

LUNA, F. V. & KLEIN, H. S. Slave Economy and Society in Minas Gerais and São Paulo, Brazil, in 1830. *Journal of Latin American Studies*, vol. 36, parte 1, fev. 2004. p. 1-28.

SLAVE ECONOMY & SOCIETY IN MINAS GERAIS AND SÃO PAULO, BRAZIL IN 1830

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In the last thirty years there has emerged in Brazil a new understanding of the slave society organized in the colonial and imperial periods, especially in relation to how slave labor was used. These new studies of slave ownership and of slave labor questioned the traditional vision of Brazilian slavery proposed by Gilberto Freyre from his work on the sugar estates of the Northeast, which argued for the model of the large slave plantation. This dominant vision began to be challenged in the decade of the 1980s with studies which showed that small slave owners dominated the colonial extractive economy of Minas Gerais in the colonial and imperial period.¹ How could one justify the large plantation model as the norm when the majority of slave owners in Minas owned less than 5 slaves, and they controlled a large share of the labor force? In fluvial gold mining of eighteenth century Minas Gerais, it was these small slave owners who dominated, not the imagined miner with hundreds of slaves. These surprising results of the dominance of the small slave holders found in mining in Minas, were soon replicated in succeeding studies on agriculture in various regions of the country. In fact, until the end of the 1820s, when coffee finally consolidated itself in the Paraíba Valley, the small and median slave owning farmer was the dominant producer in the rural area of São Paulo as well.²

Even in the Northeastern sugar region, the actual pattern of slave holding was substantially different from the traditional vision, with in fact the median holding being 65 slaves per *senhor de engenho* and with few sugar estates owning more than a hundred slaves.³ These findings seem obvious given the rudimentary state of colonial Brazilian agriculture. Previous scholars confused the large territorial holdings that existed with supposedly great agricultural enterprises. The ownership of land, obtained in the majority of cases through *sesmaria* grants, represented power. Land represented as well, a reserve value, but offered little liquidity and without workers, such land produced little current income. Without a large free labor market, the generation of income required investments in slaves. Slave laborers were in fact the liquid wealth, but were risky investments and required maintenance. Given the disparity between the size of the land holding, the reduced number of high cost slaves owned, and the limited available technology, one can see that the majority of landowners were capable of effectively exploiting only reduced parcels of their land in small productive units. The great landed estate with modest economic exploitation would be the best way to define

this colonial society.

Not only were slave holding units small, slave ownership itself was also more widely spread in the society than previously assumed. The supposed profound dichotomy between a minority of sugar plantation and mill owners (the so-called *senhores de engenhos*), whose slaves were concentrated in cultivating export crops, and the majority of free whites, blacks and mulattoes who owned no slaves has also been questioned by the new studies. It turns out that slave labor was present in all areas of the economy, whether oriented to the internal market or dedicated to exports. These recent studies suggest a more complex society, with an active internal market, one in which basic staples were commercialized to attend to that market, as well as identifying an ample system of local commerce, trade and craft activities. In all of these activities - agriculture, commerce and artisan industries - we find both slave owners and non-slave owners, along with both free workers and slave laborers. We even find owners working alongside their slaves. Slaves were everywhere, even in households characterized as poor. There was no region or economic activity in which slaves could not be found. But it is important to emphasize that we also find free workers who owned no slaves in all activities, except in the production of sugar. In general. A third of the households possessed slaves and slaves represented a quarter of the resident population.⁴

Another important finding of the new research has been to discover the role of the free colored population in colonial and imperial society. Afro-Brazilians became slave owners and were involved in most basic economic activities, and were especially important in the crafts. Although the traditional literature highlighted the importance of the free colored, the new research has finally shown their economic importance. They were to be found in all regions and all economic sectors, although in general they were poorer than the whites and were little represented in the principal government positions. There is also evidence of an ample manumission process occurring, influenced by sentimental, humanitarian and sexual considerations, which privileged women and children. Self-purchase of freedom by slaves was also significant especially for slaves working in skilled occupations and mining. Some of these manumitted slaves even became slave owners themselves.⁵

The new research has also uncovered the role of women as slave owners. Despite the dominance of men as heads of households and owners of slaves, women were an important element in both groups. Moreover as slave owners they possessed the same average number of slaves as men. However the majority of woman assumed their position as household head or slave owner as widows, assuming their marriage patrimony. But there were also many women, especially artisans and those working in commerce, who were economically independent through their own resources, which often included slaves. Among the households controlled by persons of color we find proportionally more women than men as slave owners.

The natural reproduction of slaves represents, in the last twenty-five years,

another fundamental theme developed by Brazilian and foreign researchers. In general the elevated ratio of adult men among the slaves imported, as well as their precarious conditions of health and the harshness of their labor resulted in a negative growth rate of the slave population resident in Brazil. But there is also evidence of some positive natural growth rates among the slaves in some areas and some epochs. In Minas Gerais, for example, with the decline of mining in the second half of the 18th century came reduced importation of slaves and changes in the use of local servile labor which created special conditions favorable to a natural positive growth of local slave populations. Slaves born in Brazil became numerically dominant with a resulting move toward equilibrium between the sexes, and the increase in the ratio of children in the total population. The result was that in this case, slave reproduction began to come close to the reproductive patterns among the free population in the same province, and these regions reached replacement stability or even achieved positive natural growth without the need for more imported servile workers. The variation in the volume of African arrivals was the essential transformation in this process of natural growth. A similar experience with positive slave growth also occurred even earlier in Paraná.⁶

In the areas of export agriculture, where the proportion of Africans was constantly increasing, natural growth among the slaves could not occur. In these cases the growth of the servile population necessitated the continuous importation of new African slaves. The Atlantic slave trade brought more men than women, few children and practically no infants, thus distorting the demographic structure of the local slave population. Moreover the arriving African slave women had already lost part of their reproductive potential in their country of origin. This process of high African importation and negative resident slave growth is seen in the expanding areas of export agriculture, particularly in São Paulo and in Rio de Janeiro at the beginning of the 19th century. The high level of African arrivals distorted the age and sex structure of the arriving population, making it more male and far older than the native-born slave population. The higher the proportion of Africans, the lesser possibility existed for the local slaves to reproduce naturally.

In this work we continue the model of these earlier studies by examining in detail the unpublished census of population and production for the provinces of Minas Gerais and São Paulo at the beginning of the 19th century. These same sources have become the basis for much of the recent analyses of slavery which we have been discussing. For São Paulo (including Paraná),⁷ we rely on the Listas Nominativas de Habitantes of the year 1829 housed in the Arquivo do Estado de São Paulo.⁸ For Minas Gerais, we use a group of census found in the Arquivo Público Mineiro which were carried out in the province at the beginning of the decade of the 1830s.⁹ In these two provinces we find the majority of the major economic activities developed in 19th century Brazil. There was a large commercial and subsistence agriculture, as well as an active local and long distance market as well as international exports. Here as well could be found the full spectrum of artisanal activities.

The decline of mining in Minas Gerais in the second half of the 18th century

provoked disorganization in the local economy, internal migration and the transference of both slave and free labor to other activities such as agriculture and crafts. African arrivals were reduced and the population stabilized and the regional diversity within the province became more pronounced. The South and Southeast of Minas, at the frontier with São Paulo and Rio de Janeiro, became important agricultural areas, including coffee and sugar production. The old mining centers, with the largest and oldest urban centers, remained centers of artisans and merchants, although agriculture also penetrated these regions as well. They were also the centers with the longest history of intense slave occupation in the region and the high level of generalized miscegenation here resulted in the largest free colored population in any region in Brazil. In the North and Northeast, with their low population densities, there developed an extensive ranching economy, of reduced economic importance, since they were located far from consumer markets.

The history of the province of São Paulo in the 18th century was intensely influenced by the dynamic of the mining economy. In the two previous centuries the area occupied by the *paulistas* had little economic appeal and its inhabitants dedicated themselves to an agriculture of subsistence and the capture and enslavement of Indians, their only source of servile labor. The wealth generated by the exploration of Minas Gerais, coincided with the development of an intense internal market and later with the consolidation of Rio de Janeiro as the new imperial capital, created an important market for goods produced in São Paulo. This led to a slow but steady economic and population expansion in the province. The intensification of local agriculture because of the opening of these new regional markets permitted *paulistas* to substitute African slaves for Indian ones. At the end of the 18th century there even began to appear commercial production of sugar in the province. Initially this production was sold only in the local market, but the improvement in the quality of sugar output led to its exportation both to the rest of Brazil and Europe. At the beginning of the 19th century there began the commercial cultivation of coffee in Rio de Janeiro and at the end of the first quarter of the 19th century it became an important product in São Paulo as well, spreading through the Paraíba Valley. The loss of the mining markets in Minas was now compensated for by the successful exportation of first sugar and then coffee on the national and international markets. There also evolved a significant export of foodstuffs to the imperial city of Rio de Janeiro, which became Brazil's a primary internal market with the arrival of the royal family in 1808. In the first decades of the 19th century occurred both a significant expansion of the local economy as well as a major increase in the local population of the province, which included increasing arrivals of African slaves. During the major part of the 18th century São Paulo growth was moderate, with limited importation of slaves and relative stability in the slave population which appeared to have maintained a positive rate of natural growth. At the beginning of the 19th century that equilibrium was broken by the intense flood of African slaves feeding the expansion of both coffee and sugar cultivation in the province. This increase in the African share of the slave population resulted in a negative rate of natural growth of the resident slave population. The ratio of males to females rose dramatically with an equal fall in the ratio of children to adults in the total servile

population. From that point on, slave population growth was only maintained by the continued importation of slaves to São Paulo.

Although there are no completely trustworthy statistics of the Brazilian population in the period before the first national census of 1872, there are some partial census materials of good quality which permit us to compare regional growth patterns within the province. According to the government survey carried out by Daniel Pedro Müller in 1836, (¹⁰) the present state of São Paulo counted a population of 282 thousand persons, of which 201 thousand were free and 81 thousand were slaves. At the same time the current state of Estado do Paraná, then still part of São Paulo, included 42 thousand inhabitants of whom 35 thousand were free and 8 thousand were slaves. In Minas Gerais the population was larger, but the population estimates are less reliable than for São Paulo. It was estimated that the census of 1831-32 found some 620 thousand persons in the province, or more than twice the number residing in São Paulo. But there were problems in the quality of the total estimate noted by the Presidente of the province at the time, (¹¹) and our own census datasets – missing a few districts - provide information for only some 407 thousand persons.

The process of the occupation and economic development of the distinct regions within the two provinces of Minas Gerais and São Paulo are reflected in the dominant activities and the importance of slave labor which predominated in each region. In this work we will compare the characteristics of these regions in the period from 1829 to the first years of the decade of the 1830s. Our data, which comes from the unpublished censuses (*mappas*) for these provinces, is currently the most extensive available for this period and these provinces and contained information on 677,000 persons.

To permit a regional analysis of these provinces we have divided each province into what we feel are coherent macro-regions primarily based on their economies and to a lesser extent on their ecologies and locations. In Minas Gerais we have organized the state into four zones: the Traditional Mining Centers, the Southern Frontier, the Zona de Mata (forest region) and the North/Northeast.¹² The province in the early 1830s, according to our local level censuses which contained just 407,000 persons, 234,000 lived in the old mining centers, and another 122,000 in the Southern Frontier, which were the two most populated zones of the province.

In turn several studies of São Paulo at the beginning of the 19th century divide the province into five zones. The Paraíba Valley, the *Oeste Paulista* or the West Paulista area, the Litoral (or coast), the region of the Capital and the South.¹³ In this article, to simplify the results, we have used three regions: that of the Paraíba Valley and the West Paulista area - the two most dynamic regions in which were concentrated both the sugar and coffee production – we consider one region, the second grouping includes the Capital Region, the southern and northern coasts and the zone immediately to the south of the Capital region. The capital city of the province is found in this later macro-zone, and here were concentrated the government officials, the artisans and the merchants. We have separated out the future province of Paraná

(often called the Southern Road) as a third zone in the general São Paulo region. This far southern Paraná region dominated the route to the distant southern frontier and the zones of cattle and mule ranches in what would later become Rio Grande do Sul and Santa Catarina. An entire local industry and market evolved around Curitiba for fattening mules brought from the southern ranches to be sold to muleteers and their agents from all the provinces north of São Paulo as well as São Paulo itself. These mules were in high demand as the basic form of transport in this pre-railroad era.

The data which we have for the two provinces of Minas Gerais and São Paulo are for some 677,441 persons distributed in 105,635 households; the slaves represented around 30% of the population and were present in an equal percentage in the households. There were, however, significant regional differences. Although the province of Minas Gerais as a whole had this 30% slave population, in two areas the relative importance of slaves stand out. In the Zona da Mata – a zone of new settlement and modest population size – were concentrated the coffee *fazendas* and there the slaves represented some 40% of the population. In turn the region of the Traditional Mining Centers, still a rich and populous part of the province which contained two thirds of the regional population had a slave population which reached 36% of the total population. In compensation the two others regions of Minas Gerais were of lesser importance demographically and economically and had a low ratio of slaves. But there were major differences between regions in the size of holdings. In the Mining Zone of Minas, with its high ratio of slaves, the average holding of slaves per owner was just under 7 slaves – a ratio quite similar to the southern Minas frontier (Fronteira Sul) and well below the average of just under 8 slaves per owner in the Zona da Mata.

In the macro region of export agriculture in São Paulo – the export agricultural area encompassing the Valley of Paraíba and the West Paulista plains - the average holding was close to that of the Zona da Mata and well above that of the other regions of São Paulo as well as above the Minas mining center region and the southern Paraná area. In this later zone even the ratio of slaves to total population was quite low – at just 20% of the population and the average of just 5 slaves per owner was quite similar to the poor zones of Minas (see table 1)..

TABLE 1
SLAVES, FREE AND HEADS OF HOUSEHOLDS IN THE TWO PROVINCES IN 1830

	Free	Slaves	Total Population	Total Households	Households with slaves number	% %	% Slaves in total population	Average Slave Holding
Minas Gerais								
Traditional Mining Centers	149844	84513	234357	35917	12310	34%	36%	6,9
Southern Frontier	86269	36043	122312	19186	5761	30%	29%	6,3
Zona da mata	10100	6601	16701	2174	874	40%	40%	7,6
North/Northeast	26772	7678	34450	6155	1554	25%	22%	4,9
Total	272985	134835	407820	63432	20499	32%	33%	6,6
São Paulo								
Export Region (Oeste Paulista e Vale Paraíba)	76368	42736	119104	17356	4940	28%	36%	8,7
Capital, Coast & South Region	88556	26993	115549	18599	4753	26%	23%	5,7
Paraná Region	28914	6054	34968	6248	1191	19%	17%	5,1
Total	193838	75783	269621	42203	10884	26%	28%	7,0

Source: São Paulo mapps (unpublished census) in the Arquivo do Estado de São Paulo and for Minas Gerais mapps in the Arquivo Público Mineiro.

Though average slave holdings differed by region, the two provinces as a whole shared a common slave holding structure. There was a reduced number of large slave owners, and an elevated proportion of small slave owners who owned a significant proportion of the provincial slaves. In the two regions close to a quarter of the owners held but one slaves, almost 80% of the owners possessed 10 slaves or less and they in turn accounted for approximately 40% of the slaves. In this whole area of Brazil we find very few slave holdings of more than 200 slaves (less than 50 among the 30,000 households which contained slaves) and these extremely large slave holdings held but 4% of the total slave population. Of the two large provinces, Minas held the highest number of these big planters, with three owners having more than 300 slaves. In contrast the largest owner in all of São Paulo held only 164 slaves. (14) The Gini index measuring inequalities in distribution of resources among a population – in this case slaves distributed among slave owners – was virtually identical for the two provinces.¹⁵ Only the Paraná region represented a different structure. Not only was the total population of slaves smaller than normal, but the weight of the small slave holders was greater. The majority held but one slaves and those who owned 10 slaves or less represented 90% of the slave owners and controlled a high 58% of all slaves (see table 2).

TABLE 2
DISTRIBUITUION OF SLAVES IN THE TWO PROVINCES IN 1830s

Indicators of Slave Holding	Minas Gerais	São Paulo
Average	6,6	7
Modal	1	1
Largest	393	164
Gini coefficient of Distribution	0,574	0,600
Distribution of Owners by Size of Holding		
1 slave	5.022	2.669
1 to 5 slaves	13.697	7.169
6 to 10 slaves	3.581	1.869
11 to 20 slaves	2.059	1.126
21 to 40 slaves	847	477
more than 40 slaves	315	243
Total	20.499	10.884
Distribution of Slaves by Size of Holding		
1 slave	5.022	2.669
1 to 5 slaves	32.336	16.698
6 to 10 slaves	27.130	14.034
11 to 20 slaves	29.527	16.238
21 to 40 slaves	23.466	13.328
more than 40 slaves	21.312	15.485
Total	133.771	75.783
Engenhos (sugar estates)		
Number	293	590
Average slaves on	20	31
Mode	11	20
Largest	103	164
Distribution of Sugar Engenhos by Size of Holding		
No slaves	11	5
1 slave	9	2
1 to 5 slaves	41	29
6 to 10 slaves	55	54
11 to 20 slaves	80	170
21 to 40 slaves	64	184
more than 40 slaves	31	148
Total	282	585
Distribution of slaves on Engenhos by Size of Holding		
1 slave	9	2
1 to 5 slaves	131	101
6 to 10 slaves	435	441
11 to 20 slaves	1.151	2.625
21 to 40 slaves	1.799	5.350
more than 40 slaves	1.997	9.707
Total	5.513	18.224

Source: Same as table 1

In São Paulo, the dynamic expansion of the export region led to higher concentrations here of recently imported African slaves, and their ratio in the total slave population rose to 60% of the servile labor force. In Minas Gerais, except in the coffee region of the Zona da Mata, the proportion of native born slaves was greater than the ratio of Africans. Though it should be stressed, that despite the decline of the region in terms of mining, Minas Gerais was still able to import slaves in the 1830s as testified to by the important presence of Africans in the population. In the Zona da Mata they were half the slave population, in the Traditional Mining Centers and the Southern Frontier they were still 44% of the total, but were much less significant elsewhere in Minas. These poorer regions in fact were quite similar to the Paraná region in São Paulo.

The distribution of African slaves would also influence the sex ratio of the slaves, with the African presence leading to higher male ratios than among the native born slaves. In the two provinces as a whole the sex ration was almost identical at roughly 158 males per 100 female slaves. As could be expected by their different weights in each region within the provinces, there would be of course wide variation. In the Zona da Mata and in the export region of São Paulo (Paraíba Valley and West Paulista), there were 180 male slaves for every 100 female slaves. In the older mining zones the ratio was 162 per 100 females while in the poorer zones the ratio of men was much lower – Paraná being the most balanced in terms of the sex ratio of the slaves (see table 3).

TABLE 3
ORIGIN, COLOR, AGE AND SEX OF THE SLAVES IN THE TWO PROVINCES IN THE 1830s

	Color & Origin				TOTAL	Sex Ratio	Estrutura etária			Total
	Africans total	Pretos	Born in Brazil Pardos	sub-total			Children	Adults	Elderly	
Minas Gerais (I)										
Traditional Mining Centers	35.139	35.453	8.445	43.898	79.037	162	21.948	53.007	2.943	77.898
Southern Frontier	15.464	16.302	4.048	20.350	35.814	154	11.141	23.681	1.125	35.947
Zona da mata	3.462	2.524	613	3.137	6.599	181	1.892	4.567	142	6.601
North/Northeast	2.063	4.035	1.448	5.483	7.546	138	2.433	4.975	262	7.670
Total	56.128	58.314	14.554	72.868	128.996	159	37.414	86.230	4.472	128.116
São Paulo										
Export Region (Oeste Paulista e Vale Paraíba)	19.998			13.221	33.219	186	11.061	31.319	262	42.642
Capital, Coast & South Region	9.546			8.084	17.630	124	8.664	17.967	322	26.953
Paraná Region	491			1.669	2.160	104	2.204	3.710	107	6.021
Total	30.035			22.974	53.009	153	21.929	52.996	691	75.616

Source: Same as Table 1

The relative importance of Africans was, as we noted above, important in influencing the natural growth rates of the resident slave population. There is considerable evidence that large parts of Minas in the late 18th and part of the 19th century had slave populations that were self reproducing and that this was clearly the case in Paraná. ⁽¹⁶⁾ Using the child/women index as a proxy for fertility – the norm in all 19th century fertility studies for the United States – we can see that in the traditional Minas mining zone there was an elevated ratio of children to fertile women (or some 1,078 children 9 years of age and under for every 100 women aged 15 to 49 years of age). This was considerably above the other regions of Minas and well above all of São

Paulo including the Paraná area. The surprise here is both that the mining zone of Minas had a very high ratio of males to female slaves and yet still had a high child/women ratio and that Paraná, which from its balanced sex ratio and low ratio of Africans should have experienced child/women ratios as high or higher than the traditional Minas mining centers, had a much lower rate than expected. The problem with these fertility rates is how to relate the child/women ratio to that of the relative importance of males, Africans and children in the population. Perhaps the old mining centers fertility rates were more influenced by miscegenation which made the slave sex ratio much less important as an indicator. Nevertheless the question remains: was the resulting fertility sufficient to compensate for the ratio of 1.6 slave men for each slave woman in this Minas region. This is questionable. Thus it is clear that the child/women ratios presents only one part of the equation for determining overall natural growth rates. It permits us to estimate the fertility of women in their productive years, but it does not permit us to evaluate the impact of this reproduction on the total slave population. For this we need to know the ratio of native born in the various age groups, the mortality of women and children and other demographic indices and their relative weights in the total equation. Unfortunately we do not have all the relevant data to estimate this for Minas, and are especially lacking the role of Africans in the total process. Perhaps the revival of African slave imports into Minas in this period affected the reproductive potential of the population. In the case of Paraná, despite the lower child/women ratios, the ratio of native born slaves reached a very high 77% of the slave population, there was a balance between the sexes and the ratio of children to total population reached 39%. These values indicate a balanced demographic structure which was probably the result of natural reproduction and little influences by African slave imports (see table 4).

TABLE 4
CHILD/WOMEN RATIOS IN THE SLAVE POPULATION

	Women (15-44 years)	child/women (0-4/14-44)	Women (15-49 years)	child/women (0-9/14-49)
Minas Gerais				
Traditional Mining Centers	17.542	741,8	18.229	1078,3
Southern Frontier	7.867	456,6	8.163	851,9
Zona da mata	1.345	395,5	1.372	806,9
North/Northeast	1.789	397,4	1.848	854,4
Total	28.543	625,3	29.612	989,3
São Paulo				
Export Region (Oeste Paulista e Vale Paraíba)	8.945	339,0	9.209	647,4
Capital, Coast & South Region	6.736	390,6	7.003	767,8
Paraná Region	1.594	409,0	1.649	846,0
Total	17.275	366,1	17.861	711,8

Source: Same as table 1

Our data also reveals the well known findings in all previous studies of this region about the high incidence of legal slave marriage. Here São Paulo stands apart from Minas Gerais and all other slave regions in the New World in its high ratio of married

and widowed slave women. This same finding occurs in 1830. The percentage of such married slaves in the province of São Paulo reached 29% of adult slaves, while in Minas Gerais the rate was only 22%. Moreover there were important regional differences. In São Paulo the region of Paraná had the lowest ratio of such married slaves. In contrast the Southern Frontier region in Minas Gerais had a ratio of such slaves equal to those of São Paulo, while the rest of the *mineiro* regions fell well below this level (see table 5). It also turns out that among these married slaves, women did far better than men, with the 28% of the women being classified as widows or married and only 16% of the men were so listed. This of course, was much lower in both cases to the free persons where the ratio of married and widowed was 56% for both men and women. We have also discovered that marriage increased with the size of the slave unit, due exclusively to the greater availability of marriage partners for the slaves. Given that all studies to date show a high level endogamy of marriage of slaves on the units in which they lived, the size of the unit thus becomes extremely important in providing potential marriage partners.¹⁷ Secondly it should be remembered that this marriage rate had little to do with fertility, since the majority of births to the slave population were illegitimate.

TABLE 5
PROPORTION OF SLAVES MARRIED OR WIDOWED
(for slaves 14 years of age and above)

	Total	Married & Widowed	% married & widowed
Minas Gerais			
Traditional Mining Centers	51.345	10.611	21%
Southern Frontier	22.221	6.273	28%
Zona da mata	4.648	1.087	23%
North/Northeast	4.329	569	13%
Total	82.543	18.540	22%
São Paulo			
Export Region (Oeste Paulista e Vale Paraíba)	31.582	9.455	30%
Capital, Coast & South Region	18.123	5.108	28%
Paraná Region	3.834	916	24%
Total	53.539	15.479	29%

Source: Same as table 1

How do these slave data compare to those for the non-slave population in these provinces? Given the fact that our collection for São Paulo did not include the entire free population – but just those who were heads of households, in this comparison of the slave population to the free population we will only use the data for Minas Gerais for which was collected information at the individual level for the entire population. What is immediately evident when comparing these slaves and free persons is the significant differences in the ratio of males to females and the distribution of ages. While mean

predominated among the slaves (159 slave men for every 100 slave women); the women were a majority among the free population (or just 95 men per every 100 free women). Moreover, where the ratio of large age groups showed a positive correlation between sex ratio and age, among the free persons this relationship was reversed. The cause here was the impact of the African slave migrants who were predominantly adult males. Among the native-born slaves with less than 20 years of age, for example, the sex ratio was just 104 males to 100 females and among adults (those 20 years and over) it was the same rate. Among the Africans, for the children and infants the ratio was 238 males to 100 females and among the adults Africans it was 307 males to every 100 females.

Age also played a role in the ratio of Africans found among the slaves in Minas Gerais. For the census takers all slaves born in Brazil, even of African parents, were considered native-born, though it should be recalled as well that the slave trade brought few infants and relatively low numbers of children to Brazil. Thus few Africans were to be found among the youngest age groups while they were well represented in the ages favored by the slave traders. Thus they accounted for just a quarter of the infants and children, but made up half of the adult slaves. Because of their presence, the sex ratio of all resident adult slaves was 182 men to 100 women – a ratio which declined as the age group became younger (see table 6).

TABLE 6
DEMOGRAPHIC INDICATORS OF THE POPULATION OF MINAS GERAIS

	Whites	Free Colored	Total Free	Total slaves
Ratio Children/Women				
Children 0-4 years	15.361	18.768	35.300	17.845
Women 15-44	24.029	38.949	64.375	28.543
Ratio Children 0-4/Women 15/44	639	482	548	625
Children 0-9 years	32.618	40.413	75.824	29.292
Women 15-49	25.592	41.801	68.854	29.612
Ratio Children 0-9/Women 15/49	1.275	967	1.101	989
Percentage of Children	42,7	37,6	40,4	32,7
Percentage of married and widowed (older than 14 years)				
Men	63,1%	56,1%	56,7	16,0
Women	66,5%	53,7%	56,2	28,0
Total	64,8%	54,8%	56,4	20,4
Sex Ratio				
0-9 years	104,4	107,6	105,8	126,4
0-19 years	101,1	102,8	102,0	135,0
more than 19 years	104,0	82,3	89,2	182,2
Total	102,5	91,3	95,3	159,0

Source: Same as table 1

Given their high rates of natural growth the free population also had a higher ratio of infants and children. Among the Minas slaves these represented but a third of the population, whereas among the free persons such infants and children represented 40% of the population. The free persons also had a high child/women ratio. For the slaves of Minas this ratio was 989 children under 10 years of age per 100 women aged 15-49, and for the free persons it was 1,101 children per 1000 women. The big surprise here, given our general assumptions of higher fertility for free colored as opposed to the slaves, is that the child/women ratio for these persons was lower than the slaves and not close to the 1,275 ratio found for the free whites.¹⁸

While there are clearly demographic differences between slaves and free in Minas, do these same differences hold in terms of the slave owners and the slaves? When we examine the slave owners, we can now use both sets of data for the two provinces, since in both cases we are dealing with heads of household. Here we will find that the slave owners differed in the same regional variations as their slaves. In São Paulo and Minas men predominated as heads of household and even more so as slave owners, though with important regional variations. São Paulo demonstrates a great weight of men with values identical for all heads of households and those which just owned slaves. In Minas the results were considerable less, with 2.6 males per

every female (not the 4.2 males per every female in São Paulo) among the heads of households and 3.5 men for every women among the slave owners. Women did especially well in the old mining zone, and as many previous studies have shown, the decline of mining resulted in a large proportion of women emerging as heads of households and even slave owners. Clearly the economic crisis provoked a disintegration of many households and demanded of the women a more active role as head of household. This of course also provided great possibility of socioeconomic mobility, as the rise of female slave owners also suggests. (¹⁹) In the other zones of Minas the role of women was less developed and in the Zona da Mata males predominated to an extent even greater than in São Paulo – though the Southern frontier in this as in so many aspects shared many of the same indices as São Paulo (see table 7).

TABLE 7
THE SEX AND COLOR OF THE HEADS OF HOUSEHOLDS AND SLAVE OWNER BY REGION

Minas Gerais	Sex of Heads of Household		Sex of slave owners		Color of Heads of Households			Color of Slave owners		
	Male	Female	Male	Female	Whites	Pretos	Pardos	Whites	Pretos	Pardos
Traditional Mining Centers	24.408	11.433	9.111	3.157	12.755	6.120	16.811	8.228	407	3.569
Southern Frontier	15.096	4.073	4.749	995	9.654	1.492	7.988	4.526	64	1.147
Zona da mata	1.799	374	748	126	944	136	1.091	628	6	239
North/Northeast	4.659	1.495	1.237	316	1.967	581	3.566	984	26	535
Total	45.962	17.375	15.845	4.594	25.320	8.329	29.456	14.366	503	5.490
São Paulo										
Export Region (Oeste Paulista e Vale Paraíba)	14.301	3.026	4.049	865	13.755	238	3.289	4.610	22	243
Capital, Coast & South Region	13.542	3.543	3.763	969	11.826	445	4.713	4.389	13	313
Paraná Region	4.867	1.377	914	274	4.421	111	1.702	1.139	3	39
Total	32.710	7.946	8.726	2.108	30.002	794	9.704	10.138	38	595

Source: Same as table 1

Minas Gerais was especially unusual compared to São Paulo in terms of the color of the heads of household and of the slave owners. In São Paulo the whites were the clear majority, accounting for two thirds of heads of households. In Minas Gerais were in the minority, accounting for just 40% of these heads of household, with mulattos (pardos) being the largest group at 47% of these heads and blacks (pretos) being 13%. Being the wealthiest group overall in both societies, the whites did better than the free colored even in Minas Gerais. In São Paulo they were 95% of the owners and in Minas they accounted for 70%. The mulatto (pardos) owners though a minor part of the São Paulo region were 27% of the slave owners in Minas Gerais. The earlier nature and more intense movement of the slave trade to Minas and the long history of local miscegenation which affected all level of society, increased the ratio of pardos in Minas Gerais and permitted a more rapid socioeconomic mobility as seen in their share of slave ownership. For example, in the old mining centers region, 47% of the homes were headed by a pardo and even 17% by a black, and these free colored represented a third of the slave owners. Given its more recent evolution and its more backward start and slower growth, São Paulo had a far less important and rich free colored class than Minas. It was this different timing in the occupation and economic evolution of these two different provinces along with different patterns of migration which had an influence not only on the demographic characteristics of the population but on their economic position as well.

But if the free colored were slave owners, even in Minas they were the poorest element of the slave owning class. In São Paulo they owned less than 3% of the slaves, and in Minas Gerais, they controlled only 16% of the slaves despite the fact that they were almost a third of the owners. Obviously the free colored had fewer slaves than their white peers - on the order of 3 per owner as opposed to 8 for the whites – a rate similar to what the whites held in São Paulo. Although for the whites regional variations in slave holdings were quite pronounced depending on local economic activities, for the free colored in general there was little variation. Everywhere they always held relative few slaves. Given that they were the poorest owners and few were major producers of the export crops of sugar or coffee, they held few slaves whether they were rural or urban, agriculturalists or artisans. In agriculture they concentrated in food production and subsistence and they were important as artisans, but in no category did they accumulate many slaves (see table 8).

TABLE 8
SLAVE OWNERSHIP BY RACE OF OWNERS

Minas Gerais	Number of Slaves owned			Average Slaves per Owner		
	Whites	Pretos	Pardos	Whites	Pretos	Pardos
Traditional Mining Centers	67.811	1.007	13.129	8	2	4
Southern Frontier	31.393	181	3.788	7	3	3
Zona da mata	5.754	16	817	9	3	3
North/Northeast	6.028	59	1.560	6	2	3
Total	110.986	1.263	19.294	8	3	4
São Paulo						
Export Region (Oeste Paulista e Vale Paraíba)	39.451	74	769	9	3	3
Capital, Coast & South Region	24.934	52	1.014	6	4	3
Paraná Region	5.769	4	77	5	1	2
Total	70.154	130	1.860	7	3	3

Source: Same as table 1

The censuses for Minas Gerais also provide us with material for examining the process of manumission in early 19th century Brazil. ⁽²⁰⁾ Other studies on Minas Gerais have already suggested the importance of manumitted slaves in this society, even suggesting that some were slave owners themselves. ⁽²¹⁾ We have found the large number of 14,483 persons freed from slavery in their own lifetime (the so called *forros* or *libertos*) among the free colored. And they represented some 5% of all free persons of any color. These freed slaves were distributed in all the regions but were most important in the Traditional Mining Centers being 7% of free persons – this being as well the zone with the most free colored in all the regions. These 14,000 or so freed persons represented 11% of the total slave force then resident in Minas, which gives some sense of the importance of manumission in the province. As expected from all previous studies, the *forros* were in the majority women with a sex ratio of 94 men for every 100 manumitted women. Clearly in voluntary manumissions women predominated, though not as excessively as some have assumed. These *libertos* were

relatively older than the free colored in general and were more likely to be pardos than the class as a whole. These libertos headed a higher ratio of households than their weight in the free population would suggest (7% in this case) and, as expected, men predominated as household heads (1.8 men for every women heading a household). Some 16% of these liberto heads of households were Africans and another 30% were blacks (pretos) born in Brazil. The mulattoes were 60% of the *forros* and headed half the households among this special class – a somewhat surprising result since it meant that the ratio of pardo heads of household among the *forros* was lower than among the free colored who had been born free. This pardo ratio among the *forro* heads was probably a better reflection of the ratio of pardos in the slave population, whereas in the free colored population there was far more mixing of groups which produced much higher ratio of pardos in general. Agriculture, commerce, mining and crafts – in that order - were the principal activities of these *forro* heads of household. Though mining took only a fifth of these *forro* heads of household they represented an extraordinary high ratio of 33% in the homes dedicated to mining. Clearly skilled slave miners had a greater access to manumission than any other occupational group in Minas society. Some 17% of the *forro* household held slaves – and they were 4% of the total slave owners and held 2% of all slaves then present in Minas Gerais. On average these *forro* slave owners held a small number of slaves – or just under half of what most slave owners held, though there was even one extraordinary liberto who owned 24 slaves. ⁽²²⁾ Those owning slaves were to be found everywhere - the majority in agriculture and commerce - with a very significant representation in mining. (see table 9).

TABLE 9
CHARACTERISTICS OF THE LIBERATED SLAVES (FORROS) IN MINAS GERAIS

Total forros		
Número		14483
% entre livres		5%
Sex Ratio		94
Age Structure:		
children		4072
adults		8452
elderly		1797
Color		
Pretos		5926
Pardos		8250
Heads of Households		
Number of households		4431
% forros among heads of household		7%
Sex ratio		182
Color		
Pretos		2.030
Pardos		2.348
Occupations		
agriculture		1.118
mining		631
crafts		1.053
commerce		191
Slave Owners		
Number		732
% of forros among slave owners		4%
Sex ratio		153
Color		
Pretos		240
Pardos		468
% of their households with slaves		17%
Mode of slaves		2
Largest Owner owns		24
Average slaves owned		3,4
Number of Slaves owned		2.491
Ratio of all slaves held by forros		2%
Size of Holdings	Number of Owners	Number of Slaves owned
1 slave	186	186
1 a 5 slaves	615	1431
6 a 10 slaves	91	665
11 a 20 slaves	22	306
20 a 40 slaves	4	89
Occupations	Number of Owners	Number of Slaves owned
agriculture	165	557
mining	158	551
crafts	103	259
commerce	64	278
Ratio of homes with slaves		
agriculture		15%
mining		25%
crafts		10%
commerce		34%

Source: Same as table 1

Looking at the occupations of the slave owning class as a whole, it is obvious that agriculture was their predominant activity even in Minas with its mines and more urbanized population. ⁽²³⁾ Agriculture claimed approximately half the households and half the slave owners in the two provinces combined, though as could be expected the ratios were somewhat higher in São Paulo (59% to 47% of the households respectively and 66% to 55% of the slave owners). A third of the mine households held slaves, while half the heads of households dedicated to commerce in both provinces held slaves. But only a small ratio of the artisan households held slaves in either province and few of the day laborers anywhere were slave owners (see table 10).

TABLE 10
OCCUPATIONS OF THE HEADS OF HOUSEHOLDS AND SLAVE OWNERS BY REGION

MINAS GERAIS	Heads of Household Slave Owners		Slaves	% of households with slaves	Average Number of slaves
Agriculture	26.674	10.417	73.584	39%	7
Mining	1.857	636	6.376	34%	10
Fishing					
Artisans	15.239	2.906	8.998	19%	3
Commerce	3.753	1.917	8.608	51%	4
Civil Service	785	514	3.647	65%	7
Transport	943	410	2.144	43%	5
Domestic Service	584	214	1.134	37%	5
Jornaleiros (day laborers)	3.662	206	588	6%	3
Others	3.488	1.736	20.474	50%	12
Total	56.985	18.956	125.553	33%	7
São Paulo					
Agriculture	23.712	6.927	57.770	29%	8
Mining	-	-	-		
Fishing	399	42	123	11%	3
Artisans	3.871	794	2.016	21%	3
Commerce	2.310	1.322	6.568	57%	5
Civil Service	1.327	569	3.049	43%	5
Transport	635	213	1.270	34%	6
Domestic Service	41	3	4	7%	1
Jornaleiros (day laborers)	1.991	34	81	2%	2
Others	5.748	613	2.493	11%	4
Total	40.034	10.517	73.374	26%	7

Source: Same as table 1

Examining these slave owning households by region, some interesting patterns emerge. The export centers of the Paraíba Valley and Oeste Paulista held a very high average number of slaves. The biggest holdings were the sugar estates, present both in São Paulo and Minas Gerais. The *paulista* engenhos held on average 31 slaves – there was some 585 such plantations with a total of 18.224 slaves – a quarter of the provinces total servile workforce. In Minas Gerais the 282 engenhos were smaller –

holding only 20 slaves per unit and they controlled only 5% of the provincial slaves. ⁽²⁴⁾ Coffee in São Paulo was concentrated in the Paraíba Valley, which contained some 1,725 coffee *fazendas* of which less than half owned slaves. These slave owning coffee producers controlled 9,966 slaves and average just under 10 slaves per unit. Unfortunately the organization of the information relative to Minas Gerais does not permit us to analyze the coffee farms in this province (see table 11).

TABLE 11
DISTRIBUTION OF THE SLAVES AND THEIR OWNERS BY OCCUPATION & REGION

<i>Proprietários</i>	MINAS GERAIS				SÃO PAULO		Paraná Region
	Traditional Mine Centers	Southern Frontier	Zona da Mata	North & Northeast	Export Region	Capital, Coast & Southern Region	
Agriculture	5.209	3.835	644	729	3.440	2.846	641
Mining						21	21
Fishing	571	47		18			
Artisans	2.022	674	64	146	372	349	73
Commerce	1.306	474	34	103	465	559	298
Civil Service	365	115	13	21	174	365	30
Transport	323	54	27	6	113	81	19
Domestic Service	134	63	7	10	1	2	-
Jornaleiros (day laborers)	165	31	1	9	9	11	14
Others	936	316	67	417	271	267	75
Total	11.031	5.609	857	1.459	4.845	4.501	1.171
<i>Escravos</i>							
Agriculture	40.966	24.542	4.414	3.662	36.596	17.882	3.292
Mining						69	54
Fishing	5.596	578		202			
Artisans	6.300	2.077	211	410	883	834	299
Commerce	6.178	2.018	89	323	1.850	2.932	1.786
Civil Service	2.063	1.426	106	52	840	2.078	131
Transport	1.785	208	126	25	661	528	81
Domestic Service	656	408	29	41	1	3	-
Jornaleiros (day laborers)	486	72	1	29	19	33	29
Others	12.595	3.787	1.481	2.611	1.154	1.011	328
Total	76.625	35.116	6.457	7.355	42.004	25.370	6.000
<i>Mediã de Escravos</i>							
Agriculture	8	6	7	5	11	6	5
Mining						3	3
Fishing	10	12		11			
Artisans	3	3	3	3	2	2	4
Commerce	5	4	3	3	4	5	6
Civil Service	6	12	8	2	5	6	4
Transport	6	4	5	4	6	7	4
Domestic Service	5	6	4	4	1	2	
Jornaleiros (day laborers)	3	2	1	3	2	3	2
Others	13	12	22	6	4	4	4
Total	7	6	8	5	9	6	5

Source: Same as table 1

While the large export crop estates held the most slaves and the largest slave owners, there was no economic activity that did not involve some slave labor. Even in the poorer economic activities such as the food producing farmers or the artisans, slaves were not uncommon. The other significant finding is that the free colored could be found everywhere in both provinces, and as we have seen from the data from Minas, even the recently manumitted slaves were a significant element in the population and could even be found as slave owners. This generalized use of slaves in

the economy in turn guaranteed the predominance of the small slave owners. Thousands of heads of households owned just one slave or at most two, and these probably worked alongside the family and servants in the same labor as their owners. Few slave owners possessed enough slaves to just live off their labor. Thus small farmers, poorer merchants and artisans used their slaves to support their own labor or that of their families. It should also be stressed that in every area and every occupation there were households which had no slaves – some two thirds in fact did not own any. Only the production of sugar, because of its high cost investments and complexity, was an activity exclusively controlled by slave labor. ⁽²⁵⁾ In coffee, the low costs of entry, the mixed farming nature of the early *fazendas* and their important role in food production meant slaves were not the exclusive labor force they appeared to be in sugar. In the Paraíba Valley, for example, 40% of the coffee estates possessed no slaves and even those owning slaves had initially very few slaves which required a mixed slave and free labor force to become productive.

Thus the picture that emerges from this structural analysis of the population of South-Central Brazil in the 1830s is that of a society in which the majority of slave owners were those who held but a few slaves, and the large estates with hundreds of slaves were of little significance. In the number of slaves held within the society and economy, this region shared many features in common with most American societies at the time, including the United States. Slave ownership was distributed widely in the society and the slave owning class included an important share of free colored, even some who were recently freed in their lifetimes. In this structural examination of the census materials from 1830, as in all recent studies of slavery in Brazil, it is evident that the dominant plantation model does not hold for most of Brazil during most of its history. The late 19th century southeastern coffee and sugar estates and the *recôncavo* estates of the Northeast for most of this period did see the domination of large estates in selected areas of export agriculture. But overall, Brazil looked far more like the United States than it did the sugar islands of the West Indies. The only significant differences from this generalized continental pattern is that in South-Central Brazil, we find that slaves were more widely distributed by region and by occupation than in most American slave regimes. Equally the central importance of the free colored, even in the class of slave owners, is quite unusual. If the experience of Minas Gerais is a model for the future evolution of the free colored in both provinces, and the fact that by 1872 the free colored outnumbered the whites in Brasil and were four times as numerous as the slaves suggests this to be the case, then this group of slave owners would only increase in importance as time passed.

NOTES:

¹ In the decade of the 1980s numerous studies were published on ownership of slaves in Minas Gerais appeared by Francisco Vidal Luna. See his *Minas Gerais: Escravos e senhores*. (São Paulo: USP, Instituto de Pesquisas Econômicas, 1981); "Estrutura da Posse de Escravos em Minas Gerais (1718)," *História Econômica: Ensaios Econômicos*. São Paulo, IPE/USP, 1983)pp. 25-41; "Estrutura da Posse de Escravos em Minas Gerais (1804)," in Iraci del Nero da Costa, ed.. *Brasil História Econômica e Demográfica. Série Relatórios de Pesquisa*. (São Paulo: IPE/USP, 1986) pp. 157-172, as well as Francisco Vidal Luna and Iraci del Nero da Costa, "Demografia Histórica de Minas Gerais," *Revista Brasileira de Assuntos Políticos*(Belo Horizonte), vol. 58 (1984) pp. 15-62.

² On the theme of slave ownership in other areas of Brazil see Stuart Schwartz, "Patterns of Slaveholding in the Americas: New Evidence from Brazil." *American Historical Review* 87, no. 1 (February 1982): 55-86; Francisco Vidal Luna e Iraci del Nero da Costa, "Posse de Escravos em São Paulo no início do Século XIX," *Estudos Econômicos* (jan/abr 1983), vol. 13, n.º 13, pp. 211-221; José Flávio Motta. *Corpos escravos, vontades livres: posse de cativos e família escrava em Bananal, 1801-1829* (São Paulo : Fundação de Amparo à Pesquisa do Estado de São Paulo : Annablume, 1999)

³ Stuart B. Schwartz, *Sugar plantations in the formation of Brazilian society : Bahia, 1550-1835* (Cambridge: Cambridge University Press, 1985).

⁴ On this theme see Francisco Vidal Luna "São Paulo: População, atividades e posse de escravos em vinte e cinco localidades (1777-1829)." *Estudos Econômicos* 28, no. 1 (January-March 1998): 99-169; Iraci del Nero da Costa. *Arraia-Miúda: Um estudo sobre os não-proprietários de escravos no Brasil*. (São Paulo: MGSP Editores, 1992);

⁵ Russell-Wood, A. J. R. *The Black Man in Slavery and Freedom in Colonial Brazil*. New York: St. Martin's Press, 1983; Maria Inês Côrtes de Oliveira, *O liberto: O seu mundo e os outros, Salvador, 1790/1890* (São Paulo: Corrupio, 1988); Maria Sylvia de Carvalho Franco, *Homens livres na ordem escravocrata* (São Paulo: Atica, 1969); Laura de Mello e Souza, *Desclassificados do ouro: A pobreza mineira no século XVIII* (São Paulo: Graal, 1982); Hebe Maria Mattos, *Das cores do silêncio: Os significados da liberdade no sudeste escravista--Brasil, século XIX* (Rio de Janeiro: Nova Fronteira, 1998); Leila Mezan Algranti, *O feitor ausente: Estudos sobre a escravidão urbana no Rio de Janeiro--1880-1822* (Petrópolis: Vozes, 1988); Francisco Vidal Luna and Iraci del Nero da Costa. "A presença do elemento *forro* no conjunto de proprietários de escravos." *Ciência e Cultura* (São Paulo) 32, no. 7 (July 1980): 836-41; Herbert S. Klein, "The Colored Freedmen in Brazilian Slave Society." *Journal of Social History* 3, no. 1 (fall 1969): 30-53; Herbert S. Klein and Clotilde Andrade Paiva. "Free Persons in

a Slave Economy: Minas Gerais in 1831." *Journal of Social History* 29, no. 4 (June 1996): 933-62; Herbert S. Klein and Clotilde Andrade Paiva "Slave and Free in Nineteenth Century Minas Gerais: Campanha in 1831." *Journal of Social History* 15, no. 1 (April 1994): 1-21; Herbert S. and Francisco Vidal Luna, "Free Colored in a Slave Society: São Paulo and Minas Gerais in the Early Nineteenth Century," *Hispanic American Historical Review*, vol. 80, no. 4 (November 2000), p. 913-941; Francisco Vidal Luna and Herbert S. Klein, "Características da População em São Paulo no início do século XIX," *População e Família* (São Paulo) No. 3 (2000), pp. 71-91; Peter L. Eisenberg, "Ficando Livre: As alforrias em Campinas no século XIX." *Estudos Econômicos* 17, no. 2 (1987), pp.176-216; Kátia M. de Queirós Mattoso, "A propósito de cartas de alforria--Bahia, 1779-1850." *Anais de História* (Assis, São Paulo) Ano 4 (1972): 23-52. On the wealth of a sample of first-generation ex-slaves, see Maria Inês Côrtes de Oliveira, O liberto: o seu mundo e os outros, Salvador, 1790/1890 (São Paulo, 1988).

⁶ See the work on this done by Paiva, in a series of articles: "Minas Gerais no século XIX"; "A natalidade de Minas Gerais no século XIX"; and with Libby, "The Middle Path." Also see Cano and Luna, "La reproducción natural de los esclavos en Minas Gerais"; Libby and Grimaldi, "Equilíbrio e estabilidade.", and Bergad, Laird W. *Slavery and the Demographic and Economic History of Minas Gerais, Brazil, 1720-1888* (Cambridge: Cambridge University Press, 1999). All of these works directly contradict the model proposed by Martins in "Growing in Silence," and in Martins Filho and Martins, "Slavery in a Non-Export Economy." For Paraná, see two articles by Gutiérrez: "Demografia escrava numa economia não-exportadora: Paraná"; and "Crioulos e Africanos no Paraná." and –Luna, Francisco Vidal and Herbert H. Klein. Características da População em São Paulo no início do século XIX. *População e Família*, São Paulo, no. 3, p. 71-91, 2000.

⁷ In this period the present state of Paraná was part of the then Province of São Paulo, and we so include it here within the larger São Paulo definition of the 1830s.

⁸ We have used the following census, or mappas, which are called the "Listas Nominativas de Habitantes," housed in the Arquivo do Estado de São Paulo (AESP), Série Maços de População. Latas no.2,5,16,24,24A,27A,29,33A,36,37,37A,40,43,46,47A,47,55,62, 64,69,70,79,85A,86,86, 94,96,112,113,115A,123,124,133,135,140,141,142,147,150,154,157,160,165,173A,174,184,185,190,191,193,196,197,201,212,213,214,215,222,225.

⁹ We are indebted to Profa. Clotilde Paiva for kindly making available to us her datasets for the censuses of Minas Gerais in 1831-33, as well as for her invaluable suggestions on how to analyze this material. This dataset created by Prof Paiva represents one of the largest and richest collections so far prepared from these unpublished census of early 19th century Brazil. The Minas census was carried out between 10/1831-2/1832 and is found in the Arquivo Público Mineiro, Seção Provincial,

Mapas de População.

¹⁰ Daniel Pedro Muller, Ensaio d'um Quadro Estatístico de Província de São Paulo (3rd reprinting; São Paulo, Governo do Estado, 1978).

¹¹ Joaquim Norberto de Souza e Silva, Investigações sobre os Recenseamentos da População Geral do Império (3rd reprinting; São Paulo, Instituto de Pesquisas Econômicas, 1986), pp. 132-133..

¹² For a justification of this regional division for Minas Gerais, see Clotilde Paiva, "População e Economia nas Minas Gerais do Século XIX", (Phd, thesis, Department of History, Universidade de São Paulo, 1996).

¹³ This includes our own recent work. See Francisco Vidal Luna and Herbert S. Klein, The Slave Economy and Society of São Paulo, 1750-1850 (Stanford University Press, 2003).

¹⁴ It is interesting to observe who were the largest slave owners in Minas Gerais. The owner who held 393 slaves was sr. Joze Ignacio Nogueira da Gama, resident in the Zona da Mata, white, married, 53 years of age, and identified as a *fazendeiro*. The owner of 392 slaves was a corporation, the "Imperial Companhia de Mineração," and the third largest owner – with 341 slaves – was the Reverend Capelão Nicolau Gomes de Araujo, a churchman.

¹⁵ The gini was 0.574 in Minas and 0.596 in São Paulo.

¹⁶ In our study of the population of São Paulo in 1804, we identified possible indications of a positive natural growth in the slave population of the Paraná region in that year. See Luna and Klein, "Características da população em São Paulo no início do século XIX, "loc. cit.

¹⁷ For a detailed analysis of this question see Francisco Vidal Luna and Herbert S. Klein, Slave Society and Economy in São Paulo, Brazil, 1750-1850 (Stanford: Stanford University Press, 2003), chapter 6.

¹⁸ There is an intriguing mystery as to the difference which is seen in child/women ratios when we use the 0-4 years for children and 14-44 years for women instead of the older children equation and longer age spread for women. We find that the relationship at this level for both slave and free are closer than at the 0-9 age grouping. Could it be that infant and child mortality differences explain this phenomenon? Or is there some type of age distortion in recording slave ages which generates an age heaping at 10 or 50 years of age. Changing the usual breakdown and using a ratio of children 0-10 with women 15-50 might resolve this problem. Using this new measure gives a slave fertility of 1,061 children to 1,000 women aged 15-50) but does not

change the free fertility (1174), which is now closer to that of the slaves. These homogeneity suggest the surprising conclusion that there was perhaps no serious difference in mortality between free and slave children, for any significant differences would have influenced these fertility rates. There was however some difference among the free between white and non-whites in terms of fertility. The whites for these new ages were 1,275 children and the free colored just 967 children. In breaking down the free persons by color we see a sharp difference at all age groups of the sex ratio, with the colored freedmen having a low ratio of but 82 males to 100 females, compared to 104 males to 100 females among the whites. But there was an inversion between younger and older ages in this sex ratio among the free colored – those under 20 being predominately male and adults just the opposite. How can this be understood? One possibility is simply under-registration of males because they were escaping military conscription. Another hypothesis is that the sex distortions in the manumission process affects the free colored sex ration, but we doubt that this could be the whole definition. A third possibility might be that there was a serious emigration of free colored males to other localities beyond the province of Minas Gerais. But even here most of the migration was between regions within the province. Finally it might be suggested that there was a higher mortality among free colored men. But this work related mortality would have affected women workers as well. But given our current state of knowledge and the gaps in our information, these hypotheses will have to remain just that, and not conclusions.

¹⁹ In Ouro Preto in the year of 1804 there were evident signs of decadence, with women being dominant among the free persons and with a major participation in all occupations and as single heads of households. See Francisco Vidal Luna and Iraci del Nero da Costa, “Contribuição ao Estudo de um Núcleo Urbano Colonial (Vila Rica: 1804),” *Estudos Econômicos*, vol. 8 no. 3 (set/dez. 1978), pp. 1-68,.

²⁰ Contrary to what was found in the census of Minas Gerias, those of São Paulo contained no systematic information relative to *forros* or *libertos*.

²¹ Already in 18th century Minas Gerais, we find an elevated ratio of *forros*, including some who were already slave owners. In this case women were the majority of such recently freed slaves who in turn owned slaves. See Francisco Vidal Luna and Iraci del Nero da Costa, “A presença do elemento *forro* no conjunto de proprietários de escravos,” *Ciência e Cultura*, (São Paulo), vol. 32, no. 7 (1980), pp. 836-841.

²² He was a pardo and a liberto, of 40 years of age, married and working as a merchant.

²³ There are a series of problems related to the identification of occupations in Minas Gerais, because of the problem of the listing for individuals with multiple occupations and the inability to determine – especially in the case of coffee- which was the principal occupation. In the case of sugar, there was not problem in identifying the *senhores de*

engenho.

²⁴ We frequently find in the census the generic term "*fazenda*", without specification as to the type of farm or plantation involved or the crops being produced. This occurred in some 405 cases of which 284 such households owned slaves. They owned some 4,113 slaves, thus averaging over 14 slaves per *fazendeiro*, with the largest owner having 393 slaves. It would seem some of these *fazendas* must have been sugar estates, but we cannot be more precise because of the limitations in the manuscripts.

²⁵ We found a few cases of sugar *engenhos* which owned no slaves, and were probably just *engenhocas*, or slam mills producing can alcohol (or *aguardente*), or were deactivated *engenhos*.