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MARKET ARTICULATION AND ECONOMIC STRATIFICATION IN WESTERN GUATEMALA†

The research presented here is based on the notion that economic stratification in traditional societies is structured in space, and influenced by the pattern of market access. To demonstrate this proposition, data on trade and stratification have been drawn from a marketing region of Guatemala. These data show that the distribution of different population segments and social groups within that marketing region can be related to the distribution of access points in the marketing organization, i.e., the spatial pattern of the terms of trade. More important, the analysis suggests that the structure of marketing in this region helps to create and maintain income disparities between different population segments and groups that make up the social system. It seems clear, therefore, that marketing is an important mechanism through which income is distributed in underdeveloped countries, and that the organization of trade and markets is most relevant to regional patterns of economic growth.

The model used to describe the spatial orientation of market centers is taken from central-place theory. This theory was developed to explain the size, order, and distribution of urban settlements in modern societies, although it is probably more accurate in describing the same characteristics of market towns in preindustralized societies. In any event, the most basic requirement of the theory is met in applying it to market centers in western Guatemala, i.e., that the centers in question serve mainly to provision a dispersed, rural population. The spatial organization of commodity flows is also described, following the lead of Jones' market studies in Africa (9; 10). Few students have described the relationship

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¹ Central-place theory was developed by Walter Christaller and August Lösch some thirty years ago; good summaries of that theory that include modern developments and departures from the original can be found in 2 and 12. The theory has been applied to periodic marketplaces by a number of people, most notably Skinner (15).

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between central-place hierarchies and commodity flows. Most have assumed that major consumption centers serve as bulking-distribution points for traders and that goods produced in the rural hinterland will flow up a sequence of ever larger market centers while goods produced in urban centers or outside a rural area will flow down a sequence of ever smaller market centers. In theory, larger centers should service and collect from a wider hinterland than smaller centers. In this study both trade flows and trade centers are described; they show that position in a central-place hierarchy (determined from measures of consumption goods) does not necessarily predict the trading functions or range of a center. But an examination of both features of economic centrality does suggest what the terms of trade are to suppliers and consumers found at different points in the hierarchy and different areas in the regional system.

ECONOMIC AND SOCIAL FEATURES OF WESTERN GUATEMALA

The marketing system in western Guatemala is made up of the market centers that fall within the maximal hinterland of the large market town of Quezaltenango. Quezaltenango is located in the midwestern highlands of Guatemala and had an urban population of about 40,000 in 1970. Its hinterland (the ten westernmost departments of Guatemala) is about 10,000 square miles in area, supports 1.8 million people, and includes some 300 marketplaces. Average population density is 150 per square mile and average population dependent on each marketplace is about 6,000. Map 1 locates the study area within the country, and Map 2 shows the distribution of observed marketplaces within it—all highland centers and all major lowland centers. As shown, the national capital of the country, Guatemala City, falls outside of the study area, east of the western region. The following analysis of the marketing system in western Guatemala is based mainly on my own fieldwork, conducted between January 1969 and August 1970.²

The population of Guatemala is divided into two distinct ethnic groups, Indians and Ladinos. In the following remarks, different kinds of economic adaptations among the two ethnic groups will be described, but for present purposes it can be said that most Ladinos in this part of the country (20 percent of its population) are not farmers, and belong to or have direct access to the elite commercial and administrative power-holders of the country; while most Indians (descendants of the preconquest Mayan civilizations) are peasant farmers, i.e., farmers who gain a livelihood without the benefits of modern industrialized inputs or techniques and have only indirect access to the elite power-holders of the country.

In western Guatemala, agriculture directly supports more than 80 percent of the population, but in this economy agriculture subsumes two quite different kinds of production systems. Economists such as L. B. Fletcher commonly describe a subsistence-agriculture sector in which 70 percent of the population produces about 20 percent of the gross agricultural output (in market value) and a commercial-agriculture sector in which the remaining 30 percent of the population produces about 80 percent of the gross agricultural output (5). Because eco-

² A detailed description of the study area can be found in 16, along with the methodology and preliminary conclusions concerning fieldwork on which this study is based.

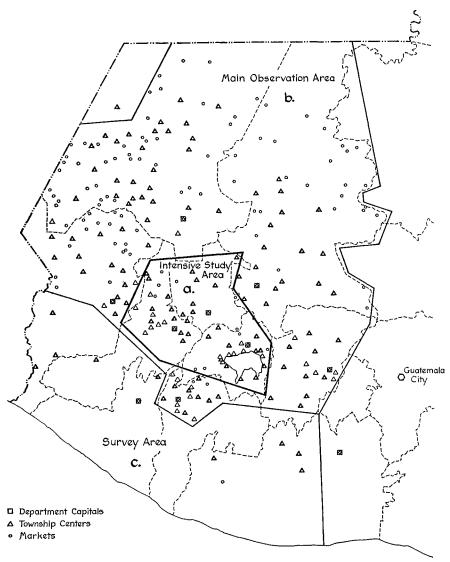
Map 1.—Major Agricultural Regions of Western Guatemala



nomic data are collected by area, the different agricultural sectors of Guatemala are normally defined by location. Altitude defines the regions of plantation (commercial) agriculture, concentrated in the southwestern lowlands below the 2,000 meter line (i.e., the southern third of the study area) and peasant (subsistence) agriculture which predominates in the remaining area.

Plantation agriculture is dominated by the international market, is highly commercialized, and requires large inputs of land and labor, but little mechanization. Most plantation crops are exported (coffee, cotton, and bananas) but some

Map 2.—Observed Marketplaces and Study Areas of Western Guatemala*



- a. All markets observed seasonally
- b. All markets observed
- C. Selected markets observed

* All known marketplaces were observed in the highlands (main observation area); only selected marketplaces—probably all major marketplaces—were observed in the lowlands (survey area).

crops are produced for a broad domestic market (sugar, livestock, and corn). Plantations in the study area produced nearly 50 percent of the *national* agricultural output in value in the 1960s. Though most of it moved out of the local economy, a small percentage was sold within the region—some through market-places but more through other domestic channels (shops and warehouses).

About 70 percent of the permanent residents in the southern lowland plantation area are Ladinos. All major plantations are owned and managed by Ladinos

and receive supporting services from predominantly Ladino urban centers. The plantation work force is about half Ladino and half Indian; many of the Ladinos have recent Indian parentage,³ and many of the Indians are temporary workers who migrate annually from the highland peasant areas during the coffee and cotton harvests.⁴ Ethnic and class stratification is marked in the area: plantation owners form the smallest, richest, and most powerful group (more than 80 percent of the land is owned by 4 percent of the landowners), followed in the local ranking system by the urban commercial elite and administrative bureaucrats, the few small independent farmers, petty traders and urban craftsmen, the permanent Ladino plantation workers, and last the temporary Indian laborers.

Peasant agriculture, concentrated in the central highlands, is basically hoe agriculture practiced by Indian farmers; farms are small, purchased inputs are rarely utilized, and the labor force normally consists of a single nuclear family. The most important agricultural products are corn (the basic starchy staple of Guatemala), a variety of pulses, wheat, poultry, eggs, fruits, vegetables, and some pigs—destined almost entirely for domestic consumption. It is quite misleading, however, to suggest that such production is only for household consumption or "subsistence." By my estimate, some 50 percent or more of the product of this sector moves into domestic marketing channels—i.e., cash exchanges through the marketplace between peasants or between peasants and producers (urban or plantation residents). The market value of these goods is simply much less than that of plantation products, and certainly not as well represented in statistical reports.

In the highland peasant area the most prominent social division is between Indians and Ladinos; there is little mobility between the two groups. Most Ladinos live in urban centers, providing administrative, professional, and commercial services to the rural Indian hinterland. Most peasants farm their own land, although 40 percent of the arable land in the highlands is owned by 4 percent of the population, many of them urban Ladinos. The social organization of Indians revolves around the township, a semiautonomous political territorial unit that usually includes a few Ladinos. National political directives are translated through the Ladinos, but for most local affairs the Indian group in the township is self-regulating. Indian access to people outside the township is minimal except through fleeting market contacts, while Ladino access is wide both spatially and hierarchically (1).

The terms used above—Ladino, elite, commercial sector versus Indian, peasant, subsistence sector—hardly do justice to the wide variety of groups in western Guatemala, each with particular kinds of market orientation. For this purpose, a further breakdown is necessary. On the basis of some census figures and my own questionnaires on occupation, I estimate that at least 15 percent of the so-called peasants are full-time producers of nonagricultural goods; another 25 percent produce some specialized goods as a sideline to the main business of farming and occasionally market some crop surplus; perhaps another 25 percent market a fair portion of basic products annually (e.g., corn, beans, chickens, eggs,

⁸ Most Ladinos have some Indian ancestry; usually in this part of Guatemala the more remote the Indian ancestry the higher the Ladino class. Indians can become Ladinos by leaving their communities and adopting a Ladino life-style; this is frequently done when an Indian becomes a permanent plantation worker (1).

⁴ Because of the large number of temporary plantation workers, the actual number of people engaged in plantation agriculture is probably more than the 30 percent quoted above.

pigs); while some 35 percent produce only a portion of the basic foodstuffs needed for personal use, deriving income to purchase the rest from seasonal work on plantations. About 15 percent of the Ladinos are farmers, and another 35 percent are farm managers or laborers. (Most of the goods produced by Ladino farmers are plantation products exported from the region.) The rest are divided fairly equally among government positions, professions, and business. Since very few Ladinos produce basic foodstuffs and many Indians do not produce enough for their own use, about 50 percent of the agricultural labor force in the region supplies most of the basic food requirements of the population on something like one third of the land area in the least productive parts of the country.⁵

The relationship of different segments of the population to the market exchange process can be clarified by distinguishing two kinds of centers for exchange, marketplaces and urban settlements; and by distinguishing exchange between people of the same class from exchange between people of different classes, in this case between Indians and Ladinos. Most of the goods and services that the Ladino elite produce are marketed through channels other than the marketplace, while most goods produced for sale by Indian peasants go only through the marketplace. In fact, most exchanges seen in the marketplace are peasant exchanges. But although peasant exchanges seem to underlie the domestic marketing economy, they are only more visible than other exchanges. And as determinants of the spatial organization of the marketing system, peasant exchanges are secondary.

Exchanges between Indians and Ladinos are more basic. They are less visible because only one side of the exchange process takes place in the marketplace: the relatively few Ladinos are supplied in the marketplace by Indians with the foodstuffs that Ladinos rarely produce for themselves, while the more numerous Indians are supplied by Ladinos with administrative and professional services, manufactures, and plantation products outside the marketplace. (Indians also pay taxes and rents outside the marketplace.) More important, many peasant exchanges take place only because specialization is necessary in order to produce the surplus required to provision the Ladino elite. For this reason, one can more cogently argue that the Indian-Ladino exchange system underlies the domestic economy. In any event, the kinds of exchanges that take place between Indians and Ladinos have determined the spatial organization of marketing, as the following section should make explicit.

I have assumed that few foodstuffs come from other regions of Guatemala not matched by the outflow from western Guatemala; in fact, there is probably a net outflow to Guatemala City from all

⁵ In the last ten years commercial lowland farms (usually owned by Ladinos) have produced a good deal of the corn marketed in western Guatemala. This corn essentially feeds the lowland population including the 35 percent of the highland peasants who work there seasonally. Some of it is also trucked to other parts of western Guatemala, but that not consumed by the seasonal plantation workers is probably matched by an equal amount of highland corn that moves to the lowlands. (Corn production in the lowlands began in earnest with the death of subsistence farming, when large numbers of peasants began working seasonally on the plantations.)

⁶ Approximately 95 percent of all sellers (regardless of product) found in the marketplace are Indians, and at least half of the cash that Indians obtain from marketplace sales is spent on other peasant-produced goods. (Even the peasant who produces most of his own basic grains must still purchase other foods, baskets, rope, pottery, limestone, grinding mills, and the like, that are produced by other peasants.) On the other hand, about 90 percent of all major shop owners and all professionals and administrators found in urban centers are Ladinos. Manufactured imports and plantation products are sold mainly in the Ladino shops.

THE DISTRIBUTION OF MAJOR CENTRAL PLACES

The basic structure of the regional marketing system is created by 19 major Ladino-controlled market towns that are distributed regularly over the land-scape. (Members of this group of Ladino market towns will be termed LMTs in the following discussion.) An outline of this system, shown in relation to production zones and major lines of communication, is shown on Map 3.

The largest market town is Quezaltenango (urban population 40,000, central functions 76),8 the administrative and commercial center of the region. This central LMT is surrounded by six intermediate LMTs that are equivalent to each other as central places (average urban population 10,000, central functions 45).9 They are linked to each other through the central LMT, Quezaltenango, and only dependent on and secondary to that single higher-level center. All six are large commercial centers, all support large town marketplaces that meet daily, and five of the six are local administrative centers—department capitals like Quezaltenango, but with fewer functions. Each is about 50 kilometers distant from Quezaltenango and linked to it by a major road. Each intermediate LMT is the major center for a local marketing system that extends from the outer reaches of the regional system to the inner hinterland of the central LMT (which has a local system dependent on it as well as a maximal hinterland—the regional system—that includes all of the local systems in western Guatemala).

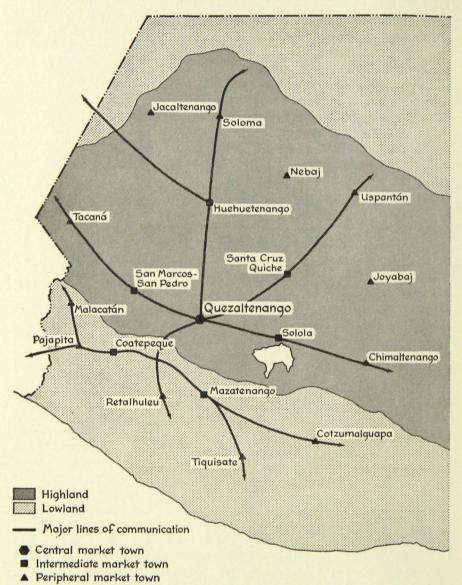
The seven major LMTs described above are surrounded by twelve other LMTs that are smaller and that are located on the periphery of the regional marketing system. Six of these peripheral LMTs are located on the main roads that radiate out from the central LMT through the six intermediate LMTs and six are located between the major traffic routes, connected to two intermediate LMTs by secondary roads. All but two of the twelve peripheral LMTs are smaller than the intermediate LMTs, both as marketplaces and as towns (average urban population 2,000, central functions 20), and all but two lack administrative functions. (The two exceptional cases, Chimaltenango and Retalhuleu, need not detain us since with respect to domestic marketing they share most characteristics of other peripheral LMTs.) Most peripheral LMTs are found in relatively sparsely populated areas where production levels are low. They have smaller marketplaces than intermediate LMTs because their dependent populations are smaller and less commercialized. The peripheral LMT shops and warehouses are provisioned directly by intermediate LMTs, but the peripheral LMT marketplaces are provisioned primarily by a local hinterland independent of that for the intermediate LMTs. Thus, as towns the peripheral LMTs belong to the maximal intermediate LMT hinterlands, but as marketplaces they have their own hinterlands.

⁷ They are distinguished from all other central places in the study area by a number of criteria: marketplace function and size; town-shop development around the marketplace site; population size and composition of center (all are predominantly Ladino); and distributive functions in the domestic economy. These criteria are detailed in 16.

⁸ The number of different central functions is a useful measure of a center's importance; this measure is frequently used in careful central-place studies (12). In western Guatemala common town functions are small shops (tiendas), drugstores, lawyers' offices, and grain mills (molinas); noncommercial functions are schools, churches, and hospitals.

⁹ Different levels of functionally similar central places are distinguished by number of central functions, population size, and range of hinterland. Measurement procedures for this are described in 16.

Map 3.—Major Ladino Market Towns in Western Guatemala*



^{*} All centers are shown in true relative locations.

The 19 market towns described above are the only true "town" centers in western Guatemala. Each township in the region (some 250) has a cluster of permanent commercial establishments in its political center, but only the 19 LMTs have any claim to commercial importance over rather wide hinterlands. On the other hand, a number of township centers boast periodic marketplaces equivalent in size and diversity to the marketplaces found in the Ladino market

towns. These marketplaces are rural bulking centers (termed RBCs) for goods produced primarily by Indians in rural areas. They contrast with LMTs both in that they have fewer permanent establishments (averaging only ten commercial functions) and in that they are oriented toward Indian production and consumption rather than urban Ladino provisioning. Most are located in townships of dispersed settlements where few Ladinos reside. The kinds of goods traded and the level of trade (about half retail and half wholesale) are similar in all of the RBCs but one. The exceptional case is San Francisco el Alto, the largest wholesale marketplace in western Guatemala, located only a few kilometers from Quezaltenango, the largest urban center. The deviant features of San Francisco el Alto—large size and predominance of wholesaling—stem from its central position vis-à-vis other RBCs.

Map 4 shows the distribution of RBCs in relation to LMTs. The RBCs are found in the interstices between three of the LMTs; when the RBCs are connected to each other, they form the outer boundaries of the LMT hinterlands. San Francisco el Alto, the central RBC, shares the central position in the system with Quezaltenango, the central LMT.

The spatial pattern of the major central places in this system is quite regular. When only LMTs are considered, it conforms to the Löschian K=4 (traffic) principle, but when all major centers are considered it conforms to the Löschian K = 3 (marketing) principle. These principles should predict central-place location, given competition between centers for markets and even distribution of population (purchasing power) and economic resources. Under these conditions, service centers are located so as to meet the demand of the greatest number of people in the most spatially competitive manner (through even distribution and hierarchical organization of marketing resources). The only significant difference between the two models of location is in the changed spatial arrangement of centers created by different ratios of the numbers of places in successive orders. The K = 4 pattern maximizes position on a limited number of roads by locating lower-level centers between two higher-level centers, while the K = 3 pattern minimizes the number of lower-level centers by locating lower-level centers between three higher-level centers. (Neither model tells one how many centers a particular region will support, this being an empirical question.)¹²

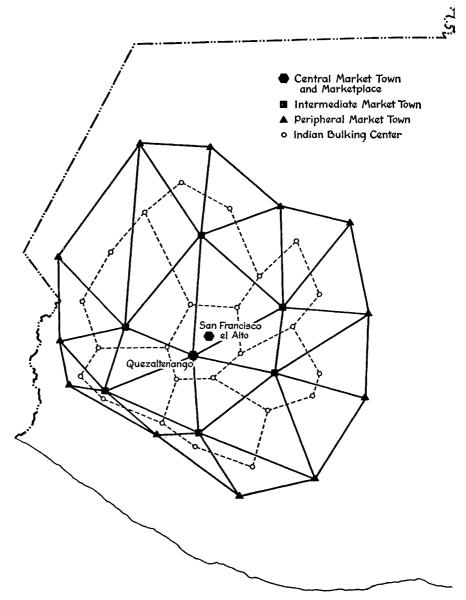
Before considering the causes and consequences of having a mix of the two different patterns in the domestic marketing system, some of the features of the pattern should be clarified. Three different levels of LMTs have been distinguished on the basis of central functions and the related size of hinterlands. The place that is central, Quezaltenango, is the highest-level center; the surrounding ring of centers (intermediate LMTs) are second-level centers; and the outlying ring of centers (peripheral LMTs) are the third-level centers. Central-place

¹⁰ All of the marketplaces described here (both LMTs and RBCs) have a centrality value (calculated independently of the town centrality value) above 50, contrasting with lesser market centers that have fewer goods and services and provision a smaller hinterland. Only San Francisco el Alto has a marketplace centrality value above 100, contrasting with its town centrality value of 10.

¹¹ Bulking centers are not found in the plantation areas (the lower part of Map 4) because few pcasants there produce for the marketplace.

¹² See B. J. L. Berry (2) for an exposition of the logic in the geometry of central places, and Skinner (15) for a discussion of variables affecting total number of centers.

Map 4.—All Major Market Centers in Western Guatemala*



* All centers are shown in approximately true relative locations. Solid lines connecting LMTs are drawn only to show that RBCs fall between three of them; they do not indicate lines of communication or trade flows. Similarly, broken lines connecting RBCs are drawn only to show the hinterland boundaries of LMTs, not to indicate trade flows between them.

theory predicts that under conditions of even population distribution second-level centers will be in the third spatial tier—maximizing the size of their hinter-lands. In our case, they are in the second tier where population density is highest. This is in keeping with the theoretical assumption that the largest centers will be found in areas of most concentrated purchasing power. Purchasing power is

not evenly distributed in western Guatemala and because of it the hierarchical pattern of LMTs is spatially distorted. While not theoretically inexplicable, this distortion should affect the flow of commodities and have important economic ramifications in the regional marketing system.

The RBCs are in one sense different kinds of entities from LMTs because their main functions are wholesale rather than retail. In another sense, they form a fourth level in the marketing system, since they lack some critical retail functions as towns and have other less relevant functions as marketplaces—i.e., they can be considered fourth-level retail centers but high-level wholesale centers. As wholesale centers, however, the RBCs show no pattern of hierarchical interrelationship except through LMTs. They do have one higher-level center, San Francisco el Alto, but the relationship of most RBCs to that center is indirect—at least spatially.

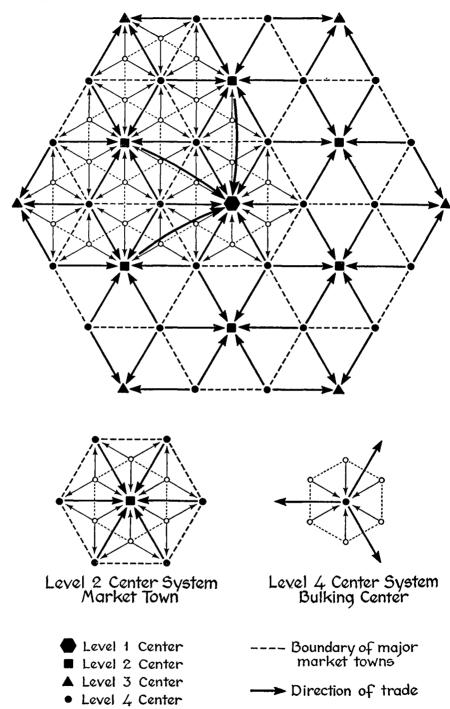
Overall, it appears that there is a good approximation to the K = 3 model if all major market centers are considered together (counting RBCs as fourth-level retail centers and taking into account that centrality values and hinterland size drop off at the periphery); or a slightly distorted K = 4 model if only the LMTs are considered. From these locational patterns, one might expect that town goods would flow through the ordered series of centers hierarchically, from larger centers to ever smaller ones along the K = 4 network, possibly bypassing RBCs. Goods produced in the rural hinterland, on the other hand, should flow upwards to provision the urban populations and plantation areas in the pattern predicted by the K = 3 model—beginning in the rural bulking marketplaces (or even smaller centers) and moving up through the market towns. This would be the prediction that a central-place theorist concerned with commodity flows would make. To test this prediction, I have mapped out the actual commodity flows of a number of different goods produced in different areas and at different levels of the market structure in western Guatemala that can be compared to the ideal pattern.

COMMODITY FLOWS

Chart 1 is an abstract representation of an ideal hierarchical commodity flow in a K = 3 network with five different orders or levels of centers. The most notable characteristic of the model is that it assumes no trade between markets of the same order, contrasting sharply with Hodder's model of Yoruba markets (8). All lower-order centers orient to three higher-order centers; and each order of centers has 0, 6, 12, or 18 partially dependent lower-order marketplaces. For our purposes, the orientation of the two intermediate-level centers shown separately in Chart 1 are of particular interest. The Level 4 centers correspond to our RBCs and the Level 2 centers to our LMTs, specifically the intermediate LMTs. The RBCs collect rural goods from six adjacent lower-order centers and redistribute them to the six lower-order marketplaces. The intermediate LMTs collect rural goods from six RBCs and six of the lower-order marketplaces, servicing the same twelve centers with urban goods.

The five commodity groups to be compared to this ideal pattern include goods produced in both rural and urban areas as well as goods produced inside and outside of the regional system. All goods, however, in theory should flow through

CHART 1.—IDEALIZED MODEL OF A HIERARCHICAL COMMODITY FLOW PATTERN*



^{*} The model assumes a K=3 locational pattern, five orders of centers, and only upward direction of flow. By reversing the arrows one would have an idealized version of downward flow.

o Level 5 Center

the hierarchical network in similar ways; the differences should be only in the direction of flow and the length of the marketing chain.¹³

Map 5A shows the distribution pattern of goods produced so widely in rural areas (firewood, greens, flowers, eggs) that sales are normally made only to non-rural residents—most rural households produce their own supplies of these commodities and rarely buy them. Consequently, the net trade movement is vertical rather than horizontal, up to central places rather than down to rural market-places. Little redistribution from center to center takes place since each center has its own separate supply hinterland. There is rarely a marketing chain, for most producers sell directly to consumers in the urban marketplaces. This very simple supply pattern can be termed "direct" in contrast with a more complex pattern involving middlemen and redistribution centers termed "redistributive." The direct supply pattern in these commodities is not surprising given the limited demand and ubiquitous production of these goods. Because of it, every major urban center has its own supply hinterland that can adequately provision the center.

Map 5B shows the distribution pattern of goods also produced widely in rural areas but not by all households (corn, beans, fruit, vegetables, pigs). As a consequence many rural households purchase these goods in the marketplace. On this map one sees a rather good approximation to the hypothesized redistributive pattern of Chart 1. Most urban centers (major LMTs) are supplied by nearby rural marketplaces and by more distant rural bulking marketplaces (RBCs) that collect from other small marketplaces and redistribute goods to the urban centers. The only significant deviation from the predicted pattern is that the redistribution of goods does not go beyond the local-system level, i.e., the supply area of each major LMT is only weakly linked to the supply area of other LMTs. The redistributive system does not extend beyond the three lowest-level market centers because the highest-level centers (Quezaltenango and San Francisco el Alto), while drawing in a great quantity of these commodities, do not redistribute them to lower-order centers and other local systems. Consequently, few goods flow down to rural marketplaces from other regions.

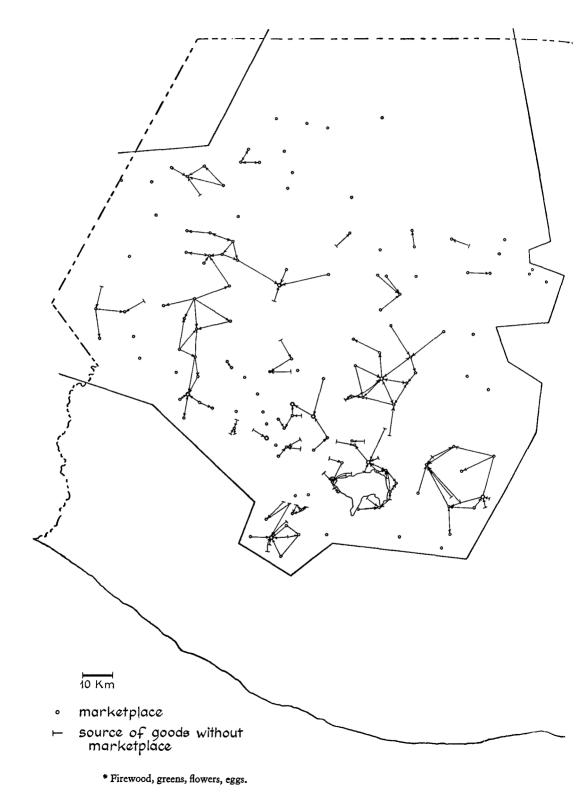
Similarly, few LMTs of any kind redistribute these commodities to lower-order marketplaces; instead, they retail the goods to local consumers. Some goods do flow to rural marketplaces and even between local systems through the arbitrage of the RBCs, but the linkage is a kind of horizontal chain rather than a vertical hierarchy—local and regional supply and demand information is not communicated through a central place. In the whole process, the redistributive role of the RBCs is much more significant than that of the LMTs. On the one

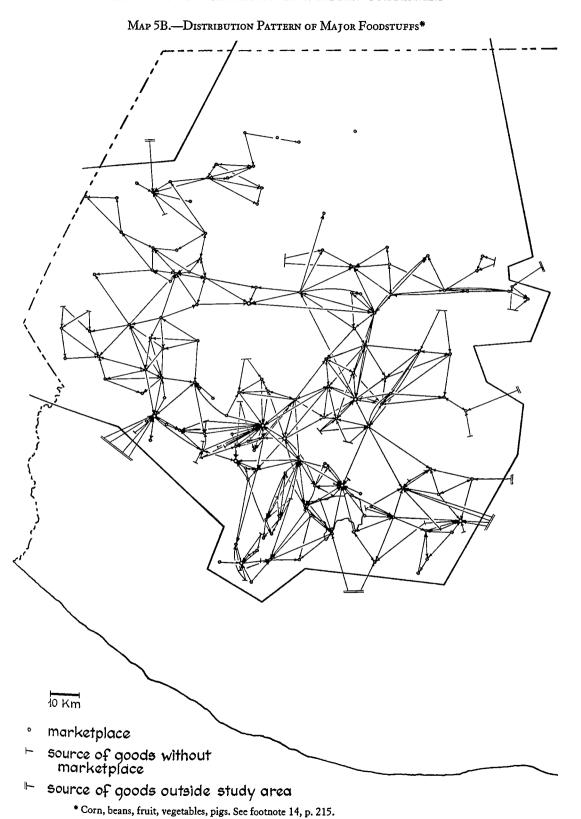
The South Coast plantation area and Guatemala City are omitted from these maps because data are incomplete. I have data on only some centers, but not enough to show the ties to other centers. Although no connections are made to Guatemala City, virtually every commoditity is sent there in some quantity.

¹³ Maps 5A-5E were prepared by tracing the movement of particular kinds of trade goods through trader movements. Sellers were identified by township, so origin points are township centers rather than actual dwellings. When a marketplace is supplied only by sellers from that township, no arrows are drawn. When goods move through redistribution centers via middlemen, the redistribution center is symbolized on the map, and the origin and sales point are linked through it. Otherwise, redistribution is traced through arrows.

¹⁴ Particular redistribution centers are not shown on Map 5B because of the large number of them, and because many centers have minor redistributive functions for these commodities. Redistribution can be traced by arrows, however.

Map 5A.—Distribution Pattern of Rural Goods*





hand, the RBCs are the main links between local systems, directing the upward flow of foodstuffs to LMTs; and on the other, they coordinate the redistribution of goods at the local-system level, collecting the specialties of each small rural market center. This makes it possible for local peasant consumers and middlemen to purchase those items not produced in their particular area at the same center where they sell their surplus.

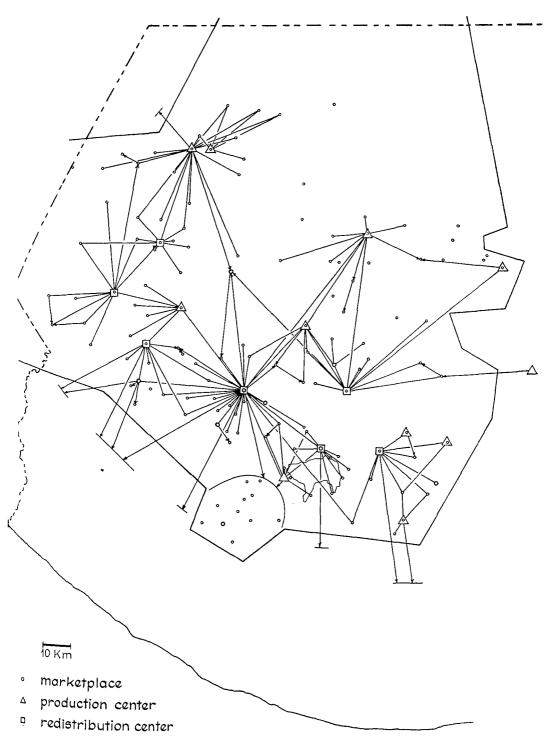
The bulking centers, therefore, are critical for the development of localized specialization. But the fact that the LMTs do not provide such coordinating functions for the wider local systems inhibits broader specialization. Peasants cannot risk exclusive production of a single crop for a broad domestic market because of the poor articulation of local systems with each other. They not only run the risk of glutting their local market but also the risk of not obtaining all of the goods they would require themselves. Market articulation and specialization are closely linked; both are limited in western Guatemala. As I hope to demonstrate below, this limitation stems mainly from the organization of the marketing system rather than from the intransigent conservatism of the peasantry.

Maps 5C and 5D show the distribution patterns for peasant-produced handicrafts. Like foodstuffs, handicrafts are produced in rural areas by Indian peasants, but unlike them, they are purchased mainly by other Indian peasants rather than by the urban elite. Consequently, the LMTs play no major role in the distribution of such goods, and are not even major consumption centers for them. Again the RBCs are the major redistribution centers. Map 5C shows the distribution system for a simple craft (rope) that requires a low level of specialization and capitalization and is produced by peasants as a sideline to the main business of farming. Map 5D shows the distribution system for a more complex handicraft (skirt cloth) produced by full-time Indian specialists concentrated in one area of western Guatemala. Producers of both kinds of products live in dispersed households within rural areas.

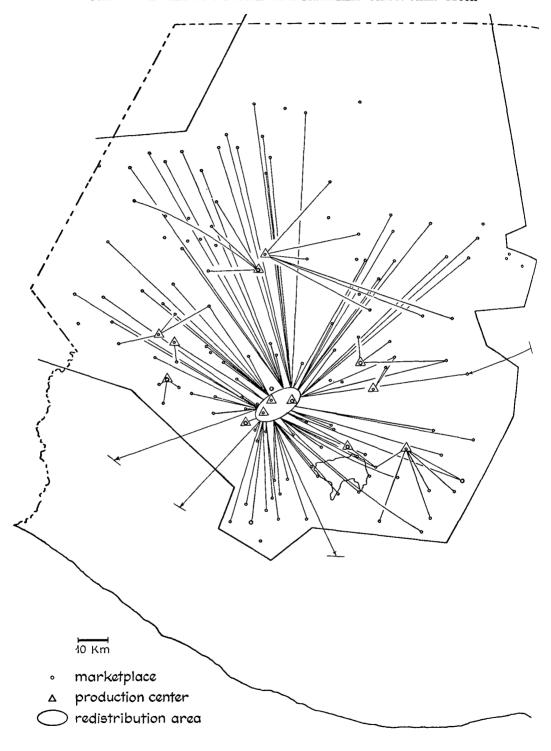
Commodities such as rope (also pottery, baskets, mats, and other simple craft products) are usually sold retail by the producers in a few nearby rural market-places, but are wholesaled in one of the major RBCs. Few such goods flow from one highland local system to another, although some will flow to the main RBC in the country, San Francisco el Alto, for redistribution to parts of the lowlands. They are typically produced in each local system and distributed mainly within it. Because there are few communities of rope specialists in the region, only six major RBCs distribute rope; pottery, however, is produced much more widely and is distributed by many more RBCs. All major RBCs bulk some of these kinds of handicrafts and redistribute them locally, the range of a particular RBC for each good depending on the number of specialist-community producers.

Although skirt cloth (Map 5D) has a very small, localized production area, it is distributed to all parts of the region through a peddling operation by producer-traders and through a single RBC (San Francisco el Alto) by its special group of long-distance marketplace traders. Other highly specialized goods (blankets, sombreros, shoes, jackets) are similarly produced near San Francisco el Alto and distributed by long-distance traders from the immediate hinterland of that center to all other marketplaces. Normally, the central RBC for a par-

Map 5C.—Distribution Pattern of a Simple Craft: Rope



Map 5D.—Distribution Pattern of a Specialized Craft: Skirt Cloth



ticular production center supplies all marketplaces in its local system directly, regardless of the type or level of center. Thus, in this system the LMTs are just other marketplaces and have no redistributive functions.¹⁵

The main articulating centers for all rurally produced goods, therefore, are the RBCs that mediate both vertical and horizontal exchanges within local systems. These centers are linked to each other only through San Francisco el Alto, long-distance traders, and the LMTs (which lack redistributive functions). They are not themselves hierarchically organized. Consequently, nothing articulates and unites the little local economies centered on each major marketplace into first regional economic structures and eventually into a single society-wide economy. San Francisco el Alto and the group of long-distance traders that work out of it do have price-making, communicative functions—through them each local system that lacks a particular group of local specialists is supplied. But because the trade that centers on all RBCs is peasant oriented and few peasants have access to modernized transport and warehousing facilities, the quantity of goods moved from local system to local system is actually a very small percentage of the goods produced by peasants. Only high-priced, low-weight items produced in the central area (the immediate hinterland of San Francisco el Alto and Quezaltenango) are regularly distributed throughout the region, and these are carried directly to consumers by long-distance traders. Trade in these goods alone cannot support a hierarchical marketing system because demand for such goods can be deferred for relatively long periods and thus easily satisfied by the irregular visits of itinerants or the annual fiesta cycle. In sum, limited demand and poor transport-storage facilities have curtailed the hierarchical structure of marketing for almost all rurally produced goods.

Map 5E shows the distributive pattern for regional imports and manufactures (largely from Guatemala City), through shops and warehouses. Map 5F shows the pattern for the same goods distributed through local marketplaces via particular groups of long-distance traders from the central area, supplied in Quezaltenango, San Francisco el Alto, and Guatemala City. In both cases the pattern is hierarchical (redistributive) but limited by the lack of lower-level central place participation in the redistributive process.

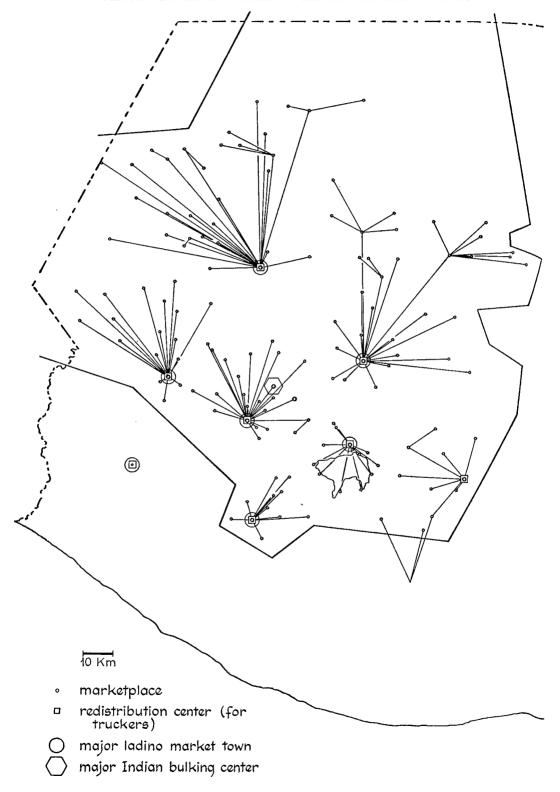
The distributive pattern for shop goods closely parallels the administrative hierarchy, for only the seven major LMTs (the central and intermediate level LMTs) are redistribution centers. Each major LMT is both an administrative and a commercial center linked to other major LMTs mainly through Guatemala City which delegates political control and commercial services to them; and each controls a discrete administrative-commercial hinterland quite exclusively.¹⁷ They

¹⁵ There are exceptions as Map 5C demonstrates, but they are rare; the particular exception in Map 5C, Solola, is the most Indian-oriented LMT in the region.
¹⁶ Map 5F was prepared in a slightly different manner from the others. In other maps all trade

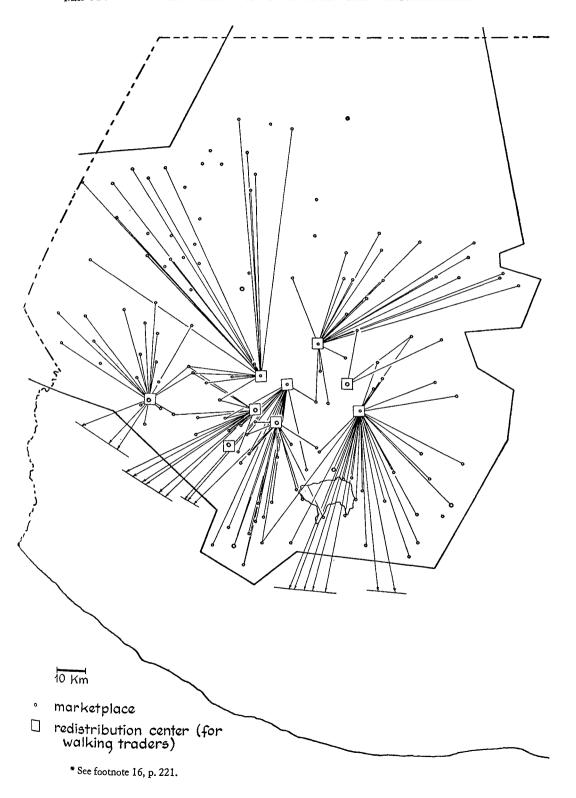
¹⁶ Map 5F was prepared in a slightly different manner from the others. In other maps all trade connections are shown; in this map, only the dominant traders are shown. Most marketplaces actually have traders from a number of different townships who sell manufactures; however, the normal situation is for one and only one group of traders (from one of the townships indicated) to dominate sales in a particular marketplace.

¹⁷ Quezaltenango is a higher-level administrative center only by reason of having some special administrative services (offices, courts) that others lack rather than being a link in the chain of command; administrative control over department capitals is held exclusively by Guatemala City. Similarly, most major LMTs get special urban goods and services directly from Guatemala City rather than through Quezaltenango.

Map 5E.—Distribution Pattern of Manufactures Through Shops



Map 5F.—Distribution Pattern of Manufactures Through Marketplaces*



supply the townships in their hinterlands with shop goods in much the same way that they supply townships with political power to back local administration. Lower-level centers are tied into one and only one local system for these services, and competition between local systems and major LMTs is minimal.

The close parallel of the administrative and commercial systems can be explained by the fact that most shop goods are distributed through Ladino-owned monopolies. Members of the commercial elite in each major LMT come from the same families that supply personnel to the administrative bureaucracy—these families control local business franchises, trucking, and storage as they control local politics, taxes, and law. Because of their monopolist position in both large-scale commerce and politics, the commercial and administrative hierarchies and hinterlands are one and the same. And because Indian market centers (RBCs) do not tie into this commercial control system, there is little competition between local systems. The end result is a thin distribution of major redistributive centers for shop goods which does not allow competition and is not particularly efficient in terms of distance minimization.

Some manufactures can be found in most marketplaces as well as shops, however. Their supply pattern (indicated by Map 5F) is a curious blend of that for specialized crafts and shop goods. The general pattern is for San Francisco el Alto and Quezaltenango to supply specialist groups of long-distance traders who live in the immediate vicinity, who in turn exclusively supply one of the LMT hinterlands in a direct supply pattern. What makes this system notable is the fact that distribution is controlled by central-area traders rather than local-system traders from the major LMTs that supply shops. Since major LMTs are the local depositories of shop goods in their local system one would expect them to supply their dependent marketplaces as well as shops. As can be seen on all of the maps, however, LMTs virtually never supply marketplaces in their hinterlands with anything; they are only supplied by them.

In the distribution of manufactures through marketplaces RBCs are not utilized, nor are many LMTs; and again there is little linkage or competition between local systems. The major feature distinguishing the marketplace distribution system for manufactures from the shop distribution system is the personnel. Shop goods are distributed from Ladino wholesalers by trucks owned and normally operated by Ladinos to Ladino shop owners who retail mainly to Ladinos and urban Indians. Marketplace manufactures are distributed from Ladino wholesalers in the central area and Guatemala City by Indian traders who walk to their destinations (marketplaces) and sell directly to Indian consumers—they mainly supply rural Indian marketplaces but can also be found in urban marketplaces where some Indians prefer to shop. The goods distributed are all from the same source, and the suppliers to each local system—through both marketplaces

¹⁸ The outlying centers that redistribute some shop goods are mainly Ladino-controlled town-ships that supply their large dependent hamlets with goods supplied to them from the major LMTs; this is also a politically controlled relationship.

¹⁹ As Map 5F indicates, some of the LMTs do provision local traders, and in one case those traders are dominant. This is not the normal pattern, however. The exceptional case (San Marcos-San Pedro) is a commercial center divided into a Ladino section (San Marcos) and an Indian section (San Pedro). Shop goods are distributed through San Marcos and marketplace goods through San Pedro).

and shops—tend to be a group of oligopolists either from the central area or from the local LMT.

DISTRIBUTIVE SYSTEMS AND THE ARTICULATION OF CENTRAL PLACES

How can the commodity flow maps and the relation between commodity flows and central-place distribution be interpreted? In particular, why is only one group of commodities—basic rurally produced foodstuffs—distributed in a system that was predicted for *all* distribution from the layout of central places? To explain the relationships described it will be necessary to draw on general information about the economy of western Guatemala, particularly about marketplace supply and demand.

Basic, rurally produced foodstuffs are the only goods commonly purchased through the marketplace by both the Ladino urban elite and the Indian rural peasant. They are also the only commodities that flow between RBCs and LMTs in a manner that is in keeping with the level of centrality, overall functional characteristics, and locational association of the two kinds of centers. Since this commodity group comprises some 80 percent of the bulk of goods distributed through marketplace channels, it is not so surprising that marketplace centrality, function, and location are mainly determined by the distribution of these goods.

As noted above, however, the direction of this flow is only upward—LMTs do not redistribute basic foodstuffs to other marketplaces—so in fact only part of the expected pattern is realized even in this case. Moreover, all other commodities flow through channels peculiar either to RBCs or LMTs without regard to the location or functions of the other. Most of these supply patterns are direct rather than redistributive: urban centers are directly supplied with common rural goods that rural households procure individually without recourse to the marketplace, and they directly supply all town shops with the kind of goods that Ladino shops normally handle; likewise, rural bulking centers directly channel the flow of peasant-produced consumption goods—notably handicrafts—to other rural marketplaces, or they are directly supplied with industrial goods from the major central places in the region without redistribution from the local LMT.

In sum, there are two kinds of distributive channels, one for Indian consumption goods and one for Ladino consumption goods. Each channel operates relatively independently of the other except in the distribution of those goods that are most commonly exchanged between the two ethnic groups—basic foodstuffs, produced largely by one sector and purchased largely by the other. There is no direct exchange between systems for other goods simply because the peasantry and the elite (here Indians and Ladinos) generally consume and produce different kinds of goods.²⁰

Is this a common pattern in most traditional agrarian societies where a lifestyle gulf separates the peasants and the elite? Since the kind of analysis presented above has not often been done, data on this question are scarce; but from the available evidence, it seems unlikely. The pattern typically described is the following: rural hinterlands supply urban centers with foodstuffs in much the

²⁰ Even in manufactures, Indians mainly use hoes, machetes, cotton, and plastic raincapes, while Ladinos use machinery, ready-made clothing, cosmetics, and umbrellas.

way described here, except that downward and outward distribution from urban centers also takes place (cf. 15 on traditional China); more important, urban centers rather than rural areas are the production sites for handicrafts and cottage industries, or at least the distribution points for goods produced in the immediate vicinity. In other words, rural goods are usually processed in urban (elite) centers and then distributed back to the peasantry in the form of tools, clothing, and milled or processed grains, rather than being processed in rural areas and distributed through separate channels. Peasant bulking centers may exist in the hinterland, but they are part and parcel of a single interlocking system of market-places integrated by the urban centers. And the class of middlemen that mediates exchanges between peasants and the elite normally operates from the urban centers, servicing both the urban and rural sectors of the population. Although economic and political cleavage between urban centers and rural areas is commonplace in traditional agrarian societies, the marketing system integrates exchange across local systems and across rural-urban boundaries.

This is the kind of system that one finds in Chiapas, which borders western Guatemala; and this kind of system obtained in western Guatemala some fifty years ago. Then, for instance, skirt cloth was woven and distributed by Ladinos who lived in the urban centers rather than by a particular group of central-area peasants residing in dispersed settlements. (Remnants of the older pattern can still be seen on Map 5D.) In the same period, Ladinos probably consumed more of the simple Indian handicrafts, and LMTs may have been redistribution centers for them. It is known that Ladinos were once much more heavily involved in general marketplace distribution (as they are today in Chiapas). The change dates back to the turn of the century when plantation agriculture was introduced into the economy of western Guatemala. From this, one would guess that the pattern seen today in Guatemala is an outgrowth of a semicolonial economy dominated by plantation agriculture with markets in industrialized countries. Partly from known history, and partly from conjecture, I will attempt to describe how the changes came about.

The development of the coffee export industry brought about a marked shift in the economic orientation of the urban elite (Ladino) sector, some of whom were once craft specialists and marketplace middlemen. They dropped the less profitable local industries for plantation enterprises and became more concerned with drawing labor rather than basic provisions out of the rural hinterland. The gap they left in domestic commerce and industry was taken up by groups of the Indian peasantry, particularly those who had served as laborers in the original commercial enterprises. Since the peasantry had already been drawn into a market economy and since forced labor withdrawals from the peasantry made market orientation all the more imperative, food provisions for urban centers continued to flow without direct Ladino political control or participation. The relationship between the LMTs and RBCs in food provisioning was probably established in an earlier period, and continued to function with little change, except that articulation was now provided by Indian rather than Ladino intermediaries. Since few Indians lived in LMTs, this meant that downward distribution from the LMTs ceased.

At the same time, the rural hinterland came to be provisioned more and

more by the RBCs and by a semi-industrialized group of Indian peasants, particularly from the central area of the regional marketing system. And this system came to operate more and more independently of the basic food-provisioning system for urban centers. This separation was enhanced by the fact that foreign exchange from the coffee market was now bringing industrial goods from abroad into the market—goods channeled through the Ladinos who controlled international commerce—and that these goods became for Ladinos preferred substitutes for Indian handicrafts. (Today most Ladinos prefer Japanese and Mexican china and enamelware to local pottery, plastic bags to baskets, imported blankets to native ones, and so forth.)²¹ Consequently, Ladinos began making purchases in Ladino-owned shops more than in the marketplaces, while Indians continued to make few shop purchases.²² At present, virtually all specialized production for the Ladino market takes place outside the region, while virtually all specialized production for the Indian market takes place within the region—in rural areas.

The Ladino urban centers (LMTs) now function mainly as administrative centers or political outposts; they have limited economic functions except the redistribution of imports from abroad, but nevertheless require basic provisions from the rural hinterland. Rural RBCs articulate most exchanges in the domestic economy-vertical and horizontal. They are loosely connected through the central RBC, San Francisco el Alto, but because their basic orientation is to LMTs, they are poorly connected to one another. Each local subsystem, centered on a single RBC, operates fairly independently of the other subsystems, importing little in the way of industrial goods and specialized handicrafts, and exporting even less-mainly labor for the plantation economy. The only subsystems with thriving import-export businesses in the region are those centered on Quezaltenango and San Francisco el Alto. These central-area subsystems provision much of the plantation area with highland products and all of the region with specialized handicrafts and marketplace manufactures, goods transported mainly in primitive style, by walking traders who still carry their trade goods on their backs.28 Thus the growth that has taken place in this area is an intensification of the traditional pattern, involutionary rather than evolutionary.

The above characterization is only true of the highland part of the regional system. All LMTs in the plantation area are larger and more diversified than those in the highlands, because they cater to a Ladino or Ladinoized population. Over time, the plantation area has become more self sufficient vis-à-vis the highland area, since lowland people now buy manufactures in place of Indian handicrafts and produce their own basic food (corn). The present trend, in fact, is for the two zones of the regional marketing system to operate more and more independently of the other, and for each to have a different pattern of development. For while LMTs are declining in relative importance to the RBCs in the highlands and are integrated along the lines described above, central places at all

²¹ To some degree, Ladino status is based on the number of imported substitutes their incomes will support, while Indians, outside of that status system, still prefer the cheaper Indian handicrafts.
²² Today, major Ladino settlements often lack marketplaces but never lack shops; while the reverse is true of major Indian settlements.

²⁸ In very recent years the advantaged commercial position of the central area has brought in sufficient income to underwrite some sophisticated marketing infrastructure in RBCs, including warehouses, trucks, and better roads—but only in this one area.

levels are proliferating in the lowlands, all of them equivalent in function if not rank, and are well integrated by the transport (K=4) network. This has brought about the decline of Quezaltenango as a major center in the region, and a consequent loss of its regionally integrative functions for all areas and for all levels of articulation. The market for goods produced by the peasants is also declining—peasants are important to the plantation economy only as a labor reserve, and this will surely become less important with progressive mechanization. With "modernization" the marketing system has become dualized into an efficient, export-oriented sector and a fractionalized subsistence-oriented sector. While average Guatemalan income may not decline, the position of the peasant, whose goods and increasingly whose labor are no longer required, is considerably worsened, both with respect to his income as a peasant, and with respect to the potential of changing his status as a peasant. For to become something else now requires far more knowledge and money than he has access to.²⁴

MARKETING AND ECONOMIC STRATIFICATION

In this final section I will describe some of the structural consequences of this distribution system, particularly with respect to ethnic division and stratification and with respect to production and consumption by the different segments of the society. Again, this interpretation rests on sociological as well as economic data.

As discussed above, ethnic division seems to be enhanced by the dualized distributive channels: Indian-Ladino exchanges have declined and thus the two groups interact with less frequency. More important, the kind of spatial division of the two kinds of distributive channels (Indian and Ladino) is such that the Indian is in a poor bargaining position with Ladinos. Many Indian food producers dispersed in rural areas must compete with each other for urban Ladino business at the same time that the few Ladinos concentrated in urban settlements monopolize the distribution of required imports into the rural areas. Because the Ladino settlements are an outgrowth of a political-administrative system rather than a commercial-competitive system, and because Ladinos channel the distribution of imported and plantation products, they can set the local price for imported goods. Their monopolist position is enhanced by their political control over roads, trucking, and storage facilities, which are concentrated in areas of interest to them. So while they face some competition from central-area import traders, they can keep the costs of such competitors very high by monopolizing efficient distribution channels. In fact, Indian import traders probably survive in this environment only because many Indian consumers prefer to deal with Indian traders rather than Ladino businessmen.

The road network is instructive in this regard. Most townships are connected only to the administrative capital of their district (the major LMTs), and few

²⁴ A similar situation has been described for northeastern Brazil by Shepard Foreman and J. Riegelhaupt (6). Here, modern farmers have taken over city provisioning, for urban middlemen find it less costly to truck goods directly from large farms to urban warehouses than to collect in the small, dispersed peasant marketplaces. The vertical flow is mainly urban goods to peasant consumers (it is not clear whence peasant purchasing power). John Cordell (personal communication) notes that many Brazilian peasants who once belonged to the lower class of Brazilian society, have become marginals in that society, i.e., people of no political or economic consequence to the power holders.

roads connect competing commercial regions. Three distinct subsystems of Huehuetenango, for instance, are connected to each other only by roads leading through the political capital, which thereby controls distribution between the subsystems. In consequence, all three subsystems compete with each other to provision that center, are supplied with imports only through that center, and have few direct trade ties with each other. Moreover, when corn is short in one area and surplus in another, only the Ladino businessmen in the center are immediately aware of the imbalance; since they control trucking they can buy cheaply in one area to sell dear in the other. Even when the imbalance becomes known to the Indian producers, they are in a poor position to compete with Ladino truckers by backpacking corn across the local areas.

Another consequence of this kind of distribution system is that regional or areal production specialization is inhibited. Of the three subsystems of Huehuetenango mentioned above, each has a comparative advantage in agricultural production, one for wheat, another for semitropical products, and a third for potatoes and wheat. Nonetheless, all three produce corn because of their disadvantaged position with respect to buying corn and selling specialties in the wider market. Each area, in fact, strives for self-sufficiency insofar as possible. Specialization only exists at the subsystem level mediated through local RBCs; since this provides a very narrow market, specialization is part-time and the production firm is a household. The low-level craft specialties produced in each subsystem do not flow to other subsystems regularly because of the relatively poor articulation of the RBCs with each other. So instead of the most efficient producers of pottery, rope, baskets, and the like in Huehuetenango going into full-time specialization and tapping the entire market of that local system or of the region, each subsystem has its own less efficient producers. Similar situations prevail in the other local systems so that western Guatemala as a whole has far more localized, parttime specialists in each subsystem than is warranted for an efficient marketing organization.

I attribute the generally poor articulation of the local subsystems with each other to the fact that major LMTs are in the critical arbitrage positions and that these are too few to be competitive or efficient in redistribution. I do not mean to suggest, however, that the system is entirely inefficient or that it operates the way it does from lack of business acumen on the part of Ladinos. The present system is efficient administratively and with respect to provisioning urban centers—major indices of efficiency from any point of view. It is not likely to become commercially efficient, however, because administrative systems (both for governments and for monopolists) are not only different in spatial organization, but are fundamentally opposed: commercial systems must be competitive while administrative systems must be strictly noncompetitive for effective operation.

Yet I do not wish to claim that the system operates the way it does because of a regionwide conspiracy of Ladinos in the key positions. Certainly if a great deal of profit were to be gained from developing major arbitrage functions in the peripheral LMTs or other centers (thereby making the system more competitive), no Ladino power-holder would oppose it, and no Ladino businessman would ignore it. Investing in other LMTs, however, would serve no administrative purpose, so new centers are not likely to develop the administrative popu-

lation base (purchasing power) that could support major commerce. Without that, the amount of demand or market production surrounding peripheral LMTs or other centers is insufficient to warrant the establishment of more central functions and hundreds of miles of new roads. Ladino businessmen would find it more profitable to invest in a plantation or to set up shop in the present political capitals. One could argue that should new centers develop those functions and roads, market production in their hinterlands would be considerably enhanced. But at present there is no incentive for such development.

In other words, a negative feedback system is operating. The present system simply fails to stimulate more efficient market production on the part of the peasants; this in turn inhibits the investment in competitive market centers that would stimulate higher levels of production. Thus it is not direct collusion between business monopolists that prevents investment in the peripheral LMTs or other centers; it is the poor economic base that presently surrounds them that would require some period of stimulation to develop. Perhaps an even more critical problem in setting up new centers is that Ladino businessmen cannot produce goods that are competitive with the superior products that come from Guatemala City (often imports from industrial countries) or with the low-cost Indian products of specialized handicrafts. New LMTs would still require such provisions from Guatemala City via the political capitals or from central-area Indian producers. Because of this, transport costs would remain high enough that Ladino businessmen could not survive without an administrative base to support them.

What about Indian production specialists and RBC articulation—why do they not fill the need for regional arbitrage, at least for goods produced mainly by and for Indians? The answer lies in the relationship between RBCs and LMTs. As noted above, RBCs articulate the little local economies that surround them at the same time that they supply LMTs. Their functions are thus divided between distribution of Indian handicrafts locally and distribution of basic foodstuffs to urban centers. At present the urban Ladino consumers provide a much stronger market for the main items of marketplace trade than do rural Indian consumers—at least partly because the RBCs were initially located so as to optimally provision urban centers. This means that they do not have an organization or locational pattern of their own through which Indian handicrafts (or more specialized foodstuffs) can be channeled to other regions. There is no way that they can perform both functions efficiently from their present locations.

The only simple solutions would be: (1) for two sets of RBCs to operate, or (2) for Indian traders to operate through major LMTs to redistribute specialized goods interregionally. The first condition is not met because it would be too costly for present levels of demand (i.e., the negative feedback system whereby demand is too low to support new centers that might increase demand). And the second condition is not met for any one of the following reasons: LMT marketplace wholesalers are heavily taxed—twice as much as RBC wholesalers; Indians have poor access to storage and transport facilities in the Ladino-dominated LMTs; Ladino demand for Indian handicrafts is so low as to discourage stockholding in those centers; and Indian businessmen in LMTs are hedged in with countless discriminatory regulations that most Ladino businessmen can get around. Ladinos do not redistribute Indian handicrafts from the LMTs where

they are already established because they have little interest in it: it is culturally proscribed, difficult to execute (because of Indian-Ladino suspicion and hostility), runs counter to their interests in controlling and expanding the import trade, and would not be as profitable as other enterprises where they have privileged access (law, government, labor recruitment, plantation commerce, import franchises, motorized transport, and the like).

The only RBC that bulks Indian handicrafts for and from all local systems through its loose connections with other RBCs is San Francisco el Alto. Because it supplies and is supplied directly, primarily by means of walking Indian traders, the only goods that it bulks for wide distribution are those produced in the immediate area or those brought from the distant hinterland by trader specialists from the central area who backhaul exotic products. In other words, this single organizing node for RBCs is not accessible to most Indian producers. Production and stratification among peasants are affected accordingly: there are three different areas of market access, dividing peasants into three market opportunity groups, each with different levels of income and market orientation.

The group in the central area (the inner system surrounding Quezaltenango and San Francisco el Alto and extending out to the six intermediate-level LMTs) is the richest. Here, trade and peasant production are highly specialized and most Indians farm as a sideline to other productive activities or raise cash crops. The structure of the regional marketing system gives this area a distinct advantage in marketing specialized goods since the direct supply system makes this the only area that can tap the demand of the entire region with competitive prices. Although market orientation and marketing channels are still basically traditional, many peasants in the area are successful businessmen and relatively wealthy. It is the only area where Indian production, specialization, and income are probably rising. The benefits of higher incomes may not be generally realized, however, for Indians themselves are more highly stratified within communities than elsewhere. Some figures suggest that average central-area incomes may be declining (5, p. 23). Moreover, the profits made in this area are made at the expense of development in other areas.

Surrounding the central area are the middle-range peasants. Their area extends from the intermediate-level LMTs to the peripheral LMTs—an area where RBCs exist mainly to provision the urban centers. Here specialization is along traditional lines—pottery rather than blankets, rope rather than skirt cloth—and fractionalized into poorly articulated subsystems. Most peasants in this area are more oriented to self-sufficiency than elsewhere, depending on the central area only for specialized goods and on local specialists for low-order crafts. Most peasants are farmers and produce craft goods or trade as a sideline because they stand in a relatively poor position in the regional marketing system for more specialized production—most trade is oriented to the local subsystem or nearby LMTs and little is channeled beyond. Yet a living can be gained in this area through farming and low-level exchanges without resort to large-scale labor export. The only cost is a traditional and stagnant local economy controlled by the LMTs and the central-area traders.

The third group of peasants, located in the peripheral reaches of the system beyond the peripheral LMTs, is the poorest. At one time these peasants were

quite self-sufficient and marketed irregularly.25 Today they must send the major share of the adult labor force to the plantations for regular or seasonal work for the cash necessary to eke out a bare existence. They are being transformed from peasants into rural proletariats, a temporary labor force for the plantations. Land loss to plantations and population growth have contributed to the now heavy market dependence more than has the desire for specialized goods-in fact, few specialized goods are consumed in these areas. There are no RBCs in these peripheral areas because no domestic surplus is produced. No surplus is produced because poor access to the regional marketing system limits market demand to the local area, and this is insufficient to support even low-level specialization. But small marketplaces abound, terminals for goods produced elsewhere. Peasants frequent them to buy rather than to sell, caught in a cycle of being forced to sell labor in order to buy basic provisions produced by other peasants, which puts them in debt so they must sell their labor. This is compounded by the fact that they often buy food from local monopolists who are frequently also the buyers of their labor.

The effect of the marketing system on this cycle is particularly notable in the north, where land pressure is not as great as in other parts of the region inhabited by middle-range or even rich peasants. Land pressure has only made *subsistence* farming rather than all farming nonviable. But the position of the peripheral-area peasants in the marketing network also makes cash-crop or handicraft production nonviable. Consequently, they must sell labor, while central-area peasants with even less land can turn to horticulture or skirt-cloth production. Because marketing is a feedback system, low levels of production in the periphery do not support the marketing infrastructure that could stimulate higher levels of production.

In sum, the industrious and productive peasants, such as those described by Sol Tax, are found only in the central area or in townships that border major Ladino market towns. And as Tax describes, these peasants struggle to maintain a fairly traditional standard of living because the costs of supplying themselves with goods distributed through the marketing system are high (17). Other peasants in less advantaged positions in the region face even higher costs, so attempt to provide themselves with as many required goods as possible without recourse to heavy marketing. These middle-range peasants, however, face the classic Malthusian problem—fixed resources and constantly increasing population—for without specialization and marketing, productivity remains limited. Finally, peasants in the peripheral areas, who face the most limited market for their goods and the highest costs of market dependence, survive only by engaging in another market, the market for their labor on plantations that is supported by the international economy. They are not attracted to plantation labor because of higher incomes there, but because it is the only source of income at all (14).

Overall, highland-peasant income is declining while average Guatemalan income is rising.²⁶ Peasant production cannot keep pace with population increase, and wages to plantation labor are not high enough to offset the decline in real

²⁵ For a history of market development in one peripheral area, see 4.

²⁸ According to Fletcher et al., per capita domestic product has declined in the eight highland departments with the highest percentage of peasants, from \$97 in 1951 to \$51 in 1966 (5, p. 24).

income. Only higher levels of specialization among the peasantry could alter the present situation and this is unlikely, given the present organization of the domestic marketing system. The poor organization of marketing for peasant access is a result of ethnic divisions in the country and the political nature of the potentially integrative distributive centers. Urban Ladinos and some central-area peasants gain from this system, but the other peasants lose in it. And everyone loses some of the benefits of higher productivity that a more efficient, competitive, and integrated marketing system could bring about.

CITATIONS

- 1 R. N. Adams, Crucifixion by Power (Austin, Tex., 1970).
- 2 B. J. L. Berry, Geography of Market Centers and Retail Distribution (Englewood Cliffs, N.J., 1967).
- 3 Walter Christaller, Central Places in Southern Germany (Englewood Cliffs, N.J., 1966).
- 4 Benjamin Colby and Pierre Van den Berghe, Ixil Country (Berkeley, Calif., 1969).
- 5 L. B. Fletcher, Eric Graber, William Merrill and Erik Thorbecke, Guatemala's Economic Development: The Role of Agriculture (Ames, Ia., 1970).
- 6 Shepard Foreman and J. Riegelhaupt, "Market Place and Marketing System: Toward a Theory of Peasant Economic Integration," *Comp. Studies in Soc. and Hist.*, II, 12, 1970.
 - 7 Peter Haggett, Locational Analysis in Human Geography (London, 1965).
 - 8 B. W. Hodder and U. I. Ukwu, Markets in West Africa (Ibadan, 1969).
- 9 W. O. Jones, "The Structure of Staple Food Marketing in Nigeria as Revealed by Price Analysis," Food Res. Inst. Studies in Agr. Econ., Trade, and Dev., VIII, 2, 1968.
 - 10 ——, Marketing Staple Food Crops in Tropical Africa (Ithaca, N.Y., 1972).
 - 11 August Lösch, The Economics of Location (New Haven, Conn., 1954).
- 12 J. U. Marshall, The Location of Service Towns (Univ. of Toronto, Dept. Geog. Res. Pub., 1969).
- 13 S. W. Mintz, "Internal Market Systems as Mechanisms of Social Articulation" (Amer. Ethnol. Soc. Pub., Washington, D.C., 1959).
- 14 Lester Schmidt, "Migrant Labor on the Pacific Coast of Guatemala" (unpub. Ph.D. diss., Univ. of Wisconsin, 1967).
- 15 G. W. Skinner, "Marketing and Social Structure in Rural China," J. Asian Studies, Pts. I and II, 24, 1964-65.
- 16 Carol A. Smith, "The Domestic Marketing System in Western Guatemala: An Economic, Locational, and Cultural Analysis" (unpub. Ph.D. diss., Stanford Univ., 1972).
- 17 Sol Tax, Penny Capitalism: A Guatemalan Indian Economy (Smithsonian Inst., Inst. of Soc. Anthrop. Pub. 16, Washington, D.C., 1953).