

III. AGRICULTURE AND LIVESTOCK RAISING

3. THE AGE OF PARADOX: MEXICAN AGRICULTURE AT THE END OF THE COLONIAL PERIOD, 1750 – 1810

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The eighteenth century was, for Mexico, an age of paradox. In a period of Baroque splendor – witness those sumptuous monuments to the Churrigueresque style: Santa Prisca, Tepotzotlán, La Valenciana – the *lépero* became a familiar figure on the streets of the viceregal capital. As the sphincters of imperial trade policy loosened and commercial prosperity increased, the fiscal machinery was cranked up to extract ever larger surpluses from New Spain, and political controls were tightened on the colony, producing a real sense of disfranchisement within a large segment of the colonial elite. While educated, white, and wealthy urban dwellers sought increasingly to be a part of a wider western culture, large groups of the uneducated, brown, and poor rural masses fought tenaciously to preserve a traditional way of life slipping from their grasp. These contradictions and many others were not of course children of the Bourbon century exclusively. Every age has its paradoxes, and the seeds of these had been planted long before. But the eighteenth century – and especially its latter half – seems to have been a period of particularly sharp contradictions and of accelerating change.

In no aspect of Mexican life of the period was this characteristic more marked than in rural economic structure. Thus, for example, while absolute levels of agricultural and livestock production seem to have risen considerably, productivity – that is, the relative capacity to produce of a given unit of capital, land, or labor – seems to have stagnated or grown little. Rising prices for agricultural and livestock products made large-scale agriculture more profitable, while declining real wages for farm labor helped produce a general scenario of rural impoverishment and proletarianization. Large landholdings seem to have grown more valuable and effectively larger, and small ones smaller. While agricultural surpluses grew and commercialization spread through the countryside, crises of death and famine seemed to come more frequently and to be of greater magnitude. Rural population grew

precipitously, but poverty was ever more widespread. In terms of the overall social distribution of wealth, then, the eighteenth was a century in *chiaroscuro* – a pattern of light and dark, of vivid contrast and contradiction.

Most modern historiography on late colonial Mexico has tended to emphasize the boom aspects of the period after 1750, the age of the "new prosperity" as Leslie B. Simpson called it.¹ It has been assumed that the agricultural economy, *ipso facto*, must have shared in the prosperity and growth, following the more dynamic commercial and mining sectors.² Yet there are important reasons to doubt the accuracy of this knee-jerk model of agricultural development. In the first place, as mentioned above, the putatively bright picture of the late colonial rural economy offers darker shadings as well. Secondly, evidence is beginning to accumulate that even in the leading sectors of the Mexican economy, notably mining, the vaunted late colonial boom was not as strong as investigators have always thought, and may even have represented a decline relative to earlier cycles of prosperity.³ If the condition of commercial agriculture, in particular, is seen to be linked to that of other economic activities, and if those activities did not undergo the kind of degree of development we have thought previously, then some doubt must be cast on the optimistic view of rural economic development as well. Thirdly, it is becoming fairly clear that even in some areas where the prosperity of agriculture was very marked – in the Guadalajara region and in the Bajío, for example – the changes evident in the late eighteenth century were ones of degree, and not of kind. That is to say, we are looking at situations in which growth is present, but development may not be present, or may be significantly distorted.⁴ These reservations notwithstanding, the evidence of considerable agricultural prosperity in late colonial Mexico is substantial. How, then, can views of boom and poverty or stagnation be reconciled?

This apparent contradiction can, in fact, be explained by the consideration of a somewhat more complex model of agrarian change – a model that goes beyond the compilation of aggregate figures or general descriptive statements. Such a model would need to take into account distributional factors, both horizontal and vertical, as well as overall quantitative ones – that is, the distribution of agricultural property and product among identifiable regions within New Spain (horizontal), and among class and ethnic groups (vertical). If these cross-cutting variables are ignored, then the averaging tendency of general statements, both descriptive and statistical, will obscure not only spatial and social parti-

cularities which are interesting in themselves, but also the internal dynamism of the rural economy considered as a system. Seen from this perspective, the apparent contradictions of late colonial agrarian structure can be treated as a series of interlocking, symbiotic sub-systems rather than as sets of irreconcilable inconsistencies. To cite but one example, the relative growth and florescence of some Mexican cities can be associated with a dual process involving both spatial and social shifts in economic resources. On the other hand, resources were in a sense transferred from hinterlands to urban areas in the form of declining rural wages and only moderately rising food prices for urban-dwellers.⁵ On the other hand, the process of agricultural commercialization spurred by expanding urban demand implied a greater social concentration of wealth in the non-subsistence sector of the farming and stock-raising economy - thus the horizontal and vertical shifts, respectively. We shall have occasion to cite other examples of seeming paradox within Mexican agrarian structure, aspects of late colonial developments which are really more dialectical than inconsistent with each other.

The present essay is an effort to define some of the characteristics of late colonial agrarian structure in New Spain with reference to the apparent contradictions of the age - factors which upon closer inspection turn out to be the obverse and reverse sides of the same coin. Rather than aim at presenting a unified, coherent vision of Mexican rural economy from 1750 to 1819 - impossible in any case one would think, in an essay of this length - I have opted to focus on sets of problems and of processes. The approach is therefore necessarily allusive, cleaving closely to the limitations of the secondary literature which it synthesizes incompletely. The central method is to fit the characteristics discussed into the matrix formed by the cross-cutting variables of horizontal and vertical resource distribution mentioned above.

I. Agriculture and the Bourbon Policies: Step-child in an Age of Reform

Perhaps the most dramatic and noisiest development of the late colonial period, at least as portrayed by modern investigators, was the advent of the Bourbon reforms - what one scholar has dubbed a "revolution in government."⁶ Whether these reforms - a largely incoherent mass of imperial legislation created in the name of military preparedness, fiscal efficiency, and economic revitalization - revolutionized anything more than the structure of the colonial bureaucracy is open to

serious question. Nonetheless, the reforms and the general atmosphere of "enlightened despotism" which prevailed at the end of the colonial period did bring about certain changes in the Mexican economy, particularly in the area of taxation, but also notably in commerce, and to a lesser degree in mining and manufacturing.⁷

Agriculture was the step-child in the age of enlightened despotism - it was almost totally neglected by the Bourbon reformers, both in a philosophical and a practical way. Compared with the perceptible restructuring of activity that occurred under the impact of the Bourbon reforms in bureaucratic organization, fiscal policy, international and domestic commerce, and to some degree in the mining sector, state-induced change in agriculture was minimal. The agricultural economy was thus the passive recipient of effects produced in other sectors of the colonial economy which were directly affected. David Brading has suggested, for example, that one result of reduced trade restrictions within the Empire beginning in the 1770's was to drive mercantile capital out of international commerce, where it had enjoyed strongly monopolistic advantages and concomitantly high profits, and into large-scale landownership.⁸ Other investigators, on the other hand, have pointed to the continuing functional links between large-scale commerce and landownership to the very end of the colonial period, since the business of agriculture often required a constant injection of capital to yield its unspectacular but steady profits.⁹ The relationship suggested by the latter situation, then, would be one not so much of capital flight or self-liquidation as of constant symbiosis. Whatever interpretation one elects, it seems clear that the late colonial commercial boom was stimulated by population growth and imperial trade reform, and that commercial capital in turn was made available to finance agriculture. The change itself was exogenous to the agricultural economy to a large extent, however.¹⁰

Attempts to change Mexican agriculture substantially by royal fiat, or at least to regulate it, were made, but in the first case demonstrated little success, and in the second were implemented with quite different ends in mind. Crown efforts to encourage the planting of new crops, such as flax, by Indian peasants and other farmers met with indifferent results.¹¹ The creation during the latter part of the century of royal monopolies, or increases in fiscal exactions on semi-processed agricultural products of wide popular consumption such as tobacco and the ubiquitous *pulque* certainly rendered profits to the crown by concentrating production and keeping prices high, but they also limited the diffu-

sion of incomes from such activities, stimulated contraband, and may ultimately have damaged the industries.¹² Agricultural colonization in the far north of New Spain, despite its long-term significance, did little to relieve population pressures in the central part of the country, and indeed, if it had, would probably have driven up rural wages and inhibited the commercialization of large-scale farming.¹³ At the end of the period the infamous *Consolidación de Vales Reales* of 1804-1809 succeeded in wringing several million pesos of borrowed ecclesiastical capital from the agricultural economy, but this was an ad hoc policy initiated without regard for that economy per se, and its actual effects on the rural economy of New Spain are still not clear.¹⁴

Why should the reformist Bourbon monarchy have, at best, taken a few half measures towards stimulating the Mexican agricultural economy and, at worst, have preyed upon it as a source of revenue without thought as to the effects of fiscal exactions? Two interrelated reasons suggest themselves. In the first place, despite the awareness of contemporaries (Alexander von Humboldt and José María Queiros, for example) that agricultural production in New Spain had a greater aggregate yearly value than any other sector of the economy, the Spanish crown simply was interested in other things as targets for reform, activities which the Bourbon ministers and *proyectistas* felt offered greater fiscal benefits in the short-run and which were more in keeping with current European notions of political economy.¹⁵ Thus, despite the beginnings of a mild, Physiocratic-like critique of latifundism in the colony, taken up even by such illustrious members of the colonial establishment as Bishop Abad y Queipo of Michoacán, a fundamental attempt to restructure Mexican agriculture in general and the landholding system in particular was not forthcoming, let alone any widespread public debate on the issue.¹⁶ In the second place, the agricultural economy, even had reformers wanted to change it significantly, was much harder to get at than commerce or the fiscal structure. As an economic activity it was ubiquitous, less concentrated, and more heterogeneous than other sectors: its ills were harder to analyze and its processes harder to control. Therefore, to the degree that the Bourbon reforms, although they took place over several decades, were a "quick fix" for imperial ills, they quite naturally ignored the ponderous and glacier-like socio-economic structures represented by the rural economy.

II. *Capital and Technology: Growth without Development*

Although it would be difficult, if not impossible, to construct figures regarding productivity in agriculture for the last half-century of the colonial era, it seems reasonable to say that overall increases in production can be ascribed to higher levels of capital investment and labor inputs, rather than technological improvements or new production arrangements. In terms of the distributional variables discussed above, capital investment in market-oriented agriculture, especially among large and middling haciendas, seems to have moved up and in; that is to say, from the mass of the rural population towards large landowners, and from the countryside to the city. Low rural wages (on which more below) partially underwrote the profitability of investment in large-scale agriculture, and in turn fed the burgeoning cities of the realm. Under such circumstances, the landholding elite, new and old, exacted a kind of brokerage fee in the transfer of resources from country to city in the form of profits on agricultural investment. Wages lagged behind prices for agricultural commodities and manufactured goods, creating an available surplus for a form of primitive accumulation which fueled some forms of economic development, albeit in a truncated way.

Capital investment in commercial agriculture apparently tended to assume the form of land acquisition, where possible; or of *mise-en-valeur* of land previously underutilized; or of the expansion of a technology already basically in place. One common form of the latter process was the pattern of crop successions and displacements typical of areas of commercial agriculture. In the valley of Mexico, for example, Tutino has noted the northward displacement of stock raising in the late eighteenth century in favor of *pulque* production and other more intensive activities which grew up in response to the expanding market of Mexico City. Similarly, in the Guadalajara region and Bajío tillage expanded at the expense of livestock raising, and wheat cultivation at the expense of maize, while in large parts of Michoacán, considerable capital was invested in irrigation works.¹⁷ Land values rose, particularly in the commercial agricultural sector, not just owing to the passive processes of population growth and the limitation of resources, but also due to active capital investment, much of it supported by landowner borrowing from the church. In the case of the Guadalajara region, which I have studied, increases of several hundred percent in the value of major grain-producing haciendas were not uncommon. For example, the important Hacienda de Atequiza, near Lake Chapala, grew 800 percent

in value between 1725 and 1821, and the great Hacienda del Cabezón, further to the west, increased in value by 300 percent in the thirty years between 1763 and 1793. By way of contrast, rural wages remained virtually stable during the eighteenth century, while maize prices barely doubled between 1700 and 1810.¹⁸ Capital continued to flow into large-scale agriculture, as we have noted above, from the mining and commercial sectors of the colonial economy, supporting traditional elite status aspirations and the optimizing strategy of economic diversification so characteristic of late colonial family enterprises.¹⁹

The late colonial rise in production levels was created principally by capital investment in dams, irrigation works, storage facilities, etc.; by the intensification of existing technologies; and by increased labor inputs. Productivity increases ascribable to the natural fertility of previously unworked lands being brought into production were probably offset by the fact that most prime arable land in the more heavily populated parts of Mexico had already long since been occupied.²⁰ The development or application of new technologies – of new multipliers of human effort – in late colonial agriculture, such as the following practices, fertilizers, or crop rotations which characterized the "new husbandry" in northern Europe, were scarcely to be found in New Spain or elsewhere in Latin America. At the very end of the colonial period contemporary observers, such as Baron von Humboldt, noted the relative backwardness of Mexican agricultural technology even within the commercial sector. Attempts at state-directed innovation in agriculture were not particularly successful, as noted above. Even capital-intensive, specialized agricultural industries, such as sugar production, tended to experience improvement in very small increments, if at all. In the specific case of sugar there were technological innovations, especially in the milling process, but these seem to have been zealously guarded and remained of local impact only.²¹

As other societies have found before us, and as we are finding today, there are definite limits to the amount of technological innovation applicable under given environmental, economic, and social conditions. Some of these limits are natural and some man-made.²² Under the prevailing conditions of late colonial Mexico, three factors operated to keep technological innovation in agriculture to a minimum. First, and most intractable, was the scarcity of arable land (it has been estimated that only about 10 or 12 percent of the total land area of the country is capable of sustaining agriculture under optimal conditions) and water.²³ Second, population densities in the colony had apparently not reached

sufficiently high levels to warrant intensifications of a technological nature such as were occurring in parts of Europe during the seventeenth and eighteenth centuries. France, for example, which hardly led the way in technological innovation in agriculture in this period, had an overall population density of approximately 127 people per square mile in about 1800, as compared to Mexico's seven per square mile.²⁴ Under such circumstances technological intensifications simply would not have been cost-effective in New Spain, even given the generally low prevailing wages in agriculture. Finally, the low degree of economic specialization in agriculture, represented by the continued importance and resilience of the peasant subsistence sector, acted as a drag on technological innovation in agriculture as a whole. Demographic growth in the peasant sector on a more or less fixed land base tended to force wages downward, thus shifting the production costs in the direction of labor and largely eliminating the need for technological improvement. Within the peasant sector itself an already highly adapted technology, that of maize agriculture, formed the material base of production. Given enough land for the expansion of peasant agriculture, the technology would simply have been extended in an additive manner. Since this was not the case in the peasant sector, the tendency was for Indian and other subsistence producers to invest more labor rather than more capital or technology, along the lines of the model suggested by A.V. Chayanov. Surplus manpower was put to work in what I have elsewhere referred to as "interstitial" economic operations, such as labor-intensive artisanal and collecting activities.²⁵

III. Population Movement and Subsistence Crisis: A Malthusian Scissors?

The growth of population in eighteenth century New Spain seems to have fueled a certain amount of economic expansion while at the same time imposing limits on that very expansion. The increase of rural population in particular, through the process of migration, contributed to the growth of Mexican cities at rates considerably in excess of the natural, thus stimulating the economic division of labor within the country while providing larger markets of agricultural products. This was notably the case with the viceregal capital, which grew from a population of about 100,000 in around 1742, to nearly double that number in 1810, but it also occurred in other regional capitals. For example, Guadalajara, which had a population of about 5,000 in 1700, had

increased to some 35 – 40,000 by 1800, or roughly double the size one would expect to see assuming a natural rate of increase in the 1700 population of even 4 percent annually. Moreover, the growth of this provincial capital was concentrated most strongly in the period after 1750, during which the city nearly quadrupled in size. Much of this growth was the result of migration from the countryside around the city. Other provincial cities, if they experienced less dramatic rates of growth during the later eighteenth century, nonetheless increased in size substantially, such as Guanajuato, which tripled in size to reach some 90,000 between 1742 and 1809, and Querétaro, which doubled its population (from about 25,000 to 50,000 inhabitants) between 1750 and 1800.²⁶ Intra – regional migration, then, played an important part in the creation of market opportunities – even though the market thus created may have possessed a relatively low consuming power – by achieving a partial horizontal shift in population.

There is evidence, however, that the same demographic expansion which helped to stimulate the colonial economy by depressing wage levels and contributing to urban growth was flagging by the end of the colonial period as a result of Malthusian pressures. To cite the case of the Guadalajara region once again, the rate of aggregate population growth, combining a recovery in the Indian population (after its nadir in the seventeenth century) with increase of non – Indian groups, hit well over 2 percent by the early eighteenth century, but lost its momentum by the close of the colonial period, dropping to 0.7 percent in the decade 1800 – 1810, and recovering only slightly in the following decade. Other areas in New Spain showed the same general upsurge during the seventeenth and eighteenth centuries, and the same tendency to reduce their rates of growth in the last decades of the colonial era. Demographic analyses for San Luis de la Paz and León, both in the Bajío, corroborate this overall trend in population movement, as do those for parts of Oaxaca.²⁷ Within the overall trend of increasing population, but with a decline in the rate of increase setting in at the end of the colonial era, shifts also occurred in the ethnic composition of the Mexican population, though with strong regional variations. The valley of Oaxaca, for example, remained heavily Indian to the end of the period despite major demographic strides by non – Indian groups in the population. In the middling case, the population of the Guadalajara region was divided almost equally between Indians and white and mixed – blood groups by the close of the period, while that of large parts of the Bajío was becoming predominantly mestizo. This would have important implica-

tions for regional agrarian structures, particularly for the resilience of Indian landholding communities, the degree of commercialization in agriculture, and the extent of rural proletarianization and proto-industrialization.²⁸

The reasons for the slackening in Mexican population growth toward the end of the colonial period are not altogether clear as yet. David Brading and Elsa Malvido, among others, have suggested that variations in the death rate, especially in the Indian segment of the population, rather than changes in fertility or other factors account for the characteristic "old regime" demographic movements one sees during the last century of colonial rule.²⁹ These patterns include periodically sharp increases in mortality – e.g., 1690's, 1730's, 1760's, 1780's (though unevenly distributed among the major ethnic components of the general population) – linked to epidemic disease and subsistence crises, and an equally marked tendency for high birth rates and the ability for the population to reestablish relatively rapid rates of growth after each crisis. Although changes in mortality do account convincingly for general population movements during the period, it is impossible to explain the demographic retrogression of the late eighteenth century by reference to the inherent severity of disease and famine alone. Indeed, it is difficult to see that the incidence of disease and famine increased significantly during the late eighteenth century over the early part of the century, or even over the seventeenth.³⁰ What *did* change during the period, however, were the relative relationships of different sectors of the population to the means of production, and the relationship of the Mexican population as a whole to environmental resources. Contemporaries certainly noted the demographic effects of recurrent disease and famine. Navarro y Noriega wrote in 1820, for example, that:

Uno no encuentra que este reino (de Nueva España) esté tan poblado como debería estarlo, excepto en una o dos provincias, porque la miseria en la que el pueblo bajo vive, los desafortunados defectos de su educación y las hambres y las epidemias, han causado la desaparición de un gran número de personas.³¹

Alexander von Humboldt, on his part, ascribed much of the social malaise of New Spain, despite the country's abundant resources, to the highly skewed distribution of wealth.³²

It is with reference to distributional factors, then, that one must seek to explain the severe effects of late colonial subsistence crises and epidemic disease on the Mexican population. Enrique Florescano has

mapped and traced these episodes for the eighteenth century. In addition to describing the dislocative effects of recurrent subsistence crises linked to occurrences of epidemic disease – rising incidence of vagabondage and crime, labor problems, disruptions in mining, manufacturing, and agricultural activities – he emphasizes the periodicity of such crises, the increasingly wild fluctuations in maize production and prices which characterized them, and the secular trend of rising maize prices which set in after 1790 or so. The most serious and so far the best studied of these late colonial breakdowns was that of the famous *año de hambre* of 1785 – 1786, in which agricultural dearth combined with epidemic disease produced truly lethal effects over much of New Spain.³³ It is true that such cycles in New Spain tended during the late colonial period to correspond with those in Europe, lending some weight to the argument that meteorological and other factors extrinsic to the Mexican economy were in part responsible for the demographic slow-down visible after 1760 or so.³⁴ Nonetheless, it is important to note that such mortal episodes were frequent in the era before the population break-down, that they demonstrated a relative intensity on occasion equal to or greater than those of the later period, and that after them population still continued its rapid upward climb.³⁵ What had changed by the late eighteenth century, and what aggravated the effects of dearth and disease, was the economic situation of the mass of the Mexican population, especially in rural areas. Increasing rural proletarianization, declining real wages, growing concentration of property in land, and a number of related socio-economic factors combined to make the popular classes even more vulnerable to the effects of epidemic and subsistence crises. If one cannot speak, precisely, of a terminal Malthusian crisis or of a "Malthusian scissors effect," it is nonetheless clear that in large parts of the country the population had begun to press closely upon the available agricultural resources, making the periodic subsistence episodes of the era more formidable than they might otherwise have been, and slowing the momentum of demographic growth.³⁶

IV. The Land Question: "Nothing is Surer..."

The most important key to the late colonial situation seems to have been the growth of population in many regions of New Spain relative to available land resources – that is, an increasing concentration in landownership. The indications are, however, that the major impulse for this concentration came from below – from the population end, rather

than from above – from the landowning end. This is not to say that land itself did not change from the Indian/peasant sector in the direction of the large, non-Indian property owners, but simply that major changes in the legal ownership of land were a product of the sixteenth and seventeenth centuries, and not of the eighteenth.

Throughout much of central Mexico – the area between the Chichimec frontier and the isthmus of Tehuantepec – the Indian demographic collapse which took place in the century and a quarter following the Spanish conquest left large stretches of the countryside empty or significantly depopulated. Combined with the general availability of land, the period saw the generation of important market opportunities with the growth of cities and towns and the non-Indian population generally. This conjunction of circumstances gave rise to the classical Mexican great rural estate, the hacienda.³⁷ In general terms, the period which saw the indigenous population reach its low point – the mid-seventeenth century – also saw the hacienda occupy the vacuum in the countryside with a more or less extensive form of exploitation, depending heavily on indebted labor and emphasizing livestock raising. There were, of course, some notable exceptions to this general scenario, in areas which remained relatively heavily populated or outside the orbit of Spanish economic interest. In the valley of Oaxaca, for example, as William Taylor has shown, Indian landholding remained dominant throughout the colonial period.³⁸

By the time the population recovery of the period 1650 – 1750 began to put significant pressure on agricultural resources, most readily cultivable land had been pre-empted by Indian communities themselves and by non-Indian estates. As the eighteenth century progressed, and with it an increasing development of large-scale capitalist agriculture, the chafing between growing numbers of peasant villagers and estate-owners became even more notable. Litigation, violence, land invasions, and enclosure seem to have increased in frequency in a number of major agricultural regions of New Spain. Minor adjustments were made in the boundaries of already-existing haciendas in many areas of the country, but remarkably few new properties were created by agglomeration of smaller parcels or by large scale expropriation of Indian lands, as studies of the valley of Mexico, the Puebla – Tlaxcala area, the Bajío, and the Guadalajara region have all shown.³⁹ More specifically, the ownership histories of individual rural estates indicate that major land acquisitions for the most part preceded 1750, or even 1700. For example, Herman Konrad's detailed study of the land titles of the great Jesuit hacienda of

Santa Lucía and its annexed properties, directly to the north of Mexico City, shows that most land transactions instrumental in building the hacienda occurred previous to 1700, and that there were no further acquisition at all after 1737. On the other hand, of the eighty-five conflicts and disputes involving the hacienda in the two centuries between 1576 and 1767, about two-thirds occurred after 1700. Much the same story can be told for the major haciendas of the Guadalajara region, nearly all of which measured the same size in 1800 as they had in 1700.⁴⁰ As I have pointed out above, what occurred during the growth phase of large-scale Mexican agriculture in the latter part of the eighteenth century was a process of internal colonization of estates already established during the preceding centuries, and not the creation of a land-hungry, aggressive commercial agriculture out of whole cloth.

Rural agrarian structure, at the end of the colonial period, demonstrated a more complex distribution of types of production units than just large haciendas and Indian villages. Particularly in the north-central and western-central parts of New Spain - in the Bajío, in Michoacán, and in New Galicia - smallholdings survived in considerable numbers in the countryside on the margins of the large hacienda, often enjoying independent juridical status as individually owned *ranchos*. But also in the valley of Oaxaca, where Indian landholding remained relatively more important in the total land tenure picture than elsewhere, small non-Indian owned properties were numerous, and may even have increased in number, if not in aggregate size, during the eighteenth century.⁴¹ Indeed, such small properties, sandwiched in socio-economically along with small provincial merchants and other rural middlemen between landholding Indian communities and large, commercially oriented estates, served to articulate peasant and capitalist modes of production in important ways.⁴² In some areas renting and sharecropping arrangements abounded, so that even where legal title to agricultural lands had already been preempted by the owners of large estates, effective units of production were more numerous than might be expected. In fact, as has been demonstrated for parts of the Bajío and Michoacán, while hacendados often worked their *demesne* farms, income from rentals and sharecropping formed important parts of overall hacienda revenues, with the terms of such arrangements generally shifting in favor of large landowners towards the close of the colonial period.

Heterogeneity and internal differentiation also characterized economic life within the peasant sector, particularly in landholding Indian villages.

The growing market opportunities and monetarization of the rural economy during the eighteenth century, and especially during its latter half, may have increased wealth differences within indigenous communities, producing strains which ill accorded with the cosmological assumptions upon which communal solidarity was based. Gibson, in his study of the Indians of the valley of Mexico, found wealth accumulation, pretension to noble status, and social-climbing present in village society in an advanced form already in the sixteenth century, despite the tendency for the Spanish conquest to compress and homogenize Indian society. The possibility exists, in fact, that much of the solidarity and hostility with which Indian villages confronted outsiders, particularly with regard to conflicts over land, may have been the artifice of an outward deflection of aggression and strain linked directly to internal social and economic differentiation.⁴³

V. *Labor: The Peonage Puzzle*

If the land tenure situation of New Spain presents a complicated picture during the period after 1750, the condition of rural labor presents one equally complex. There is by now little argument among historians of Mexican agrarian structure that agricultural labor arrangements in most regions of New Spain followed the sequence *encomienda* - *repartimiento* - free wage labor/peonage, as developed by Charles Gibson in his study of the valley of Mexico. Insofar as the growth of commercialized, large-scale agriculture in the late colonial period is concerned, despite the highly variegated labor situation in Mexico, the major variables determining any given labor regimen are clear enough: degree of commercialization, size of potential labor force, and availability of land. For purposes of the present essay, the most important questions to be answered about the late colonial rural labor system are two. First, to what degree was it dominated by the institution of debt peonage, and how widespread and exploitative was the practice? Second, in what way did labor, considered as a component of the agricultural production process, contribute to late colonial agrarian development?

Viewed as a whole, the evidence on debt peonage suggests that where labor was in short supply, either because of a manpower scarcity or because of a strong peasant subsistence sector which offered viable economic alternatives to large numbers of potential rural laborers, peonage could be relatively harsh. Where manpower was plentiful, on the other hand, the logistics of maintaining a permanent estate labor

force might necessitate some degree of debt peonage, but on the whole the institution was likely to be less pervasive and less harsh.⁴⁴ The major study we have for the north in the late colonial period, that of Charles Harris, paints a picture of fairly harsh labor conditions under the regimen of debt peonage: physical coercion of laborers, high debt levels, enforcement of the sanctity of debt, and severe limitation of physical mobility. In late colonial Oaxaca, according to Taylor, debt levels were high and physical coercion on haciendas frequent, but indications regarding limitation of physical mobility are not abundant. In the first case, land in great quantities had been preempted by large landlords and labor was scarce, so that a coercive labor system seemed to make sense in order to assure a steady labor supply. In the second, Indian peasants – the potential labor force – had at least some alternatives to working for wages on haciendas, so that high debt levels functioned at least in part as a means of recruiting and retaining labor. In areas of central Mexico during the late colonial and early national periods, there is much evidence to indicate that although laborers may have been physically abused with some frequency, nonetheless per capita debt levels were not particularly high in terms of what a resident laborer was likely to earn in a given time span; that laborers regularly absconded without liquidating their debts; that haciendas were just as likely to owe back wages to their labor forces as the reverse; and that mobility of laborers was not limited in any great degree.⁴⁵

Much of the most recent research on rural labor during the colonial period tends to the view that debt peonage was neither as widespread nor as harsh as historians had previously believed, subject, of course, to the qualifications stated above regarding regional differences. There are two major reasons for this. In the first place, it has been suggested convincingly by Gibson, and substantiated by others, that debt represented not so much a coercive mechanism on the part of labor – recruiting landowners, as a reflection of a strong bargaining position on the part of rural laborers, growing out of the labor – scarce conditions of the seventeenth century.⁴⁶ Thus, debt levels would logically vary directly with the strength of labor's bargaining power, the major determinant of which would be the availability of labor. Under such conditions, one would expect to see a decline in overall indebtedness when labor became more abundant and a concomitant weakening of the laborers position. This is precisely what happened in many areas in the late colonial period, when population increased relative to the land base of independent peasant farming and the needs of expanding commercial agri-

culture, as in the Guadalajara region in western central Mexico.⁴⁷ The resultant conditions for rural wage labor might indeed be harsh, but as a result of the weakening of debt peonage, not its health. In the second place, many researchers have noted the increasing relative importance of temporary wage labor, drawn in large measure from Indian peasant villages where shortages of land prevailed at the end of the eighteenth century. In many areas such laborers were at a disadvantage compared to resident debt peons, since they enjoyed no perquisites on rural estates, no protection, and sometimes no regular rations as part of their wages.⁴⁸

The preceding discussion provides the rudiments of an answer to the second question regarding the late colonial rural labor system, that of its role in the commercial agricultural expansion of the period. Put simply, the growth of rural population and the static land base of peasant farmers and villages increased the available labor pool during the late colonial years and insured that rural wages did not rise in money terms, thereby effectively depressing real wages. The evidence for such a trend is unequivocal and comes from all over New Spain, and even parts of the north and near north, where labor remained in relatively less abundance.⁴⁹ Cheap labor thus supported the expansion of commercialized large-scale agriculture and largely eliminated the need for technological innovation. Productivity may have remained low, but so did wages, even though labor costs made up a high percentage of overall production costs. These conditions, in the evocative phrase of Charles Harris, created a situation in which "the peon pretended to work and the master pretended to pay him."⁵⁰

VI. *Markets and Regional Development: Stirrings and Shiftings*

If eighteenth-century haciendas were frequently sprawling, underutilized properties with markedly patriarchal social structures, they nonetheless typically demonstrated a high degree of market participation. Sidestepping here the issue of whether such characteristics made the late colonial rural estate capitalist or feudal in nature (or both), we can still assert that the earning of profits through the maximization of their market position seems to have been uppermost in the minds of hacendados. The large-scale commercialization of farming, indeed, went far back into the sixteenth century, as Gibson demonstrated in his study of the precocious non-Indian agriculture of the valley of Mexico. Elsewhere in New Spain the market orientation of the hacienda (or of

labores or other smaller production units) was later in developing due to different demographic rhythms and slower rates of urbanization than in the valley of Mexico. Seen from this perspective, the apparent "feudalization" of much of Mexican agriculture which set in during the seventeenth century in response to population shrinkage and economic decline was simply an adaptive response to prevailing conditions, rather than the acting out of seigneurial ideals on a Mexican *tabula rasa*.⁵¹ When a favorable conjunction of circumstances offered itself in the last century of colonial rule – a mining resurgence, increased availability of investment capital, population growth, and expansion of markets – large-scale agriculture responded appropriately.

The late colonial trade in agricultural products and livestock is difficult to trace with any precision, but it is clear that it could extend both to regional and inter-regional markets, as well as the more familiar trans-oceanic markets for dyestuffs and other rarefied products. Harris has traced the long distance trade in sheep from the Coahuila latifundio of the Sánchez Navarro family; Serrera Contreras that in cattle and other livestock from New Galicia to central Mexico; and Ward Barrett the sugar trade from the Cuernavaca sugar zone to the viceregal capital.⁵² One would normally expect that Mexico City, given its size and preeminence within New Spain, would be the center of a far-flung hinterland and the crystallization point for a developing commercial agriculture, a process recently traced in the work of Kicza and Tutino, and in the earlier studies of Gibson and Florescano. By the same token, one would naturally expect to see mining centers, with their specialized non-agricultural work forces, emerge as important markets for the products of the countryside. What is less well studied, though hardly surprising, is the structure of major intra-regional markets centered on provincial capitals and other cities, which grew considerably, albeit unsteadily, as the pace of urbanization advanced in the period after 1750 or so. Cities such as Guanajuato, Valladolid, San Miguel, Querétaro, and Guadalajara consumed substantial amounts of maize, wheat, and livestock products annually, not to mention the garden crops typically supplied by Indian and other peasant farmers.⁵³ An important provincial urban market tended to function as the central place around which the internal socio-economic integration of an entire region might crystallize, and with it regional political and cultural identity. Furthermore the structure of local market demand tended to have a strong influence on the structure of production and landholding, typically exerting pressure in the direction of production and land concentration. Smaller producers,

among them the Indian farmers of communal villages and other, non-Indian independent peasants, tended to be at a definite disadvantage *vis-a-vis* the bigger urban markets, though they sold surprisingly large quantities of grain in provincial cities and towns, particularly maize. Larger producers enjoyed advantages perhaps out of all proportion to the economic efficiency of their farming, since they commonly were able to exercise control over the market by holding back their produce until prices rose, and interfered with the structure of urban supply through their political power.⁵⁴

Alongside the intra-regional rearrangements occasioned by agricultural expansion in the late colonial period, there also occurred shifts in the economic balance among the various major regions of the country. The nature of this shift in the economic center of gravity of New Spain is not yet clear, but the most notable aspect of it was the emergence of the regions of the near-north and west, particularly the Bajío and parts of New Galicia.⁵⁵ Concomitantly, the earlier settled and more thoroughly integrated regions of Puebla and Oaxaca, to mention the most prominent, fell on somewhat hard times in the late colonial period.⁵⁶ It would indeed be surprising to find that these fundamental shifts in the internal equilibrium of the country were not linked, at least in part, to demographic and agricultural factors. Some possible lines of explanation suggest themselves, though none has yet been thoroughly investigated on a country-wide basis. First, of course, the *arrastré* effect in the silver mining areas of the near-north and west – that is, the growth opportunities for agriculture and other activities created by a prosperous mining economy – must inevitably account for some of the northward shift. Secondly, a relatively greater demographic dynamism is evident in these areas of the country, possibly because of the proportionally lower presence of the Indian ethnic component in the population. Finally, although the Bajío, other parts of the near north, and New Galicia were not themselves frontier areas in the late colonial era, they did offer relatively greater opportunities for internal colonization, a kind of fill-in process, especially in agriculture, in which previously marginal areas were settled more densely, drawn into production, and integrated into local and country-wide markets. Under such conditions, it is probable that the returns on investment in agriculture would be likely to be higher than in older areas with more depleted resources, especially given the technological levels of the period. Thus, the more highly saturated regions of the center, south, and east would tend to lag behind relatively in terms of productivity.

Conclusion: A Chiaroscuro Century

The latter part of the eighteenth century in Mexico, then, was one of contradiction, though as I have tried to point out that contradiction was more rhetorical or aesthetic than real. A considerable degree of economic expansion and prosperity was present, but also an increasing amount of rural proletarianization and impoverishment. As Bryan Roberts has stressed in speaking of modern industrial development in Latin America, the two processes of growth and impoverishment were intimately linked to each other, and the one could not have occurred in the absence of the other.⁵⁷ Gross indicators of agricultural prosperity – rising prices, rising tithe collections, increasing stability of ownership of large estates, rising levels of profits and investment in large-scale agriculture – pointed to economic growth, but signs of rural impoverishment and a fall in living standards for the rural masses in many parts of New Spain attested to how that growth was achieved.⁵⁸ In terms of the two distributional variables set out above – vertical (class/ethnic) and horizontal (geographic) – the period saw an ever-increasing skewing in the social distribution of wealth in favor of large landowners and their allies; a probable transfer of economic resources from the countryside to the city; and a northward shift in the economic center of gravity of New Spain as a whole. What is not clear as yet is the relationship of these developments to the situation of Mexico after Independence. On the whole, the conditions of the country until the later nineteenth century – economic decline and stagnation, slow demographic growth, ruralization, political Balkanization and instability – lend weight to the view that a prolonged crisis had begun under cover of the prosperity of the late colonial era, and continued for the first half-century of the republican period.

At the end of the period under discussion we have the Mexican Wars for Independence. Given the evolution of the Mexican rural economy during the last half-century of colonial rule, it seems impossible to view that prolonged violent episode as a mere political epiphenomenon floating freely on the socio-economic substrate of New Spain. The social redistribution of wealth noted by so many historians of the eighteenth century must surely have played a role in creating pre-conditions for the rural rebellion which was such a prominent component of the wars of Independence. The strains attendant upon changes in agrarian structure in many parts of the country have been noted often. More particularly, the embattled status of the independent, landholding Indian village

and its tendency to assume a hostile posture with regard to outsiders becomes increasingly apparent at the close of the eighteenth century.⁵⁹ It seems probable, then, that secular changes in agrarian structure contributed something to the motive force behind rebellion against the colonial regime. But it must also be noted that agrarian issues – land reform, for example – played very little explicit role in the ideological and programmatic expressions of the rebels. To make the connection between long-term agrarian conditions and revolt, therefore, one must look to intervening variables, and the code of symbolic expression, in order to decipher the relationship between the way rural people thought and the way they lived.

NOTES

1. Lesley B. Simpson, *Many Mexicos*, 4th edition, revised (Berkeley, 1967). More recently, see Colin M. MacLachlan and Jaime E. Rodríguez O., *The Forging of the Cosmic Race: A Reinterpretation of Colonial Mexico* (Berkeley, 1980), and Jaime E. Rodríguez O., "Down From Colonialism: Mexico's Nineteenth-Century Crisis," (Distinguished Faculty Lecture, University of California, Irvine, 1980); and the remarks of David A. Brading, *Haciendas and Ranchos in the Mexican Bajío: León, 1700-1860* (Cambridge, 1978), pp.174-175. In fairness to Simpson, we should note that he also acknowledged the lack of a significant "trickle effect" from silver-based wealth, particularly; *Many Mexicos*, p.203.
2. When I speak in these pages of agricultural economy, unless otherwise indicated, I include stock raising for economy of expression.
3. See the papers by John Coatsworth and John Te Paske in this volume; and also John H. Coatsworth, "Obstacles to Economic Growth in Nineteenth-Century Mexico," *AHR*, 83(1978), 80-100; David Brading and Harry E. Cross, "Colonial Silver Mining: Mexico and Peru," *HAHR*, 52(1972), 545-579; David A. Brading, *Miners and Merchants in Bourbon Mexico, 1763-1810* (Cambridge, 1971); and Peter J. Bakewell, *Silver Mining and Society in Colonial Mexico: Zacatecas, 1546-1700* (Cambridge, 1971).
4. For the Guadalajara region, see Eric Van Young, *Hacienda and Market in Eighteenth-Century Mexico: The Rural Economy of the Guadalajara Region, 1675-1820* (Berkeley, 1981); for the Bajío, David A. Brading, *Haciendas and Ranchos*; and for New Spain as a whole, Enrique Florescano, *Estructuras y problemas agrarios de México, 1500-1821* (Mexico City, 1971). The term growth here is to be understood as expansion of a system already in place, and which through a kind of vegetative increase may produce more of the same; by the term development an evolutionary process in which such a system is transformed or fundamentally restructured, so as to give rise to possibilities of greater productivity – a qualitative change. This distinction notwithstanding,

- growth as defined here must entail change at least. An example of this would be the effects of economies of scale in agriculture, even barring any fundamental innovations in productive technology; on this point, see Eric Van Young, "Regional Agrarian Structures and Foreign Commerce in Nineteenth-Century Latin America: A Comment," paper delivered at the Annual Meeting of the American Historical Association, New York, 1979.
5. See Van Young, *Hacienda and Market*; and Eric Van Young, "Urban Market and Hinterland: Guadalajara and its Region in the Eighteenth Century," *HAHR*, 59(1979), 593-635. On the growth of cities in general in colonial Latin America, and the effects of that growth, see Jorge E. Hardoy and Richard P. Schaedel, comps., *Las ciudades de América Latina y sus áreas de influencia a través de la historia* (Buenos Aires, 1975); and David J. Robinson, "Introduction to Themes and Scales," in David J. Robinson, ed., *Social Fabric and Spatial Structure in Colonial Latin America* (Ann Arbor, 1979), pp.1-24. One might also, following Richard Adams' formulations, cast the rural-urban resource transfer in terms of an energy transfer, with the attendant shifts in social power and dominance; see Richard N. Adams, *Energy and Structure: A Theory of Social Power* (Austin, 1975).
 6. Brading, *Miners and Merchants*, p.31ff.
 7. On the political significance of the Bourbon Reforms, see Mark A. Burkholder and D.S. Chandler, *From Impotence to Authority: The Spanish Crown and the American Audiencias, 1687-1808* (Columbia, Missouri, 1977); on commerce, Marcelo Bitar Letayf, *Economistas españoles del siglo XVIII; sus ideas sobre la libertad del comercio con Indias* (Madrid, 1968); on mining, Brading, *Miners and Merchants*; and for a general overview for New Spain, see Daniel Cosío Villegas, ed., *Historia General de México*, 4 vols. (Mexico City, 1976), II, 185-301.
 8. Brading, *Miners and Merchants*.
 9. See John Kicza, "The Great Families of Mexico: Elite Maintenance and Business Practices in Late Colonial Mexico City," *HAHR*, 62(1982), 429-457, and *Business and Society in Late Colonial Mexico City* (Albuquerque, 1983); Richard B. Lindley, *Kinship and Credit in the structure of Guadalajara's Oligarchy, 1800-1830* (Austin, 1983); Van Young, *Hacienda and Market*; and John M. Tutino, "Creole Mexico: Spanish Elites, Haciendas, and Indian Towns, 1750-1810" (Ph.D. Diss., University of Texas, 1976). All these authors, but especially Kicza, point to the prevalence of economic diversification within individual "great families" or clans as an optimizing strategy to avoid the risks inherent in economic specialization.
 10. In part the commercial boom we have been discussing here was only an effect of rising prices - i.e., inflation. If nominal prices were to be corrected, or if intra-imperial and Mexican domestic commerce were to be put in terms of volume of goods alone, the boom would surely be less impressive.
 11. Van Young, *Hacienda and Markets*, p.318; and see also Ramón María Serrera Contreras, *Cultivo y manufactura de lino y cáñamo en Nueva España, 1777-1800* (Seville, 1974).
 12. See the paper by Susan Deans-Smith in this volume; José Jesús Hernández Palomo, *La Renta del pulque en Nueva España, 1663-1810* (Seville, 1979); and on *pulque* haciendas in the valley of Mexico, Tutino, "Creole Mexico."

13. See, for example, Herbert E. Bolton, *Texas in the Middle Eighteenth Century: Studies in Spanish Colonial History and Administration* (Austin, 1970; originally published 1915).
14. On the *Consolidación* see, among others, Masae Sugawara H., *La Deuda pública de España y la economía novohispana, 1804-1809* (Mexico City, 1976); Brian R. Hamnett, "The Appropriation of Mexican Church Wealth by the Spanish Bourbon Government: The 'Consolidación de Vales Reales,' 1805-1809," *JLAS*, 1(1969), 85-113; Asunción Lavrin, "The Execution of the Law of Consolidación in New Spain: Economic Aims and Results," *HAHR*, 53(1973), 27-49; and Linda Greenow, *Credit and Socio-economic Change in Colonial Mexico: Loans and Mortgages in Guadalajara, 1720-1820* (Boulder, 1983).
15. José María Queiros, "Memoria de estatuto (1820)," in Enrique Florescano and Isabel Gil, comps., *Descripciones económicas generales de Nueva España, 1784-1817* (Mexico City, 1973), pp. 231-264; Alexander von Humboldt, *Ensayo político sobre el reino de la Nueva España*, edited by Juan A. Ortega y Medina (Mexico City, 1966); and see also Brading, *Haciendas and Ranchos*, p.1-2.
16. Enrique Florescano, "El problema agrario en los últimos años del virreinato," *HM*, 20(1971), 477-510; Brian R. Hamnett, "Obstáculos a la política agraria del despotismo ilustrado," *HM*, 20(1971), 55-75; and Claude Morin, *Michoacán en la Nueva España del siglo XVIII. Crecimiento y desigualdad en una economía colonial* (Mexico City, 1979). Aspects of the anti-latifundium critique were used as a political tool by mid-nineteenth-century liberals for an attack against the church, but not against large landowners generally, since the power-holders as a group continued deeply committed to landlordism. It is also interesting to note how little, comparatively speaking, land reform played a role as an issue in the movement for Independence between 1810 and 1821.
17. Tutino, "Creole Mexico;" Brading *Haciendas and Ranchos* and "La estructura de la producción agrícola en el Bajío de 1700 a 1850," *HM*, 23(1973), 197-237; Van Young, *Haciendas and Market*; Morin, *Michoacán*. These successions and displacements in fact created something of a "moving frontier" situation whose social and economic effects in the countryside have hardly been looked at as yet.
18. On rising land values see David A. Brading, "Hacienda Profits and Tenant Farming in the Mexican Bajío," (unpublished ms., 1972), p.11 and "La estructura de la producción agrícola;" and Brading, *Haciendas y Ranchos*. See also Isabel González Sánchez, *Haciendas y ranchos de Tlaxcala en 1712* (Mexico City, 1969); Van Young, *Hacienda and Market*, pp.176-182; and for a somewhat different view, Florescano, *Estructura y problemas*, chap.3 and p.175. On Church lending in agriculture, see François Chevalier, *Land and Society in Colonial Mexico: The Great Hacienda*, translated by Alvin Eustis (Berkeley, 1966), pp.253-262; Brading, *Miners and Merchants*, pp.217-218; William B. Taylor, *Landlord and Peasant in Colonial Oaxaca* (Stanford, 1972), pp.141-142; Florescano, *Estructuras y problemas*, pp.162-178; Arnold J. Bauer, "The Church and Spanish American Agrarian Structure, 1765-1865," *TA*, 28(1971), 78-98; Michael P. Costeloe, *Church Wealth in Mexico: A Study of the "Juzgado de Capellanías" in the Archbishopric of Mexico, 1800-1856* (Cambridge, 1967); Greenow, *Credit and Socio-Eco-*

- normic Change*; and Van Young, *Hacienda and Market*, pp.182 - 191. The original data on Atequiza and El Cabezón were drawn from eighteenth - century notarial records in the Archivo de Instrumentos Públicos, Guadalajara (Mexico), and are cited more completely in Van Young, *Hacienda and Market*, chaps. 5 and 11.
19. Kicza, "The Great Families of Mexico" and *Business and Society*; Tutino, "Creole Mexico;" Brading, *Miners and Merchants and Haciendas and Ranchos*; Doris M. Ladd, *The Mexican Nobility at Independence, 1780 - 1826* (Austin, 1976); Manuel Romero de Terreros, *El Conde de Regla, creso de la Nueva España* (Mexico City, 1943); and Van Young, *Hacienda and Market*.
 20. Indeed, if any increase in land productivity occurred in the colonial period, it probably took place in the late sixteenth and early seventeenth centuries, rather than in the eighteenth; see Sherburne F. Cook and Woodrow Borah, *Essays in Population History: Mexico and the Caribbean*, 3 vols.(Berkeley, 1974 - 1980), II, chap. 2.
 21. Von Humboldt, *Ensayo político*, p.256; Florescano, *Estructuras y problemas*, p.128ff; and on European farming technology, B.H. Slicher Van Bath, *The Agrarian History of Western Europe, 800 - 1850* (London, 1963). On the sugar industry, see Ward Barrett, *The Sugar Hacienda of the Marqueses del Valle* (Minneapolis, 1970), and for examples of innovation in sugar - milling techniques see the request for an exclusive ten - year license to use an improved *trapiche* of his own invention by Coronel Juan Pablo de Piniaga in AGN(M), Tierras, vol. 1421, expediente 5, 1818 (I owe this reference to Jonathan Amith of Yale University); and for a similar case in the Guadalajara region involving a 1730 invention for improved furnaces utilizing bagasse, see Archivo de Instrumentos Públicos, Guadalajara (Mexico), Libros de Gobierno de la Audiencia de Guadalajara, vol. 44, ff. 1170r - 174v, 1730.
 22. For some interesting ideas on this theme as applied to historical and contemporary societies, see Marvin Harris, *Cannibals and Kings: The Origins of Cultures* (London, 1978); Adams, *Energy and Structure*; and Richard J. Barnet, *The Lean Years: Politics in the Age of Scarcity* (New York, 1980).
 23. The water problem in Mexico is one of the most critical issues facing the country today; see Norman Gall, "Can Mexico Pull Through?," *Forbes*, 15 (Aug. 1983), 70 - 79; and also Simpson, *Many Mexicos*, pp.1 - 21, 356.
 24. The base figures for France in 1800 were a total population of about 27 million and an area of 213,000 square miles; for Mexico (excluding the northern zones of New Mexico, Texas, California, etc.), a population of 5,760,440 and an area of 800,000 square miles; see Eric Van Young, "Mexican Rural History Since Chevalier: The Historiography of the Colonial Hacienda," *LARR*, 18(1983), 5 - 6.
 25. On the peasant household economy, see A.V. Chayanov, *The Theory of Peasant Economy*, edited by D. Thorner, R.E.F. Smith, and B. Kerblay (Homewood, Ill., 1966); and on interstitial economic activities see Van Young, *Hacienda and Market*, and Morin, *Michoacán*, pp. 290 - 292.
 26. Richard M. Morse, ed., *The Urban Development of Latin America, 1750 - 1920* (Stanford, 1971), p.95; Van Young, *Hacienda and Market*, pp.29 - 35; John Super, *La vida en Querétaro durante la colonia, 1531 - 1810* (Mexico City, 1983), pp.16 - 17. There were, of course, cities in less economically dynamic regions which remained stable in population, or even shrank

- during the period, for example Oaxaca; Taylor, *Landlord and Peasant*, pp.18 - 19.
27. Cecilia Andrea Rabel Romero, *San Luis de la Paz: estudio de economía y demografía históricas, 1645 - 1810*, pp. 56 - 57; Brading, *Haciendas and Ranchos*, pp. 58 - 60; Sherbune F. Cook and Woodrow Borah, *The Population of the Mixteca Alta, 1520 - 1960* (Berkeley, 1968); Van Young, *Haciendas and Markets*, pp.36 - 39; and on rural - urban migration and overall rates of population growth in New Spain, see MacLachlan and Rodríguez, *The Forging of the Cosmic Race*, pp.286 - 287. As Brading has pointed out, however, in an excellent and far - ranging general discussion of the population literature of New Spain as a whole, certain regions partially recovered their demographic dynamism after the late colonial stutter, particularly those less developed, or "frontier" areas, the Bajío and New Galicia; Brading, *Haciendas and Ranchos*, p.179.
 28. For Oaxaca, see Taylor, *Landlord and Peasant*, pp.33 - 34; for the Bajío, Brading, *Haciendas and Ranchos*; and for Guadalajara, Van Young, *Haciendas and Markets*.
 29. Brading, *Haciendas and Ranchos*, p.60 and chap.3 generally; David A. Brading and Celia Wu, "Population Growth and Crisis: León, 1720 - 1810," *JLAS*, 5(1973), 1 - 36; Elsa Malvido, "Efectos de las epidemias y hambrunas en la población colonial de México (1519 - 1810)," in Enrique Florescano and Elsa Malvido, comps., *Ensayos sobre la historia de las epidemias en México*, 2 vols.(Mexico City, 1982), I: 179 - 197.
 30. Elsa Malvido, "Cronología de epidemias y crisis agrícolas en la época colonial," in Florescano and Malvido, comps., *Ensayos*, I: 171 - 178.
 31. F. Navarro y Noriega, "Memorias sobre la población del reino de Nueva España," *BSMGE*, 1869 (originally published 1820), cited in Miguel E. Bustamante, "Aspectos históricos y epidemiológicos del hambre en México," p.60, in Florescano and Malvido, comps., *Ensayos*, I, 60.
 32. Von Humboldt, cited in MachLachlan and Rodríguez, *The Forging of the Cosmic Race*, p.287.
 33. Enrique Florescano, *Precios del maíz y crisis agrícolas en México (1708 - 1810)* (Mexico City, 1969). On the 1785 - 1786 crisis in general, see Enrique Florescano, comp., *Fuentes para la historia de la crisis agrícola en 1785 - 1786*, 2 vols.(Mexico City, 1981); for the Bajío, Brading, *Haciendas and Ranchos*, chap.8, and Brading and Wu, "Population Growth and Crisis;" for Mexico City, see Donald B. Cooper, *Epidemic Disease in Mexico City, 1761 - 1813* (Austin, 1965), pp.70 - 85; and for Guadalajara and its region, Van Young, *Hacienda and Market*, pp.94 - 103, and for a more detailed treatment, Eric Van Young, "Rural Life in Eighteenth - Century Mexico: The Guadalajara Region, 1675 - 1820," (Ph.D. Diss., University of California, Berkeley, 1978), pp.174 - 196.
 34. Florescano, *Precios del maíz*, p.124.
 35. See, for example, Murdo J. MacLeod, "The Three Horsemen: Drought, Disease, Population and the Difficulties of 1726 - 1727 in the Guadalajara Region," Southeastern Conference on Latin American Studies, *Annals*, 14 (1983), 33 - 46; and MacLeod, personal communication.

36. These general statements are based, for the most part, on data from the public record regarding large producers and sellers – tithe figures, granary price series, official reports, etc. What we know less about is the role of true subsistence farming in helping the rural population weather such crisis episodes. It has been suggested, for example, that in harvest crisis, barring a total crop failure (which never occurred as far as we can determine), peasant farmers tended to consume what produce they were able to recover, withdrawing from the market, where they normally earned some cash income from the sale of surpluses. On the other hand, during a really severe episode, such as 1785–86, small peasant producers might not be spared either; see, for example, the evidence on small renters on the Guadalajara city *ejidos* in Van Young, "Rural Life," p.190.
37. Woodrow Borah, *New Spain's Century of Depression* (Berkeley, 1951); Chevalier, *Land and Society*; André Gunder Frank, *Mexican Agriculture, 1521–1630: Transformation of the Mode of Production* (New York, 1979); Florescano, *Estructuras y problemas*; Lesley B. Simpson, *Exploitation of Land in Central Mexico in the Sixteenth Century* (Berkeley, 1952); and for a general review of the literature on the Mexican colonial hacienda, see Van Young, "Mexican Rural History Since Chevalier."
38. Taylor, *Landlord and Peasant*.
39. Charles Gibson, *The Aztecs Under Spanish Rule: A History of the Indians of the Valley of Mexico, 1519–1810* (Stanford, 1964), chap.10; Tutino, "Creole Mexico;" Morin, *Michoacán*; Brading, *Haciendas and Ranchos*; Van Young, *Hacienda and Market*; on the Puebla–Tlaxcala region see Enrique Florescano, "Formación y articulación económica de la hacienda en Nueva España," (unpublished ms., 1980). Florescano, among others, has characterized the eighteenth century as a period of aggressive estate expansion in his *Estructuras y problemas*, pp.44, 140–148, 189–190, but subsequently seems to have changed his views; see, for example, "Formación y articulación."
40. Herman W. Konrad, *A Jesuit Hacienda in Colonial Mexico: Santa Lucía, 1576–1767* (Stanford, 1980), pp.352–369; Van Young, *Hacienda and Market*, chap.13.
41. For the Bajío, see Brading, *Haciendas and Ranchos*, chap.7; for Michoacán, Morin, *Michoacán*, chap.6; Luis González y González, *Pueblo en vilo: micro-historia de San José de Gracia* (Mexico City, 1968); for New Galicia, see Van Young, "Rural Life," chap.11; and on Oaxaca, Taylor, *Landlord and Peasant*, chap.4.
42. See Eric Van Young, "Rural Middlemen in Bourbon Mexico: The Guadalajara Countryside in the Eighteenth Century," Paper delivered at the Annual Meeting of the American Historical Association, Washington, D.C., 1982.
43. Gibson, *The Aztecs*, p.153ff; and see the interesting discussion of village solidarity and the outside world in William B. Taylor, *Drinking, Homicide and Rebellion in Colonial Mexican Villages* (Stanford, 1979), pp.152–170. For a more developed presentation of the internal conflict/deflection hypothesis, see Eric Van Young, "Conflict and Solidarity in Indian Village Life: The Guadalajara Region in the Late Colonial Period," *HAHR*, 64, (1984), 55–79; and for opposing views Tutino, "Creole Mexico," p.7, and Morin, *Michoacán*, pp.292–295.

44. See Van Young, "Mexican Rural History Since Chevalier," and the large number of works cited there; Friedrich Katz, *La servidumbre agraria en México en la época porfiriana* (Mexico City, 1980); Arnold J. Bauer, "Rural Workers in Spanish America: Problems of Peonaje and Oppression," *HAHR*, 59(1979), 34-63; and the general comments by John M. Tutino, "Life and Labor in North Mexican Haciendas: The Querétaro-San Luis Potosí Region, 1775-1810," in Elsa Cecilia Frost, Michael C. Meyer, and Josefina Z. Vázquez, eds., *El trabajo y los trabajadores en la historia de México* (Mexico City, 1979), pp.356-360.
45. Charles H. Harris, III, *A Mexican Family Empire: The Latifundio of the Sánchez Navarros, 1765-1867* (Austin, 1975), chap.3; Taylor, *Landlord and Peasant*, pp.143-152; Brading, *Haciendas and Ranchos*; Gibson, *The Aztecs*, chap.9; Van Young, *Hacienda and Market*, chap.11; Tutino, "Life and Labor;" Morin, *Michoacán*.
46. Gibson, *The Aztecs*, chap.9; Van Young, *Hacienda and Market*, p.248 ff. This raises an interesting question regarding the origins of debt peonage in the seventeenth century. Coercion through the enforcement of debt and the limitation of physical mobility on the part of the laborers are said to have arisen from the need to create a stable labor force. If such was the case, then one would not expect to see rising wages during the same period (e.g., Gibson, *The Aztecs*), which would be symptomatic of competition for laborers and more or less free market conditions for the sale of labor. This contradiction has yet to be resolved.
47. Van Young, *Hacienda and Market*, chap.11.
48. Van Young, *Hacienda and Market*; Morin, *Michoacán*; Tutino, "Life and Labor" and "Creole Mexico;" Brading, *Haciendas and Ranchos*.
49. Van Young, *Hacienda and Market*, pp.248-261; Morin, *Michoacán*, p.256ff; Gibson, *The Aztecs*, p.251; Brading, *Haciendas and Ranchos*, pp.196-197; Harris, *A Mexican Family Empire*, pp.67-70.
50. Harris, *A Mexican Family Empire*, p.78.
51. On the valley of Mexico, see Gibson, *The Aztecs*; and on the seventeenth century, see Borah, *New Spain's Century of Depression*; Chevalier, *Land and Society*; Frank, *Mexican Agriculture*; Bakewell, *Silver Mining and Society*, especially the conclusion; and for general discussions on the debate over "feudalization" in the seventeenth century, see Magnus Mörner, "The Spanish American Hacienda: A Survey of Recent Research and Debate," *HAHR*, 53(1973), 183-216, and Van Young, "Mexican Rural History Since Chevalier."
52. Harris, *A Mexican Family Empire*; Ramón María Herrera Contreras, *Guadalajara ganadera: Estudio regional novohispano, 1760-1805* (Seville, 1977), chap.3; and Van Young, *Hacienda and Market*, chap.10; Barrett, *Sugar Hacienda*.
53. John E. Kicza, "Consumption and Control: A Mexico City Business Community and the Marketing of Commodities in the Eighteenth Century," paper delivered at the Annual Meeting of the American Historical Association, Washington, D.C., 1982, and *Business and Society*; Tutino, "Creole Mexico;" Florescano, *Precios del maíz*; Gibson, *The Aztecs*; on the cities of the bishopric of Michoacán, see Morin, *Michoacán*, p.141 ff; on Querétaro,

- Super, *La vida en Querétaro*, pp.51 – 56; and on Guadalajara, Van Young, *Hacienda and Market*, chaps.3 – 5.
54. On changes in agrarian structure as response to local urban demand, see especially Van Young, *Hacienda and Market*; on the competitive structure of urban markets, grain speculation, and many related issues, see Van Young, *Hacienda and Market*, and Florescano, *Precios del maíz* and *Estructuras y problemas*.
 55. The stimulating collection of essays edited by Ida Altman and James Lockhart, *Provinces of Early Mexico: Variants of Spanish American Regional Evolution* (Los Angeles, 1976), includes much material on a number of individual regions, and some interesting thoughts on regional development as such, but little if anything concerning inter – regional dynamics.
 56. On Oaxaca, see Brian R. Hamnett, *Politics and Trade in Southern Mexico, 1750 – 1821* (Cambridge, 1971). There is as yet surprisingly little published research on the Puebla – Tlaxcala region in the late colonial period. Apparently the area experienced a marked economic decline in the late eighteenth century, the reasons for which are not entirely clear; Juan Carlos Garavaglia, personal communication. Brian Hamnett, in a forthcoming book on the period of Mexican Independence and the early Republic, will deal in detail with the question of regions in New Spain and their relationship to the center and to each other.
 57. MacLachlan and Rodríguez, *The Forging of the Cosmic Race*, pp.286 – 287, recognize this but do not relate the two apparently contradictory trends. See also Rodríguez, "Down from Colonialism;" Bryan Roberts, *Cities of Peasants: The Political Economy of Urbanization in the Third World* (Beverly Hills, 1978).
 58. For largely impressionistic conclusions on rural living standards, see Brading, *Haciendas and Ranchos*, pp.196 – 197, and Van Young, *Hacienda and Market*, pp.268 – 269. It is true, as Brading points out, that the question of autoconsumption among laborers and peasants makes money or real wage levels alone an unreliable indicator of material conditions of well – being. For a somewhat different view of this question for the early post – independence period, see Harry E. Cross, "Debt Peonage Reconsidered: A Case Study in Nineteenth – Century Zacatecas, Mexico," *BHR*, 53(1979), 473 – 495; and "Living Standards in Rural Nineteenth – Century Mexico: Zacatecas, 1820 – 1880," *JLAS*, 10(1978), 1 – 19.
 59. On the situation of villages, see, for example, Taylor, *Drinking, Homicide and Rebellion*; Van Young, "Conflict and Solidarity." For a summary of economic and social conditions in New Spain on the eve of rebellion, see Brian R. Hamnett, "The Economic and Social Dimension of the Revolution of Independence in Mexico, 1800 – 1824," *IAA, N.F.*, 6(1980), 1 – 27; and see also Eric Van Young, "Moving Towards Revolt: Agrarian Origins of the Hidalgo Rebellion in the Guadalajara Region," paper delivered at Social Science Research Council Conference on the Comparative Study of Peasant Revolts in Mexico, New York, 1982.