

Demographic Changes in the Mining Community of Muzo after the Plague of 1629

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AS WE KNOW, the rapid decline in the aboriginal population of the Indies resulting from the Spanish occupation alarmed the authorities. Though the government attempted to halt it by means of a long series of legal measures, these evidently had little effect. Chroniclers and informants, for their part, tried to explain away the decline with a "plague" theory, that is, epidemics which periodically descended on the New World and particularly affected the Indians.

Even today many authors subscribe to the plague theory. One declared recently that "the amazing mortality rate [of the native peoples] has been nature's means of eliminating those individuals who were genetically and constitutionally liable to contract diseases from which they were unable to recover."¹ To him the medieval notion of a plague visited on the human race as a divine punishment becomes a modern technique used by wise Mother Nature to exterminate certain groups while others are preserved. Some historians who do not accept this deterministic attitude nevertheless consider the plagues to be the principal cause, or at least an important factor, in the dwindling of the aboriginal population, although they must be aware that invasion by a colonial power creates in a primitive society conditions under which the subjugated individuals are more susceptible to disease and even minor infections.²

This is not to say that colonial America was free of epidemics. But the objective historian should not accept colonial reports of their frequency, endemic nature, and destructive role without looking for supporting evidence. Real epidemics leave many documentary traces. One might expect, for instance, that the census of a given period

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¹ Julio R. Romani Torres, "Datos para la antropología femenina de los Yaguas de la Amazonia Peruana," *Boletín americanista*, Año III, Nos. 7-9 (1961).

² Jaime Jaramillo Uribe, "La población indígena de Colombia en el momento de la Conquista y sus transformaciones posteriores," *Anuario colombiano de historia social y de la cultura*, I, No. 2 (1964), 239-284.

would show a sudden irregular drop. Encomenderos would petition for new encomiendas or for increased tributes, or Indians might sue for a tribute reduction—pointing to the plague as justification. The same reason would be adduced if a Spanish settlement were relocated, Indian doctrines reorganized, or Indian reservations merged. However, although there is an abundant record of such events in the Indies, the plague is, in fact, rarely blamed for them. At the same time, there are numberless documents which definitely attribute the decrease of the Indian population to excessive work, malnutrition, flight, segregation of the sexes, ill-treatment, cruelty, conscription for expeditions, enslavement, the mita, etc. Hundreds of archival documents invariably refer to these factors rather than to plagues as the cause of the decline.

While working on the history of the Quimbayas,³ I established that in 1546 the province of Cartago in New Granada was not visited by the plague, as the otherwise reliable chronicler Cieza de León would have us believe. For none of the successive official visitors to the region alludes to it, nor is it mentioned in any of the numerous petitions made by the citizens of Cartago—such as petitions for the importation of Negro slaves. The same may be said regarding the province of Tunja. In the inspection records which cover the period from the sixteenth to the eighteenth centuries, there is only one mention of a plague.⁴ In 1560 the cacique of the encomienda of Suta reported to the auditor Tomás López that before the smallpox the Indians paid tribute of 20 blankets and six *pesas* of gold (reduced after the epidemic to four *pesas*).⁵ It seems clear that the epidemic was purely local, and that it had limited consequences. It is significant that the neighboring Indians make no mention of a plague, and that there was no general decrease of the tribute rate in the province of Tunja. Nevertheless, the chroniclers have insisted on three epidemics in that province, so severe, they say, that one of them exterminated whole sections of the population, while the other two killed one-third and one-fifth respectively of the inhabitants.⁶ The wide dispersion of communities or tribes in New Granada, the different

³ Juan Friede, *Los Quimbayas bajo la dominación española* (Bogotá, 1963).

⁴ Archivo Histórico Nacional. *Visitas a Boyacá*, Tomos I-XIX (hereafter cited as AHN).

⁵ AHN, Tomo XVIII, fol. 148.

⁶ Pedro Simón, *Segunda parte de las noticias historiales de las conquistas de tierra firme en las Indias Occidentales*. Noticia 7, Chap. XXXIX, tells of a universal epidemic of smallpox that included Peru and Chile and destroyed one-third of the population "both Spanish and native." In 1617 another epidemic, measles this time, killed "one-fifth of the natives."

climates of their habitats, and their relative isolation, even after the Conquest, were undoubtedly an obstacle to the spread of epidemics.

The 1629 records of Rodrigo Zapata, notary of the Bogotá audiencia, for the provinces of Muzo and La Palma (famous for their emerald mines worked exclusively by Indians) illustrate what a real plague was like and how it was reflected in contemporary documents.⁷ Zapata's visit was ordered by the audiencia on June 12 of that year, in answer to a petition made by the encomenderos. The epidemic had reduced the Indian population and, consequently, the tribute payments, to such an extent that the encomenderos refused to cover the expenses of religious indoctrination in their area. It was necessary to reorganize the doctrinas, to set new stipends for priests and friars, and to redistribute the expenses among the encomenderos according to the number of tributaries left to each. Encomienda and mining crew lists show that the total Indian population of Muzo, which consisted of 9127 individuals in 1617, had fallen to 4866 in 1629—a reduction of 4261, or 46.6 percent. And the decrease of tributary population was equally impressive: from 2532 “useful” individuals in 1617 to 1486 in 1629—a reduction of 940, or 41.3 percent. That such a catastrophic change in the situation should have demanded the reorganization of doctrinas and the redistribution of expenses among the encomenderos is understandable. This was the object of Rodrigo Zapata's visit.

We have no such detailed information for the neighboring province of La Palma that was also hard hit by the epidemic. Antonio Agudelo, registrar of the audiencia, gave only the number of “useful” Indians, in other words, the tributaries.⁸ According to his information in 1617, there were 1539 tributaries. By 1629 the total had fallen to 1182—a decrease of 357, or only 23 percent. A comparison of the percentages shows that the population decrease was 50 percent lower in La Palma than in the neighboring region of Muzo and demonstrates how difficult it is to generalize on the influence of a plague.

These two examples demonstrate that:

1. Data on plagues given by contemporary chroniclers must be used cautiously when not corroborated by reliable documents. It should be remembered that the medieval belief in divine punishment was still strong in the seventeenth century, thus facilitating generalizations with respect to its effects, and that there was a real interest

⁷ The dispatches are to be found in the AHN, Tomo VI, fol. 1-533. Only one encomienda, Cañaveral, belonging to Gonzalo de León Venezo (AHN, Tomo VI, fol. 75) is composed of one Indian and 26 Negroes. We have not taken this encomienda into our accounts.

⁸ AHN, Visitas de Boyacá, Tomo VI, fol. 480.

on the part of Spanish settlers in explaining away the consequences of the colonial regime by adducing causes beyond human control.

2. When there were epidemics in Spanish America, these were neither general nor of identical consequences throughout the regions affected, contrary to what might be gathered from reading the various reports and chronicles of the colonial era.

The list of Muzo encomiendas and their mining crews provides useful material for the study of various aspects of these colonial mining communities. It reveals the proportion existing between tributaries and the total number of inhabitants of an Indian community. This proportion can be used as a rough guide for determining with some degree of accuracy the total Indian population in a hot, unhealthy mining region, such as is the territory of Muzo, when only the number of tributaries is known. This aspect is of special interest in relation to New Granada, where there were many mining regions with an ecological situation similar to that of Muzo (e.g. Antioquia, Chocó, Cauca, and Nariño), and where an identical system of exploitation of Indian labor prevailed until Negro slavery took its place.

This same proportion facilitates the study of another important factor, namely, the family structure of a community. If we assume that for every adult man there is one woman of similar age, the remainder of the population would represent those exempted from tribute, the "non-useful"—the *reservados* (caciques, and, sometimes, captains), the aged (those older than 50 or 55), the infirm (blind, maimed, lame, diseased), and, principally, the *chusma* (young children). Thus a high ratio of total population to tributaries indicates large families, whereas a low ratio shows the contrary. The figures make it possible to determine whether the life of a community is vigorous or decadent. These are the statistics for Muzo: In 1617 there were 2532 tributaries from a total population of 9127—a ratio of 1:3.6. In 1629 the population was 4866 and the number of tributaries 1486—a ratio of 1:3.3. The average ratio of total population per tributary is 1:3.45, indicating that the epidemic had not appreciably affected this proportion. This ratio is much lower than in the agricultural communities.⁹ It points to small families in the mining communities, for the number of Indians free of tribute—including children—does not even reach that of the adults (2 adults and 1.45 *reservados*). It reveals a decay of the family structure, and consequently of the community as a whole. Undoubtedly this decline was

⁹ See Juan Friede, *Los Quimbayas* and "Algunas consideraciones sobre la evolución demográfica de la provincia de Tunja," *Anuario colombiano de historia social y de la cultura*, I, No. 3 (1965).

due to the mining economy, the destructive character of which is confirmed by many colonial reports and by legislation. Mining had these consequences: A need for providing a food surplus for the agriculturally nonproductive mining crews, entailing an intensive exploitation of the other *encomienda* Indians; breakdown of the family as a result of the forcible removal of adults for work in the mines; enforced and arduous portage of supplies over mountain trails on the backs of *encomendados*—men and women alike; high death rate of children and old people because of neglect; physical decay of the entire population through undernourishment and overwork.

A comparison of the ratio of tributaries to total population in the large and the small *encomiendas* of Muzo is revealing. In the ten largest *encomiendas* the figures for 1617 show 1013 tributaries from 3752 individuals (a ratio of 1:3.69). For 1629 there were 514 tributaries from a population of 1724 (a ratio of 1:3.43). The mean ratio of the two years was 1:3.56. In the ten smaller *encomiendas* the corresponding figures are 114 of 295 in 1617 (a ratio of 1:2.58) and 59 of 162 in 1629 (a ratio of 1:2.74). The mean ratio for these *encomiendas* was 1:2.66. This difference shows that, with reference to family structure, the larger *encomiendas* were much more "normal" than the smaller ones. In the former there was an average of 1.56 non-tributaries for every two adults, while in the smaller *encomiendas* the average was only 0.66. If Indian communities in the larger mining *encomiendas* were in a state of biological decline, those in the small ones were on the road to extinction—their offspring could not counterbalance the shrinkage of the adult population, even if this were due only to death from natural causes.

Further research must confirm or disprove the general validity of the foregoing conclusions. Meantime, it is evident that the smaller *encomiendas* harmed the Indians more than the larger ones, either because in the former the individual was more ruthlessly exploited or because in them he lacked the backing of a large community and had no means of defending himself against the tyranny of his masters. The tendency of Spanish legislation to put an end to the micro-*encomiendas*, of which the number was steadily increasing in the seventeenth and eighteenth centuries, by uniting them with larger ones or amalgamating several, had social motives, although the official reason was to facilitate indoctrination in the Catholic faith.¹⁰ The differences noted between the tributary ratios of the larger and smaller *encomiendas* are additional evidence of the dependence such

¹⁰ A royal *cédula* of December 20, 1717, in reference to Peru (AHN, *Visitas de Boyacá*, Tomo VII, fol. 11) ordered that the *encomiendas* have at least 25 Indians, and that those that had a smaller number be transferred to the Crown.

ratios have on structurally conditioned social and regional factors, rather than on some "innate vitality," "biological force," or "natural growth tendency" of this or that tribe.

Even more revealing is a study of the composition of Indian mining crews in Muzo. In these, the tributary ratio is still lower than that found in the smaller *encomiendas*. In 1629 there were 241 tributaries from a population of 568 (a ratio of 1:2.43). The proportion is thus of two adults for barely 0.43 other Indians, as against an average of 2:1.56 in the larger *encomiendas* and 2:0.66 in the *microencomiendas*. It is no longer a question of a declining community, but rather of one that is actively disintegrating. There are no children or old people in the mining families.

It is interesting to note that the terrible loss of life occasioned by the Muzo and La Palma epidemic hardly affected mining operations; in fact the records indicate that in 1617 there were 26 mining crews with 254 Indians, while in 1629, 27 crews included 251 Indians.¹¹ Because the numbers of crews and of miners remained essentially unchanged, it would seem that the industry was virtually undisturbed by the plague. Evidently the miners who died were promptly replaced with other Indians from the *encomiendas*. But to call these latter *mitayos* is inaccurate. This term refers to Indians assigned by the authorities to work on specific tasks and during a specific time, and their number—theoretically at least—was proportional to the total number of members of the community. Had the Indian miners of Muzo been true *mitayos* their number would have shown a decrease corresponding to that suffered by the whole of the *encomienda* population. It is obvious that this did not occur in this case because the number of miners and crews remained the same. This is one of the many instances of the *encomenderos*' arbitrary measures, which were winked at by the authorities in order not to hamper the all-important mining activities. The *encomiendas* represented the storehouse that furnished human material and filled in the gaps left by death. This situation, however, could not last indefinitely. The continued decline of the Indian population in the seventeenth century eventually emptied that storehouse. In the Itoco Hill mine (which is still in operation) there were only 21 crews with a total of 117 Indian miners left in 1642.¹² The organized operation of the Muzo mines ceased toward the end of the century. At the same time the Indian communities of Muzo and La Palma became extinct. It was the hard mining life, not the plague, however, that was the chief cause of their demise.

¹¹ AHN, *Visitas de Boyacá*, Tomo VI, fol. 356.

¹² AHN, *Visitas de Boyacá*, Tomo XVI, fol. 966.