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## Demographic change in eighteenth century Ecuador

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« *La numeración general de Indios es la Piedra fundamental del erario y de todo el gobierno político del Reyno del Perú como lo daré a conocer brevemente, siempre fue máxima política en los Límites de su imperio para conzeptuar sus fuerzas para imponer las capitulaciones y otros fines que penetra vuestra Magestad mejor que yo. Esto mismo mando Dios a Moyses en el Desierto de Sinay quando instruíéndole de lo que habia de hacer con israelitas, le ordenó empadronase a todos por sus casas y familias...* » Juan Romualdo Navarro, « Idea del Reyno de Quito, 1761-4 »<sup>1</sup>.

I. Juan Romualdo Navarro's assertion, placed at the head of this paper, that census-taking – and specifically the indian head-counts – formed the cornerstone of empire has been taken as an epigraph to lead us into late-Colonial Ecuadorian demographics. It was in the eighteenth century, and particularly during its latter part, that the Bourbon monarchy began to take stock of its prerogatives and carried out the censuses which are among the most tangible monuments to its programme of imperial renewal. If it was a colonial *oidor* rather than court officials who compared the *numeraciones* to the mission of Moses in Sinai, that at least, with its religious overtones, can remind us of the centrality of population data both to late-Colonial society, and to our interpretation of it: the *padrones* were the indispensable basis for tax assessment or the determination of ethnic status, as they were to become for political representation and conscription. And not least they were major events in their own right, as

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1. AGI Quito 223; J. Rumazo González, *Documentos para la historia de la Audiencia de Quito*, Madrid, 1948-50, Tomo VIII, P. 529.

the convulsions surrounding the two census-taking phases of around 1764-5 and 1780 were to demonstrate<sup>2</sup>.

After the dearth of material for the mid-colonial period, when the evidence, if it survives, is fragmentary or indirect, the late eighteenth century imperial censuses form a marker against which we can correlate the evidence from tribute, parish or ecclesiastical documentation. For the first time in Spanish American history, we have something which is neither report, geographical description nor fiscal record but a full-scale census in the modern sense, a systematic attempt to count and classify all heads in all regions. In view of the somewhat uncertain reputation of Republican censuses we must be least as well served for this period as for any in Ecuadorian history prior to the second half of the twentieth century. How well that is, however, is a different matter. The late-Colonial censuses, usually presented according to a standard formula and preserved in summary form, are models of elegance to anyone who has waded through the scrappy tribute listings which preceded them, with their revisions and scribbled marginal annotations. Nevertheless, it was precisely one of the attributes of post-Reform bureaucratic paperwork that information was required on a scale which even the Bourbon bureaucracy could ill provide, and might be compiled by – say – an official in the Viceregal capital of Bogota who had no firsthand knowledge of the province. The official who summarised the 1814 census, for example, confused the district (Five Leagues) of Quito with the city itself and tripled the relatively plausible estimate of around 20.000<sup>3</sup>. Another official arbitrarily raised a figure by a third<sup>4</sup>. Such interventions were not likely to be subsequently corrected and have even made their way into the national historiography. In part, we are able to minimize its effects by trying to concentrate on data which appears to be based on direct census returns rather than on compilations using data from ten, twenty or even fifty years earlier<sup>5</sup>. But once we have done so and directed our attention away from later defective summaries such as that for 1789, or even incomplete censuses such as that of 1814, we only return with more force to the censuses of 1780 as the essential datum line in Ecuadorian demographic history.

If we have begun by underlining the *numeraciones* as the « cornerstone of empire » it is therefore because our first purpose here is to present an essay in quantification organised around that date. In what should be the most carefully recorded moment in a country's (and a continent's) population history, how many Ecuadorians were there ? Or, since the present author's research interests

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2. The census-taking activity of the mid-1760's has not been used here because the data is rather incomplete for our purposes. For riots and rebellions connected with the *padrones*. Cf. S. Moreno Yáñez, *Sublevaciones indígenas en la Audiencia de Quito*, Bonn : 1976, 2nd edn. Quito, 1978.
  3. ANB Misc. de la Rep. Tomo 123 (i), f. 191. A total of 20.627 was replaced by 65.133 from the entire Five Leagues.
  4. ANB Misc. de la Rep. Tomo 123 (i), f. 188, for the official habit of « perfecting » figures.
  5. Cf. D.G. Browning, and D.J. Robinson, « The origins and Comparability of Peruvian Population Data 1776-1815 », Discussion Paper, Syracuse Univ., 1976.

are somewhat narrower, how many Indians were there, for example, in Quito or in Cuenca...? With slight variations depending on the copy or the exact year referred to, the imperial census returns of around 1780 have already been made widely available<sup>6</sup>. These censuses have generally been taken as accurate and in a country in which « everything connected with demography », past or present, « is hypothetical », that was not an unreasonable assumption<sup>7</sup>. Nevertheless, within what range are they accurate? When we read, for example, that the total population in the country in 1779-80 was 445.906 do we really mean 450 000 or do we mean 400-500 000? The heroic age of Spanish American demography in which the population of pre-contact Hispaniola may have been anywhere between 100 000 and eight million is already long behind us<sup>8</sup>. But the discrepancies between part of the material discussed here and the established figures of the national historiography are nevertheless substantial. The official 1780 figures will here be compared with the parallel census of Villalengua of roughly the same date in order to test their strengths and weaknesses and provide an acceptable population range for the late-Colonial Audiencia. In the next part of the paper, 1780 is used as a datum line for the back projection of the parochial records of births and deaths in order to complement the previous section with a diachronic analysis of demographic change. Finally we attempt to flesh out the statistics with a few interconnections between the demographic data and the social history of the Audiencia, although this is an approach capable of indefinite extension in both depth and breadth.

2. We continue, then, with a discussion of parallel demographic data from the years which immediately followed the Royal order of 1776 to carry out censuses, and send annually revised returns to Spain. Later revisions of the initial returns in the 1780's were to see bizarre fluctuations creep into the official data, as a consequence of creative accounting or errors of transcription, so only relatively « pure » data from 1779-1781 is used from the well-known official series<sup>9</sup>. The parallel enumeration carried out by Visitor and Enumerator Juan Josef de Villalengua, in the late 1770's, is of a somewhat different kind; intended for tribute purposes, it was basically concerned with the Indian population, but did also list non-Indians<sup>10</sup>.

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6. Bromley and Hamerly, located a great quantity of census data, cf. also J. Estrada Ycaza, *Regionalismo y Migración*, Guayaquil, 1977.
  7. To paraphrase Manuel Maria Lisboa, *Relação de uma viagem a Venezuela, Nova Granada e Equador*, (1853), Bruxelles, 1866, p. 356.
  8. L. Bethell (ed) *The Cambridge History of Latin America*. Cambridge, 1984, vol.1, pp. 145-6.
  9. The official series is available in multiple copies in Seville, Bogotá and Quito. Cf. ANB Hacienda Real, varios nº 2893, a single volume entitled « Censos del Ecuador ».
  10. This census, located in AGI Quito 381, was used by R.D.F. Bromley, « Urban Growth and Decline in the Central Sierra of Ecuador, 1698-1940 », Ph. D., University of Wales, 1977, and M. Minchom, « Urban Popular Society in Colonial Quito, c1700-1800 », Ph. D. University of Liverpool, 1984. J. Ortiz de la Tabla is considering its publication. R.D.F. Bromley's work has been made at least partly available in a series of articles.

The importance of the Villalengua enumeration as an independent check on the « standard » official series for c 1780 was suggested by R.D.F. Bromley who used it to examine the date on the regions of Ambato, Latacunga and Riobamba. Her work suggested that although Villalengua had managed to reach somewhat higher totals for the Indian population, the white population was broadly similar in both cases, while taken together the two censuses could be considered mutually confirmatory<sup>11</sup>. The data on Quito, however, examined by the present author, revealed substantial differences<sup>12</sup>. The comparison of crude totals for the Audiencia as a whole makes it readily apparent that Riobamba, Latacunga and Ambato are in fact the *only* parts of the Audiencia where the two series correspond, while for all other regions there are major discrepancies (see Table 1). In other words, far from confirming the reliability of the official censuses, the parallel census data throws into disarray the basic premises of Ecuadorian historical demography. If we prefer to follow the Villalengua enumeration, the total population of the Audiencia for around 1780 creeps towards the half a million mark as against the previously accepted total of around 450 000. As there is ample evidence of evasion and therefore undercounting for nearly all late-Colonial censuses, a higher figure is *a priori* at least as plausible as a lower one, in the absence of any clear suggestion that the figures have been fraudulently inflated<sup>13</sup>.

On first reading, the revised overall total for 1780 emphasizes the demographic stagnation of late-Colonial Ecuador. Even the very limited growth suggested by Hamerly for the country as a whole during the period 1780-1825 is subsumed within the widened margin of error suggested by the Villalengua enumeration<sup>14</sup>. A fall from a total of 435.301 around 1780 for the Highlands to one of 402.260 for 1825 would be sufficient to offset the incipient population growth of the coast. Differences between the central Sierra and other parts of the Highlands are somewhat flattened out, although Riobamba (along with Alausí), perhaps as a consequence of the earthquake of 1797, retains its place as the region most affected by population decline.

However, figures for the Audiencia on such a macro-scale are inevitably something of an abstraction, and in Table 1 the unwritten map of the Audiencia was re-drawn to underline the regional variation of demographic change in the Ecuadorian Highlands. The conventional division between the northern Highlands (Quito, Ibarra,...), the central Sierra, and the south of the Audiencia (Cuenca, Loja), can be misleading. The Ecuadorian Highlands were characterised by both geographic unity (the intermontane basin which is the spine of the northern Andes), and by the relative homogeneity of its economic base: textile and agricultural production based on a substantial rural Indian population, and

11. R.D.F. Bromley, *op. cit.* particularly pp. 150-1.

12. M. Minchom, *op. cit.* 197 ff.

13. For comparative purposes, the risk is that the Villalengua enumeration « soaked up » the missing population better in c 1780 than the census-takers did in 1825.

14. M.T. Hamerly, « La demografía Histórica del Distrito de Cuenca », *Boletín de la Academia Nacional de Historia*, (Quito), Vol.I.III (116), (Jul.Dec. 1970) pp. 209,222. *Historia social y económica de la antigua Provincia de Guayaquil, 1763-1842*, Guayaquil, 1973, pp. 65-6.

small – to – medium urban centres with a largely white and mestizo population serving commercial, administrative and ecclesiastical functions<sup>15</sup>. This characterisation may be somewhat more accurate for the centre of the Audiencia than it is towards the north and south (it breaks up altogether in the province of Loja<sup>16</sup>), but by the simple expedient of taking the Highlands as a continuum rather than dividing it into ready – made blocs our figures become readily intelligible. As we move south, Cuenca's population decline of around 10 % 1780-1825 is situated at roughly mid-distance between that of the « disaster areas » of the central Sierra and more usual rates, suggesting that it was not fully insulated from the economic circuits of the central Highlands. Towards the north, the proximity of Latacunga to Quito may help to explain why it fails to participate in the demographic decline of the south-central Highlands.

For the Audiencia as a whole, there is, then, a sliding-scale in the indices for demographic decline and growth with the south-central Highlands worst affected, and progressive stabilisation as we move away, whether to the north or the south. The contrast is quite marked: combining the two series of *padrones* gives a population loss for the south-central highlands of around 15 % in the period 1780-1825, while the combined totals for Ibarra to Latacunga suggests at least stability, and probably some growth. In the south the growth of Loja for an equivalent period was of the order of 20-40 %. In this perspective, there is little to justify Hamerly's suggestion that the growth of Ibarra and Loja may have been a consequence of their role as « regions of refuge » in the Wars of Independence<sup>17</sup>. Such a role they may indeed have played, but we may doubt that it did more than reinforce underlying trends, and at least in Loja's case population growth appears to have preceded the Independence period<sup>18</sup>. The north/south contrasts are best seen as part of a fundamental long-term re-orientation of the Audiencia's economic patterns in which the textile trade with Peru was replaced by smaller-scale commerce with New Granada<sup>19</sup>. This shift favoured the north of the Audiencia as obviously as it handicapped the south-central highlands, not least as the Colombian trade in coarse cloth provided lower profit margins than the luxury cloth exported to Peru, and suppliers closer to the market could minimise transport costs<sup>20</sup>. In the south, the region of Loja, with its dispersed rural population and diverse ecology, presented – at different moments – a variety of distinctive

15. For regional ethnic composition, D. Washburn, « La delineación de regiones por características demográficas », *Revista del Archivo Nacional de Historia (Sección del Azuay)*, 4 (1980), pp. 34-57, R.B. Tyrer, « The Demographic and Economic History of the Audiencia of Quito: Indian Population and the Textile Industry, 1600-1800 », University of California at Berkeley, 1976, p. 51. Cf. also note 6 and Table 3.
16. See *Cultura, Revista del Banco Central del Ecuador*, 15 (Quito) (1983) and *The Bulletin de l'Institut Français d'Etudes Andines* in 1984.
17. See note 14 above.
18. M. Minchom, « Historia demográfica de Loja y su Provincia: Desde 1700 hasta fines de la Colonia », *Cultura, Revista del Banco Central del Ecuador*, 15, (Quito) (1983) pp. 149-169.
19. M. Minchom, « Urban Popular Society », *op. cit.*, p. 109 ff.
20. R.B. Tyrer, *op. cit.* especially p. 310 ff.

economic features (stock-raising, Peruvian Bark, mule-rearing for inter - regional transport) which allowed it to attract a modest in-migration<sup>21</sup>.

In Table 1 both the Villalengua and the official series of census data are given. Why these should coincide for some regions but not for others is not necessarily a matter of mere chance. The central Sierra, with its small - to - medium sized urban centres averaging around 5 000 inhabitants posed no particular problem for enumerators, while Quito with around 25 000 according to the official series (but only 21 960 according to census B), offered a much more difficult task for enumerators, notably because of the perfectly rational apprehension of « cholos » that they would be reduced to tributary status. Similar considerations also appear to apply to the variation in rural population figures, although this argument is based on a premise which requires stating. This is namely that Ecuadorian territory was more or less a « closed pool » - differential population change was primarily due to inter-regional migration rather than natural increase or exchange with territory outside Ecuador. Without ignoring increased mortality due to earthquakes and so on, or the possibility of some exchange in the frontier regions, there is little doubt that this was essentially true for the period under question<sup>22</sup>. What is therefore striking is that the two series of censuses are in agreement (both for aggregate totals as well as in some of the details given by Bromley<sup>23</sup>), for the regions which are net « exporters » of migrants. (The one exception is the relatively unimportant region of Alausí). It is in the regions of net in - migration that the real discrepancies begin (northern Sierra, Loja). The link between migration and « cholification » points to some of the difficulties of carrying out census-taking in these areas<sup>24</sup>, since it was precisely indian migrants who were vulnerable to the imposition of tribute. For the region of Quito, for example, it was interesting to discover that Villalengua's *padrón*, concerned primarily with tribute, had located more male indians than the parallel series, and there may have been differences in the criteria of classification<sup>25</sup>. We cannot quantify tribute evasion and hidden migration from the official figures anymore than we quantify contraband from official trade statistics. What we can see is how much authority the official figures begin to lose for the areas where these factors are known to exist.

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21. See note 16 Guayaquil has not been included in this « panorama », because of the availability of Hamerly's research.
  22. The major exception to this point may have been Riobamba, as a consequence of mortalities in the earthquake of 1797, this event, however, had the effect of accentuating migration trends.
  23. R.D.F. Bromley, *op. cit.* p. 151.
  24. Cf. M. Minchom, « The making of a white province : demographic movement and ethnic transformation in the south of the Audiencia de Quito », *Bulletin de l'Institut Français d'Etudes Andines*, (Paris-Lima), XII (3-4), (1983) : 23-39.
  25. We have the explicit testimony of Villalengua that he « enumerated Indians/ Mestizos with indeterminate ethnic status. For Quito, there there were 2.944 Indian males and 3.674 females, compared with 2.615 Indian males and 3.495 females ; the higher masculinity underlines the fiscal nature of the document. M. Minchom, « Urban Popular Society », *op. cit.* p. 297. Cf. R.D.F. Bromley, *ibid.*

DEMOGRAPHIC CHANGE IN EIGHTEENTH CENTURY ECUADOR

Table 1:  
The population of Highland Ecuador by Region, c 1780-1825:  
comparative estimates.

	c 1780		1825	1780-1825 (% change)		
	A	B	C	A	B	A/B
<b>Highlands</b>						
Ibarra	16,585	23,871	25,492	(+ 53.7)	(+ 9.4)	+ 38.4
Otavalo	32,060	37,897	33,233	(+ 3.7)	(- 12.3)	- 5.0
Quito	59,391	66,733	65,605	(+ 7.1)	(- 4.7)	- 0.1
Latacunga	49,919	49,018	55,814	(+ 10.2)	(+ 13.9)	+ 12.8
	157,955	177,519	178,144	(+ 12.8)	(+ 0.4)	+ 6.2
Ambato	42,372	41,337	37,495	(- 11.5)	(- 9.4)	+ 6.2
Riobamba	66,766	66,827	51,137	(- 23.4)	(- 23.5)	- 23.4
Guaranda	14,368	15,704	15,006	(+ 4.4)	(- 4.4)	+ 0.1
Alausí	11,960	17,281	10,388	(- 13.1)	(-40.0)	- 23.6
Cuenca	82,708	87,673	75,785	(- 8.4)	(- 13.6)	- 11.0
	218,174	228,822	189,811	(- 13.0)	(- 17.0)	- 15.1
Loja	23,810	28,957	34,305	(+ 44.1)	(+ 18.5)	+ 30.0
	399,939	435,301	402,260	(+ 0.6)	(- 7.6)	- 3.7
<b>[Coast</b>						
Esmeraldas	2,497	-	2,352			
Manabí	7,699	-	17,444			
Guayaquil	22,644	-	55,048			
<b>« Oriente »</b>						
Quijos	3,264	-	2,976			
Macas	643	-	443			
Maynas	9,270	-	8,000			

Sources : For c1780 A and 1825, M. Hamerly, « La demografía Histórica del Distrito de Cuenca », *Boletín de la Academia Nacional de Historia*, Vol.LIII, n° 116, jul-dic.1970 : p. 222, for 1779-80. Summaries, with a few variations, are available in the ANH/Q « Empadronamientos » under boxes classified by region. The 1825 census is also available in the ANB Misc. de la República, Tomo 123 (i). c1780 B is the Villalengua enumeration, available in AGI Quito 381 or 412 (the latter used here). For discussion of these sources, see the text.

3. In the best tradition of historical demography, we have begun with the end of this story, and now propose to retrace our steps towards its beginning. The « regressive method », proceeding from the sure to the unsure, has been used (not always consciously) for all areas of study where the evidence is relatively good for one period, and fragmentary for an earlier one. If this approach has produced its classics, such as Marc Bloch's work on French rural society, and has subsequently been extended to virtually all historical fields, it has obvious pitfalls, not least of which is the problem of comparability<sup>26</sup>. Correlating late-Colonial censuses with the more fragmentary pre-1780 data is made no easier by the evidence of the previous section: the 1780 baseline does *not* in fact provide a very secure baseline from which to proceed. The intention was not, however, to induce existential doubt but to direct us towards the pattern of change rather than crude totals: the broad trends of population change in the eighteenth century Audiencia are in fact relatively clear.

A certain amount of pre-1780 population data has been excluded from considerations for reasons which do not require elaboration in this paper<sup>27</sup>: the emphasis here will be on the parish archives. Contemporary observers, for example, tended to give inflated population estimates which have been the bane of the national historiography<sup>28</sup>. Nevertheless, in a paper given at a congress to celebrate the 250th anniversary of the Franco-Spanish scientific expedition, it is appropriate to do homage to the work of Juan and Ulloa. Their estimates, although twice the probable totals, have proved reliable for the *comparative* size of the different urban centres they visited in the late 1730's and early 1740's, whenever these have been correlated with other sources<sup>29</sup>. Hypothetical population totals for the Audiencia at the time of their visit, are set alongside estimates from 1780:

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26. Marc Bloch, *French Rural History, An essay on its basic characteristics*, London, 1966, pp. XXIII-XXX; P. Burke, *Popular Culture in Early Modern Europe*, London, 1978, repr. 1983, pp. 81-85, etc.
27. For tribute data, R.B. Tyrer *op. cit.* pp. 2-78.
28. For the city of Quito, for example, the estimates of observers nearly always give estimates far higher than the evidence of the parish records, census data etc. suggests. Juan de Velasco gives a post-1759 epidemic total of 70.000 in his *Historia del Reino de Quito...*, Quito, 1977-8: Vol.3, p. 119. Giandomenico Coleti, who lived in Quito, for example, gives a total of 58.000 in his *Dizionario storico - geografico dell'America Meridionale*, (Venezia, 1771) vol.2, p. 106, although this may have been for a wealthier past, when compared with other descriptions by the same author. Many historians working on pre-1780 population data have either relied exclusively on contemporary observers, and given totals which are too high, or mixed early descriptions with census data which tends to produce inexplicable fluctuations.
29. See Table 2, and Jorge Juan y Antonio de Ulloa, *Noticias secretas de América*, London, 1826, edn. Madrid-Quito, 1982, pp. 168-9.



DEMOGRAPHIC CHANGE IN EIGHTEENTH CENTURY ECUADOR

Table 2:  
*Urban Centres of the Audiencia of Quito :*  
*Population Estimates 1740-80*

	c1740	c1780
Ibarra	3-4 000	5 104
Otavalo	9-10 000	8 697
Quito	30 000	(25 000)
Latacunga	5 000	3 400
Ambato	4 000	4 000
Riobamba	8 000	7 600
Guaranda	3-4 000	2 421
Cuenca	12-15 000	13 000
Loja	4 000	4 700
Guayaquil	8-10 000	8 000

*Sources :* For c1740 Juan and Ulloa's totals for Latacunga, Ambato and Riobamba, Quito and Loja have been checked (and halved) on the basis of the parish records. (See the work of Bromley and Minchom, cited in the text). For other areas, an equivalent overcount is presumed. For c1780 the « standard » official series has here been followed with totals rounded from the work of Bromley on the central Sierra, Hamerly on Guayaquil and Minchom on Quito and Loja. Totals not previously published have not been rounded, (the data on Ibarra and Otavalo is from 1781). See the text for bibliographical references and the location of the official *padrones*. Such questions as the status of outlying indian parishes make the exact size of urban centres, even where known, a matter of definition.

Table 2 probably gives a reasonably accurate demographic picture of the urban centres in the eighteenth century. The overall pattern is one of urban stagnation, with modest confirmation of the long-term pre-independence growth of Ibarra in the north and of Loja in the south of the Audiencia. How far is this general picture borne out by the more detailed evidence of the parish records ?

For the registers of births and deaths, the method of back projection, calculating the changing total population, by relating annual baptismal rates to the known total in a census year, was used by R.D.F. Bromley for the central Sierra, and subsequently by Minchom for Loja and Quito<sup>30</sup>. Taken together, the parish data therefore covers much of the highlands, although there are gaps in the type of data currently available. The emphasis here will be on the Quito material,

30. See the work cited above.

however, as it has not previously been published<sup>31</sup>. Figure 1 summarizes annual baptisms from three Quito parishes, compiled from three year averages (1710-2, 1720-2, etc.) from the year 1710 onwards, with four earlier totals taken from single years (1680, 1690, etc) except for the total for 1670 for the Sagrario which is an average of 1669 and 1673. The technical criteria in the handling of this source material have been discussed elsewhere<sup>32</sup>, although it is perhaps appropriate to stress that there do not seem to have been major changes baptismal practices after the early eighteenth century, while the seventeenth century totals should be used with care for comparative purposes (e.g. on account of infants brought in from rural parishes to be baptised).

The appropriate starting-point for discussing the data is the epidemic of the 1690's. Urban parish priests recorded 423 indian tributaries dead in the city and there is evidence of major underreporting. Tyrer's estimate that the indian population fell by 40 % in the 1690's certainly suggests the scale of the disaster, which forthcoming research will emphasize<sup>33</sup>. The evidence for high mortality rates in the 1690's is so strong that we do not need to rely on the parish data to confirm it. Unfortunately, the surviving « Libro de Muertos de mestizos, montañeces, indios, negros y mulatos, 1693-1729 » of the AP/Q Sagrario begins during the epidemic, but there were ninety recorded deaths during July, twenty-two in August, twenty-two in September and ten in October. The relatively low number of baptisms in 1690 before the epidemic may have been the consequence of food shortages which preceded it, by leading to fewer pregnancies or more miscarriages<sup>34</sup>.

Taking Figures 1 and 2 together, it is clear that the city had undergone a major demographic decline between the late seventeenth century and the 1720's. At this period, the baptismal and death registers reserved for Indians, Mestizos and Mulattoes in the Sagrario were Indian dominated and the comparison of the different parish evidence suggests that it was above all the Indian population of the city which was declining at this period. The relative impact of epidemics on the Indian population was commented on by many observers, and in a city like Loja where socio-radical segregation survived far better than in Quito, the existence of distinct Indian and white/mixed blood parishes made it possible to establish this differential impact very clearly<sup>35</sup>. The mortality rates in the Sagrario show that after a brief recovery after the 1690's epidemic-probably because the most vulnerable groups such as infants had already been eliminated – there were high although steadily declining rates of Indian mortality 1700-20 followed by a

31. The following paragraphs are based on M. Minchom, « Urban Popular Society », *op. cit.*, pp. 193-6.

32. M. Minchom, « Urban Popular Society », *op. cit.* pp. 188 ff.

33. Tyrer, *op. cit.* pp. 40-1, S. Browne, « The effects of Epidemic Disease in Colonial Ecuador: the Epidemics of 1692 to 1695 », Paper presented at the Annual Meeting of the American Historical Association in 1982.

34. Compare with R.D.F. Bromley, *op. cit.* 52-3.

35. M. Minchom, « Historia Demográfica », *op. cit.* for the figures of white Mestizo and Indian baptisms.

new peak in the late 1720's. There is evidence for an agricultural depression at this period, whose effects were reinforced by epidemic – induced labour shortages<sup>36</sup>.

After the 1730's Quito's population appears to have undergone some modest recovery, although punctuated by epidemics in the mid-1740's and mid-1760's. The considerable rise in baptisms between 1730-2 and 1740-2 and between 1750-2 and 1760-2 certainly suggests that the 1730's and 1750's were periods of modest demographic growth. The food shortages and epidemics of the mid-1740's and the 1759 epidemic described by Juan de Velasco do not appear in the graph of mortalities in Figure 2, although this does not mean they necessarily had no impact<sup>37</sup>. The fall in baptisms between 1740-2 and 1750-2 suggests that the population of the city may indeed have been affected in the 1740's. On the other hand, the sharp rise in baptisms in the 1750's suggests that the earthquake of 1755 and the claimed epidemic of 1759 had little impact, and were in any case insufficient to wipe out an underlying trend upwards. When this trend is taken together with the albeit somewhat unreliable *alcabala* figures for the 1750's<sup>38</sup>, it can be argued that the background to the 1765 rebellion, far from being one of unremitting decline was in fact one of modest expansion followed by a short-term down-turn. The high mortality rate of the mid 1760's is clearly visible on Figure 2.

Allowing for short-term cycles and the impact of epidemics, figures 1 and 2 suggest that the period from the 1730's to the 1780's was one of demographic recovery and relative stability. Tyrer has charted the auction value of the tithe in the corregimiento of Quito as a possible index to agricultural production and his graph is largely an inversion of Figure 2<sup>39</sup>, with high tithe auction prices from the 1730's to around 1760, (although with a somewhat sharper falling off in the 1760's and 1770's than the demographic evidence might suggest). In other words, mortality rates in urban society – at least for the poorer Indian, Mestizo sectors recorded in Figure 2, although the white population in Figure 1 showed more stability – were closely following the rhythms of agricultural production, with its inevitable impact on diet etc. The depression of tithe prices in 1764-6 suggests a crisis of agricultural production around that date which ties with the epidemic of that period (and the Quito rebellion of 1765)<sup>40</sup>. For the 1780's and 1790's the parish evidence suggests rising mortality rates, although the evidence is somewhat contradictory for this period<sup>41</sup>. Some decline certainly appears in the late-Colonial census data<sup>42</sup>.

36. M. Minchom, « Urban Popular Society », *op. cit.* pp. 109 ff.

37. Multiple sources (Juan de Velasco, González Suárez, Juan and Ulloa etc).

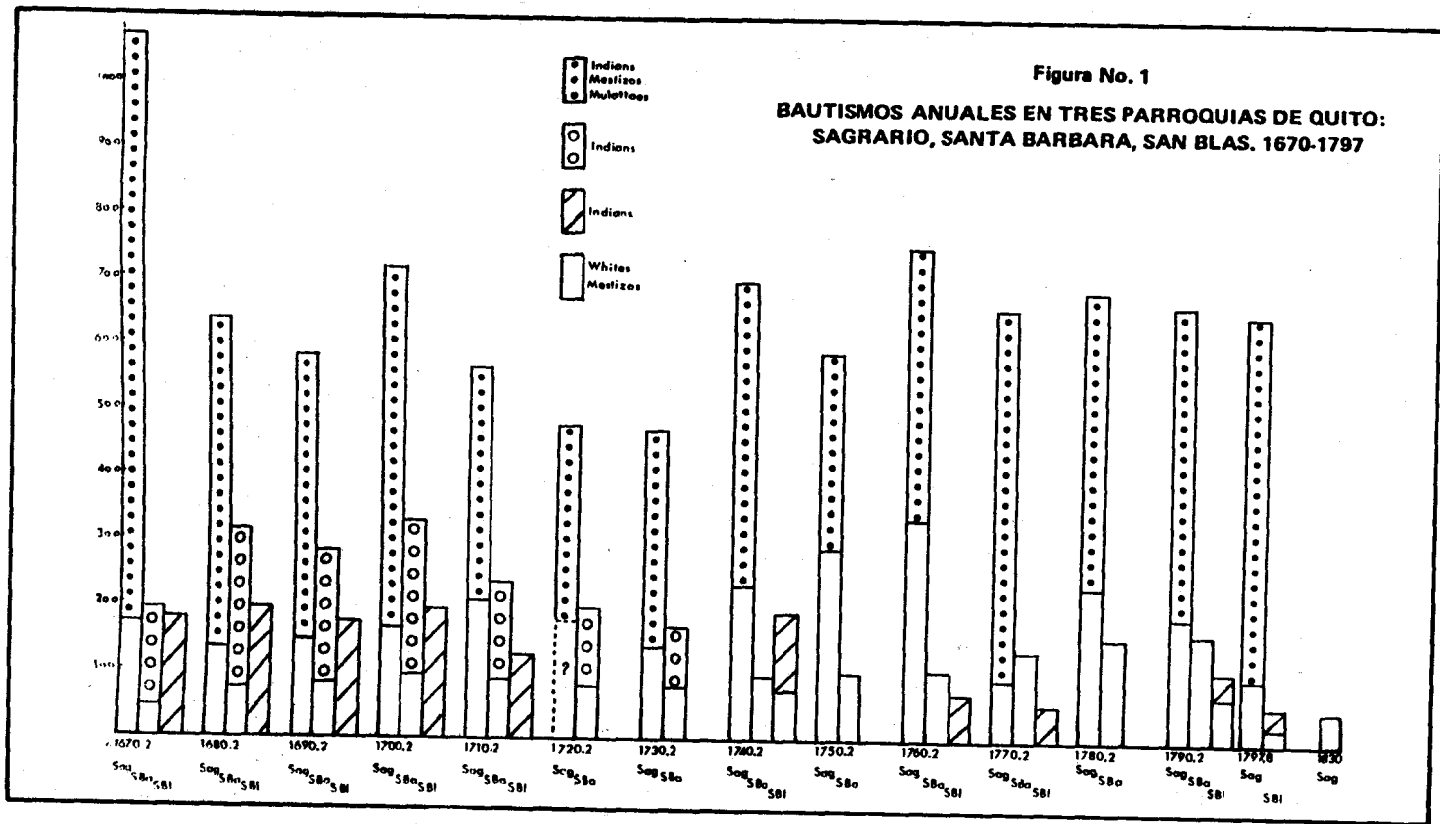
38. M. Minchom, « Urban Popular Society », *op. cit.* pp. 183 (The returns are for the relevant years are in the series in the AGI, beginning Quito 416, 417, 418... ).

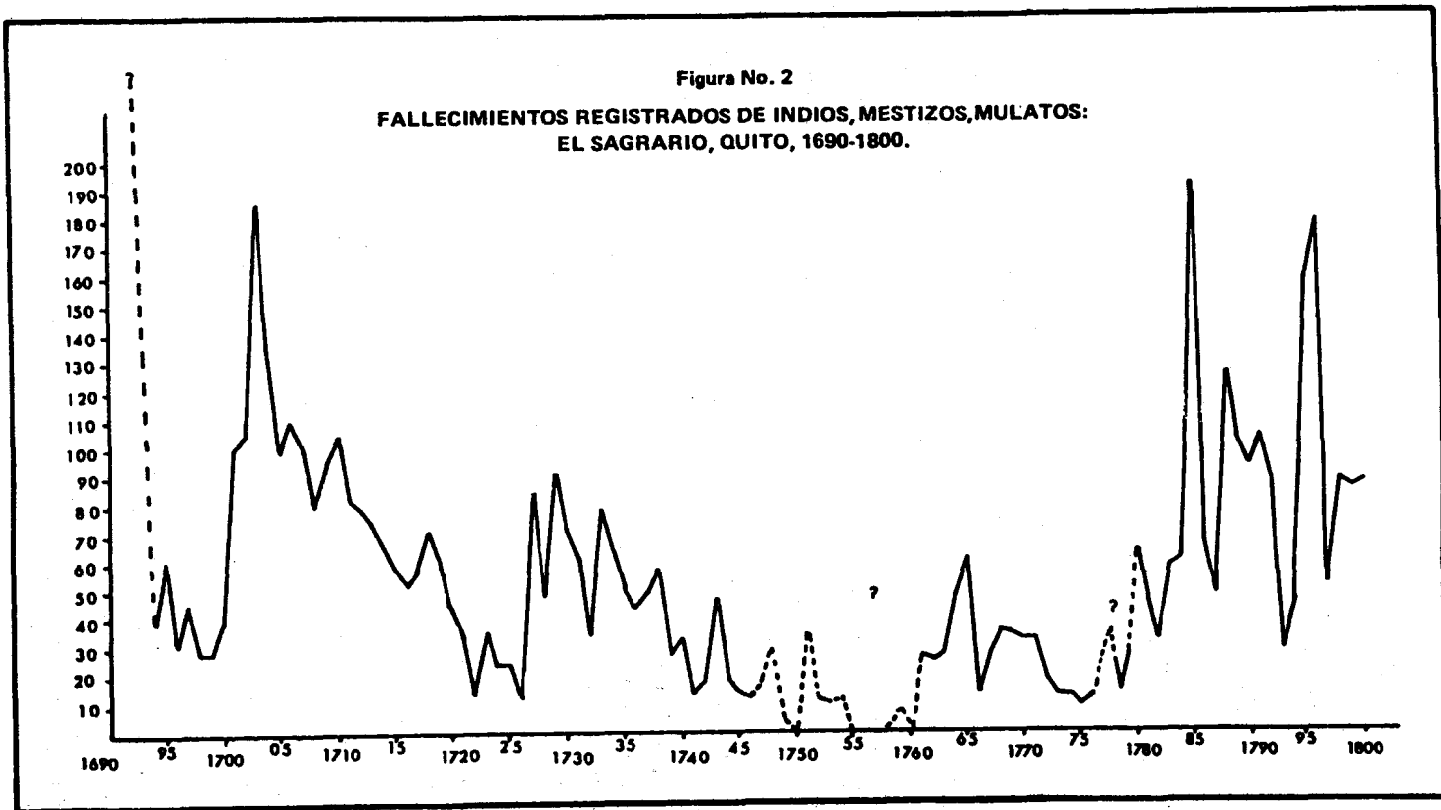
39. R.B. Tyrer, *op. cit.* p. 82. The auction value could obviously be affected by other factors such as the capacity of bidders to play.

40. R.B. Tyrer, *op. cit.* p. 62.

41. M. Minchom, « Urban Popular Society », *op. cit.* p. 197 ff.

42. *Ibidem*.





In integrating the trends noted here into the overall pattern of demographic change of the Audiencia, we may stress the matter of chronology. Quito's population decline is less an eighteenth century phenomenon than a seventeenth century one, specifically under the impact of the 1690's epidemic: its subsequent history is one of recovery and stability, although there is further urban recession towards the end of the eighteenth century. The central Sierra initially follows much the same rhythms – there is the same epidemic impact in the 1690's, there are broadly similar periods of recovery, such as the 1750's, for example – but in the latter part of the century the paths diverge and the urban recession of the central Sierra is considerably more pronounced. If we compare the long-term evolution of Quito during the period 1740-1825, for example, we find a fall in Quito's population from around 30.000 to rather under 20.000 in the early nineteenth century. Although this was a considerable change, it was at a period of urban recession throughout Spanish America, and it was less important than those registered for the central Sierra (5.000 to 2.200 for Latacunga, 4.000 to 2.000 for Ambato and above all 8.000 to 2.500 for Riobamba). These figures corroborate the data presented in the previous section concerning the comparability of the central Sierra with the rest of the Audiencia. And although the Quito material has been given emphasis here, Loja with its stable population growth, albeit from a low base, provides another example which contrasts with the experience of the central highlands<sup>43</sup>.

4. This concluding section brings together a number of themes which interrelate directly with the material examined above, and will serve both to pull together the threads, and to develop this discussion of the demographic evidence. The intention here is to extend the scope of the paper and sketch a series of questions, rather than to enter into exhaustive discussion.

We emphasized above the obvious and essential point with regard to the stagnation of the urban centres and the differential rates of urban growth and decline in different parts of the Audiencia. The process of ruralisation is in fact somewhat understated in the graphs charting the evolution of cities such as Quito and Loja, because the growth in the eighteenth century of the more central and genuinely urban parishes (in Loja, the Sagrario and San Sebastián) at the expense of outlying Indian parishes (San Juan del Valle in Loja, San Roque in Quito<sup>44</sup>) constituted a veiled form of ruralisation.

Nevertheless, the significance of urban recession requires examination, and its implications should not be over-dramatised. A close reading of the Villalengua enumeration for Quito, for example, suggests that part of the variant reading in the two censuses between city and hinterland lies in the question of urban-

43. M. Minchom, « Historia demográfica », op. cit.

44. It has only been possible to include part of the parish data I collected in Figures 1 and 2, the inclusion of some data on San Blas and Santa Bárbara was intended to « control » the data on the Sagrario. Sr Don Jorge Moreno Egas informed me about the decline of San Roque. For this concluding section, general points are not referenced where they synthesize information I have examined elsewhere.

rural classification. This would help to explain why the Villalengua *padrón* classified 30.1 % of the urban population and 79.5 % of the rural Five Leagues as Indian in 1781, while the official series classified only 24.1 % of the city but 92.4 % of the Five Leagues as Indian<sup>45</sup>. The symbiotic relationship of city and country meant that short-term and seasonal movement certainly took place on a scale which the static nature of the censuses, as a series of still-photos, had difficulty in catching. We may take note of Cushner's early eighteenth century labourer Pascual, who worked on the Jesuit estate of the Chillos, while his wife lived in Quito<sup>46</sup>. At an individual level, the complementarity of urban and rural labour requirements could not be more nicely illustrated. And the example helps to illuminate the sex ratio recorded in the censuses of a masculine dominated countryside and a female dominated city<sup>47</sup>. The inverse correlation of changes in urban and rural sex ratios in the censuses of Quito and its Five Leagues underlines the demographic interdependence of city and countryside, the city continually absorbing and « rejecting » its rural population.

Unlike the central highlands, Quito's immediate rural hinterland had a surplus of men ; the « pull » of the capital on its rural hinterland for domestic feminine labour helps to explain this, but also suggests that this region was indeed losing less (through out-migration – which was essentially masculine) than Riobamba, Ambato and Latacunga. The fact that the male-female ratio in Quito appears to have been changing even before the Wars of Independence also suggests that this was due to the deep-rooted factor of inter-regional migration rather than to masculine mortalities in war<sup>48</sup>. The wars do not in fact make much of an impact in the parish records except for the documented abandonment of Quito by its elite when the city was taken in 1812, after which baptisms drop markedly in the upper-class parish of the Sagrario<sup>49</sup>. However, the more typical parish of Santa Bárbara revealed no such major change, with the exception of a post-war « baby boom » in 1823<sup>50</sup>.

The feminine preponderance in the urban centres, noted above, merits our attention. Domestic service, male migration, and tribute evasion must have been among the most notable explanations, but it is interesting to note that Juan and Ulloa had already observed this phenomenon around 1740<sup>51</sup>. Here we will note

45. Evidence from the parallel censuses cited above.

46. N.P. Cushner, *Farm and Factory. The jesuits and the Development of Agrarian Capitalism in Colonial Quito*, New York, 1982, p. 128. In a paper given at the « Ecuador » congress in Quito in 1986, Hamerly stressed seasonal urban-rural migration in the guayaquil region for the cacao harvest.

47. For the male-female ratio, cf. M. Minchom, « Urban Popular Society », *op. cit.* pp. 206-14.

48. *Ibid.*

49. For the « spectacle » of Quito as a « dead city », A. Ponce Ribadaneira, Quito, 1809-1812, Madrid, 1960, p. 109. Cf J. Moreno Egas, *Vecinos de la Catedral de Quito bautizados entre 1801 y 1831*, Quito, 1984, for the baptismal figures in the Sagrario.

50. White baptisms were 117 in 1819, 138 in 1820, 115 in 1821, 127 in 1822 and 172 in 1823 before falling back to 122 in 1824.

51. Juan Antonio de Ulloa, *Relación Histórica del Viaje a la América Meridional*, (Madrid, 1978) : 372.

some of the consequences, one of the clearest of which in the case of Quito was a high proportion of single women and an extremely high illegitimacy rate<sup>52</sup>. The changing male : female ratio was reflected in changing patterns of property ownership. In 1768, 41.3 % of houses appear to have been owned by women in the parish of Santa Bárbara, a proportion which had risen to 58.2 % in the parish by the time of the 1831 census<sup>53</sup>. Women played a major role in late-Colonial riots throughout the Audiencia and this evidence may help to explain why. When we find the women of Baños, for example, resisting fiscal reform, this must owe much to the centrality of women in the household economy, but also to their small-scale market activity<sup>54</sup>. In societies where migration meant that men were often absent, whether permanently or seasonally, the demographic preponderance of women must have been translated into a distinctive socio-economic position of which the documentation can only provide hints.

Next, a number of points about the ethnic composition of both capital and Audiencia may be noted. Figure 1 poses a number of problems with regard to ethnic change, notably the width of the category of « Indians, Mestizos and Mulattoes » in the baptismal records of the Sagrario. In this respect, the figures for San Blas and Santa Bárbara are initially more revealing, showing the great fall in the Indian population of the city during the eighteenth century. The low proportion of the urban population which was Indian around 1780 confirms this process, as well as emphasizing the urban-rural contrast in demographic structure, the rural district being overwhelmingly Indian.

This change in the ethnic composition of the city can be attributed to selective epidemic impact, the stagnation of the urban economy, and ethnic change as well as a low rate of natural increase. On the Quito evidence there are long-term structural factors leading to the progressive diminution of an urban Indian population, unless this is renewed by new migrants. With regard to the contradictory evidence of the Sagrario, I believe it monitors two independent processes, a) the absolute decline of the urban Indian population and b) the growing selectiveness of the category « white » which meant that the Mestizos and poor whites were progressively pushed out of the baptismal category of « blancos... » which became increasingly reserved for the white élite. Up to about the 1730's, Figure 1 shows a major fall in the Indian population ; thereafter I believe this process, which may have slowed down around that date, was being hidden by this independent factor. Some confirmation of this is clear from the social exclusive-

52. e.g. Santa Bárbara, 1760, white baptisms : 57 legitimate, 36 illegitimate and 20 « expósitos ». The figures were consistently higher than Bromley found for the central Sierra.

53. The 1768 *padrón* was published in *Museo Histórico*, (Quito), 56 (1978), pp. 93-122. The 1831 *padrón* is vol.64 of the AM/O.

54. For the riots see S. Moreno Yáñez, *op. cit.* For the market-women, cf. M. Minchom, « La economía subterránea y el mercado urbano : pulperos, « indias gateras » y « recatonas » del Quito colonial (siglos XVI-XVII) », *Memorias del Primer Simposio Europeo sobre Antropología del Ecuador*, Bonn-Quito, 1985, pp. 175-187.



ness apparent in J. Moreno's recent transcription of white early nineteenth century baptisms<sup>55</sup>.

Table 3, which presents data from the Villalengua series, confirms the density of the Indian population in the Highlands. The three lowest recorded totals for the Indian population come from the extreme north and south of the Audiencia (where there was a black presence not specified here), and from Quito, where it was proportionately diminished by the white population of the capital. These low totals, all for areas with relatively small Indian populations today, allow us to pose the question of the long-term survival of Indian communities in the Audiencia. The role of the hacienda in threatening that survival has long been recognised, and perhaps overstated even if the forms of landholding are obviously important<sup>56</sup>. The great hacienda appears irrelevant to the question for the Loja area, for example, which was strikingly characterised by a dispersed, highly mobile Indian population. Throughout the eighteenth century, the region appears to have attracted a modest Indian in-migration, but in a two-way process this was offset by cultural *mestizaje*. It is interesting to note that the Indian population fell from 58.7 % (or 53.9 % according to the alternative series) to 44.6 % in the period 1780-1840, but this way by no means exceptional<sup>57</sup>. It would be more accurate to argue that ethnic change was a more long-term inheritance: of mining, for example, with its destructuring effects, and of demographic mobility in a region which did not have strongly structured « host » Indian communities to absorb newcomers. In the case of the city of Quito it is possible to chart some of the pressures to which Indian communities in the vicinity of the capital were subject<sup>58</sup>.

Although the principal conclusions have already been stated, it is appropriate to re-emphasize the revised population totals which were given above. In one sense, by raising the 1780 figures, they appear to underline the subsequent demographic stagnation of the Audiencia. On the other hand, once a regional breakdown of the figures is carried out, it is clear that the worst of the Audiencia's decline is relatively localised. We can speak of centrifugal demographic tendencies away from the central Sierra, but not in fact exclusively to the coast. The modest redistribution of population within the highlands underlines the Audiencia's growing economic and political ties with New Granada, and away from the southern and central Andes.

55. J. Moreno Egas, *op. cit.*

56. E. Grieshaber, « Survival of Indian Communities in Nineteenth Century Bolivia: A Regional Comparison », *Journal of Latin American Studies*, 12 : 2 (1980), pp. 223 ff.

57. 1840 total from Yves Saint-Geours, « La provincia de Loja en el siglo XIX », *Cultura, Revista del Banco Central del Ecuador*, (Edición monográfica dedicada a la Provincia de Loja), 15 (Quito) (1983), p. 228.

58. M. Minchom, « Urban Popular Society », *op. cit.* p. 54 ff.

*Table 3 :  
Indian and non-Indian population of the Audiencia c 1780*

Région	Vecinos	Blancos etc.	indians	%Inds	Total
Ibarra	1.394	8.232	15.639	65.5	23.871
Otavalo	1.800	7.490	30.407	80.3	37.897
Quito	5.657	24.529	42.204	63.3	66.733
Latacunga	2.203	10.345	38.673	78.9	49.018
Ambato	3.156	13.128	28.209	68.3	41.337
Riobamba	3.145	15.279	51.548	77.2	66.827
Guaranda	1.401	5.182	10.522	67.0	15.704
Alausí	791	3.610	13.671	79.1	17.281
Cuenca	5.366	27.717	59.959	68.4	87.673
Loja	2.384	11.949	17.008	58.7	28.957
<b>Total</b>	<b>27.297</b>	<b>127.461</b>	<b>307.840</b>	<b>70.74</b>	<b>435.301</b>

*Source* : the Villalengua enumeration, AGI Quito 381.412

## ABBREVIATIONS

AGI	Archivo General de Indias, Sevilla
AM/Q	Archivo del Municipio, Quito
ANB	Archivo Nacional, Bogotá
ANH/Q	Archivo Nacional de Historia, Quito
AP/Q	Archivo Parroquial, Quito.