Homer Aschmann
University of California-Riverside

Indian Societies and Communities in Latin America: An Historical Perspective

A little less than five centuries ago what we now identify as Latin America was occupied by a kaleidoscope of societies, each with a long, complex, and largely unrecorded history. That all are called Indians no longer obscures the fact that an extraordinarily broad spectrum of economic and technologic capabilities and social and political complexity is represented, often in immediate juxtaposition. The location of each group and its economic and social organization was the resultant of migration, cultural growth and development involving both autochthonous evolution and intergroup borrowings, and successful or unsuccessful competition with neighboring societies. The pre-Columbian culture history of Latin America has its intrinsic fascination, and a modest number of geographers have contributed to its unraveling though they have been dependent on archeologic, linguistic, and contact ethnographic investigations for most of their basic data. In Meso-America and the Central Andes formal native historic traditions, supported in the former area by some documents and inscriptions, permit the use of more characteristic historical methods.

My concern in this paper, however, is focused on the Indian societies in post-Columbian and modern times. Where and why did they survive both racially and culturally? Where did they survive physically but have their cultures altered or replaced? What sorts of relationships with their environments, physical and social, do communities that are identifiably Indian exhibit today, and how are their members reacting to the assimilative and acculturative pressures of the national states in which they are located? In addition to providing intrinsically interesting information and descriptive insights into the character of a considerable number of the Latin American states and regions, studies directed to answering the above questions may afford primary contributions to answers to more general and theoretical questions. A few examples are: What social and other attributes do those societies have that successfully maintain their integrity although surrounded by other more numerous and economically more powerful groups? When two distinct societies live in fairly close contact over a long period

of time what sorts of culture elements and complexes are likely to flow from one to the other, especially which elements are capable of passing from the richer to the poorer group? What are the effects on individuals and small communities of slow or rapid assimilation into at least the economic system of a more complex society? Can distinctive patterns of land use and exploitation exist side by side in the same sort of terrain or will that system which is in the short run economically more productive or profitable inevitably take over? A singular advantage in studying Indian communities in Latin America is that there are so many of them, typically almost completely independent of each other, that a sample of significant size can be developed. General tendencies as opposed to developments resulting from idiosyncratic local conditions or histories may be identified. Both historical and contemporary studies can contribute to the sample.

HISTORICAL CONCERNS

Destruction

The European contact with the Indies that began with Columbus in 1492 is an essentially unique event. Alien invaders found a large, comfortable, peaceful population in the Greater Antilles that was singularly unprepared to resist conquest and oppression. An improbably unfortunate combination of greed and egoism on the part of each Spaniard who arrived in the New World, almost identical characteristics among their leaders, both Columbus and his contemporaries and successors, and in Spain an ineffective mixture of idealism, need for revenues, infighting among courtiers and ministers, and bureaucratic bungling resulted in a sudden and almost absolute destruction of the native population, its wealth, and most of its cultural heritage. In short succession the same destruction was carried out in the Bahamas and South Florida and almost all the way around the rim of the Caribbean. The results were economically disastrous to the conquerors and hence, we can assume, unintended. But from the beginning of the sixteenth century there was no question that European presence was fully established in the Indies. There was no one else there.

Las Casas' *Brevissima Relación de la Destrucción de las Indias*, published in 1552, remains our fundamental record of this event, but Sauer's (1966) masterful analysis, based on wide field familiarity, Columbus' letters, the lately published *Historia* of Las Casas (1909), and the decades of Peter Martyr among other early

chroniclers has placed in geographic perspective the results of an invading society's full destruction of a native one. Some important crops and perhaps their modern cultivation patterns and a few words such as hammock and hurricane, maize and tobacco are all that remain. The Indian absence forms a major basis for Augelli's (1962) incisive dichotomization of Middle America into rimland and mainland sectors, which is continued in West and Augelli's text on Middle America (1966).

In a few places around the Caribbean, however, Indian societies survived considerably longer, even to the present. These include the Caribs of the Lesser Antilles, the Guajiras, the San Blas of Northeastern Panama, and the Miskitos of coastal Nicaragua and Honduras. Causal explanations for these survivals are not uniform although a strong sense of ethnic identity, even in poverty, is a necessary condition. The Caribs were warlike and effective fighters. The Guajira Peninsula and the Miskito Coast were notably unattractive to Europeans though for different reasons. I have no satisfying explanation for the survival of the San Blas Indians.

The record of almost complete destruction of Indian societies is not limited to the initial Spanish contacts around the Caribbean. The east coast of Brazil and the La Plata estuary were exploitatively stripped of their natives for crude economic gain, and in the early 1530's Nuño de Guzmán left desolate the Mexican West Coast from Tepic to Culiacán (Sauer, 1932; 1941). Baja California, on the other hand, lost all its natives because dedicated missionaries sought to aid them (Aschmann,1959). In Northern Mexico the presence of important mines is invariably associated with the absence of local Indians, but the pattern does not appear to hold in the Central Andes. A careful examination of documentary records is likely to show that an overwhelming decline in the Indian population of an area has as its immediate cause introduced diseases such as smallpox and measles, toward which the Indians showed almost no resistance. But the problem remains when we ask why were these diseases lethal to societies as well as to individuals in some areas and not in others.

Survival in Densely Settled Areas

In two extensive regions, the Meso-American highlands from Guatemala to Central Mexico and the Andean highlands from southernmost Colombia to just south of Bolivia, large Indian communities survive. All have been subjected to a

substantial though not uniform degree of acculturation, but it may be accepted that regular household use of an Indian language is an effective indication of Indianness. By this criterion major fractions of the populations of Guatemala, Ecuador, Peru, and Bolivia are Indian. The same was true in Mexico into this century and there are still many hundreds of thousands of monoglot speakers of Indian languages in that country.

All these highland Indians descend from highly organized and complex societies that were conquered promptly by the Spanish invaders although dangerous revolts occurred in the Andes as late as the 1780's (Kubler, 1946). Having observed the effects of the demographic disaster in the Antilles, Cortes and the viceroys who took over Mexico and Peru were aware that a continuing flow of wealth depended on the maintenance of an Indian labor force. There were abuses in forced removal of labor gangs to distant mines and putting highland Indians to work in lowland plantations, and epidemic diseases could not be controlled. But it was acknowledged that enough people had to be allowed to work their own lands to provide food for themselves, the Spaniards, and the forced labor. Their initial numbers were large and, though modern studies have demonstrated tremendous mortality and population declines in the first decades after conquest (Cook and Simpson, 1948; Cook and Borah, 1960), in most highland areas survivors were sufficient in number to maintain a fully viable social and demographic entity. In the present century, and especially in the last generation, there has been an explosively accelerating population growth among the Indians as well as in the several national populations. There may be as many individuals of highland Indian ancestry living today as there ever were; there will be more very soon, though, of course, there has been considerable racial mixing.

Once the civilized highland Indians came to be recognized as human vassals of the Spanish Crown a series of deliberate procedures were applied to them. As much of their labor as could be spared from their own subsistence activities was applied to revenue producing activities and their support. Native governance was encouraged at the village level, but the Spaniards supplied perquisites for the native leaders and demanded that they deliver a requisitioned labor force. Conversion to Christianity was mandatory. All these measures and a number of others held strong acculturative potency. Forced labor under alien or socially distant rulers was not new to the sedentary Indians of the highlands, and they could endure it better than could freer and more primitive groups, and many men did return to home villages with new experiences and sometimes skills. It

was in the higher levels of the Indian social strata that acculturation was most drastic. The upper levels of the native priesthoods were simply out off, often physically.

Only within the more isolated villages could priest or shaman practice his cult clandestinely, and the complex religious structures were simplified to folk cults which in many places still survive, syncretistically or parallel with the official Catholicism. Civil leadership was coopted by the Spaniards, and children of the higher Indian nobility, especially in Peru, were often given European educations and placed in honored though carefully watched and powerless positions. Village leaders, caciques and curacas, were given authority, responsibilities and special favors throughout the colonial period. Their position was always a delicate one, identifying with their own people of the village but supported by and responsible to their oppressors. Regardless of which side they chose to give their loyalty, their effectiveness and personal success were enhanced by a maximal knowledge of Spanish ways.

The result of these Spanish colonial policies and practices, in addition to a substantial physical survival of the Indians, was a complete elimination of the civilized, centralized, and urbanized content of the native cultures and civilizations, both in terms of material culture and of social organization. They were replaced by European values and practices. It is interesting to note that the great rebellion of Tupac Amaru of the 1780's in Southern Peru sought only low level administrative reform. Its leader, to his execution, professed loyalty to the Crown and the Catholic Church (Kubler, 1946). Indianness Survives in the villages where crafts, agricultural practices, and intravillage social relations, modified to be sure, maintain a continuum with pre-Columbian patterns. They resemble the "Formative" or "Archaic" villages of three thousand years ago more than they do the Aztec and Inca empires the Spaniards conquered. Because the good or even adequate farmland left to the Indian villages is scarce, outsiders, Indian or otherwise, are unwelcome and village endogamy is closely followed. Even where all villages in a region except the administrative centers are Indian, as in Western Guatemala, Southern Peru, and much of Highland Bolivia, each village is socially isolated from the others except for some formalized and traditional market exchanges (Tax, 1953). Its contacts with the outside are through agencies of the national government as they once were with officers of the Crown.

The retention or loss of Indian languages among the highland Indians presents a number of problems. Two imperial languages, Nahua for the Aztecs and Quechua for the Incas, were adopted by the Spaniards for their own administrative purposes. They were spread farther and used more widely in the first century after the Conquest than they had been before. Their speakers, however, were more subject to acculturative pressures since these languages were learned by Spanish officials and traders. Important but recessive languages, Otomi in Mexico and Aymara in Southern Peru and Bolivia, for example, although they were losing to Nahua and Quechua respectively both before and immediately after the Conquest, have been more durable during the past two centuries. Their speakers have been more isolated from acculturative pressures. Since Mexican Independence and especially since the Revolution of this century Nahua has been fading rapidly and has few monoglot speakers. The impoverished Otomi in their mountain *rancherias* seem likely to preserve their linguistic identity longer. Quechua, however, seems to be more vital. It is hard to see how its wider, international distribution can be a causal factor since the Indian villages are isolated polities. The backward social structure of the Andean states which, as opposed to Mexico, have been content to leave the Indians largely out of the national life also protects them to some degree from linguistic assimilation.

The Mayan and Chibchan linguistic groups are represented by a number of distinct and mutually unintelligible languages. The Chibchans of Colombia and Central America have largely been assimilated linguistically. The Maya in Guatemala and in Chiapas and Yucatan in Mexico have been singularly successful in maintaining their linguistic identities although Chiapas is experiencing heavy acculturation associated with both Mexican policy and the Pan American Highway (Helbig, 1961; Hill, 1964). In Yucatan the Maya represent virtually the only surviving lowland Indian community lineally descended from a high civilization, and their linguistic tenacity remains high.

The many Indian communities in the western highlands of the Americas extending from Nayarit in West Mexico to Northern Chile and Argentina are numerically important, live in extraordinarily interesting terrain, and have devised fascinating means of wresting their livings from what are often the most inauspicious environments. All have long been subjected to powerful acculturative pressures and most to severe economic oppression, and they have reacted in diverse ways. We are still far from being able to make all the relevant

generalizations we would like about these societies. Clearly acculturation and assimilation into the national societies are proceeding, during the last generation, at a rate faster than at most times in the past. Some communities will soon cease to be Indian, and all will acquire more nonIndian ways. The record of 450 years of endurance, however, suggests that some Indian communities will long remain a distinctive part of the highland scene. We cannot predict which will survive in terms of present theoretical understanding.

Survival as Fugitives

Scattered widely over the remainder of Latin America are a great number of Indian communities, most of them properly called tribes, who remain outside the polities, and to a large degree outside the economies, of the national states in which they live. The districts in which they live are sparsely populated, normally because they consist of unattractive and economically unproductive environments. At best such districts are undeveloped and isolated. The upper and middle courses of the tributaries of the Orinoco and Amazon Rivers and the Guiana Highlands hold the largest fraction of such tribes, but some may be found in locally arid districts such as the Guajira Peninsula, the Chaco, or the Seri country in Western Sonora, the high valleys of the isolated Sierra Nevada de Santa Marta, or superhumid tropical forest areas such as the Sierra de Perija, the Choco and the Upper Sinú Valley, the northeast coast of Panama and the Miskito Coast. Some of these isolated tribes live where they have since they were first contacted. Others have been driven into their present abodes as refugees from more favored areas. Although a substantial fraction of these groups cultivate crops it is normally on a shifting, slash and burn basis. Permanent settlements are rare and often there is effective nomadism though the San Blas Indians of Panama have permanent villages on tiny offshore islets, going daily by boat to their fields on the mainland.

These fugitive tribes at present possess only primitive technology, little material wealth, and simple social organization; religion is that of the shaman rather than the priest and his organized cult. There is little evidence that the regions where they live were ever occupied by complex societies or civilizations, probably because of the poverty of their natural environments in most cases. In some instances the Indians may be displaced descendants of bearers of a high culture who could not maintain its complexity in their environmentally poorer new homes. Thus the Kogi, Ika, and Sanka of the Sierra Nevada de Santa Marta may

well descend from the Tairona who once lived at its western base (Reichel-Dolmatoff, 1950-51).

The survival of these fugitive groups is invariably associated with the fact that the Spanish or Portuguese invaders, like the Indian empires of advanced technology and political organization before them, did not find their homelands suitable for permanent occupation. They were raided for slaves, notably in interior Brazil, but in rugged or heavily forested terrain at least some could remain free if at the cost of constant movement and the consequent poverty. Patterns of hostility, effectively supported by tactics such as using poisoned blow-gun darts, and timidity offered further protection. Good examples are the Motilones of the east side of the Sierra de Perija and the Auca of Eastern Ecuador.

Whenever a technological change, discovery of mineral wealth, or the development of a market for local product occurred and induced important entry and occupation by Europeans or national citizens, the marginal or fugitive Indian tribes were doomed. The gold rush of Tierra del Fuego and subsequent establishment of sheep ranges did in the Ona and Yaghan; agricultural settlement of the Argentine Pampa overwhelmed the Puelche despite their brilliant military capabilities, and the extension of commercial grazing into Patagonia did the same to the Tehuelche; the collapse of the rubber boom in the Amazon Basin occurred before all its fugitive tribes were enslaved or exterminated, but losses were heavy. The process continues and in the past few years we have learned belatedly of exterminative attacks on Indian groups in the Orinoco basin of Eastern Colombia and in the Brazilian Matto Grosso by representatives of the expanding cattle grazing industry. Mineral exploitation in the Guiana Highlands and petroleum discoveries at the eastern base of the Andes are likely to have similar effects. The long term prognosis for these fugitive tribes is poor.

Two groups have been especially attracted to these fugitive tribes: anthropologists and missionaries. Anthropologists seek to discover an unspoiled primitive tribe to study and record in detail its culture (Tessmann, 1930; Steward, 1946, 1948; Holmberg, 1950). Only some of these students have acquired the sophistication to recognize that they are dealing with peoples who have been much affected by contact with Europeans, though in a basically negative way. Their ethnographic studies in many instances, however, included notably detailed ecologic analyses. Traditionally anthropologists come to appreciate "their" tribe for itself and to hope that it can remain isolated and safe. Missionaries on the

other hand, seek to enhance physical as well as spiritual welfare. Their explicit goal is acculturation in both material and non-material culture toward their own model. As they are successful, which is less than common, a group loses its Indianness.

Semi-Acculturated Societies

Four groups, commonly referred to as Indians, require special mention because of their relative success in maintaining some vestiges of Indianness along with massive acceptance of both the technology and values of the modern nations in which they live. They are the Guajira of Colombia and Venezuela, the Yaqui of Northwest Mexico, the Guarani of Paraguay, and the Araucanians of Chile. All groups practiced some farming but had a limited technology and relatively simple social organization. It was also one that proved resilient to powerful acculturative impacts, and biologically at least, all have weathered the storm and are becoming more numerous. Culturally, however, they are likely to become more like lower class citizens of their respective countries whether or not they retain their Indian languages. I shall suggest what appear to me to have been critical factors in permitting these survivals.

Both the Yaqui and the Guarani experienced massive and somewhat forced acculturation at the hands of Jesuit missionaries from the beginning of the 17th century to 1767. Concerned more with religion than language and being an international rather than a Spanish mission, the Jesuit goal was to develop a Christian community rather than integrate the Indian population into the colonial culture of the Spanish Empire. They taught European arts well enough that even after the Jesuit Expulsion their former charges could compete in the greater colonial and later in the national societies. Both groups have been severely burdened since independence from Spain. The Yaquis fought so hard for rights to worship and hold land in their own fashion that post-Revolutionary Mexico has come to respect them, recognize their land tenure, and grant them some cultural autonomy (Spicer, 1962). Finally crushed in the Wars of Lopez and severely reduced territorially, Paraguay found its old Guarani heritage almost its only basis for survival as a state and encouraged use of the Guarani language. Except for a distinctive and wonderfully attractive musical tradition, but one that holds many European elements, there seems to be little other Indianness in Paraguayan culture.

The Araucanians south of the Rio Bio-Bio fought the Spaniards and later the Chileans from the time of Valdivia to the 1880's. Neither environmental conditions nor tribal military prowess can explain their success. The vicissitudes of colonial, revolutionary, and republican history that repeatedly took the pressure off the Indian way of life just as it appeared that Araucania was pacified are relevant but not satisfying explanations. More significant was the rapid acceptance of European crops and domestic animals along with partial participation in an exchange economy by the still free Indians. The Europeans agricultural complex was more successful in Araucania than the native, as suggested by the disappearance of the two native winter sown grains, unique to the Americas, in competition with wheat and barley. When they were not actually reacting to military pressure the Indians became more prosperous than they had ever been, engaging in a substantial trade with the lands to the north. Except for social relations and some language retention, the Araucanians are hard to distinguish from neighboring Chilean *campesinos* (Faron, 1961).

The Guajira Peninsula, projecting into the Caribbean, was discovered and explored in the first wave of the Spanish Conquest, and Rio Hacha was founded early in the 16th century. The dry thorn forest to the east, however, was singularly unattractive, and the Spaniards found little reason to go beyond the Rio Rancheria. During the colonial period the Indians acquired European livestock and evolved a pastoral economy far more productive and able to support more people than had lived on the peninsula in aboriginal times. The region is now overgrazed and overpopulated, exporting people, especially to Maracaibo, rather than receiving immigrants in number. Perhaps because of matrilineal inheritance, the Guajira have been notably able to assimilate immigrants from virtually all parts of the world (Aschmann, 1960; 1962). It is my impression that the Guajira culture is the most dynamic and vital of the four considered in this section; it shows no evidence of disappearing into the national entities. It should be noted, however, that its entire subsistence base is derived from European technology.

The Assimilated Indian or Mestizo

Biological mestizisation began when Europeans arrived in the New World, and mulattos and zambos began to appear as soon as Negroes were imported from Africa. Race mixing has long been so far advanced among all Indian populations, except for a few small fugitive tribes, that it now proceeds almost without

reference to linguistic or cultural developments. The mixture will have a greater or lesser Indian component depending on the relative size of the Indian populations that survived the initial shock of contact in particular areas and the number of European and Negro immigrants. It has often been noted that in Guatemala, where the Indian component is large, the *ladinos* as a group are physically indistinguishable from people culturally identified as Indians. In Central and Southern Chile the Indian component is smaller, and again a large fraction of the campesinos (both *inquilinos* and *minifundistas*) are physically equivalent to neighboring Arancanians.

In Western Latin America, from Mexico to Chile and Northwest Argentina, except for a few locales such as highland Costa Rica and Antioquia, the Indian component of the several national populations is so large that they must all be regarded as mestizos. Even in the above-mentioned exceptions an Indian element is definitely present. The processes whereby these mestizo populations became identified with the developing national cultures that bear a strongly Latin and European rather than Indian character are a central theme in Latin American historiographies. The transition had already occurred in Chile by the time of Independence. The same may be true for El Salvador, Honduras, and Nicaragua. In Highland Colombia and Venezuela it seems to have occurred a few decades later, and in Central and Southern Mexico the shift is significantly post-Revolutionary, from 1920 to 1940. It is still underway in Guatemala, Ecuador, and Peru; rural Highland Bolivia is still Indian.

There are many highly geographic components to the forces that are bringing into existence the several Latin American national cultures. Land tenure patterns, the relations between subsistence and export oriented agricultural production, the development of commercial markets at mines, and the creation of transportation facilities are examples. The transition from Indian to Chileno or Mexican did not occur simultaneously in all areas of Indian culture. At least official conversion to Christianity was enforced immediately after conquest. The adoption of European crops, domesticated animals, and certain kinds of technology came early and its completeness was an inverse function of how fully the Indian ways occupied the ecological niches of a particular environment. The practice of marking the transition at the time when Indian languages were or will be abandoned in favor of Spanish is perhaps as valid as using any other single index. To varying degrees in varying regions, however, Indian ways have survived the linguistic, shift, often to a greater extent than in places like the Guajira and

Eastern Paraguay where Indian languages are still dominant. Dietary preferences, agricultural practices, land holding and inheritance patterns, and familial and village level social organization are the sorts of culture elements that may survive from the Indian past and substantially affect the cultural geography of modern nations.

PROGRAMMATIC CONCERNS

We are about ready for a major study that will attempt to answer, both in detail and with effort to draw significant generalizations, the question posed at the beginning of this essay: Where, to what extent, and why have Indian cultures and communities survived in Latin America? The partial and tentative answers presented here may indicate that a geographic perspective promises a sound framework for such a study. It cannot be a dissertation topic nor would it be a comfortable enterprise for one who needs regular publication to rise on the academic ladder. Its completion, however, will make a major contribution to the culture history of mankind and be of interest to historians, anthropologists and historically oriented social scientists in general.

A great many more individuals have been and will be engaged in studying the Indians and their cultures in Latin America on the community or local regional level. Few geographers have had, or are likely to have, the inclination, background, or physical durability to remain with a fugitive Indian group long enough to make a classical ethnographic study, but their ecological perspective could enhance its value. Gordon's work in the Sinú (1957), Meigs' study of the Kiliwa (1939), Bennett's work in Panama (1962), and Pennington's study of the Tarahumar (1963) are the only exceptions that come to mind.

Geographers along with anthropologists have consistently made contributions in the form of community and local regional studies among the sedentary Indians descended from the high civilizations of Western Latin America. West (1948). McBryde (1947), Brand (195I), Termer (1943) and many others, pursuing a tradition that goes back to Sapper (1901; 1905) and Schmieder (1930), have made contributions. It is noteworthy that such studies may be conceptually almost indistinguishable from those of 'ecologically oriented anthropologists such as Tax (1953), Foster (1948) and Nash (1958). Both geographers and anthropologists have also worked on communities and small regions that have crossed the transition to become mestizo, as Aranda (1964) in Northern Chile, Wagner

(1958) in Nicoya, and Stanislawski (1950) in Michoacan.

Perhaps more significant is work by geographers focused on themes that are heavily dependent on Indian cultures. The work on domesticated plants and animals of the New World is a good example. Carl Sauer (1950; 1952), is perhaps the dean of such studies, but his students and others (J. Sauer, 1950; Gade, 1967; Johannessen, 1951; Carlos Keller, 1952; Baraona, 1958; and Bennett, 1968, for example) are maintaining a vigorous tradition. Edwards' (1965) work an aboriginal sailing craft on South America's West Coast represents a parallel sort of investigation. Land tenure studies involving Indian systems go back at least to McBride (1921; 1923), but they have acquired new and practical urgency with rising interest in agrarian reform in countries such as Chile (Baraona, Aranda and Santana, 1961; Borde and Gongora, 1956) At least locally the picture of impoverished Indian villages surrounded by progressive and prosperous national citizens is in error. Goins (1961) has recently observed a situation in Highland Ecuador where Indian farmers, retaining their land through village endogamous marriages, enjoy far more security than the non-Indian towndwellers. Through the parish priest they are actually tithing a third of their crops in a relief program. More themes and examples could be cited, but it should be clear that an active and productive area of geographic research is involved.

A final concern takes us into a realm pointed up by It. C. Brookfield (1964) in his "Questions on the Human Frontiers of Geography." To what extent is it a task and capability of geographers to concern themselves with social process, social theory and the value systems of the societies they study? The unstable juxtaposition of Indian and mestizo communities sometimes along with Negro and essentially European ones as well in many Latin American countries throws the question into sharp relief. As Brookfield points out, geographers have been chary about entering this field, marked by rarified theories, tautologies, and intellectual pitfalls. Some qualification may be made for certain community studies and historical treatises. Perception of environment studies seem to be our most active entry and they have just begun to extend beyond our national borders. A rich knowledge of the community to be investigated will be needed to develop valid questionnaires and protocols and to evaluate responses to them. It may still be legitimate to assert that a satisfying cultural geography of Latin America or any of its countries or major regions will not be produced until we understand not only the activities of individuals in the diverse communities but also the motivations and goals that induce them.

REFERENCES CITED

Aranda, Ximena. "San Pedro de Atacama. Elementos diagnósticos para un plan de desarrollo local," *Informaciónes Geográficas*, XI-XIV (1964), pp. 19-61.

Aschmann, Homer. *The Central Desert of Baja California: Demography and Ecology*. Ibero-Americana, No. 42. (Berkeley: University of California Press, 1959.)

_____."Indian Pastoralists of the Guajira Peninsula," *Annals of the Association of American Geographers*, L (1960), pp. 408-418.

_____."The Cultural Vitality of the Guajira Indians of Colombia and Venezuela," Akten des 34. *Internationalen Amerikanistenkongresses*, Vienna, 18-25 July, 1960. (1962), pp, 592-596.

Augelli, J. P, "The Rimland-Mainland Concept of Culture Areas in Middle America," *Annals of the Association of American Geographers*, LII (1962), pp. 119-129.

Baraona, Rafael. "Informe sobre los maices de Socaire," *Publicación del Centro de Estudios Antropológicos de la Universidad de Chile, No. 5 (1958), pp. 36-41.*

Baraona Rafael, Aranda, Ximena, and Santana, Romulo. Valle de Putaendo: Estudio de Estructura Agrícola. (Santiago: Instituto de Geografía, Universidad de Chile, 1961.)

Bennett, Charles F., Jr. "The Bayano Cuna Indians, Panama: An Ecological Study of Livelihood and Diet," *Annals of the Association of American Geographers*, LII (1962), pp. 32-50.

_____. *Human Influences on the Zoogeography of Panama*. Ibero-Americana, No. 51. (Berkeley: University of California Press, 1968.)

Borde, Jean, and Gongora, Mario. *Evolución de la Propiedad Rural en el Valle del Puangue*. 2 vols. (Santiago: Instituto de Sociologia, Universidad de Chile, 1956.)

Brand, Donald D. *Quiroga: A Mexican Municipio*. (Washington, DC: Smithsonian Institution, Institute of Social Anthropology, No. 11, 1951.)

Brookfield, Harold C. "Questions on the Human Frontiers of Geography," *Economic Geography*, XL (1964), pp. 283-303.

Cook, S. F., and Borah, W. *The Indian Population of Central Mexico: 1531-1610*. Ibero-Americana, No. 44. (Berkeley: University of California Press, 1960.)

Cook, S. F., and Simpson, L. B. *The Population of Central Mexico in the Sixteenth Century*. Ibero-Americana, No. 31. (Berkeley: University of California Press, 1948.)

Edwards, Clinton R. *Aboriginal Watercraft on the Pacific Coast of South America*. Ibero-Americana, No. 42. (Berkeley: University of California Press, 1965.)

Faron, Louis C. *Mapuche Social Structure: Institutional Reintegration in a Patrilineal Society of Central Chile*. University of Illinois Studies in Anthropology, No. 1. (Urbana: University of Illinois Press, 1961.)

Foster, George M. *Empire's Children: The People of Tzintzuntzan*. (Washington: Smithsonian Institution, 1948.) Institute of Social Anthropology, No. 6.

Gade, Daniel W. "Plant Use and Folk Agriculture in the Vilcanota Valley of Peru: A Cultural-Historical Geography of Plant Resources." Unpublished Ph.D. Dissertation, University of Wisconsin, 1967.

Goins, John F. "An Ethnographic Study of a Quechua Indian Community in the Highlands of Southern Ecuador." Preliminary Report on Research Accomplished on Sabbatical Leave from University of California, Riverside, 1961, (Dittoed.)

Gordon, B. L. *Human Geography and Ecology of the Sinú Country of Colombia*. Ibero-Americana, No. 39, (Berkeley: University of California Press, 1957.)

Helbig, Karl M. "Das Stromgebiet des oberen Río Grijalva: Eine Landschaftsstudie aus Chiapas, Süd-Mexiko," *Mitteilungen der Geographischen Gesellsehaft in Hamburg*, LIV (1951), pp. 5-274. Also translated as: *La Cuenca Superior del Río Grijalva: Un Estudio Regional de Chiapas, Sureste de Mexico*. Translated by Felix Heyne. Tuxtla Gutierrez: Institute de Ciencias y Artes de Chiapas, 1964.

Hill, A. David. *The Changing Landscape of a Mexican Municipio; Villa las Rosas, Chiapas*. NAS-NRC Foreign Field Research Program Report No. 26. (Chicago: University of Chicago, Department of Geography Research Paper No. 91, 1954.)

Holmberg, Allan R. *Nomads of the Long Bow: The Siriono of Eastern Bolivia*.

(Washington, DC: Smithsonian Institution, Institute of Social Anthropology, No. 10, 1950.)

Johannessen. Carl. "Man's Role in the Distribution of the Corozo Palm (*Orbignva* spp.)," *Yearbook, Association of Pacific Coast Geographers*, XIX (1957), pp. 2933.

Keller, Carlos. "Introducción" to José Toribio Medina. *Los Aborigines de Chile* (1882). (Santiago: Fondo Histórico y Bibliográfico José Toribio Medina, 1952, pp. vii-lxxii).

Kubler, George. "The Quechua in the Colonial World," in *Handbook of South American Indians*, Vol. 11. (Washington, D.C.: Bureau of American Ethnology, Bulletin 143, 1946, pp. 331-410).

Las Casas, Bartolomé de. *Apologetica Historia de las Indias*. (Madrid: Biblioteca de Autores Españoles, 1909.)

McBride, George M. *Agrarian Indian Communities of Highland Bolivia*. (New York: American Geographical Society, 1921.)

_____. *The Land Systems of Mexico*. (New York: American Geographical Society, 1923.)

McBryde, F. Webster. *Cultural and Historical Geography of Southwest Guatemala*. (Washington, D. C.: Smithsonian Institution, Institute of Social Anthropology, No.4, 1947.)

Meigs, Perveril. *The Kiliwa Indians of Lower California*. Ibero-Americana, No. 15. (Berkeley: University of California Press, 1939.)

Nash, Manning. *Machine Age Maya: The Industrialization of a Guatemalan Community*. (Glencoe, Illinois: The Free Press, 1958.)

Pennington, Campbell D. *The Tarahumar of Mexico: Their Environment and Material Culture*. (Salt Lake City: University of Utah Press, 1963.)

Reichel-Dalmatoff, Gerardo. *Los Kogi - Una Tribu de la Sierra, en Colombia*. Vol. 1 in Revista del Instituto Ethnológico Nacional, IV. Bogotá, 1950. Vol. II. Bogotá: Editorial Iqueima, 1951.

Sapper, Karl. "Beiträge zur Ethnographic des südlichen Mittelamerika," *Petermanns Geographische Mitteilungen*, XLVII (1901), pp. 25-40.

_____. "Die Zukunft der mittelamerikanischen Indianerstämme," *Archiv fur Rassen-und Gesellsehaftsbiologie*, 11 (1905), pp. 383-413.

Sauer, Carl O. *The Road to Cibola.* Ibero-Americana, No. 3. (Berkeley: University of California Press, 1932.)

_____. "The Personality of Mexico," *Geographical Review*, XXXI (1941), pp. 353-364.

_____. "Cultivated Plants of South and Central America," in *Handbook of South American Indians*, Vol. 6. Washington, D. C.: Bureau of American Ethnology, Bulletin 143 (1950) pp. 487-543.

_____. *Agricultural Origins and Dispersals.* (New York: American Geographical Society, 1952.)

_____. *The Early Spanish Main.* (Berkeley: University of California Press, 1966.)

Sauer, Jonathan. "The Grain Amaranths: A Survey of their History and Classification," *Annals of the Missouri Botanical Garden*, XXXVII (1950), pp. 561-632.

Schmieder, Oscar. *Settlements of the Tzapotec and Mije Indians, Oaxaca, Mexico.* University of California Publications in Geography, Vol. 4, 1930.

Spicer, Edward H. *Cycles of Conquest.* (Tucson: University of Arizona Press, 1962.)

Stanislawski, Dan. *The Anatomy of Eleven Towns of Michoacán.* Latin American Studies, No. 10. (Austin: University of Texas, 1950.)

Steward, Julian (ed.). *Handbook of South American Indians*, Vol. 1, The Marginal Tribes, Vol. III, The Tropical Forest Tribes.(Washington, DC: Bureau of American Ethnology, Bulletin 143, 1946, 1948.)

Tax, Sol. *Penny Capitalism: A Guatemalan Indian Ecomomy* (Washington, DC: Smithsonian Institution. Institute of Social Anthropology, No. 16, 1953.)

Termer, Franz. "Die Ethnischen Grundlagen der Politisehen Geographic von Mittelamerika," *Zeitschrift der Gesellsehaft für Erdkunde zu Berlin*, (1943) pp. 148-171.

Tessmann, G. *Die Indianer Nordperus.* (Hamburg, Friedrichsen, de Gruyter, 1930.)

Wagner, Philip L. *Nicoya, a Cultural Geography*. University of California Publications in Geography, Vol. XII (3) (1958) pp. 195-250.

West, Robert C. *Cultural Geography of the Modern Tarascan Area.* (Washington, DC: Smithsonian Institution, Institute of Social Anthropology, No. 7, 1948.)

West, Robert C., and Augelli, John P. *Middle America: Its Lands and Peoples.* (Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1965.)