area, the southern escarpment, is part of the southern part of the Mesa Central; it includes the Balsas-Tepalcatepec



Map 1. Michoacan

Basin. The fourth area, which West designates the northern plateau area (West 1948:4) extends from Lake Chapala westward to the Sierra de Ozumatlan and from the Sierra north to the Lerma River.

The Sierra region is a volcanic plateau some 1,500 feet higher than the surrounding areas. Its uneven surface topography has been due to volcanic activity; the most recent being the Paricutin eruption of 1943. The altitude of the plateau increases from west to east from approximately 5,000 feet to almost 8,000 feet. Within the central part of the plateau elevations range from 7,000 feet to over 12,000 feet.

Volcanic activity during the Tertiary and Quaternary has produced the area's major landforms. These are composite volcanoes of conical shape and radial drainage such as the Cerro de Tancítaro (12,660 feet), the Cerro de Patamban (12,300 feet), or the Cerro de Quinseo (10,800 feet). More recently--i.e., from the Pleistocene to Recent times--cinder cones (ranging in size from 250 to 700 feet) and lava flows have produced the rugged terrain of the Sierra's bedlands.

In addition to those surface features which are the result of volcanic activity, aeolian and alluvial deposition has formed flattish surfaces between the older composite volcanoes and the younger cinder cones. These surfaces, small in terms of the percentage of total land surface, are agriculturally important areas of the region. Some of this deposition overlays the area between two hills; in other cases interiorally drained basins have been formed. The largest of these basins are the Llano Grande and Charapan, the Plano de Nurio and the Plano de Paracho; numerous others are scattered throughout the plateau.

As a consequence of its volcanic origins, the surface of the Sierra is porous and contains few streams or lakes even though the rainfall is moderate. Large springs occur only on the boundaries of the Sierra where the porous surface gives way to impervious rock layers. Smaller springs, such as those found near the Cerro de Tancítaro or the Cerro de Patamban, are the only supply of water for many of the Sierra villages.

Immediately to the east of the volcanic plateau of the Sierra and dominated by its cinder cone and lava flow geomorphology on three sides (north, west, and south) lies Lake Pátzcuaro. Situated in a basin of interior drainage, Pátzcuaro is a "C"-shaped lake of 111 square kilometers and a maximum depth of 15 meters. Twelve kilometers to the south is Lake Zirahuen, a smaller but deeper lake of approximately 17.5 square kilometers and a depth of 41 meters (Romero Flores 1967:37).

There is evidence to suggest that the water level of Lake Pátzcuaro has fallen considerably since colonial times and that it has been subject to fluctuations in more recent times. For example, a late sixteenth century map shows Japupuato as an island. Today it is a mountain rising from the eastern shore of the Ihuatzio basin. This evidence is further substantiated by pollen analysis (Hutchinson, et al, 1956:1491) which defines a moist phase for the lake that correlates with Sear's (1952:241-254) Nahuá (900 A.D. to 1500 A.D.) sequence for Lake Texcoco in the Valley of Mexico. Recent studies (De Buen 1941:20-44; West 1948:3) also document a falling water level which has exposed large areas of mudflats along the shores.

Lake Pátzcuaro presently contains 10 small islands. Some of these--e.g., Pacanda, Yunuen, Tecuena, and Janitzio--are old volcanoes with steeply sloping sides; as such they are useless for agriculture. Others, such as Pastora and Copujo (now attached to the mainland, are of alluvial material. The Uranden islets, which are of volcanic origin, are separated from the mainland only by marsh (West 1948:4).

The southern escarpment, part of the Mesa Central's southern wall, is a transitional zone between the Sierras and the Balsas lowlands. Situated between 1500 and 2000 meters elevation, the escarpment is the product of Pleistocene and Recent volcanic activity in the higher regions and erosion by spring fed streams--which created deep barrancas--in the lower lands bordering the Balsas lowlands. Those areas closest to the Sierra region are characterized by the presence of flat basins which are probably volcanic in origin. Examples of such plains are the lands surrounding Uruapan, Peribán, and Los Reyes as well as the valleys of Tingambato and Tacámbaro. (West 1948:4).

To the north of the Sierra and extending from Lake Chapala east to the Sierra de Ozumatlan and north to the Rio Lerma is the area West (1948:4) terms the northern plateau. Characterized by older volcanoes and mountains interspersed with flat to rolling plains, this northern plateau decreases in altitude from approximately 2200 meters near the Sierra de Ozumatlan to around 1500 meters at Lake Chapala.

The area is characterized by heavier alluvial deposits than the Sierra region; these probably represent the remains of Pleistocene Lakes. This northern area is drained by a major river, the Rio Lerma, as well as by numerous springs which originate at the northern and north-

western edges of the Sierra. Two large lakes, Chapala and Cuitzeo, also drain the area (Romero Flores 1967:25).

The Balsas Depression is bounded by the southern escarpement to the north, the Sierra Madre del Sur to the west and south and the Sierra Madre de Oaxaca to the east. Its elevation is approximately 1,000 meters but the central part of the depression--through which the Rio Balsas flows--ranges from 500 meters to less than 200 meters in the western part (Tamayo (Vol. 1) 1949:417).

The Balsas Depression is formed of sedimentary rock dating from the Cretaceous interspersed with andesites and other volcanic formations which often form long ridged mountains. The entire area is sharply folded with numerous faults; frequent earthquakes testify that movements are still progressing. There is evidence to indicate that the Balsas Basin, composed of Quaternary alluvium (Lister 1947:7), was at one time a large lake which was transformed into the Rio Balsas due to headward erosion by the Pacific Ocean of the walls of the Basin (Brand et al. 1960:241). The area is now drained by the Rio Balsas, the largest river in Southwestern Mexico, and its tributary, the Rio Grande Tepalcatepec together with smaller north-south tributaries such as the Rio Marques or the Rio Tacámbaro.

The mountainous coastal area of Michoacán is part of the western extension of the Sierra Madre del Sur. Singletary (1960:257) states that this coastal region is composed of a massive granitic base which is overlain with dark limestone dating from the Cretaceous. Numerous mountains slope from an altitude of 2,000 to 2,500 meters to less than 100 meters near the sea coast. Drainage is evidently controlled by the

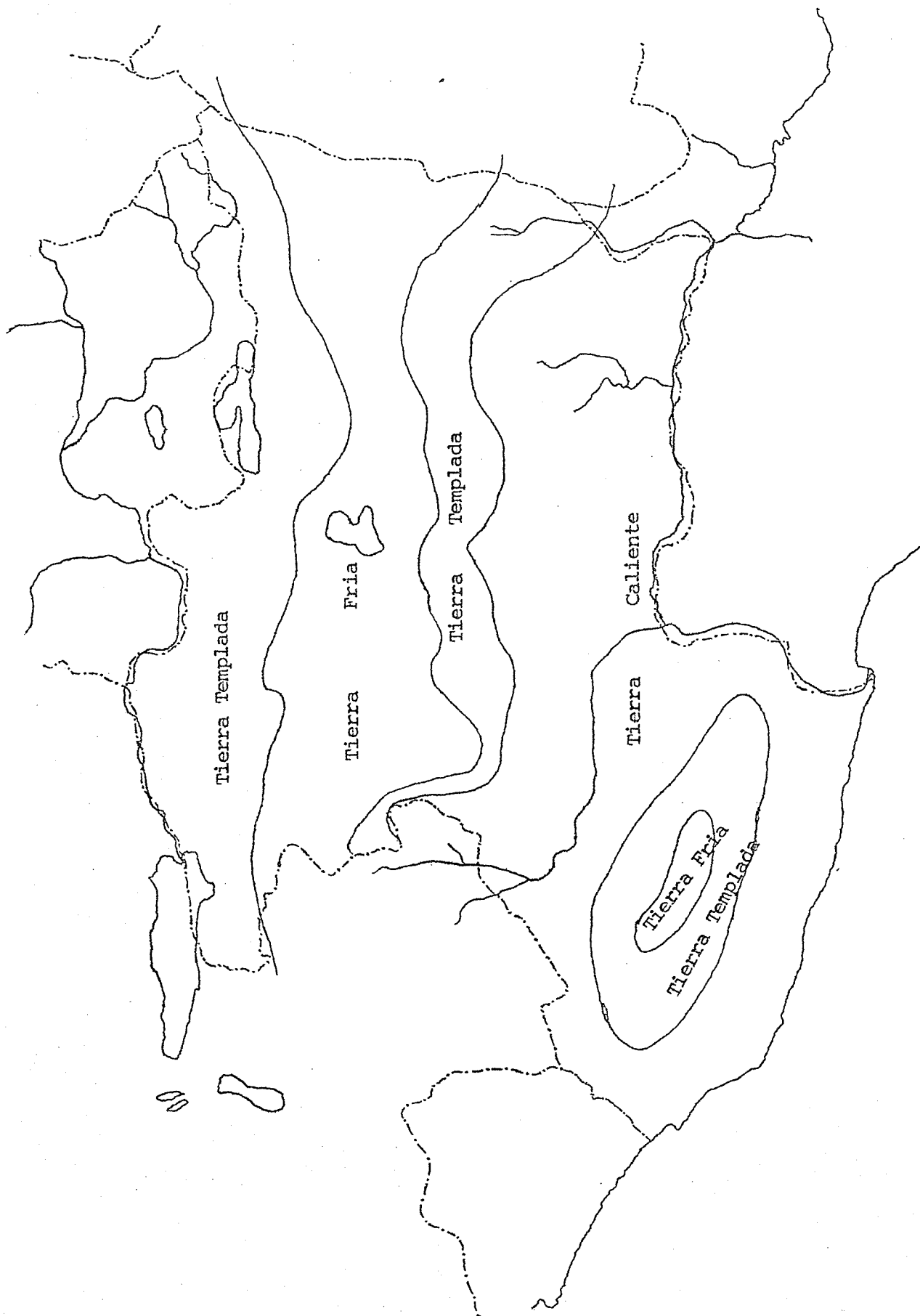
limestone beds; streams are parallel and their courses are often meandering and choked with sand or sediment.

The area is one of the least explored in Mexico. As Stanislawski (1969:4) points out:

There is little to attract men to these mountains. The soils are thin and the steepness of the slopes and canyon walls has precluded the use of all but a small part of them. There are no snug fertile valleys here of the kind that are found in the volcanic Mountain Region lying on the other side of the Balsas Lowland.

2. Climate and Vegetation. Three zones of climate have been recognized for Mexico. These are based on altitudes; they are tierra fria (cold land-above 2,000 meters), tierra templada (temperate land-2,000-1,000 meters), and tierra caliente (hot land-below 1,000 meters) (Vivo Escote 1964:198-199). In Michoacán tierra fria encompasses the northern plateau, and lake region, the Sierras to the edges of the southern escarpment. Tierra templada includes the region of the southern escarpment to a line drawn through the communities of Tancítaro, Ario de Rosales, Tacámbaro, and Zitácuaro. Tierra caliente includes the Balsas depression and the coastal mountain area of the state (Romero Flores 1967:38-39).

Temperatures in tierra fria reach freezing during the months of November to March; depending on the altitude, up to 180 days of frost have been recorded (West 1948:5). During the warmest months (April or May) the days are mild; temperature averages about 19 to 24° C. While specific figures for localities in Michoacán are lacking, in general tierra templada temperatures reach freezing only during December and January. Rainy season daytime temperatures average 24-27° C. with highs of 35° C. occurring during the dry season (Vivo Escoto 1964:199).



Map 2. Ecological Zones of Michoacan

Tierra caliente is an area without frost at any time of the year. With the exception of the northern desert areas, tierra caliente of Michoacán has the highest mean summer temperature in Mexico. In addition winter temperatures are higher here than anywhere else excepting coastal Chiapas. The yearly temperature range is slight; for example at Apatzingán the difference between the highest (31.6° C. during May) and lowest (25.3° C. during January) means is only around 6° C. (Stanislawski, 1969:12).

Rainfall in Michoacán follows the rainy season dry season pattern that characterizes all of Mexico and Central America. For example, in the Sierra 80% of the total yearly rainfall occurs from June to September. In the northern and eastern areas of the Sierras the average yearly precipitation is 750 to 850 mm. The lake region (Pátzcuaro) averages about 1,100 mm while at the edge of the southern escarpement--the windward side of the Sierra region--the towns of Uruapan, Ario de Rosales, and Tacámbaro average 1,683 mm, 1,225 mm, and 1,240 mm (West 1948:6). Rains in tierra caliente, and particularly the Balsas region, start later than other regions; they are confined almost entirely to the July-September period. In addition there is variation from year to year and a high rate of evaporation (Stanislawski 1969:12). Annual totals are approximately 750 to 1,500 mm (Brand 1943:226).

Varying conditions of surface relief, temperature, and rainfall combine in each climatic zone to produce a characteristic vegetational cover. In tierra fria a mixed oak-pine forest predominates in all but the highest areas; over 3,000 meters fir forms the dominant cover. In tierra templada the oak-pine forest gives way to stands of oak and madrano, then to a grass-shrub association in the moister regions, and

finally to xerophytes such as huisache, mesquite, and assorted cacti in the driest areas. Tierra caliente is characterized by what Leopold (1950:516) classifies "arid tropical scrub." This consists of patches of thorn and deciduous forest interspersed with dense bunch grass and cacti.

Exactly what relationship these vegetational zones bear to the sixteenth century situation is, as West (1948:8) points out, problematic. Throughout all of Middle America human occupation and settlement generally means the removal of practically all large trees and their replacement by agricultural plots, pasture, and brush. In addition the burning of trees to produce charcoal has denuded whole areas wherever adequate trails have made its distribution feasible. In all probability the forested regions of Michoacán were much more extensive in the sixteenth century than they are today because pollen analysis of Lake Pátzcuaro suggests a moister climate and more lush vegetation (Hutchinson et al. 1956).

B. The Archaeology of Michoacán

Archaeological investigations in Michoacán have been underway since the latter part of the last century. Beginning with the exploration of burial mounds and yacatas by Plancarte y Navarrete (1895) and Leon (1902) and the collecting trips of Starr (1897) and Pepper (1916) in tierra caliente, generations of archaeologists have attempted to shed some light on Tarascan culture history. Yet as Brand (1944:37) pointed out in the forties, "there is no archaeologic complex that covers any extensive area of Michoacán and certainly none that is coextensive with the putative limits of the Tarascan state."

Nor has the status of archaeology in Michoacán improved over time. Chadwick (1971:660), summarizing work done in the fifties and sixties, comments:

The random excavations have yielded a variety of styles of restricted distribution, which may be historically significant or may be due to inadequate reporting. . . . Thus the correlation of phases in the different chronological sequences presents a difficult, if not impossible, task with present knowledge. In some cases, isolated cultures have been arranged in chronological order to produce a sequence for a specific area. The scant data, however, preclude the establishment of development sequences for most of the state. Radiocarbon dates are lacking and many cross-ties suggested by archaeologists with cultures in other regions are tenuous in some instances, questionable in others.

After commenting on the short-lived and isolated nature of the archaeological cultures, Chadwick offers a tentative chronology based on Willey and Phillips (1958) developmental states---the Formative, Classic and Postclassic and the regional divisions of highlands, lower Balsas, and tierra caliente. Noting that his approach is limited to description based on stylistic horizons in pottery and architecture and burial customs, he offers the following sequence:

1. Formative. Investigations by INAH at El Infiernillo (Litvak-King 1968), by Porter (1956) at Chupicuaro, and Noguera (1942) at El Opeño indicate that highland and coastal Michoacán have been occupied from at least Middle Formative times. El Infiernillo in the Balsas Basin is perhaps the oldest of these sites; decorative ceramic techniques such as fingernail impression, rocker stamping and incising have been used as horizon markers to assign it the Middle Formative. Porter (1956:569) states that her Early Chupicuaro phase "can be correlated precisely with the Late Ticoman of the Valley of Mexico"

which places it in the Middle Formative, but that Chupicuaro is strangely lacking the long Early Formative development characteristic of Ticoman. Similarly, Noguera's excavations at El Opeño have also been assigned to the Middle Formative (Willey et. al. 1964:481) but Chadwick (1971:667), whose observations are based on museum collections, assigns it to the Upper Formative or Protoclassic.

2. Classic. Michoacán during Classic times appears to have been a cultural backwater in comparison to other areas of Mesoamerica; Chadwick (1971:673) notes that some of the Pre-classic cultures of Michoacán appear to be more sophisticated than those of the Classic. Data from Apatzingán excavated by Kelley (1947), revealed three phases of the Classic horizon--Chumbicuaro, Delicias, and Apatzingán--that are thought to be contemporaneous with Ortices in Colima and Teotihuacan III in the Valley of Mexico. (Kelley 1948:68; Willey et. al. 1964:481). At Zamora and Zacapu, the phases Curutan and Potrero de la Isla have been assigned to the Formative or Protoclassic and the Early Classic by Jimenez Moreno (1966:13) and Noguera (1965: chart facing 286). Other phases that appear to be included in the Classic horizon of Michoacán are Jiquilpan, defined by the site at El Otero and Ojo de Agua from site V-12 at La Villita in the lower Balsas (Chadwick 1971:676).

3. Post Classic. Although relationships between the middle Balsas and Xochicalco in Morelos, the Inca of South America, Teotihuacan in the Valley of Mexico and even the Maya area during the Post Classic have been postulated (Paddock 1967:428; Armillas 1945:79-81; Noguera 1965:281; Rubin de la Borbolla cited in Chadwick 1971:678), they have been based

almost entirely on architectural similarities and not the total archaeological complex. The Post Classic horizon in Michoacán appears to be characterized by numerous isolated local cultures that show little relationship to other areas.

At El Infiernillo, in the middle Balsas region, survey of 104 sites by INAH has been analyzed by Lorenzo (1964) who dates the phase of approximately 700 A.D. The most significant feature of the phase is the introduction of metallurgy, which Willey (1966:178) feels was introduced from South America. From La Villita site V-42 Litvak-King (1968) has isolated the Postclassic phases of El Romanse and El Poche but notes that they show no resemblances to the inhabitants of El Infiernillo. Kelley's (1947) investigations at Apatzingán have defined two Postclassic phases--Tepetate and Chila. Armillas (1945) and Noguera (1965) have noted architectural similarities between the Mexquito--Huetamo region and the Inca area during the Postclassic. At Cojumatlan on the shores of Lake Chapala, Lister (1949) has defined the Chapala phase--with affinities to Tula-Mazapan--and the Cojumatlan phase--which is reminiscent of the Mixteca-Puebla style. None of these phases appear to have any Tarascan affinities (Chadwick 1971:686).

4. Tarascan. Although ruins exist to the present day Tarascan communities of Ihuatzio, Jacona, Quiroga, and Huetamo, these have not been systematically excavated. From information based on excavations at Tzintzuntzan, Rubin de la Borbolla (1948:30) isolated three late phases--Lower, Middle, and Upper Lacustrine--the earliest of which dates from approximately the Late Classic or Early Postclassic. Rubin de la Borbolla (1948:33) stresses the unique character of Tarascan remains and states that they lack any apparent relationship to other

areas of Mesoamerica--a conclusion which is later echoed by Chadwick (1971:691).

Concerning the extent of the Tarascan region, Bravo Ugarte 1962, vol. 1:39-40, summarizing work done in the central area of Michoacán from about 1930 to 1950, places the limits of the Tarascan region at a quadrangle formed by the communities of Apatzingán, Turicato, Indaparapeo, and Jacona. Kelley (1947:200) discusses the intrusion of Tarascan traits in the Tepalcatepec area and dates them at approximately 1500 A.D. which would tend to support Bravo Ugarte, but later work by Lorenzo (cited in Chadwick 1971:680) notes the presence of a late Tarascan intrusion at El Infiernillo, thus extending the southern boundary to the middle Balsas.

C. Tarascan Ethnohistory

1. The Boundaries of the Tarascan State. A great deal of effort has been expended in attempting to reconstruct the boundaries of the Tarascan state from sixteenth century ethnohistoric documents. Brand (1944:39) comments:

Because of the relatively peaceful conquest of the Tarascans as compared with the bloody conquest of Tenochtitlan, because the Tarascans had no interpreters or protagonists such as did the Mexicans (e.g. Sahagun, Motolinia, Mendieta, Torquemada, Duran, Ixtilxochiti, and Tezozonioc), and because they did not have or did not preserve the equivalent of a Codex Mendoza, the real extent and importance of the Tarascan state has seldom been appreciated.

According to Brand, this downgrading of the Tarascan state has been due mainly to the uncritical acceptance of historical sources that regard the numerous Nahautl place names in Western Mexico as native and attribute them to a vast Mexican empire that reached into Sinaloa and

Zacatecas or to the influence of a supposed migration. Through a process in which a secondary compiler rephrases and reinterprets the words of a primary source, a third compiler rephrases and reinterprets the secondary source, and so on, the end product becomes more fiction than fact. Thus,

it is saddening to think of the hundreds of hours spent by scholars such as Buelna (1892) in locating, identifying, and explaining 'Aztec or Mexicano' place names and points along the legendary migration routes. It is even more depressing to discover that currently local historians, ethnologists, archaeologists and geographers in Mexico are accepting the conclusions and work of Buelna and his kind as gospel truth to be applied in many connections (Brand 1971:634).

In addition to the downgrading of their state, there are wholly fictitious events recorded concerning the Tarascans through the operation of this process. For example, although there are numerous accounts (e.g. Relacion de Michoacán, 1971; Cortez 1962) that testify to the peaceful nature of the Tarascan conquest, "there has developed a literary tradition, enshrined in textbooks of Michoacán history, that there were several bloody battles beginning at Tajimara, and that the elder statesman and warrior, Timas, for some time carried on courageous warfare against the Spaniards" (Brand 1971:636). This tradition shows in the works of Ruiz (1940) and, more recently, Romero Flores (1946). Similarly, Brand argues that an examination of original sources shows the work of the compiler Tello (1891) and those using his manuscript--such as Beaumont (1952)--have perpetrated a fictitious conquest of Queretaro and Guanajuato by Nuno de Guzman, an entrada from Cuitzeo via Lagos and Zacatecas to Tepic by Guzman's lieutenant Charinos, a shipwreck on the Jalisco coast in pre-Spanish times, misrepresentation of native political structures, and a migration myth (Brand 1971:651-653).

In addition to distortion brought about by an uncritical reliance on historical studies, the years since the publication of Brand's work in 1944 have seen the creation of a dispute over the extent of the Tarascan state--particularly along its southern and eastern borders. Barlow (1949:8-22), on the basis of the Matricula de Tributos, supposedly prepared for Montezuma, argues that the area around Zacatula was conquered by the Mexicans. Brand (1971:644) counters by stating that the Matricula de Tributos used by Barlow is inaccurate. Place names appearing on the Matricula are descriptive and could be any place in Mexico--e.g. Coyuca, Itaxpa, and Cihuatlan. Moreover, the Matricula de Tributos list of subject towns is not supported by other documents containing the same information such as the Relaciones Geograficas.

While the linguistic geography of the Tarascan area might at first glance support Barlow since there is an area around Zacatula known linguistically as Mexicano Corrupto that may be Nahuatlan, Brand argues that it is just as likely to be a post-contact development that was introduced when Spanish missionaries--whose only training in native Mexican languages was Nahuatl--came into the area. The archaeological finds at Infiernillo and Huetamo suggest that the southern extent of the Tarascan state may have approached the coast, but until more work has been done in the area this is purely conjectural.

In any case the pre-contact Tarascan state dominated the greater part of present day Michoacán. From its nucleus in the lake and Sierra regions of Michoacán its influence was felt as far away as Lake Chapala and the communities of Jiquilpan, Peribán, and Tigüindin in the west, the Balsas depression and coastal mountain area surrounding Coalcomán

in the south, Lake Cuitzeo to the fringe of the Bahio in the north, and Maravatío, Morelia and Tacámbaro in the east (Stanislowski 1947:46-47).

The Relacion de Michoacán, written between 1539 and 1541, is a primary ethnohistoric source but it should be pointed out that the "history" related therein has not been confirmed either by other documents of a group of "Chichimecas" under Hireticatame who settled near Zacapu and in time came to dominate the neighboring village of Naranjan. From this area they embarked on a campaign of conquest in the central lake region under Hireticame's son Sicuiracha and established a base at Guayameo---now Santa Fe de la Laguna. Within several generations these Chichimec Tarascans consolidated their holdings and adopted the sedentary agricultural and fishing techniques of the inhabitants of the region (Boyd 1961:v).

The ascension of Taricuri to the office of cazonci or "king" in approximately 1370 marks the beginning of a period of imperialistic expansion for the Tarascan state. Under Taricuri the Tarascans conquered what is now northwestern Michoacán and part of Avalos province in Jalisco, the tierra caliente of Michoacán and Guerrero, and became involved in a series of wars with the Aztecs. At his death the state was divided among his heirs Hiripan, Tangxoan, and Hiquage who ruled at Cuyacan (modern Thuatzio), Tzintzuntzan, and Pátzcuaro. Of the three Tangaxon became the most powerful; subsequently his son, Zizipandequare, gained sole control of the state and extended its boundaries into southeastern Jalisco, Colima, and Zacatula in the 1440's and won a major war against the Aztecs under Axayacati. The boundaries of the state fluctuated during the reign of Zizipandequare's son Zuange. Brand states that some of the territory gained under Zizapandequare was lost; but with

his successor, Tangaxoan II, also known as Zinzicha, the state was expanding from Ajuetitlan and Cutzamala into central Guerrero (1944:41). Tangaxoan II ruled during the Spanish conquest of the Tarascan region; he capitulated to the Spanish conquest of the Tarascan region; he capitulated to the Spanish in 1522 and was killed by Nuno de Guzman in 1530.

2. Population and Settlement Pattern. Various estimates of the population of the pre-contact Tarascan state have been made. Mendizabal, basing his estimates on figures given in the Suma de Visitas,¹ places the pre-contact population at 200,000 (West 1948:12). Cook and Simpson (1948:29) citing Ixtlilxochitl's estimate of the Tarascan army, estimate 1,000,000. However, in a more extensive analysis of tribute lists, visitas, encomiendas and other types of documents, Cook and Simpson (1948:137-143) arrive at a figure of 236,089 for Michoacán in 1665. If we assume, as Cook and Simpson do on the basis of a large sample of central Mexican towns, that the 1665 population is forty percent of the population in 1519, then the pre-contact population is 495,787. More recently Borah and Cook (1963:87) have estimated the pre-contact population of Michoacán at 1,300,000. This figure, because it has been cross-checked in different types of documentary sources, is probably the most accurate.

The settlement pattern of the Tarascans appears to have been the typical Mesoamerican type, i.e., one of scattered towns containing a civil-religious center surrounded by residences and interspersed with

¹The Suma de Visitas is one of the first attempts to compile a demographic and economic survey of New Spain. Composed mainly of extent materials, it covers the period 1531-1544. However as Cook and Simpson (1948:3) point out, "There are wide differences in its treatment of the various provinces--differences in time, in methods of gathering and in criteria of evaluation. For this reason it should be used in conjunction with other sources."

smaller hamlets or ranches (Shook and Proskouriakoff 1956:100). Favored locations were isolated wooded mountain slopes exemplified by Cheran, the high ground near the margins of lakes, typified by Tzintzuntzan, ecologically transitional areas near access routes between different ecological zones as is Tacámbaro, and along river banks in tierra caliente as is Zacatula.

The most prominent structures built by the Tarascans were Yacatas. These were rubble filled stone faced mounds composed of a rectangular stepped pyramid joined to a circular stepped pyramid by a stepped passageway. The discovery of burials both within as well as on the margins of the structures suggest that they probably were used as tombs (Chadwick 1971:690). Smaller temples, consisting of a stone faced pyramid topped by a cane and thatch altar--as pictured in the Relacion de Michoacán (1970:pl. 27)--were built to receive sacrifices.

The pre-contact Tarascan houses were probably not the distinctive shingle-roofed plank structures pictured in the modern ethnographies of the area such as in Brand (1951) or Foster (1948). According to information contained in the Relacion de Michoacán and the Relaciones Geograficas, houses were constructed of cane and mud, adobe, and stone, depending on locality, and roofed with thatch. House shape appears to have been rectangular. Houses with round floor plans may have served as temporary shelters (Beals, Carrasco, and McCorkle 1944:33).

3. The Pre-contact Technology and Economy. The technology of the Tarascan state was primarily horticultural. Although the rich alluvial lands surrounding the lake areas and the volcanic basis in the Sierra region offer the greatest productivity to modern plow agriculture, pre-

ferred lands in the pre-contact period were probably the volcanic slopes due to their lesser susceptibility to frost and their lack of a tough sod cover (West 1948:36). These lands were reportedly held in common by the inhabitants of a village (Boyd 1969:vii), with special plots allotted to the *cazonci* and nobles. Such plots may have been worked by a class of tenants, as were the lands of the Aztec nobility (Carrasco 1952:12).

The basic horticultural implements were the *taricuri*, a hoe with a copper blade set at a right angle to the handle, and a simple digging stick of fire-hardened oak. With these implements the Tarascans cultivated small plots on the hill slopes and near houses. The technique of slash and burn horticulture was used prior to contact and, in fact, is still in use on some hillside Sierra fields. The remnants of terraces found near Chilchotla suggest that this technique was also known (West 1948:36).

Utilizing these techniques a variety of crops were grown. These included maize, beans, squash, amaranth, goosefoot, red and black kidney beans, pumpkins, chili peppers, agave, tobacco, tomatoes, chayoti, prickly pear cacti, custary apples, zapotes, avocados, cherries, chia and hog plums (Brand 1951:145-150; Relacion de Michoacán 1970; Barlow 1944:285-291). In tierra caliente fruits such as guayabas, ciruelas, and guamuchil were cultivated. Vegetables such as huautli, jicama, sweet potatoes, and manioc were also cultivated but were not of major economic importance. Cacao² and cotton were also important products of tierra caliente. (Brand 1943b:228).

²Pre-contact cacao cultivation has been documented by Millon (1955:55-56; 225; 227; 257) for Apatzingan, Ajuchtitlan, Zacatula, and possibly La Huacana.

The only true domesticated animals kept by the Tarascans were the dog and the turkey. Bees were kept for their honey and wax-- particularly in tierra caliente. Quite possibly the coati, a common pet in warmer areas of Michoacán today and described as the "hump backed dog of Michoacan" by Hernandez in the 1570's was also a pre-conquest domesticate (Brand 1951:152). The Relacion de Michoacán (1970:14) reports that the cazonci kept a zoo at Tzintzuntzan which included numerous species of birds as well as lions, jackels, tigers, and wolves.

In the lake region fishing was an important adjunct to the diet--in fact the word Michoacán is derived from the Nahuatl "michuque" which means "owners of fish." Several species of fish inhabit the lake; the most famous of these is pescado blanco, a freshwater smelt of the genus Chrisostoma. Fishing was undertaken from plank canoes with nets. Today ducks are taken with spear and atl-atl; the exploitation of this recourse is most intensive on October 31, the day before the eve of Todos Santos, when up to 1,000 canoes gather near Janitzio for collective hunts (Foster 1948:107). Humboldt (1903, vol. 2:448) reports on gathering axolotl, a type of salamander, but this was probably of little importance to subsistence.

Hunting was of considerable importance in the Sierra region during pre-contact times. Deer, rabbit, grouse, doves, quail, small rodents, peccary, and armodillo were hunted with bow and arrow, spears and slings for food; wolves, jaguars, and coyotes were taken for their skins. Hunting as a subsistence activity has declined from its former importance; Foster (1948:120) refers to it more as a sport than a contribution to subsistence.

Of minor importance to subsistence was the gathering of wild plants and animals. Edible roots, bulbs and berries, as well as many types of herbs were collected. Much of this activity is seasonal; for example, mushrooms and annual greens known as sakua appear only during the rainy season. The buds of a species of agave of the mezcal type were also gathered. These are rich in starch and were possibly one of the more important pre-contact wild foods (West 1948:51). The gathering of wild honey has also been of some importance (Brand 1943b:229).

Considerable economic importance has been attached to the utilization of forest products for construction making implements, cooking, and for ceremonial fires which burned at Tarascan temples; the Relacion de Michoacán (1970:11) notes that wood for these activities was part of the cazonci's tribute. In the Rio Balsas region of tierra caliente copal, dye plants, maguey, palm, rubber, and tree calabashes were gathered. From these came incense dyes, pulque, fibers for weaving, rubber balls for use in games, and decorated containers (Brand 1943b:29).

Tarascan handicrafts utilized numerous resources from all areas of their state. Copper from mines in the Jorullo region of tierra caliente was worked into axes, fish-hooks, masks, needles, bracelets, bells, and tweezers. The Tarascans were also one of the first peoples in Mesoamerica to employ techniques of alloying, smelting, soldering, casting, and plating (Willey 1966:173). Woven cotton cloth, utilized for clothing and preserved in the archaeological record due to its proximity to copper artifacts³ attests to the use of unique forms of multi-element fabrication as well as the use of a loom (Johnson 1962:525-526). Feathers

³The chemical action of copper oxide formed on the surface of artifacts sometimes preserves small swatches of fabric.

obtained from the numerous species of tropical birds inhabiting tierra caliente, were utilized to make cloaks of various types. Reeds from the margins of the lake were employed in the making of baskets and mats (West 1948:66).

A primary method of distributing the products of these regions was through tribute. Tarascan military expeditions throughout Michoacán resulted in the genesis of a system of tribute that served in redistribute the products of the conquered provinces among the Tarascan nobility. This tribute passed from smaller communities throughout the state to larger towns and from there to the *cazonci* and nobility residing in the dominant lake communities. Thus, for example, Periban and its subject towns gave to the *cazonci*, "maize, gallines de la tierra, deer, rabbits, jars and other things" (Barlow 1944:303).

The other means of distribution was through a series of local markets. Unfortunately there is little historical information concerning Tarascan pre-contact markets. Foster (1948:11), citing Rea, notes that there were periodic markets in major towns for the exchange of local products that took place in the evening from five to nine o'clock. However, evidence from contemporary ethnography such as Van Zantwijk's (1957:15) or Foster's (1948b:158-159) on fish-wood exchange in Erongari-cuaro and from archaeology such as Chadwick's (1971:680) report of Tarascan ceramics in the El Infiernillo area suggests that numerous exchanges of various types of products were taking place.

Information from the Relaciones Geograficas concerning the acquisition of salt and cotton by highland Tarascan villages allows a tentative reconstruction of some other trade patterns. The communities of the western Sierra region (e.g. Jiquilpan, Tingüindin, and Peribán)

reportedly obtained salt and cotton from Avalos, Colima, and towns in eastern Jalisco northwest of the Rio Teralcatepec (Papeles de Nueva Espana 7:82, 86, 114, 115; Barlow 1944:286). While cotton was an important product of tierra caliente villages such as Zacatula and Sirandaro, more documentation is needed of trade in this item. The modern exchange route between tierra caliente and the Tarascan villages of the lake area is via either Arlo de Rosales or Tacámbaro and it is likely that these routes were followed in pre-contact times (Stanislowski 1969:77).

In any case sufficient information concerning tribute and trade is present to conclude that these activities were conducted between numerous communities in varying ecological zones. While it is obvious that there would be a demand for products grown only in a certain area, it is also likely that some of these areas might have experienced pressure on resources at certain times of the year. One way to alleviate these shortages would be to gain control of areas having slightly different ecological conditions. This would have been of some significance to the formation of the Tarascan state in that the dominance of numerous ecological zones appears to be a necessary condition for advanced political organization (Carniero 1970:737).

4. Social Structure. Numerous writers have utilized the Relacion de Michoacán to attempt to decipher the workings of the Tarascan government. For the most part, however, their observations on this aspect of Tarascan culture are confusing. For example, Foster (1948a:11-12) and Stanislowski (1947:46) stress the personal power of the Cazonci or "king" of the Tarascans as well as the extent of their "empire". Bravo

Ugarte (1962:95) refers to the Cazonci as an absolute monarch, who through conquest, established a kingdom in which all were brothers. Most recently Van Zantwijk (1967:36) pictures a kind of shifting kingship in which the ruler of one of three administrative centers dominates for a period of time and is then replaced by another.

The Tarascans had an advanced political organization and a system of social stratification that was probably on the level of a large chiefdom or state. Tarascan economic structures have characteristics which Service associates with chiefdoms (1971:165). For example the Relacion de Michoacán discusses redistribution:

All the lords here have no virtue other than generosity for they hold it insulting to be niggardly. When messengers sent by the chief of some village enter the house of the Cazonci, he orders that blankets and shirts be given to them. Frequently he distributes blankets to the people attending the feasts and banquets given for the lords.

Certain other features--for example, the legitimate monopoly of force--indicate that the Tarascans achieved statehood. According to the Relacion de Michoacan, "the ministry of the Cazonci consists of overseeing the feasts of the gods, ordering wood for the temple fires, and sending people to the wars" (1970:19).

This information, together with the statement from the Relacion de Michoacan (1970:1) that the state was united under the present Cazonci's grandfather Zizipandesquare, who died in 1479, suggests that the Tarascans had achieved statehood just prior to the arrival of the Spanish. This development was probably facilitated by Tarascan rivalry with their Aztec neighbors to the south and east in that it necessitated the further centralization of power to carry out military activities.

The Cazonci, in addition to his semi-divine status and civil and religious control of the state, was accorded a number of other privileges. He was the head of his lineage, the Vacuxecha or eagles, and was also responsible for arranging the marriage of his relatives to other lords. He also had a large retinue of female servants who, under the leadership of his wife, the yreri, cared for both his person and his possessions. Moreover, sumptuary rules set him apart from his fellows: for example, whenever a lord wished to speak with the Cazonci he was required to wear old garments, remove his footgear, and speak from a distance (Relacion de Michoacán 1970:31).

The Cazonci was assisted in his duties by a number of minor officials who made up the state bureaucracy. These officials supervised the day to day activities of the state such as the operation of the system of tribute, the overseeing of the production of goods and services, and the supervision of the religious activities of the state. The following list of officials has been compiled from the Relacion de Michoacán (1970:11-18) and Van Zantwijk (1967:42-45).

TABLE ONE

CIVIL AND RELIGIOUS OFFICIALS OF THE TARASCAN STATE

<u>Title</u>	<u>Duties</u>
Archaechas	Maintenance of palaces for the Cazonci in the provinces
Carachaecapachas	Province chiefs
Ocambecha	Tribute collections; census; labor conscription for public works
Piroxaquen-vandari	Collection of tribute in blankets and cotton; collection of mats and matting for common needs

<u>Title</u>	<u>Duties</u>
Tareta Varatati	Supervisor of the Cazonci's seed plots
Kwahta-uri or Wekskuti	Head of builders
Cacari	Supervisor of stone masons and quarries
Quanicoti	Chief of all hunters
Curru Apindi	Head of quail and duck hunters; gathers birds for sacrifices
Vavuri	In charge of all net fisherman; collected tribute in fish
Cavaspati	Supervisor of the harvests
Tarama	Head of fisherman
Ehpuspati or Kwipuakuri	Receiver of corn and honey
Cuzuri	Chief leather dresser
Uscuarecum	Overseer of feather workers
Pucuricuari	Head of forest guards, wood cutters, and carpenters
Mayapeti	Head of merchants, particularly traders in gold, feathers, and precious stones
Kwinguingati-uri	Head of silversmiths
Cheriguenquei	Supervisor of cotton armor makers
Quaricoquari	Head of bow and arrow production and storage
Quenque	Supervisor of corn on the ear
Kwatas-uri	Head of makers of trunks and the tuli weavers
Hicharuti Vandari	Chief canoemaker
Paricuti	Chief boatman
Evongkarikwa	Chief of spies
Vaxanoti	Chief of messengers
Anksukwapari	Chief of standard bearer

<u>Title</u>	<u>Duties</u>
Wakuxeranguti	Guardian of the eagles and other birds
Xurihkakaheri or Ts napeti	Chief of curers
Vrani Atari	Head of gourd painters
Chunicha	Head of painters
Hucaziquauri	Chief of jars, plates, and bowls
Akawekwa-uri	Head of the sandal makers
Kahratati	Deputy of the housesweepers
Tsinahpu-uri or Ts ts Kikanakwa-uri	Head of flower and wreath makers
Quangariecha	Lords to the Cazonci
Petamiti	High priest
Curitiecha	Preachers, officials at ceremonies, check on wood tribute
Curicitacha	Place insence in burners
Tininiecha	Carry gods in war
Kikiecha	Chanting of prayers and rituals
Axamiecha	Perform human sacrifices
Opitlecha	Hold human sacrifices
Atapacha	Drum beaters
Pasantiecha	Sextons and guards of the gods
Pungakucha	Horn blowers
Hiripacha	Make prayers and exorcisms before battle
Hatapatiercha	Sing and march ahead of captives

Some idea of the size of the Tarascan state organization can be seen from the Relacion de Michoacán (1970:12) which lists the size of the builder's group at 3,000. The fact that there were numerous levels

of organization mentioned for some occupations--for example, the Quanicoti was head of all hunters but the Curru Apindi headed the quail and duck hunters--also testifies to fairly large groupings. That craft specialization and the division of labor was highly developed is also evident from the numerous activities mentioned and the levels of organization within them.

Pre-contact Tarascan society was a stratified society. The Relacion de Michoacán makes clear reference to at least three classes; these are nobles, commoners, and slaves. The first of these, the nobles can be subdivided--as the Relacion de Michoacán does--into "greater and lesser lords." A greater lord might include an official or chief of one of the boundary such as Jacona while lesser lords would probably rule the smaller villages. It is also likely that certain occupational groups such as the priests were of high status particularly since the Relacion de Michoacán (1970:17) mentions that Cazonci and nobles were also members of the Axamiecha who performed human sacrifices.

There is, then a parallel with the Aztec hierarchy about which Borah and Cook (1963:12) write:

The rulers of the Triple Alliance, the administrators and counselors of their courts, and the pipiltin (nobility) in general were all essentially a single group of divinely sanctioned origin entitled to support by the lower orders. Associated with them and entitled also to support were the temple priests, the administrative staffs of the state and community, those commoners who served in the lower ranks of the administrative hierarchy, such as the calpullec; the calpixques, community priests and teachers; the artisans; and specialists associated with administrative and religious services.

This nobility was probably supported, as it was among the Aztecs, through the production and services of large numbers of slaves, through the income provided by land held by the nobility, and through the operation

of the tribute system. In addition there were probably the equivalent of what the Spanish called servicio and comida in the Valley of Mexico. These were, respectively, informal levies of such services as "grinding corn, cooking, fetching firewood and water for households and temples, and providing labor and materials for such jobs, as building and repairing houses and maintaining gardens," and "the delivery of foodstuffs and related items for daily consumption beyond the quantities paid under formal tribute assessments. . . ." (Borah and Cook 1963:14).

In addition to this differential access to resources and privileges, the Relacion de Michoacán (1970:30) discusses the sanctions that were imposed to maintain internal social order. The Cazonci and high priest, either personally or through a class of messengers known as vaxanoti, could confiscate the property and ranks of insignia of the guilty party. The offending party was then either subject to a jail sentence of a few days in the case of a minor offense, or to exile or death in the case of a more serious crime. Interestingly, relatives of the Cazonci who were deemed irresponsible due to a fondness for alcohol, were subject to the death penalty.

External social control was maintained through the army of the Cazonci. The list of occupations given previously does not include military specialists; the raising of the armies for war was left to the chief of each village. These officials, in conjunction with the Quangariecha or valient men and the Ocambechas who knew the number of inhabitants in each village assembled groups of warriors and provisions and departed for battle. Non-Tarascan subject groups were also included; the Relacion de Michoacán (1970:23) states, "those who are going to this conquest are the people from Mechuacan with Chichimecas and Otomis, whom

the Cazonci had subjected, the Maltalzincas, the Vetamaocha, and the Ychontales, who were joined by those from Tuspa, Tamazula, and Capotlan."

All of the state offices, including that of the Cazonci, were hereditary. The inheritance of position was reckoned patrilineally and was linked to membership in a clan or lineage. For instance the Cazonci and the other members of his lineage, the eagles or Vacuxecha, constituted the Tarascan ruling class. Members of this lineage, were either appointed or married into positions of authority with the approval of the Cazonci.

There seems to be some dispute about forms of inheritance other than offices in the state bureaucracy. Van Zantwijk (1967:55) notes that Aguirre Beltran's supposition of a matrilineal descent for the Tarascans was based on the Relacion de Michoacán's statement that it was possible for an "uncle" to marry his "niece," but not for a "nephew" to marry his "aunt". While Aguirre Beltran has concluded from this that a man could marry a brother's daughter but not a sister's daughter, Van Zantwijk (1967:55) points out that this interpretation is based on a Spanish translation of the Relacion de Michoacán and not the original Tarascan text which has been lost. In any case it is known that inheritance of some property was matrilineal, thus suggesting that double descent may have operated.

Marriage, which is discussed both for the nobility and commoners, was lineage endogamous. The Relacion de Michoacán (1970:38) states, "they began to marry their relatives to benefit each other, and because they are all one family, they still have this custom handed down to them," and (p. 40) "they always marry their relatives of the stock they sprang from, and they do not mingle lineages as do the Jews." Marriages among

both nobles and commoners were generally arranged by the parents, although occasionally love matches occurred, and could be dissolved by the high priest. It is reported that after marriage the couple lived with the groom's parents (Relacion de Michoacán (1970:39)).

5. Religion. Although the Tarascan religion was reportedly polytheistic much attention has been given in the Relacion de Michoacán to Curicaveri, the god of the Cazonci's lineage. Other important deities included the goddess Xaratanga, whose status was nearly equal to that of Curicaveri, and Querenda angapeti to whom the Cazonci made an annual pilgrimage from Tzintzuntzan by canoe and on foot to Zacapu. While the Cazonci and the Petamiti or high priest were responsible for maintaining the ceremonies surrounding the worship of Curicaveri by tending the sacred fires at the temples, the care of the other gods was entrusted to lesser members of the priesthood (Foster 1948a:13).

Human sacrifice appears to have been an important element in the Tarascan religion. Sacrificial victims were slaves, war captives, criminals, and sometimes volunteers who were reportedly possessed by a god. These sacrifices, administered by the Cazonci and the Petamiti occurred at intervals throughout the Tarascan year.⁴ For example, the Relacion de Michoacán (1970:15-16) notes that during the feast of Sicuindiro two slaves were sacrificed by having their hearts removed. The hearts, while still warm were then taken from Zinapécuaro to the hot springs of Araro where they were thrown into one of the springs and covered over with planks.

⁴The scheduling of sacrifices appears to have been correlated with the calendar. The Relacion de Michoacán (1970:16) also mentions sacrifices at the feasts of Cuingo and Curindaro, which are also the names of Tarascan months.

Minor ritual functions, such as assisting at sacrifices by holding the victims, transporting the idols to fiestas or wars, burning incense in the temples, chanting the rituals and the like were relegated to lesser members of the priestly class. In addition sorcerers, curers, and diviners were also considered members of the priesthood. Priests were not expected to be celibate and their position was hereditary (Foster 1948a:14).

CHAPTER III

COLONIAL MICHOACAN

A. First Contact

Since there is no definitive work on the conquest of Michoacán comparable to Bernal Diaz's description of the conquest of the Aztecs, any reconstruction of the first Spanish expeditions to Michoacán must be based on fragmentary passages from various accounts. Most useful are the Relacion de Michoacán, the Relaciones of Cortes (Morris 1962), and the general accounts of discovery and conquest such as those of Herrera y Tordesillas or Oviedo y Valdez as interpreted by Sauer (1948). Often, as Brand points out, the result of such a reconstruction are more confusing than enlightening; events described by one source are not confirmed in another, the same event may be described in such a manner as to appear to be different, and different events may be described so that they appear to be the same, particularly in those circumstances in which a compiler is himself working from numerous accounts (1971:636). If we add to this the vested interests of the various writers--be they Franciscan or Dominican, in favor of or opposed to certain Crown policies, i.e., the encomienda--we are then faced with the problem of evaluating these accounts in addition to synthesizing a series of events.

According to Wagner who utilizes the Cronica de Nueva España of Cervantes de Salazar, Michoacán was discovered by accident (1944:389). Francisco de Montano, one of Cervantes de Salazar's informants, tells

of a soldier named Parrillas who, while out seeking turkeys for the army, stumbled upon the Tarascan village of Tajimoroa on February 23, 1522. This first entrada into Tarascan territory is also described in the Relacion de Michoacán (1970:68); accuracy of dating was achieved because the event coincided with the feast of Purecoragua (1970:68). Parrillas remained for two days in Tajimoroa and then returned to Mexico City.

Conflicting accounts are given of the second entrada into Michoacán. The second expedition, as reconstructed by Bravo Ugarte from the accounts of Herrera, consisted of three Spaniards and twenty Aztec allies under the command of Francisco de Montano and was received by the Cazonci at Tzintzuntzan (1962, vol. 2:18). This expedition remained eighteen days before returning to Mexico City. The Relacion de Michoacán's description of a second expedition is quite different. The Relacion de Michoacán states that only three Spaniards were received by the Cazonci (1970:68-69). After giving the Cazonci ten swine and a dog and trading in various items, this party, accompanied by two Indian girls, returned to Mexico City. The Relacion de Michoacán then attributes the origin of the word Tarascos to a Spanish corruption of Tarascue, or son-in-law, which is what the Spaniards were called by the other Indians who accompanied them (1970:69). A third expedition to Michoacan is described only by the Relacion de Michoacán.⁵ After the return of the second expedition to Mexico City, four more Spaniards joined the Tarascans on their

⁵Sauer (1948:6) notes that Herrera mentions the dispatch of some Spaniards back to Tzintzuntzan with the Tarascans who arrived from the second expedition, but neither the purpose nor the result of this expedition is mentioned.

journey back to Tzintzuntzan where they gathered a number of men for an entrada into Colima. At a village called Hac-zgran the Spaniards remained and sent the Tarascan allies on ahead to meet with the lords of Colima. The Tarascans were captured and sacrificed; the Spaniards returned to Tzintzuntzan where they stayed for two days before their return to Mexico City.

News of the Spanish conquest of Mexico, received first from Aztec missions to Cazonci⁶ and later from the returning Tarascans of the first entradas, evidently prompted the Cazonci to ally himself with the Spanish. Cortes notes in his Third Letter (Morris 1962:229).

The ruler of the great province, by name Michoacan, whose seat is some seventy leagues from Tenochtiklan, hearing of our capture and destruction of the capital, and thinking that since we had done this nothing could be impossible, sent in fear certain messengers to tell me that he had heard that we were vassals of some mighty lord, and (if I should think it good) both he and his people desired to become vassals of that lord and dwell in friendship with us.

Stimulated by the previous expeditions, Cortes decided to mount a major expedition to the area to claim Michoacán for Spain. On July 17, 1522, during the Tarascan feast of Caheri Conscuaro, a force of 200 Spaniards together with an unknown number of Mexican allies under the command of Cristobal de Olid journeyed to Tajimoroa. When news of the occupation of this town reached the Cazonci at Tzintzuntzan he fled the city but was later captured after the occupying forces reached the capital. The Spanish force remained in Michoacán for 120 days occupying the five major temples and priests' residences at Tzintzuntzan and collecting

⁶The Relacion de Michoacán (1970:65-67) describes two Mexican expeditions to Michoacán sent by Montezuma to secure aid against the Spanish who were attacking Tenochtitlan at the time.

numerous items of gold and silver which were subsequently sent by tamemes⁷ to Cortes at Mexico City (Relacion de Michoacán 1970:80).

After acquiring more gold and silver from information given him by the Cozonci, Olid sent him 300 loads of the gold and silver, and "all the lords, principals, and chiefs of the province" to Mexico City (Relacion de Michoacán 1970:83). The Cazonci was received by Cortes and told not to collect any more tribute from his villages, which were to be given in encomienda. He then returned to Tzintzuntzan carrying with him two ship's anchors for Olid. Olid split his forces, and sent half to Mexico and half with a party of 1600 Tarascans to establish a port of Zacatula. Zacatula thus became the first Spanish shipyard on the Pacific coast of Mexico (Brand 1956:586).

The first Spanish survey of Michoacán was undertaken to determine the number of villages for distribution in encomienda and was conducted by Antonio de Carvajal in 1523. The survey was a listing of all the major towns in the area together with the smaller settlements that were subject to them and includes the number of houses in each settlement.⁸ Carvajal, accompanied by three other Spaniards, spent approximately one year conducting the survey before returning to Mexico in 1524 (Warren 1963:406).

Although the first contacts between the Spanish and the Tarascans were peaceful, the partition of Tarascan rights to tribute and land among the Spanish was not without strife. The ten year period immediately

⁷Indian carriers.

⁸Unfortunately for estimates of aboriginal population only fragments of the original visitation has been recovered. Complete reports are given only for the towns of Comanja, Uruapan, Turicato, Guanigüeo, and Erongarícuaro.

following the conquest was marked by a power struggle between differing factions of encomenderos on the one hand and the native nobility on the other. For while Cortes was occupied with the conquest of Guatemala and Honduras in 1524, the royal factor Salazar was confiscating his encomiendas, including Tzintzuntzan in Michoacán, and redistributing them to his friends. In addition the Cazonci may have attempted to keep additional tribute for himself by re-routing some of the inspection parties to avoid certain isolated communities (Warren 1963:408).

The arrival of Nuño de Guzman with 300 Spanish troops and 7000 Indian allies and his subsequent execution of the Cazonci because of the latter's failure to give sufficient gold and interference with the workings of the encomienda marked a period of violence in Spanish-Indian relations in Michoacán. Guzman, stimulated by tales of the Amazons⁹ and their wealth, seized several thousand Tarascans to act as tamames and proceeded to pillage and burn his way from Michoacán to Jalisco. Even in those cases in which the Indians received him peacefully, he goaded them into rebellion so that he might justify enslaving them. These excesses finally reached the attention of the Crown and Guzman was called to Mexico and imprisoned (Parker 1966:70).

⁹This is not so far-fetched as it sounds. As Leonard (1964:36) points out:

Beginning with Columbus' account of his voyages and in the writings of Peter Martyr, the first of the historians of the New World, and of his successors, Oviedo and Herrera as well as in those of first-hand chroniclers such as Pigafetta of Magellan's voyage, and particularly Carvajel, who recorded the famous odyssey of Crellana through the heart of South America, the widely advertised legend appears conspicuously. Many other explorers of the sixteenth century and later, including Sir Walter Raleigh, have left testimony of their varying shades of conviction concerning the existence of the Amazons.

B. Population and Settlement Pattern

The population of Michoacán, like that of all Mexico, underwent a precipitous decline during the sixteenth century. From a pre-contact population ranging from 500,000 to approximately 1,000,000, the population of Michoacán declined to about 236,000 in 1565 (Cook and Simpson 1948:137-143). Gerhard provides more detail concerning both the rapidity and scope of the decline by reporting figures for numerous alcaldias mayores in Michoacán:

TABLE TWO

POPULATION DECLINE OF SELECTED MICHOACAN ALCALDIAS MAYORES

<u>Alcaldia Mayor</u>	<u>Year</u>	<u>Population</u>
Celaya	1570	6,000
	1580	3,500
Cinagua y La Guacana	1550	2,500
	1570	1,750
	1600	620
Cuiseo de la Laguna	1548	4,379*
	1554	2,000**
	1579	1,900
	1588	1,545
Charo	1548	963*
	1554	600**
	1573	600
	1597	351
Guarmeo y Sirandaro	1548	5,468
	1579	2,300
Maravatío	1570	4,148
	1600	2,000
Motines	1560	2,500
	1571	2,200
	1580	1,200
Tancítaro	1565	1,200
	1600	1,000

* persons above four years of age

** hombres de carga

<u>Alcaldia Mayor</u>	<u>Year</u>	<u>Population</u>
Tinguindín	1522	3,000
	1566	608
	1579	480
Tuxpa	1580	1,700
	1623	685
Valladolid	1554	37,100
	1570	25,385
	1600	12,770
Xiquilpa	1579	1,700
	1600	1,435
Zacatula	1550	5,500
	1571	1,812
Zamora y Jacona	1546	4,361
	1566	1,185
	1571	1,000
	1588	935
	1600	672

(From Gerhard 1972a)

Numerous factors such as famine, war, and ill-treatment have been cited to explain this population decline; however the heaviest contribution to the decline was undoubtedly plague. As Crosby pointed out, the American Indian was isolated from the rest of mankind for generations; his only genetic resistance for disease was restricted to native American pathological species (1967:322). This meant that disease which Europeans could occasionally survive, such as smallpox, measles, typhus, plague and influenza, resulted in extensive mortality in the unprotected Indian, particularly in the first century of contact.

The Spanish population of Michoacán tended to settle on or near the Tarascan towns. The encomenderos naturally wanted to be close to their source of tribute and labor; the missionaries settled near the Indians to convert them. Some settlements, like Valladolid, were established near areas which the Spanish found suitable to cultivation

or ranching. Others like Zacatula, were chosen because of their suitability as ports; still others, like Tacámbaro, because they were important centers for products of tierra caliente (Stanislowski 1947b:143).

These early settlements were constructed using a grid plan of Roman origin that specified straight streets that were either parallel or at right angles to each other (Stanislowski 1947c:96). Important civic or religious buildings were located in the center of the town. For example Basalenque's description of Tiripitio states:

Hacia el mediodia el convento; al Oriente el hospital, al Norte la escuela de cantores, y de muchachos para leer y escribir, al Ponciente el cemitario con sus capillas donde los ninos apprehenden la doctrina (1963:62).

Numerous specialized settlements--forerunners of the great haciendas of the seventeenth century--arose from land grants to individuals, missionary orders or communities. These grants or mercedes were given by the King's representative or the ayuntamiento of a community and specified the location, the amount of land granted and the purpose for which it was to be used. Initially granted as a reward for services to the Crown and an incentive to colonization, mercedes were eventually bought and sold (Chevalier 1970:135).

A grant of agricultural land was either a peonia,¹⁰ approximately twenty acres which was granted to a footsoldier, or a caballeria, approximately one hundred acres which was given to a soldier on horseback. By the second half of the sixteenth century, these settlements were known as estancias, either de labor (plowland) or de pan llevan (wheatland). They usually consisted of numerous caballerias which were accumulated by repeated grants, purchases from other Spaniards or Indian

¹⁰ Chevalier notes that the peonia was generally given to Indians.

caciques, or the expropriation of unused land (Chevalier 1970:69).

Three types of land grants for livestock were made in New Spain each of which these grants (mercedes) specified use of the land. Ranches (sitios) were divided into either ganado mayor for large animals such as cattle, horses, mules and burrow, ganado menor for smaller animals like sheep goats and hogs, or sitio de criadero mayor for cattle breeding (1963:99). At first the sizes of these grants was unregulated but by the 1530's a site for ganado mayor was to be approximately 5,000 varas; and for cattle breeding 2,500 varas or 1,084 acres. In addition by the 1530's the distances between ranches and Indian lands or communities was regulated. Ranches could be not nearer than 1,000 varas to Indian houses or 1100 varas from an Indian church (Dusenberry 1963:99-100).

Often agricultural and livestock grants were made together. Sitios de ganado mayor or menor could include several caballerias for farmland; estancias de labor or pan llevan could also include one or more sitios for stock raising. All of these grants included water rights (saca de agua) for irrigation (West 1949:69). This practice had numerous precedents in Spain particularly in the province of Valencia (Cf. Glick 1970).

Another type of settlement introduced shortly after contact was the real de minas or mining community. These settlements in contrast to the placer mining of the temporary rancho, grew up around large deposits of metal and required considerable capital investment. The real de minas included the mines themselves, ore-reduction plants, buildings for the workers, and surrounding areas of agricultural, grazing, and woodlands (West 1949:4).

The missionaries were actively engaged in settling Michoacán. The first missionaries entered Michoacán at the request of the Cazonci

who had asked Martin de Valencia, head of the Franciscan mission to Mexico, to send priests. The first friars arrived at Tzintzuntzan in 1526 where Fray Martin de Jesus founded a convent. In the years following missions were established at Pátzcuaro, Acambaro, Zinapécuaro, Uruapan, and Tarecuato. In addition residences were established at Erongarícuaro, Guayangareo (Valladolid) and Zacapu. The populous central lake area of Michoacán was thus the center of Franciscan religious activities in the region (Ricard 1966:65).

Some Franciscan settlements, exemplified by Santa Fe de la Laguna, were based on ideas set forth in Sir Thomas More's Utopia. Vasco de Quiroga, first as oidor of the first audiencia and later as the Franciscan bishop of Michoacán established a number of hospitals throughout Michoacán that cared for the needy, served as centers of instruction in civilized life (policia) and instructed the natives in Christianity. These hospitals consisted on a number of large extended family dwellings with an infirmary, chapel, and public offices, all of which were surrounded by communal lands and workshops. The first of these, established in 1533, was built with Indian labor on land sold to the pueblo of Santa Fe by the Tarascan governor of Michoacan for 150 pesos (Warren 1963:87).

The Augustinians did not establish a mission in Michoacán until 1537. The encomienda of Tiripitio, granted to Juan de Alverado, was the site of the first Augustinian mission to Michoacán. From this settlement, they expanded south to Tacámbaro and Cupandaro and north as far as Yuriria. The Augustinian expansion in Michoacán was relatively rapid; for example between 1550 and 1554 missions were established at Cuitzeo, Yuriria, Guayangareo, Huango, Charo, Ucareo, and Jacona. Augustinian

settlements in Michoacán followed a north-south line in eastern Michoacán that extended from the northern plateau area to the Balsas Lowlands (Ricard 1966:75).

C. Sixteenth Century Economy

The introduction of Spanish agricultural and stock raising techniques lent a new direction to the sixteenth century economy of Michoacán by creating potentialities for exploitation of the environment that were not realized by the indigenous inhabitants. While in pre-contact times the volcanic slopes had been preferred agricultural land, the introduction of the ox drawn plow made possible the exploitation of the rich alluvial basins that are scattered throughout the Sierra regions as well as the wide fertile valleys such as that surrounding Morelia. In addition, the undulating grasslands of tierra templada and the scrub vegetation of tierra caliente provided rich grazing lands for cattle and sheep.

Extensive grants of land to individuals and groups such as the clergy resulted in changes in land tenure. The indigenous system of community owned small holdings was replaced by one in which large holdings became predominant—especially in those cases where stock raising was involved. Major land holding groups in Michoacán included the Spanish gentry, such as the Perez de Boca-negra and Villaseñor families (Chevalier 1970:65), the Church, to whom numerous capelliarnias¹¹ had been granted. The Indian nobility (Lopez Sarrelangue 1965:133-144), and municipalities, which had been granted townsites of 500 varas (1375 ft.) in each of the four cardinal directions (Taylor 1972:68).

¹¹Pledges of income to the Church upon the death of the giver.

In addition to changes in the type of land exploited and the amount of land under cultivation, the introduction of new techniques had a number of other effects on subsistence economy. As Lewis points out in his contemporary study of plow vs. hoe agriculture, plow agriculture "had inherent potentialities for expanded production depending primarily upon the amount of capital available and the amount of land owned or rented" (1949:117). Thus even though present day yields might be higher with hoe agriculture per cuartillo (one cuartillo equals approximately two liters) of seed planted, farmers using the plow simply plant more (Lewis 1941:117). Increased cost for the tools of production and decreased production time are also characteristic of plow agriculture. The effects of these two systems on the environment also differ; slash and burn hoe agricultural systems tend to be the least disruptive of the environment; plow agriculture, particularly in combination with monocropping is much more disruptive (Rappaport 1971:79).

Techniques of irrigation, derived from the Moors, were also introduced. Stream waters were sometimes diverted through canals or dammed to create presas or reservoirs. Wells were dug and in some places the noria, or waterlift, was used. Spanish canal irrigation was evidently similar to indigenous irrigation techniques but more highly developed (West and Augelli 1966:280).

Numerous European crops were introduced in those areas which were suitable for their cultivation. Wheat,¹² barley, cabbage, turnips, carrots, lettuce, grapes, figs, straw for livestock, apples, pears,

¹²Two varieties of wheat are mentioned by the Relacion de Chilchotla. (Papeles de Nueva Espana 6:24-25). One of these, de riego, was probably irrigated.

peaches, apricots, quince and European cherries were cultivated on tierra fria and tierra templada lands such as those surrounding Tancítaro or Jiquilpan (Papeles de Nueva Espana 6:211; Papeles de Nueva España 7:285). Warmer tierra caliente lands were used to plant oranges, lemons, limes, citrons, pomegranates, nuts, and sugar cane. (Papeles de Nueva Espana 6:210). Some of these crops yielded two times a year; the Relacion de Jiquilpan mentions two yields of oranges and pomegranates (Papeles de Nueva Espana 7:93).

Although I was unable to obtain any production figures for sixteenth century agriculture in Michoacán¹³ and hence cannot compare it to other agricultural areas of Mexico, a rough idea of the amount of land under cultivation can be obtained from Simpson's study of mercedes contained in the Mexico National Archives:

Grants of Agricultural Lands 1536-1620

<u>Region</u>	<u>Grants to Spanish (in cabellerias)</u>	<u>Grants to Indians (in Caballerias)</u>
Jiquilpan-Tancítaro	270	17
Puruandiro-Tacámbaro	498	68
Turicato-Zacatula	59	6
Zinapécuaro-Temescaltepec	486	27
Pungarabato	46	-

(1952:table following page 19)

Other types of plants under cultivation produced dyes. Although the hot country dye plant Indigofua suffruticosa (xiquilite) was probably not cultivated in Michoacán, cochineal (grana) is mentioned in both

¹³El Archivo del Obispado de Michoacán contained only one expediente from the sixteenth century. With the exception of a few account books from 17th and 18th century haciendas, most information on agricultural production dated from the 19th century.

¹⁴The Center of Indigo production in the New World was the Pacific coast from northwest Guatemala to Honduras. See also Smith (1959).

the Relacion de Pátzcuaro and the Relacion de Tinguindin (Papeles de Nueva Espana 7:50; Papeles de Nueva España 7:85). This dye stuff obtained from scale insects inhabiting the nopal cactus, was of considerable economic importance to New Spain. Lee notes that total cochineal exports from New Spain reached nine percent of the silver export in 1594 (1951:205). Dyewoods, although mentioned in the Relacion de Zacatula, (Barlow 1947:265) were probably not exploited to any great extent, as this activity was undertaken on the east coast of Central America by the English (West and Augelli 1966:285).

The introduction of the mulberry tree and the silkworm into Puebla and Oaxaca in the sixteenth century resulted in the creation of a Mexican silk industry. The raising of silkworms was also carried on in Michoacán at Pátzcuaro and Tinguindin but was probably not extensive (Papeles de Nueva Espana 7:50; Papeles de Nueva España 7:85). The Mexican silk industry disappeared in the latter part of the sixteenth century with the establishment of the Manila trade and the importation of cheaper Asiatic varieties into Spain (Borah 1943).

Coconuts, which probably reached the region of Zacatula from Panama by a long-shore current, were the raw material of a minor industry that was established at the end of the sixteenth century. The Indians of the region of tierra caliente who learned the technique from newly arrived Filipinos, began to manufacture and sell coconut wine and brandy. Although the industry was at first banned by decree of the Viceroy Luis de Velasco, it was later licensed and flourished sufficiently to supply vino de cocos for export (Bruman 1945:217).

Processing, for those crops that required it, was generally undertaken at various locations throughout the state. Simpson lists

the number of grants establishing flour mills (eridos de molino) in Michoacan; these tend to be concentrated in the northern plateau area near the primary wheat growing areas such as La Canada (1952: table following page 19). Sugar cane, which was grown near the Lerma River and Yuriria and in the central and southern valleys, was processed in large refineries located at Tajimoroa, Zitacuaro, Tingambato, Tacambaro, and Periban (Chevalier 1970:77). Because of the large capital investment required--as much as 50,000 pesos in the sixteenth century--refineries were controlled by very wealthy individuals or the missionary orders (Chevalier 1970:76).

Livestock raising, while not quite on the scale of northern Mexico, was conducted in all areas of Michoacan where grazing land was available. Simpson records the following land areas given over to sheep and cattle raising:

TABLE THREE

GRANTS FOR LIVESTOCK RAISING 1536-1620

<u>Region</u>	<u>Grants to Spanish (square leagues) for cattle</u>	<u>Grants to Indians (square leagues) for cattle</u>
Jiquilpan-Tancitaro	88	-
Puruandiro-Tacambaro	129	-
Turicato-Zacatula	29	-
Zinapecuaro-Temescaltepec	88	-
Pungarabato	25	-

<u>Region</u>	<u>Grants to Spanish (square leagues) for sheep</u>	<u>Grants to Indians (square leagues) for sheep</u>
Jiquilpan-Tancitaro	20	6
Puruandiro-Tacambaro	58	16
Turicato-Zacatula	1	1
Zinapecuaro-Temescaltepec	70	17
Pungarabato	2	-

(1952: table following page 19)

Mining activities in Michoacán were evidently on a very small scale and played only a minor role in the economy. West and Augelli state that the Tarascan gold mine of Tamazula may have been exploited as early as 1525, (1966:293) but the Relacion de Tuxpa-Capotlan, which includes a description of Tamazula, makes no mention of any gold mines (Papeles de Nueva España 7:127). Gold placer mining took place throughout tierra caliente along the tributaries of the Rio Balsas; gold deposits and mines are mentioned in the region near Zacatula (Barlow 1947: 266). Silver was extracted near Sirandaro:

Quatro leguas de la cabecera ay vnas mynas de plata que se dizen del Espiritu Sancto, donde ay trey haziendas con algunas negros: los anos rasados avia en ellas muchos espandes y haziendas, y se sacaua muncha cantdad de plata, y, como se libertaron los esclauos yndios (Fol. 3 vto) que las solian labrar, an benido a la miseria en que al presente estan; es poca la plata que sacan: tienen hierro de su Magestad con que se senala (Papeles de Nueva España 6:22).

While the distribution of goods in the pre-contact economy was oriented toward the central lake district, during the colonial period the distribution of goods was affected by the intensive development of mining in northern Mexico. For of all the new technology introduced during the Spanish colonial period, none had so great an impact upon Michoacán's economy as mining. West and Augelli state, "the acquisition of precious metals was the outstanding motive for initial Spanish settlement in Middle America. . .the extraction of gold and silver became the leading business of New Spain" (1966:292).

The surpluses produced by new agricultural technology found ready markets at the mining communities established in Zacatecas, Guanajuato, and Chihuahua. Until the rise of the Bahio as a major

producer of grain for the mines in the seventeenth century.¹⁵ Michoacan and other food producing areas sent goods north. Bakewell notes that the grain producing areas of Michoacán were linked to the Camino Real as early as 1550 (1971:58). Products of Michoacán's tierra caliente such citrus fruits, coconut wine, and plantains were exported as far north as the Parral mining district in what is now Chihuahua (West 1949:77). Other foodstuffs, such as crude brown sugar from Jacona, Pinsandaro and Pátzcuaro, dried salted fish from the region of Lake Chapala, and lentils from Zamora and Jacona were regularly exported to Zacatecas (Bakewell 1971:74).

Cotton and woolen textiles, the latter produced in mills in Valladolid, were also an important export item. Woolen cloth, because of its superiority over native skins and cotton garments was in great demand; it was even used as payment in the mines to attract Indian labor. Bolts of wool (sayal) small woolen blankets (fresadas or frasaillas) were popular in the Parral district. Cotton mantas, a popular tribute item in central and southern Mexico, were not in much demand but cotton blouses and shirts (still a craft speciality of Michoacán) were imported in large quantities (West 1949:81).

Tarascan handicrafts were also exported to the mining areas. Store inventories for Parral contain wooden lacquered bowls (bateas), cups (tecomates), stools (taburetes), boxes and religious items. Leather goods---especially shoes from Sayula and other areas of Michoacan were imported by buyers in Zacatecas. Earthenware and items of copper were also exported to the Parral district.

¹⁵Cf. Wolf (1957)

Even the Tarascans themselves were in demand. West notes that Michoacán was one of the sources of mine laborers for the Parral district (1949:50). Tarascan labor was fundamental in the establishment of new settlements in Northern Mexico. For example, houses for the city of Celaya, founded in 1570, were built by Indians from the communities of Acámbaro, Ucareo, Zinapécuaro, Cuitzeo, and Yuririapundaro (Powell 1944:191). Tarascans were also utilized as soldiers and tamemes during the Spanish conflict with the Chichimecas; the 1552 expedition of Herrera was accompanied by several hundred Tarascan warriors as well as numerous tamemes (Powell 1952:63).

The demand for products of Michoacán stimulated a program of road construction. The Viceroy Antonio de Mendoza ordered that the roads connecting the agricultural areas of Michoacan with the mines be improved to accommodate wagons (Powell 1952:17). In the eastern part of the state goods were shipped from Valladolid to Acámbaro and then either directly north via Salamanca, Leon, and Aguascalientes to the mines or first east from Acámbaro to the Camino Real at Queretaro or San Miguel and then north to Zacatecas. The western part of Michoacán probably joined a system of roads leading from Colima to the mines via Guadalajara.

Communities within Michoacán were tied into one or the other of these systems. For example the Relacion de Chilchotla states:

Pasa por este dicho pueblo de Chilchotla un camino real ques my pasajero, por donde ban a el rreyno de balizia, y la governazion de Chiametla, y a la villa de Collma, y a las mynas de Guaxacatlan, Chiametla, Culiacan, Sacateas, San Martin, Nieses, Masapil, Santiago coneto, Yndehe, Santa Barbola, Freznillo, rranches, Chalchuytes abinos, charcas: todas estas mynas, ziudad de Guadalaxara, billa de la Purificazion se pasa por este rueblo y es el camyno, y llevan cantidad de mercaderias a las dichas provinzias y mynas ya

Dichas, y asi mismo los que destas provinziias vienen
pa Mexico y su vvieno (sic) ande pasar y rasan por
este Pueblo, azeto de las de Sacatecas y su comarca
que ruedes yr por otro camyno, (Papeles de Nueva
España 7:28-29).

While the economy of Michoacán in the pre-contact period was oriented toward meeting the relatively simple needs of a small ruling elite in the central lake area of Michoacán, Spanish utilization of the three ecological zones of the area and the subsequent introduction of new technology produced an economy with a potentiality for greater surpluses and which was subordinate to the needs of the northern mining communities. As a consequence the Tarascan towns of the central lake region lost some of their importance as economic centers. Goods which formerly went to Tzintzuntzan or Pátzcuaro as tribute or trade were now sent to the northern mining communities via Guadalajara or Valladolid.

D. Social Structure

Once the subjugation of the Indian population of Michoacán was completed, the Spanish introduced a number of institutions designed to regulate the activities of this population. The first of these was the encomienda, which was a grant of Indian labor and tribute given by the Crown to Spaniards who had performed various services, usually military. Encomenderos were obligated to defend their holdings for the king and to protect their charges and instruct them in the Christian faith. In order to put this last policy into effect, the Indians were to be moved from their dispersed ranches to new villages which were to be built close to the dwellings of the encomendero. In addition the encomendero had to build a church and supply the wages of a priest to instruct the Indians (Simpson 1966:33).

Once peaceful contact was established with the Tarascans, Cortes lost no time in establishing encomiendas in Michoacán. After the baptism of the Cazonci, who adopted the name Francisco Tzintzicha, and the ceding of his rights to the Crown of Castile in 1525 or 1526, the factor Gonzalo de Salazar was commissioned to establish the boundaries of Michoacán and to determine which towns were to fall under the control of the Spanish and which were to belong to the Cazonci. As a result of this division a number of towns were transferred to the Spanish. Lopez Sarrelangue and Bravo Ugarte list the known encomenderos and their lands:

TABLE FOUR

ENCOMENDEROS IN MICHOACAN

<u>Encomendero</u>	<u>Town(s)</u>
Hernan Cortes	Tzintzuntzan, Tamazula, Tuxpan, Amula, Zapotlan
Cristobal de Onate	Tacámbaro, Caracuario, Necupataro
Gonzalo de Salazar	Tajimaroa, Irimbo, Senguio
Juan de Villasenor Cervantes	Huago, Numuran, Penjamillo, Puruandiro
Juan Infante	Comanja, Naranja, Erongarícuaro, Xaracuario, Purenchecuario, Pomacoran
Jorge de Alvarado	Tiripitio, Acuitzio, Huiramba, Etucuario, Undameo
Francisco de Villegas Hernan Perez de Bocanegra	Uruapan, Zirosto, Acámbaro
Antonio de Caicedo	Peribán, Tepehuacan

<u>Encomendero</u>	<u>Town(s)</u>
Gonzalo Gomez	Iztapa
Peralmindez Chinnos	Jacona
Pedro Juarez	Maravatío
Alonso Martin	Ocotlan
Francisco Gutierrez	Pochutla
Pedro Bazan	Pungarabato
Benavides	Sirandaro
Francisco Rodriguez	Taimeo
Monzon	Tamalocan
Domingo Medina	Tancítaro
Francisco de Chaxes	Tarecuato
Antonio de Oliver; Diego Hernandez Nieto	Turicato
Br. Juan de Ortega	Tuzantla
Hernando de Jerez	Zacapu
Pedro de Meneses	Coyuca
Alvaro Gallego	Chocandiro
Juan de Pantoja	La Huacaña
Gonzala Lopez	Cuiseo de la Laguna
Cristobal de Valderrama	Acareno, Tarimbaro
Dr. Ojeda Luis de Berrio	Capula
Francisco Vazquez de Coronado	Cutzamala
Gonzalo Ruiz	Cutzeo
Alonso Davila Alvarado	Huaiméo
Francisco Morcillo	Indaparapeo

(Lopez Sarrelangue 1965:52; Bravo Ugarte 1962, vol. 2:90)

The encomienda did not endure for long, however. During the first decades of the sixteenth century the encomienda became a source of conflict. On the one hand the encomenderos argued that the institution was necessary to provide labor for the mines and to grow food for Spanish settlers. The largest encomendero, Hernan Cortes, in his defense of the institution cited his soldiers' demands and the need for the liberation of the Indians from their oppressive Indian nobility (Gibson 1964:59). On the other hand reformers such as Bartolome de las Casas held the encomienda responsible for the severe depopulation of the Indies. In his Remedies for the Existing Evils, With Twenty Reasons Therefor (sic) he argued:

'that your Majesty order. . .that all the Indians in all the Indies. . .be placed, brought back, and incorporated under the royal crown of Castile and Leon, under the leadership of Your Majesty, as subjects and free vassals, which they are, and that none be entrusted to Spanish Christians. . . .'
(Las Casas 1542; quoted in Sanderlin 1971:174.)

This dispute finally began to be settled in favor of the reformers when the encomienda began to lose its economic viability. During the mid sixteenth century, the income provided from Indian tribute fell year by year due to the severe depopulation of New Spain (Gibson 1966:65). With the creation of a colonial economy based on providing goods or services to a number of mining regions, the new source of wealth was land. Encomenderos with some foresight thus started to acquire land in addition or in place of their encomiendas.

The passage of the New Laws of 1542 placed a number of limitations on an already weakened institution. The installation of royal government in the colonies and the implementation of its policies by

officials who had no stake in the encomienda system¹⁶ brought about the gradual weakening of the institution so that by the end of the seventeenth century, "it had degenerated into a device for pensioning off descendents of the conquistadores or influential people at court" (Simpson 1959:402).

As the power of the encomenderos began to wane, Spanish royal authority began to have an impact. The sixteenth century Spanish government of New Spain was divided into five branches or ramos. These were the Gobierno (civil administration), Judicial (judiciary), Militar (military), Hacienda (exchequer), and Eclesiastico (church affairs). While each of these branches contained a hierarchy of officials ultimately responsible to the king, most administrative power in New Spain was delegated to the Real y Supremo Consejo de las Indias or the Council of the Indies which was created by Charles V in 1524 (Haring 1947:94). Directly under the council was the royalty appointed viceroy of New Spain. The viceroy, like the king at a higher level, controlled all five branches of government. He was, as Gerhard points out, "simultaneously governor of New Spain (gobierno), captain-general (Militar) and president of the audiencia of Mexico (judicial). During most of the colonial period he also supervised financial matters, and he nominated lesser ecclesiastical dignitaries (1972b:63).

Each of five ramos had a local representative. With the exception of the Eclesiastico, which was presided over by the local parish priest, and which employed different territorial divisions, the local officials responsible for the other branches were corregidores or

¹⁶ Encomenderos served as members of cabildos and other governing units.

alcaldes mayores. These officials were local governors whose jurisdictions were territorial units known as alcaldias mayores or corregimientos. Although the relationship between the two units is not clear, alcaldias mayores were first established during the 1520s and appear to have left the administration of local affairs in the hands of the Indian nobility or caciques with occasional help in the case of disputes from encomenderos, priests, and visitadors. To rectify this situation and to curb the abuses of the encomienda, by 1550 all encomiendas were to be assigned to corregimientos, thus establishing royal control on a local level (Gerhard 1972b:14).

The lowest stage in the Spanish administrative hierarchy was the ayuntamiento or cabildo---the town council. These councils bore roughly the same relationship to the corregidores and alcaldias mayores as did the Council of the Indies to the king. Depending upon the size of the community, they were usually made up of one or two alcaldes, or magistrates, and from four to eight regidores or councilors. In addition a number of minor officials such as police chiefs, guardians of public property, collectors of fines and the like were also included but only some of these were voting members (Gibson 1966:97). Although membership was theoretically elected, these town councils were in actuality closed corporations. Memberships were purchased, inherited, granted as a gift by the king, or passed around among wealthy landowners, a practice which no doubt contributed to the creation of large estates because of the cabildo's control over land (Pike 1960:67-80).

In communities that were primarily Indian, the alcaldes and regidores shared power with the hereditary native chief of the community. In addition a native governor was appointed; in Michoacán for

example, descendents of the old Cazonci became the Tarascan governor of the province. Both the cacique and the native governor were subordinate to the corregidor but they could appeal directly to Mexico City (Gerhardt 1972b:14).

In order to assess tribute for official purposes such as military service and tribute collection, sixteenth century population of Michoacan was divided into three groups. The first of these were Spaniards, either European or American born, who were gente de casta limpia, or of legitimate descent with no Negro or Indian blood and who were culturally Spanish. The second of these were castas or castes, who were of mixed descent, and regarded as "'viles, traidores, ociosos, borrachos. . ." the people most 'casteros, perfidos, e inmorales de la humanidad'" (McAlister 1963:355). The third group was composed of pure Indians and those mestizos who were culturally Indian.

The colonial aristocracy was made up of descendents of the conquistadores, higher civil and religious officials, people related to influential Spanish families, and those who purchased or received gifts of titles. Castilian law stipulated that any subject above the rank of peasant could erect his property into a mayorazgo or entail and acquire privileges of hidalguia and a title of don. Such status was a virtual prerequisite for entry into the higher echelons of legal, military or religious groups but meant that the holder was forbidden entry into any occupation connected with commerce or industry (Haring 1947:198).

The Indian caciques became an integral though subordinate part of the aristocracy. From the earliest the Spanish recognized differences of status within Indian society. Such a policy arose from their prior experience during the Reconquest of the Peninsula and their con-

tact with peoples of the Canaries and the West Indies. In all of these new territories the Spaniards came into contact with numerous tasks such as the utilization of native manpower, the creation of a stable government, and the conversion of the newly conquered peoples to Christianity, which required the cooperation of already existing native leaders (Gibson 1959:175).

Native caciques were relatively powerful in Michoacán. Lopez Sarrelangue, writing of the wealth of the son of the last Tarascan Cazonci, Antonio Huizimengari Caltzontzin, states:

Era dueno, entre otros bienes, de muchas suertes de tierra en diversos pueblos, de una valiosa biblioteca y de un considerable numero de animales de labor, del palacio situado en la plaza mayor de Pátzcuaro, conocido hasta ahora con el nombre de 'Casa del Gobernador,' de otro palacio en Tiripitio, de varias casas (entre ellas, una en Pátzcuaro), y un molino que se encontraba por el rumbo de Opopeo (1965:175).

In addition the Viceroy Antonio de Mendoza licensed him to use Spanish clothing and weapons and appointed him Indian governor of the province. During his term he participated in the campaigns against the Chichimecas and contributed to the founding of three towns on the road from Michoacán to Zacatecas. Don Antonio continued as governor of the province--with much acclaim from chroniclers such as Cervantes de Salazar for his friendship to the Spanish, his respect by the Indians, and his mastery of Christian teachings and Spanish and Latin script--until his death in 1562 (Lopez Sarrelangue 1965:178).

The acquisition of wealth through the ownership of land and the holding of civic offices was not limited just to descendents of the Cazonci; even minor members of the nobility could acquire it. Lopez Sarrelangue records the following events for sixteenth century Tiripitio:

- 1574 Don Francisco de Baximobo, principal, es gobernador. Se le senala salario mientras desempeña este cargo.
- 1585 " Alonso Apachi, regidor,
 " Juan Chichique, regidor,
 " Cristobal Nuri, alcalde, y
 " Nicolas Tolentino, regidor contradicen cierta merced de tierra concedida a un particular.
- 1591 " Miguel Acandiqua, principal, recibe un sitio de estancia para ganado menor y dos caballerias de tierra en terminos de este pueblo.
 " Agustin,
 " Geronimo, y
 " Pedro, principales, estan casados con las hijas de don Agustin Pinto.
 " Miguel Cuyro, principal, recibe un sitio de estancia para ganado menor y dos caballerias de tierra en termino de este pueblo.
 " Agustin Pinto, principal y alcalde. Tiene un hijo y tres hijas casadas con principales. Se ordena que, previa averiguacion y constando ser tal principal, se le guarden sus preeminencias. Se cueja de que los indios delincuentes que ha condenado a servicios son extraidso por algunos espanoles mediante cierta cantidad. Pide que pagando el lo que dichos espanoles, pueda disponer en su beneficio de estos indios. 1592. Obtiene un sitio de estancia para ganado menor y dos caballerias de tierra.
- 1592 Don Francisco, principal y organista, recibe licencia para andar en caballo con silla y freno.
 " Bernabe Quinzi, principal, obtiene un sitio de estancia para ganado menor y tres caballerias de tierra.
 " Juan Sina, principal, recibe un sitio de estancia para ganado menor y tres caballerias de tierra.
 " Agustin Villegas, principal, obtiene una merced de un sitio de estancia para ganado menor y tres caballerias de tierra (1965:274-275).

Indians who were not members of the nobility probably fared little better and perhaps a bit worse under the Spanish than they had under the Tarascans. They were still subject to the demands of tribute, of encomienda and later repartimiento labor, and of the Catholic Church. The best of their lands were given over to livestock raising and large

scale agriculture, and if the poor and infirm benefited from the efforts of reformers such as Don Vasco de Quiroga, it should also be pointed out that the healthier members of the community were obligated to build churches.

Apart from the observance the Catholic Church's prohibition on polygamy, little is known about marriage during the sixteenth century in Michoacán. However, if the seventeenth century collections of matrimon-ials contained in El Archivo del Antiguo Obispado de Michoacán are any indication, Spanish-Indian marriages--generally between a Spanish man and an Indian cacica--increased in number throughout the century (AOM 1645 y otros). Indian marriages within the nobility were generally endogamous, however, and inheritance appears to have been patrilineal (Lopez Sarrelangue 1965:169).

E. Sixteenth Century Religion

The main motive for the establishment of missions in Michoacan was of course, to proselytize among the Indians and to spread Spanish civilization; for as Haring points out, Spain in the sixteenth century had the almost overwhelming task of attempting to Christianize and civilize the natives of an enormous amount of territory. A large part of the royal instructions to explorers and governors was concerned with spreading the gospel to the Indians (1947:172). Prior to the coming of the missionaries the responsibility for teaching Christian doctrine and policia (civilized ways) was in the hands of the encomenderos (Simpson 1966:32).

The missionaries had two ways of viewing native civilizations and religions. The first of these approaches denied the validity of all native traditions and insisted that they all be wiped out; it is

exemplified in the destruction of native idols and temples beginning in Texcoco in 1525 (Braden 1930:164). The second of these traditions was essentially paternalistic. The Indians were regarded as like children who could be taught Christianity and policia. It is this approach that the Franciscan Vasco de Quiroga took in Michoacán. Warren comments:

Quiroga found much to admire in the Indians. He was attracted by their natural, simple virtues--their humility, obedience, poverty contempt of the world, and lack of interest in clothing. To his mind they were like the Apostles, going about barefooted, with long hair, and without any covering for the head. In fact, they were like a tabula rasa and like very soft wax that was ready to receive any impression (1963:29).

Quiroga's hospitales, the structure of which was strongly influenced by More's Utopia, and which served as models for other orders, were ideal environments in which to write upon the tabula rosa. Indians were to be instructed in the Spanish alphabet, farming and mechanics,¹⁷ and most importantly in Christian morals, customs, and doctrine as set down in Quiroga's Doctrina Christiana. In addition Mass was to be attended on days when it was celebrated and a special list of feast days was compiled. Finally, "the people of the pueblos are to strive for cleanliness of both body and soul" (Warren 1963:40).

Other types of instruction were supervised by the Church. The Indian nobility could attend schools which instructed them in the humanities as well as to Latin and Greek. In 1540 the Augustinians established a school for members of their order in Tiripitio that was one of the first in the New World (Bravo Ugarte 1962, vol. 2:123). This institution

¹⁷ Quiroga is popularly credited with establishing craft specialization in Michoacán. Actually, craft specialization is a pre-contact phenomena. Its development during colonial times is probably due as much to the creation of a demand at the mines as to Quiroga's influence.

was of little relevance to the native population, however, since almost all proposals for the creation of an Indian clergy were rejected in the sixteenth century (Gibson 1964:99).

Exactly what impact the Church had on the Tarascan religious system during the sixteenth century is as yet unknown. Most likely the Tarascans maintained some of their odd beliefs and customs; Quiroga based his arguments for hospitales in Michoacán on the fact that once Indian youths had completed their religious instruction and returned to their native communities, they would return to "idolatry." If there is any parallel with the situation in Central Mexico, elements of Christianity were simply added to already existing beliefs. For example, a concept such as the community of saints became part of a pantheon of anthropocentric deities, belief in a soul was extended to animals and inanimate objects, or the idea the Christian God was acceptance but not as a single duty (Gibson 1964:100).

The sixteenth century Church in Michoacán was what Bolton regarded as a frontier institution (1917:61). For not only did it spread the Christian doctrine; it also provided instruction in Spanish language and customs. Subsidized by the State in many cases, the Church was a vital part of Spain's efforts at colonization in the sixteenth century.

While the stated function of the establishment of the Church in Michoacán was to convert the Tarascans and to teach them *policia*, there were a number of latent effects on the population. Settlements such as Vasco de Quiroga's Franciscan hospitals brought numbers of people together and instructed them in crafts. This instruction proved to be most fortuitous in terms of the availability of export goods to the mines of the northern areas. Church related institutions such as the

cofradia, which was a kind of Christian brotherhood dedicated to helping numbers of the group as well as the community, may have served to integrate the Tarascan populations into work groups much as they were under the Tarascan state system. Interestingly, the Archives of Michoacán contain a number of charters to these groups during the latter part of the sixteenth century (AOM 1643-1714).

That Christianity was merely incorporated into a basically prehispanic religious system is the position taken by Van Zantwijk in his study of the modern community of Ihuatzio (1967:176). Carrasco, on the other hand, argues that the modern Tarascan religion is closer to European folk Catholicism than it is to any prehispanic pattern (1952).

Although it is likely that the early sixteenth century situation most closely approximates the position of Van Zantwijk, both parties to the debate have missed the point. From the perspective of this study the importance of the investigation of Tarascan religion is not in discerning whether it is European or Indian, but in discovering how it organizes ritual life in such a manner as to support the assumptions of the economic and social structures of colonial society. On the basis of the information available, it seems to me that the system was important in the process of socialization as well as in economic integration.

CHAPTER IV

CULTURAL DEVELOPMENT IN MICHOACAN

A. The Prehispanic Period

An underlying assumption of this study in the development, florescence and assimilation of Tarascan culture in Michoacán is that the relationship that man, through the agency of technology, has with his environment affects the development of his cultural systems. More specifically this work follows Sahlins (1958) in that it views the development of an increasingly complex political organization and system of social stratification as a result of higher levels of economic productivity based on differing ecological conditions. An examination of the components of this basically technoenvironmental relationship reveals that it was a central process in the growth and organization of a stratified polity in Michoacán.

The major problem of the application of Sahlin's hypothesis to the development of stratification in prehispanic Michoacán is that it is a relatively static model. Sahlin's association between techno-environmental relations and features of social organization is limited temporally to the ethnographic present. But in Michoacán we are faced with a time period spanning several hundred years—from the first mention of the Tarascans at approximately 1100 A.D. to their conquest by the Spanish in 1522.

Yet the solution to the problem is inherent in Sahlin's argument. It should be pointed out that Sahlin's hypothesis--that higher levels of productivity yield economic surpluses which generate increasingly complex sociopolitical structures--has an element of circularity in it. For at the same time the more complex socio-political structures seem to be able to generate greater surpluses. Thus if we recognize that this relationship is characterized by reciprocal causality or feedback we can then adapt Sahlin's argument to explain a sequence of development such as occurred in Michoacán.

There is a parallel between environmental conditions described by Sahlins for the Polynesian high islands and for Michoacán in that in each case diversity of ecological zones and the scattering of resources throughout them is a central feature of the environment. Hawaii, for example, had five distinct vegetational zones--each of which was characterized by different wild and cultivated plants--that were open to human exploitation (Sahlins 1958:258). In Michoacán this diversity of exploitable resources is associated with and scattered throughout three ecological zones. These are tierra fria, tierra templada, and tierra caliente.

Sahlins associated this diversity with the development of stratification in Polynesia, and this appears to be a valid characterization of the relationship between environment and culture as manifested in the social hierarchy of Michoacán. The Tarascan system of stratification appears to have consisted of three or four classes. These included the nobles--either greater or lesser depending on their relationship to the Cazonci--a class of commoners or peasants who have the brunt of economic production, and finally a group of slaves who performed the most menial tasks and who served as a pool of sacrificial victims.

The scattering of resources throughout ecological zones that in Polynesia was associated with a scattered hamlet type settlement pattern (Sahlins 1958:203) appears to have produced similar results in Michoacán. Each of the ecological zones of Michoacán has had associated with it a number of principal towns or villages that were surrounded by subordinate hamlets or settlements. Thus, for example, the tierra fria town of Acuitzio del Canje is the cabecera for smaller settlements such as San Andres Coapa. While this type of settlement pattern could be entirely Spanish in origin, it is interesting to note that the Relacion de Zacatula, referring to prehispanic government in that region, notes that some towns were paying tribute to the leaders of other towns (Barlow 194:264). This information, together with the fact of scattered resources suggests that this settlement pattern was prehispanic in origin. In any case, it would be desirable to have archaeological investigations of the region that would concentrate on regional settlement patterns rather than individual sites.

The fact that the available resources were scattered through various ecological zones and hence not available for exploitation by a single household also suggested to Sahlins that a ramified system of social organization might be an efficient functional adjustment or adaptation to such an environment. He states:

It was deduced, therefore, that ramified systems would tend to develop where the spatial distribution of rich resource zones in the environment was one too scattered to be exploited by a single household, or where the range of crops was so large as to preclude effective exploitation of them by a single household, or both (Sahlins 1958:251).

An evaluation of the information contained in the Relacion de Michoacán concerning Tarascan social organization tends to support Sahlin's deduction in that many of the features that he associates with ramares in Polynesia are also present in Michoacán. The Cazonci, for example, was accorded semi-divine status as a direct descendent of the god Curicaveri. He and his lineage, the vacuxecha, formed the upper levels of the political organization of the society and were responsible for decisions such as whether to go to war. Differential access to resources and privileges based on rank was also a feature of Tarascan society. The Cazonci, like his Polynesian counterpart the paramount chief, could also sanction wrongdoers by confiscating property or sentencing the offender to banishment or death.

The primary mode of economic integration in prehispanic Michoacán was redistribution. Produce from each of the area's three ecological zones was channeled to the principal towns of each zone and then sent via a series of routes to the major towns of the central lake district. The organization of this distribution of goods was through the operation of a system of tribute which served to circulate goods from conquered provinces--especially salt and cotton from tierra caliente--among the Tarascan nobility residing in the other two zones.

At the same time the effectiveness of this system of tribute in producing surpluses was enhanced by the operation of a complex socio-political structure. Economic activity was organized on the basis of craft specialization and officials of the bureaucracy supervised the activities of the various craft specialists. Representatives of the Cazonci were stationed in the larger towns throughout Michoacán and were responsible for the organization of labor which produced tribute

as well as its collection and distribution to the Cazonci.

An examination of the social concomitants of what was basically a technoenvironmental relationship reveals that it was central to the growth and development of a stratified polity in Michoacán. An environmental situation in which wild and cultivated resources were scattered throughout three ecological zones gave rise to higher levels of economic production which supported an increasingly complex sociopolitical organization. This complex organization through its greater efficiency tended to produce an increase in economic surpluses. This kind of feedback relationship, continued over several hundred years, eventually led to the development in the fifteenth century of a group that was the second most powerful in prehispanic Mexico--the Tarascans of Michoacán.

B. The Colonial Period

The contact period in Michoacán was characterized by a change in the nature of the technoenvironmental relations and, subsequently, in the socioeconomic structures arising from these relationships. The Tarascans, through their technology, produced economic surpluses from the resources of three ecological zones. These surpluses were organized into an economic system which supported a relatively complex sociopolitical organization centered in the lake district of Michoacán. The Spanish, who changed the nature of the previous technoenvironmental relationships by introducing a more efficient technology, were able to extract even greater surpluses from the same environment. However, the integration of these surpluses into an economic system involved a change in the type of economy as well as in the quantity of goods involved.

The major difference between the prehispanic economy and that of the colonial period is that between a redistributive economy and a market economy. In the prehispanic period the products of each ecological zone contributed to the creation of an economic system that encompassed territory roughly equivalent to present day Michoacán and which involved the circulation of goods among the Tarascan ruling elite. During the colonial period there was a shift to a market economy. Goods from each ecological zone still met local needs, but the increased surpluses generated by new technology began to be exchanged in a system of markets.

The reason for this transformation relates to the nature of economic activities in all of colonial Mexico. The discovery of vast amounts of silver in the northern areas of Mexico in the mid-sixteenth century created a demand for a quantity and variety of goods that had not been present in the prehispanic period. The very scale and complexity of the exchanges necessary to support the newly developing mining economy necessitated a switch to money as a medium of exchange. Michoacán, as a major producer of these goods, sent produce north via a series of exchanges involving the use of money. For example, the producer of coconut palm wine from tierra caliente might sell his produce in Morelia in exchange for cash. From Morelia the goods might go directly north to the mines where they would be sold again. Money was then used to support the activities and investments of the producers as well as the middleman involved in the series of exchanges.

The stimulus to the development of this market economy was the introduction of new technology. This new technology centered primarily on ox drawn plow agriculture, large scale herding and ranching, and

cottage industries. These innovations allowed the Spanish to increase economic surpluses by exploiting potentials of the environment in ways that the Tarascans' technology could not. But the price for this increased production was the need for relatively large amounts of land, capital, and labor.

Land holdings in Michoacán during the sixteenth and seventeenth centuries followed much the same pattern that Chevalier notes for all of Mexico (1970). Holdings gained through mercedes, capellanias, legitimate sales, and/or expropriation were joined together to form large estancias or haciendas. These large holdings in Michoacán produced surpluses that found ready markets in the mining areas to the north and, until the rise of the Bahio as a major grain producer in the seventeenth century, provided, together with the area of central Mexico, the only source of supply to the newly developing mining industry.

Heavy capital investment was also a feature of the colonial economy of Michoacán. Capital was needed to acquire additional parcels of land as well as for improvements to that land such as irrigation channels, buildings, fences, and equipment. Sugar mills in particular required particularly heavy investments; Chevalier reports that in the sixteenth century it cost as much as 50,000 pesos to build one (1970:76).

Large scale enterprises such as those rapidly becoming characteristic of Michoacán during the sixteenth century required a steady supply of labor. The activities of planting and harvesting, ranching, and industrial production---mainly sugar and textile mills---were supported by Tarascan labor. In addition workers were needed in the mines, to

build new settlements on the rapidly expanding northern frontier, and to serve as native allies of mercenaries to the Spanish armies.

This change in economic relationships was reinforced and supported in the social structure of Michoacán's colonial culture. The Crown and its official representatives, wealthy encomenderos, and the Church constituted an aristocracy or upper class that was supported by the labor of the Indian population. During the colonial period there was a gradual transition in social structure taking place to ensure this supply of labor. This transformation takes two stages each of which is characterized by a particular institution. These institutions are the encomendero, and debt peonage.

The encomienda, which gave the produce and labor of the Indians of a particular village to the encomiendero was particularly well adapted to supplying labor to a redistributive economy in that it was simply a functional equivalent to the old Tarascan system of tribute. Rights to the labor of the Indian population and the obligation of that population to supply food to the encomiendero who then redistributed the surplus among the needy were regular features of encomienda. The Spanish simply substituted their own officials for those of the Cazonci and collected goods and services in much the same manner as the Tarascans before them.

With the switch to a market economy the encomienda was no longer an efficient means of organizing the population for production. Most of the emphasis in the old redistributive economy was on the production of goods and services that were redistributed directly among a local elite. The Indians under this system were entrusted to the care of an encomendero situated in a particular village or group of villages. As long as

the economic networks were small and surpluses relatively few, this system was relatively efficient. However, once the colonial economy began the transition to a market economy the *encomienda* was no longer a viable institution.

This lack of viability arose from the fact that the production of surpluses on a large scale created a demand for labor--further intensified by severe depopulation of the Indian population--that was far greater than under the old redistributive system. In addition the creation of a market system involving the use of money on a supraregional and even national scale meant that this labor was drawn from a much larger geographic area than previously. This worked against the *encomienda* because of the fact that the efforts of numerous *encomiendas* could not be effectively coordinated since the *encomenderos* involved would all be wanting "their" Indians to be working their own lands.

The result of this situation was the creation of a class of free laborers--gananes--who hired out to large land owners for cash. By the latter part of the sixteenth century these workers had become essential to the sowing, cultivating, and harvesting of crops, and the major problem of the landowners was ensuring a steady supply of this labor.

The stabilization of this class of laborers was fostered by the institution known as debt peonage. Under this system the landowners would advance cash and loans against the future wages of the Indian laborers. These advances were soon spent--in company stores--so that the laborers, in order to work off their indebtedness, had to remain on the land. By the seventeenth century the institution of debt peonage became a regular feature of the entire Mexican economy (Chevalier 1970).

This transformation in economic and social structure was also supported in the religious ideology of the colonial period. The assumption that the Indians were childlike and uncivilized creatures who had to be instructed in policia and Christianity reinforced their social and economic subservience. Even benevolently intentioned institutions such as Quiroga's hospitales tended to reinforce socioeconomic integration by providing instruction in arts and crafts useful to the production of goods useful at the mines together with instruction in Spanish customs.

CHAPTER V

SUMMARY AND CONCLUSION

The evidence for the origin of the Tarascans of Michoacán is conflicting; archaeology postulates affinities with the Valley of Mexico and South America and the Relacion de Michoacán with the northern Chichimec area. Regardless of their origin, however, once a Tarascan nucleus was established in Michoacán, it spread rapidly over an area roughly equivalent to most of the modern Mexican state of Michoacán. Once this expansion started it appears to have been relatively rapid. In the approximately 400 years from the beginning of their expansion to the arrival of the Spanish in 1522, the Tarascans developed from a small group dominating the central lake area of Michoacán to the second most powerful indigenous political unit in Mexico.

The prehispanic period in Michoacán is marked by the development of a complex political unit. This unit, based on slash and burn horticulture, was a class-structured society with a small ruling elite--the Cazonci, his lineage, officials, priests, and artisans--supported by a system of tribute produced by the lower classes. This social order was maintained internally by the civil authority of the Cazonci's officials, who could impose confiscation of property, exile, or death, and externally by the Tarascan army. The ideological justification of this

system is seen through the association of the Cazonci and his lineage with the god Curicaveri, thus implying supernatural sanctions as well.

The colonial period in Michoacán is characterized by the development of a colonial society shaped by the introduction of a new technology. This new technology made possible a change in the orientation of Michoacán's economy from a redistributive system whose primary function was to support a local elite to a market system which produced sufficient surpluses to be a viable part of a national economy based on intensive mining activity in the north of Mexico. Parts of the old Tarascan elite were incorporated into this new economy through the replacement of their rights to tribute of various communities with grants of land and local offices, but in general the old elite lost political and economic power to Spanish encomenderos, the Church, and governmental officials. Those Tarascan peasants who had supplied the bulk of the tribute that supported the elite in prehispanic times were of importance in the colonial period as a source of labor in the mines, on large estates, and in craft production. As was the case in the prehispanic period, the ideological justification of Spanish colonial society rested on the assumption of divine authority.

Although this sequence of events has been generally accepted by anthropologists, the prevailing theoretical orientation--which concentrates on cultural traits--has made it impossible to synthesize this sequence into a coherent pattern of cultural development in Michoacán. By concentrating on the nature of man's relationship with the environment and the effect of these relationships on culture, I have been able to describe the development, florescence, and assimilation of a stratified polity in Michoacán in terms of the processes involved rather than as a series of discrete stages.

This study of prehispanic and colonial Michoacán has applied an ecological approach to ethnohistorical data to show the effects of ecological zoning on the development of a stratified polity in Michoacán. More specifically, I have shown that the economic surpluses produced by three ecological zones--tierra fria, tierra templada, and tierra caliente--supported a relatively dense population and a complex political organization. This relatively dense population and complex sociopolitical organization was rather rapidly incorporated into Michoacan's colonial society through the transformation from a redistributive economy to a market economy. This transition is characterized by social institutions that supported assimilation. The earlier of these institutions--the encomienda--was a functional equivalent of the old Tarascan tribute system that supported the redistributive economy. The Tarascan entry into the market system was supported by the institution of debt peonage. Once the Tarascans became part of the market economy, assimilation into colonial society rapidly followed.

APPENDIX I

HISTORY OF ARCHAEOLOGICAL RESEARCH IN THE TARASCAN AREA

<u>Authority</u>	<u>Work</u>	<u>Research</u>	<u>Publication Date</u>
Leon	Studies on the Archaeology of Michoacán	Reconnaissance and limited excavations for many years.	1902
Plancarte	Archaeological Explorations in Michoacán, Mexico	Excavations by Plancarte near Jacona in 1889. Article translated by W. H. Holmes from several letters received from Plancarte.	1893
Starr	Little Pottery Objects from Lake Chapala Mexico		1897
Lumholtz	Unknown Mexico	Reconnaissance, surface collections, and limited excavations in western Mexico between the years 1890 and 1898.	1902
Spinden	An ancient Sepulcher at Placeres del Oro, State of Guerrero, Mexico	Excavations by Niven in 1910.	1911
Mena & Aguirre	La Nueva Zona Arqueologica	Excavations, surface collections, at Chupicuaro, Guanajuato in 1926.	1927
Caso	Informe Preliminar de los Exploraciones Realizados en Michoacán	Reconnaissance, surface collections, and excavations near Zacapu in 1929.	1929

<u>Authority</u>	<u>Work</u>	<u>Research</u>	<u>Publication Date</u>
Noguera	Exploraciones Arqueologicas en las regiones de Zamora y Pátzcuaro.	Reconnaissance, surface collections, and excavations in Michoacán in 1930.	1931
Acosta	Exploraciones Arqueologicas Realizadas en el Estado de Michoacán durante los anos de 1937 7 1938	Excavations at Tzintzuntzan and Ihuatzio in 1937 and 1938.	1939
Borbolla	Antropologia Tzintzuntzan-Ihuatzio. Temporadas I y II.	Surface collections and excavations at Tzintzuntzan and Ihuatzio, Michoacán in 1937 and 1938.	1939
Noguera	Explorations in El Opeño, Michoacán	Excavations near Zamora Michoacán in 1938.	1942
Brand	Recent Archaeologic and Geographic Investigations in the Basin of the Rio Balsas, Guerrero and Michoacán.	Reconnaissance and surface collection in 1939.	1942
Goggin	An Archaeological Survey of the Rio Tepalcatepec Basin, Michoacán, Mexico	Reconnaissance, surface collections in 1939.	1943
Lister	Cerro Oztuma, Guerrero.	Reconnaissance and surface collections in 1939.	1941
Lister	An Archaeological Survey of the Region about Teloloapan, Guerrero	Reconnaissance and surface collections in 1939.	1948

<u>Authority</u>	<u>Work</u>	<u>Research</u>	<u>Publication Date</u>
Osborne	An archaeological Reconnaissance in Southeastern Michoacán, Mexico.	Reconnaissance and surface collections in 1939.	1943
Ross	Some Pottery Types of the Highlands of Western Mexico.	Based on the Humboldt collection in the American Museum of Natural History.	Unpublished
Borbolla	Exploraciones Arqueológicas en Michoacán. Tzintzuntzan Temporada III.	Excavations in 1939 and 1940.	1941
Ekholm	Archaeology of Northern and Western Mexico.	Summary of the archaeology of these regions based upon personal observations and source materials.	1940
Moedano	Estudio Preliminar de la Cerámica de Tzintzuntzan. Temporada III.	Excavations in 1939 and 1940.	1941
Armillas	Oztuma, Guerrero, Forteleza de los Mexicanos en la Frontera de Michoacán.	Reconnaissance in 1941.	1944
Brand	An Historical Sketch of Geography and Anthropology in the Tarascan region.	Documentary research as well as reconnaissance and excavations in Michoacán and Guerrero in 1939 and 1941.	1943
Lister	Archaeology of the Middle Rio Balsas Basin, Mexico.	Reconnaissance, surface collections, and excavations in Guerrero and Michoacán in 1939 and 1940.	1947
Lister	Excavations at Cojumatlan Michoacán, Mexico	Surface collections and excavations in 1939 and 1941.	1949

<u>Authority</u>	<u>Work</u>	<u>Research</u>	<u>Publication Date</u>
Corona	Collares Tarascos del Museo Michoacán.	Based on collections in the Museum of Michoacán, Morelia	1941
Kelly	Excavations at Apatzingan, Michoacán	Reconnaissance, surface collections, and excavations in 1941 and 1942.	1947
Noguera	Exploraciones en Jiquilpan.	Excavations at Jiquilpan, Michoacán in 1942.	1944
Hendrichs	Por Tierras Ignotas.	Reconnaissance and surface collections in the Rio Balsas Basin between the years 1937 and 1943.	1945
Noguera	Estado Actual de los Conocimientos acerca de la Arqueología del noroeste de Michoacán.	Excavations in 1942 and 1943; reconnaissance and surface collections for many years.	1948
Kelly	Ceramic Provinces of Northwest Mexico.	Reconnaissance, surface collections and excavations from Sinaloa to Michoacán between the years 1935 and 1944.	1948
Porter & Balmori	La Ceramica de Chupicuaro	Excavations in 1944 (?)	1945
Balmori & Pina Chan	Complejo Funerario en Chupicuaro.	Excavations in 1945 (?)	1948
Borbolla	Problems de la Arqueología de Chupicuaro.	Reconnaissance, surface collections, and excavations in 1944 and 1945.	1948
Porter	Pottery Found at Chupicuaro, Gunajuato	Excavations at Chupicuaro in 1944 and 1945; collections in the Museo Nacional and Museo Michoacán	1948
Borbolla	Arqueología Tarasca	Reconnaissance, surface collections, and excavations in Michoacán between 1937 and 1948	

<u>Authority</u>	<u>Work</u>	<u>Research</u>	<u>Publication Date</u>
Toscano, Kirchoff & Borbolla	Arte Precolom- bino del Occi- dente de Mexico.	A catalog of an exhibition of archaeological items from western Mexico held in Mexico City in 1946. Diego Rivera's collection formed bulk of exhibition.	1946
Barlow	Tres Complejose de Ceramica del Norte del Rio Balsas.	Reconnaissance and surface collections in northern Guerrero.	1948
Covarru- bias	Tipologia de la Industria de Piedra Tallada y Pulida de la Cuenca del Rio Mezcala.	Based on examinations over a period of 20 years of collec- tions of stone material from the Rio Balsas Basin.	1948
Moedano	Breve Noticia Sobre la Zona de Oztotitlan, Guerrero.	Reconnaissance	1948
Muller	Ceramica de la Cuenca del Rio Lerma.	Reconnaissance and surface collections along the Rio Lerma.	1948
Marquina	Arquitectura Prehispanica.	A section reviews the archae- ology of western Mexico.	1951
Brand	Bosquejo histor- ico de la geogra- fia y la antro- pologia en la region tarasca.	Survey work in Rio Balsas delta	1952
Porter	Excavations at Cupicuarro, Guanajuato, Mexico.	Excavations at Chupicuarro in 1945-1946.	1956
Brand	Coastal study of southwest Mexico. Parts I and II.	Survey of south coast of Michoacán.	1957-1958

<u>Authority</u>	<u>Work</u>	<u>Research</u>	<u>Publication Date</u>
Corona	Investigacion arqueologica superficial hecha en el sur de Michoacán.	Survey work in the coastal area.	1960
Nicholson	Notes and News: Middle America	Test pits at Melchor Ocampo.	1962
Nicholson	Interrelation- ships of New World cultures: Project A, cen- tral Pacific Coast of Mexico	Survey of Balsas delta and part of coastal region.	1963
Lorenzo	Primer informe sobre los tra- bajos arqueo- logicos de res- cate efectuados en el vaso de la presa de El Infiernillo, Guerrero y Michoacán.	INAH salvage work in middle and lower Balsas region.	1964
Litvak	Excavaciones de rescate en la presa de la Villita	INAH salvage project in lower Balsas	1968

APPENDIX II

CULTURAL SYNOPSIS OF MAJOR ARCHAEOLOGICAL REGIONS OF MICHOACAN

I. INFIERNILLO AND LA VILLITA (FORMATIVE)

- A. Geographical Situation
Lower Balsis river basin. Elevations from 100-450 meters.
Mean temperature highest in Mexico. Vegetation is xerophytic
scrub; tropical in lower thiond near La Villita.
- B. Archaeological Sites
La Villita Presa del Infiernillo. Total of 68 sites.
- C. Settlement Pattern
Series of four low house mounds grouped around rectangular
plaza at site X-43. No other habitations excavated.
- D. Pottery Types
Red, brown, and gray ollas, bottles and globular bules
uncovered. Decoration includes fingernail impressing,
rocker stamping, zoned cross-hatching and one with animal
figures.
- E. Grave Types
Primary extended burial. Individuals laid on beach surface
and covered with sand. One contained three persons. Grave
offerings present.
- F. Architectural Structures and Stonework
No structures. Jade and turquoise beads and plaques. Small
greenstone ritual metate. Jade pendants.
- G. Wood, Shell, Bone
Polished conch shell trumpet. Shell bracelets and heads.
Bone pendants in form of ducks inlaid with turquoise.
- H. Miscellanea
Charcoal recovered but no radiocarbon date available.

II. EL OPEÑO

- A. Geographical Situation
La Canada near Zamora. Fertile alluvial valley located at approximately 2,000 meters. Well watered tierra templada climate.
- B. Archaeological Sites
El Openo.
- C. Settlement Pattern
No habitations excavated.
- D. Pottery Types
Negative painted ollas. Tetraped zoomorphic pots.
- E. Grave Types
Three tombs excavated. These consisted on elliptical burial chamber with dome roof and stepped entrance passage. Multiple burials, both flexed and extended, generally on raised platform. Skull burials also present. Bones occasionally painted with ochre. Grave goods present.
- F. Architectural Structures and Stonework
No structures. Jade beads and earplugs. Green stone figurine in Olmec style. Laurel leaf and Schumla-like* projectile points.
- G. Wood, Shell, Bone
Not reported.
- H. Miscellanea
Numerous clay figurines similar to Vaillant's Valley of Mexico C and D types. Also polychrome figurines.

III. CHUPICUARO

- A. Geographical situation
Near lake Cuitzeo in northern plateau area of Michoacán. Elevation approximately 2,000 meters. Climate classified as BSh (semi-arid tropical).
- B. Archaeological Sites
Zinapecuaro, Zacapu, Purepero, Jacona in Michoacán. Tepeji del Rio, Cerro del Tepalcate, Cuanalan, Teotihuacan, Tulancingo and Jerecuaro, Guanajuato.
- C. Settlement Pattern
No structures uncovered. According to Porter (1956:570) large cemetery with abundant ceramic remains suggests good size community.

* Valley of Mexico type dating from 1 A.D. to 1100.

D. Pottery Types

Black ware and painted types showing considerable standardization. Type has sharp shoulder near rim, body or base. Decorated with incising. Tecomates, ollas, plain bowls, tripod vessels, ring stand, pedestal base, shoe shapes and effigy vessels. Painted wares consist of red-rimmed, red ware, red-on-buff, black and red, and black polychrome. Brown and dark red wares tend to replace black in the Lake Phase.

E. Grave Types

Early phase characterized by extended burial in unlined earthen graves. .5 to 2.50 meters in depth. Many scattered near fire pits known as tlecuiles, skull burials, some of which were painted red. Grave offerings present. More variation of burial position in Late Phase.

F. Architectural Structures and Stonework

No structures. Stone plumb-bobs present.

G. Miscellanea

Objects of obsidian, bone rasps, shell ornaments, clay earplugs and rattles were present in both phases. Numerous slant-eyed polychrome figurines similar to the Late Ticomán of the Valley of Mexico were characteristic of Early Phase. The Chupicuaro Late Phase figurines bear resemblances to Vaillant's E2 type.

IV. APATZINGAN

A. Geographical Situation

Located in the Tepaltepec basin at approximately 600 meters above sea level. Climate is tierra caliente with xerophytic vegetation of the basin floor and pine on the mountains. The Rio Grande de Tepaltepec and numerous oases relieve the otherwise arid character of the area.

B. Archaeological Sites

Capiral, Las Delicias, San Vicente, El Llano, El Tepetate tested. Surface survey of 25 others.

C. Settlement Pattern

Numerous mounds (composed of masonry and earth. Clay and gravel, burned stone and ash.) Terraced slopes with associated mounds. No house sites reported.

D. Pottery Types

Monochrome plain and incised ollas and bowls characteristic of Chumbicuaro Phase. Delicias phase defined by red-on-brown, red-on-buff, polished, and plain. Incised red-on-brown and plain wear in ollas and deep bowls.

- E. Grave Types
No burials from earliest horizon. Extended burials covered with stone slabs or boulders from Delicias and Apatzingan. Tepetate phase interments found in yacatas and rock crevices. Mound burial in seated and flexed positions characterizes the Chila phase.
 - F. Architectural Structures and Stone Work
Mounds of masonry and earth or clay and gravel. Stone outlined rectangles and circles characterized some sites. Rectangular and effigy mirrors of pyrites-slate. Stone pendants and beads. Black obsidian blades, scrapers, blades and cones. Ground hammerstones, maces, manos and metates.
 - G. Wood, Shell, Bone
Bone awls and beads. Shell pendants, bracelets, beads, earrings.
 - H. Miscellanea
Clay spindle whorls, plaques. Numerous clay figurines, pipes, seals, and pottery drums.
- V. MEXIQUITO-HUETAMO
- A. Geographical Situations
Located in tierra caliente Southeastern Michoacan. Limestone soil with tropical rainforest and open patterned savannah vegetation.
 - B. Archaeological Sites
Huetamo, Mexiquito, Santiago, La Huisachal, Cutzamala, Pungarabato, Purechucho, Urerio, Jario El Guajalote, La Laguna, Urapa, Hacienda Characuaro.
 - C. Settlement Pattern
Numerous sites up to 25 acres in area. Series of low platform yacatas surrounded by adobe and rubble walls. House foundations at some sites.
 - D. Pottery Types
Huetamo Red Ware Course, with forms including ollas, handled jars, bowls, three-legged bowls, pitchers and mocajetes Huetamo Red Wave Fine. Cutzeo Polished. Black Ware in open forms. La Laguna Buff, Cutzamala Incised Black La Huisachal Incised Red, La Huisachal Orange.
 - E. Grave Types
Uro burials characteristic of Huetamo region.
 - F. Architectural structures and Stonework
Numerous yacatas up to 60 meters high and constructed of rubble, uncut stone and stucco. Most common shape a truncated wedge. House foundations similar to those in modern Zacatula. Carved stelae of white rhyolite, Obsidian blades and projectile points.

- G. Wood, Shell, Bone
Not reported.
- H. Miscellaneous
Copper bells, Clay stamps. Club bark beaters.

VI. COJUMATLAN

- A. Geographical Situation
Southeastern end of Lake Cahpala near the influx of the Rio Lerma. Area is a rich alluvial plain at approximately 2,000 meters elevation.
- B. Archaeological Sites
Cojumatlan, Cerro Esquintla
- C. Settlement Pattern
Rectangular levels, and stone encountered in excavations at Cojumatlan. These are probably identical to present thatched houses of reed and cane set in rock or packed north foundation.
- D. Pottery Types
Mazapan--like red-on-brown ware, Plumbate wear, molcajetes, Chapala Polished Red, and Chapala Brown Ware are characteristic of earlier phase. Second phase is characterized by Cojumatlan Polychrome and Cojumatlan Incised Polychrome. Design motifs include feathered serpents, feathers, and headdresses. Tlaloc censers, tripod legs, and anthropomorphic and 200 morpheic effigies also present.
- E. Grave Types
17 individuals excavated. Burials flexed and placed in pits or under house foundations.
- F. Architectural Structures and stonework
Stone manos and metates.
- G. Wood, Shell, Bone
No wood reported. Shell bracelets, pendants and applique sets. Bone awls, spatulas, needles.
- H. Miscellaneous
Clay flutes, whistles, and malacates. Copper bells, beads, needles and awls. Some texlite fragments.

VII. EL INFIERNILLO (POST-CLASSIC)

- A. Geographical Situation
Lower Balsas river basin. Elevations from 100-450 meters. Mean temperatures highest in Mexico. Vegetation is xero-phytic scrub; tropical in lower regions near La Villita.

- B. Archaeological Sites
Area covered from San Jeronimo in the east to Hacienda de las Balsas where river turns south. Some work along Rio Tepalcatepec and to the south past Pinzandaran. 104 sites located.
- C. Settlement Pattern
120 structures located.
- D. Pottery Types
600,000-750,000 sherds from test pits and surface excavations. 98% were monochrome.
- E. Grave Types
251 extended burials with offerings.
- F. Architectural Structures and Stonework
Structures not described. Alabaster vases, stone effigy palettes.
- G. Wood, Shell, Bone
Recorded as present; not described.
- H. Miscellanea
Silver earplugs, copper fishhooks, lacquered gourds, textiles

VIII. LA VILLITA (POST-CLASSIC)

- A. Geographical Situation
Lower Balsas river basin elevations from 100-450 meters. Mean temperatures highest in Mexico. Vegetation is xerophytic scrub; tropical near La Villita.
- B. Archaeological Sites
La Villita
- C. Settlement Pattern
Rectangular stone house foundations. Buildings grouped on slopes. Terracing. Typical Mesoamerican four mounds around plaza pattern found at a few sites.
- D. Pottery Types
Red to brown hemispherical bowls, globular, ollas, curved bordered plates, tripod vessels.
- E. Grave Types
Varies. Disarticulated bones, stratigraphic position, urn burials. Grave goods present.
- F. Architectural Structures and Stoneworks
Earth and cobble-filled platforms with stone stairway clay ovens. Jade beads. Obsidian projectile points.

G. Wood, shell, bone
Not reported

H. Miscellanea
Copper fishhook, silver plaques, bark beaters, figurines.

IX. TZINTZUNTZAN

A. Geographical Situation
Shores of Lake Patzcuaro. Tierra fria vegetation with some modification due to Lake influence.

B. Archaeological Sites
Tzintzuntzan.

C. Settlement Pattern
5 yacatas built in common platform. No habitations excavated.

D. Pottery Types
Known from funeral offerings. Gourd shaped teapot vessels, fluted vases, miniature vessels. Black, red, cream, and gray with naturalistic and geometric motifs. Domestic wares include ollas, open bowls, plates, and comals in black, brown, and red.

E. Grave Types
Burials found in and around yacatas. Cremation and skull burials. Primary and secondary single and multiple burials, radial burials, and flexed burials.

F. Architectural Structures and Stonework
Yacatas faced with cut volcanic stone. Obsidian earplugs and labrets. Other lapidary work in jade, rock crystal and pyrite. Manos and metates. Obsidian blades and projectile points.

G. Wood, Shell, Bone
Not Reported.

H. Miscellanea
Copper clay pipes and stamps, bells, files, labrets, tweezers, axes, chisels, arm ornaments and masks.

APPENDIX III

UNPUBLISHED DOCUMENTS WITH INFORMATION ON THE PRE-CONTACT TARASCAN STATE

1. Codice de Jucutacato
Document from Jucutacaro near Uruapan. Describes the migrations of a group of Nahuatl from the coast of Veracruz to the territory of the Tarascans where they establish the industry of metallurgy. The original document is in the possession of the Sociedad de Geografía y Estadística.
2. Codice de Puacuaró
Cotton cloth document belonging to the inhabitants of Puacuaró near Erongaricuaro. Contains a map of the lake area with some Tarascan inscriptions. Original located in El Museo Michoacán.
3. Codice de Nahuantzen
Document from the community of Nahuantzen. Contains representation of a yacata. Also included are diverse historical notes. The original is in El Museo Nacional de Antropología.
4. Codice de Sevina (Siuinan)
This document, from the pueblo of Sevina near Uruapan, depicts a Spanish church and various yacatas and towns near Uruapan. Original is in El Museo Nacional de Antropología.
5. Codice Cuara
Genealogy of the Cuara family of Michoacán. Original is in El Museo Michoacán.
6. Codice de Carapan I
Cotton cloth document from the town of Carapan. Contains historical and geographic notes on persons and places in the vicinity of Carapan and surrounding towns. Original in El Museo Michoacan.
7. Codice de Carapan II
Native paper document containing a genealogy of the caciques of Carapan from the time of Tangaxoan II. Original is in El Museo Michoacan.

8. Relacion de Tiripitio

One of the Relaciones Geograficas for the community of Tiripitio near Morelia (colonial Valladolid.) Contains information on native life, crops, dress, political units, language, and other facets of indigenous culture in questionnaire format. Original manuscript located in the Garcia Icazbalceta Collection of the University of Texas.

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