Who Really Killed Off the Aztecs?

by Carlos Cota Meza

vast number of studies has been produced during the twentieth century, containing the most absurd demographic theories regarding ancient Mexico, all part of an obsessive attempt to demonstrate that the Spanish conquest, colonization, and evangelization of the New World was a horrendous act of genocide committed against the Indian populations found there.

The majority of those studies inflate by nearly one order of magnitude the number of inhabitants of Aztec Mexico whom Hernando Cortés found in 1521, in order to conclude that their "disappearance" fifty years later was the product of "genocide." The truth is that the majority of those people never existed—except in the imaginations of our modern-day anthropologists.

Cloaked in pseudo-scientific terminology, demographers of ancient Mexico employ the term *population-density* as if it meant nothing more than counting up the number of inhabitants possible per square kilometer, as if one were counting the number of head of cattle enclosed in a corral.

The term population-density has never meant that. The term is rather used to determine the relationship of the human being, at any particular stage of development, with nature or with that portion of territory where he is dominant, and to analyze whether the reproduction of the human species in that area of the globe under analysis is successful or not. Today, the concept of population-density has been scientifically developed by economist Lyndon H. LaRouche, Jr. and is known as potential relative population-density (SEE box). 1

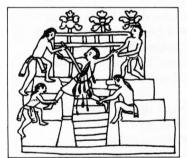
Human beings cannot be counted like cattle or sheep, but rather are to be analyzed from the standpoint of how they came to be lords over nature, and what technical means are at their disposal for the successful reproduction of their existence. Based on anthropological and archaeological evidence, as well as on the study of ancient means of production, a general table of population-density for humanity at different levels of its development can be determined.

At the level of development of the hunting and gathering society so frequently idealized today, at most, one

inhabitant could be maintained per square kilometer. With the transition to domestication of animals and to agriculture, humanity increased its population-density to eight inhabitants per square kilometer. Maximum development reachable at this primitive agricultural level was approximately 20 inhabitants per square kilometer.

Modern agriculture has increased population density to approximately 100 inhabitants per square kilometer. While hunting and gathering could maintain a population of at best 10 million inhabitants on the Earth, modern agriculture has raised the potential relative population-density of the planet to some 10 billion.²

Applying this methodology to ancient Mexico, we discover that the Indian population could never have been the 20-30 million inhabitants the neo-demographers imagine; nor did the Indians enjoy a happy existence in harmony with nature. Thus, the European conquest, colonization, and evangelization did not produce the "genocide" that is cunningly attributed to them.



Absurd Numerology

IN THE BOOK Mexico-Tenochtitlán: Economy and Society in the Sixteenth Century, author José Luis de Rojas

presents a synthesis of more than a score of essays, by more than one dozen writers. Apparently, the bible of ancient Mexico's neo-demographers is the tract written by Woodrow Borah and Shelburne F. Cook, *Essays on the History of Population, Mexico, and California*. All the essays are intended to demonstrate "the prolonged decline of the Indian population, caused by the Spanish conquest."

The figures given for the total population of pre-Hispanic Mexico have always widely differed, fluctuating between 3.3 million and 30 million. For the city of Tenochtitlán (a small island of 13.5 square kilometers),

Potential Relative Population-Density

The increase of man's power over nature is most easily measured as a decrease of the habitable land area required to sustain an average person. This measures the economy of labor in a most effective way; this measure can be applied to each and all forms of society without regard to the wide assortment of distinctions in internal culture and structure among societies in general.

The name for this measurement is, in first approximation, *population-density*. Given, a society's level of technology in practice, how many persons can be sustained, per square kilometer, solely by means of the labor of that society's population?

However, before we proceed to measure, we must make certain adjustments in our definition of population-density.

First, land varies in quality for human habitation. This variability is threefold. Relative to any technological level of culture, various pieces of land vary in quality of suitability and fertility for human habitation and other use. However, human habitation does not leave land in a permanently fixed condition. The quality of habitability and other use is worsened by effects of depletion; the quality is improved by means including irrigation, fertilization, and so forth. Finally, a change in technology is a change in the qualities of land most suitable for human use. These three kinds of interacting variability of quality of land must be taken into account in comparing the "habitability" of one square kilometer of land with another. These three considerations define the variable quality of land as relative value of a square kilometer.

Instead of measuring simple square kilometers, we must measure *relative square kilometers*. We must measure, therefore, *relative population-density*.

Second, there is usually a significant difference between the size of population which could be supported with existing levels of technology, and the current size of the population. It is the former which we must measure in comparing different levels of technological development of cultures. We must measure the *potential* population, defined in this way.

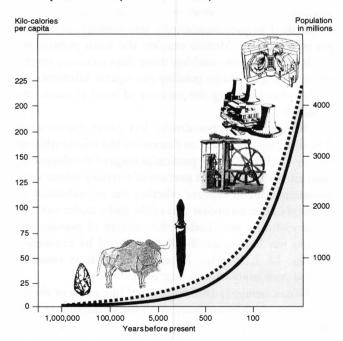
We must measure the potential relative populationdensity. This is the rough measure of the superiority of one level of culture over another. This is the measure of economic progress; it is the measure of economy of labor.

—Lyndon H. LaRouche, Jr., from So, You Wish to Learn All About Economics?

the neo-demographers calculate a population of between 260,000 and 300,000 inhabitants.

The way in which they calculate population is absolutely absurd. They multiply by five the number of warriors mentioned in the chronicles of the conquistadors, and multiply by six the number of houses said to have been there, as if Aztec Mexico could have sustained six-person families like the families of 1960's Mexico, when the population growth rate was nearly four percent a year! Using another measure, they come up with an arbitrary coefficient taken from the supposed number of taxpayers, to whom are attributed a supposed number of dependents, less a presumed number of the tax-exempt.

After feverish numerological calculations, they then extrapolate estimates for the sixteenth century, based on population structures of the twentieth. De Rojas says that Cook and Borah "assumed that the Mexican population of 1930 should hardly differ in its composition from the pre-Hispanic, which seems basically correct to us." Then, for example, based on a 1950 demographic pyramid, he indicates that "we can suppose, operationally, that among the pre-Hispanic Aztecs, the number of men and women was practically balanced"—an impossible assumption for any ancient society.



Time Line of History

Paleontological history, to about 5,000 years ago, was characterized by stone tools and gradually improved methods of hunting and gathering. In Archeological history, the agriculture of the Bronze Age was developed. In the remaining 2,500 years before the present, introduction of fossil energy sources and atomic energy has increased the relative potential population-density by three orders of magnitude.

So fantastic are such assumptions, that we could equally assert that the Aztec priests applied anesthesia to their victims before ripping out their hearts. But as we are dealing with a "demonstration" of how the Spanish conquest unleashed the prolonged collapse of the Indian population, the authors do not bother with trifling details.

Cook and Borah do a study of 206 towns, finding that between 1568 and 1646, the total population fell from 1,321,329 to 303,717. With the greatest cynicism, they admit that they did not take into consideration the possible construction of new cities in reaching their conclu-

sions. "To identify these relations and the changes that took place has required quite difficult detective work." It was merely simpler to conclude that the Indian population was exterminated, than investigate its transfer to new centers.

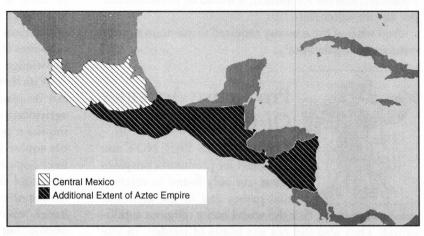
These same authors reach their climax in calculating total population. In central Mexico, they conclude that there lived 25 million people. Further, they estimate that "the average density of the Indian population was 49 inhabitants per square kilometer."

The central Mexico they are considering is bordered to the northwest by the Lerma-Santiago River, in the northeast by the Sierra Madre Oriental, from the Moctezuma River flowing out of the Panuco River down to a point where the state limits of Veracruz, Puebla, and Oaxaca join (near Cotaxtla). The southern border can be found on the southern banks of the Balsas River, and from there up the Pacific Coast to the borders of Michoacán, Colima, and Jalisco states, a point near Lake Chapala (SEE Map I).

The current estimate of the surface area of this region is 219,915 square kilometers, which—for the population calculated by Cook and Borah—yields a population-density of 116 inhabitants per square kilometer—more than twice that registered in 1985, which was 40.4 inhabitants per square kilometer for an equivalent area!

Ah, but if one adds the territory down to Guatemala, El Salvador, and Nicaragua into one's calculations—which is how far the Aztec Empire extended—one will add another 278,282 square kilometers to the original 219,915. We then arrive at a total land mass of 498,197 square kilometers, with a population-density of 50 inhabitants per square kilometer.

What these pseudo-scientists have done is to take their hypothetical figure of numbers of inhabitants calculated over a much larger area, and then "concentrate" their



MAP I. Aztec Empire: central Mexico and additional territory.

density into a much smaller area.

In a similar way, by confusing the Valley of Mexico with the city of Tenochtitlán, they give the latter a value of 300,000 inhabitants concentrated in 13.5 square kilometers, thus assigning to each inhabitant 45 square meters in which to live! If the inhabitants were 200,000, they would each have been granted 67.5 square meters. With a glimmer of honesty, de Rojas wonders, "Up to what point are these figures acceptable?" Other authors give Tenochtitlán a population which could hardly reach 80,000. Even if this were truly the population-density, it would be greater than that attributed to today's Mexico City and its outlying regions, the largest city in the world!

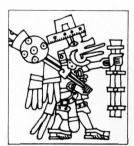
The truth is that the plains of the Valley of Mexico measure 4,300 square kilometers, which, with a population of 300,000 inhabitants in the entire valley, would yield a density of 69 inhabitants per square kilometer. Considering a population of 80,000 for the whole valley, the density would be 18 inhabitants per square kilometer—a reasonable density, in accordance with the productive activities of the period. A population of 300,000 for the Valley of Mexico in the sixteenth century, on the other hand, means a density greater than that registered in any state of the Mexican Republic, according to the 1990 census.

But as the neo-demographers of ancient Mexico are the first to admit, they are not trying to establish exact figures, but to charge the Europeans with ethnocide.

If we began the other way around and, taking nothing more than the area of central Mexico, we applied to it different population figures than those just mentioned, we would have, for 25 million inhabitants, a population-density of 116 inhabitants per square kilometer; for 18 million it would be 83 inhabitants per square kilometer; for 11 million, it would be 51 inhabitants per square

kilometer; and for 3.3 million, it would be 15 inhabitants per square kilometer.

And what of the *economy* required to maintain a given number of inhabitants?



Productive Activities Of the Aztecs

THE AZTECS DID NOT use the wheel for productive purposes (these are only found in ceremonial games and in the sacrificial

stones, suggesting that the wheel had a religious significance). They also did not use beasts of burden. In any ancient societies one might examine, the use of these two "technologies" meant a gigantic leap in productivity.

There were certain agricultural settlements, which were exploited in a very rudimentary way with the use of the "planting stick," the most ancient tool for sowing after the hand itself. In the Valley of Mexico, there were found the celebrated floating gardens, which were most extensively used by the Aztecs themselves in Lake Tenochtitlán, since they had no solid land and were permanently surrounded by enemies who did not allow them to venture onto solid land (their crops were corn, beans, pepper, and maguey cactus). Domestication of animals was clearly very limited, as no evidence of animal husbandry was found.

Metal-working was limited to fancy and ceremonial goldsmithing, and the smelting instruments were of stone, which, as is well known, could not be heated to high temperatures. Obsidian and flint stones were used as highly tempered chisels. Mining equipment was very poor. Most domestic utensils were also of stone.

The goods found in the marketplace suggested that hunting by stealth was a widespread practice, and was never abandoned for agriculture and domestication of animals, which requires staying in one place and stable concentration of labor.

The inhabitants of the new continent during the fifteenth century did not include any dairy products in their diet, despite having the opportunity to tame domestic mammals. Animal protein came from the lowest forms in the animal kingdom: iguanas, snakes, amphibians, worms, and larvae. Although the Aztecs practiced cannibalism, they were primarily insectivores. Their vegetarianism was very peculiar: They ate algae from the lakes, which, being in populated regions, received considerable quantities of human waste, causing an enormous incidence of usually fatal gastrointestinal diseases.

The astronomical and mathematical knowledge usually attributed to the Aztecs found no reflection in any

of their mechanical and productive activities. Such knowledge belonged to the most ancient and civilized populations, but did not correspond to the intellectual capacities of the Aztecs. Instead, they used their acquired knowledge for ritualistic purposes.

With these basic productive activities, the Aztec world can be placed approximately at the level of primitive agriculture (and this is a generous interpretation), which implies a potential population-density of 20 inhabitants per square kilometer. Thus, one may conclude that the total population of central Mexico would have been on the order of 4.3-million inhabitants. We could extend the population-density to 25 inhabitants per square kilometer, which would lead to a population of nearly 5.5 million, but there is no evidence that the Indian population could have been 30-, or even 20-million inhabitants, given that there was no economy that could have maintained such a number.

These figures, which could be considered prudent, have always been omitted, precisely because they argue against the dogma of "progressive depopulation."

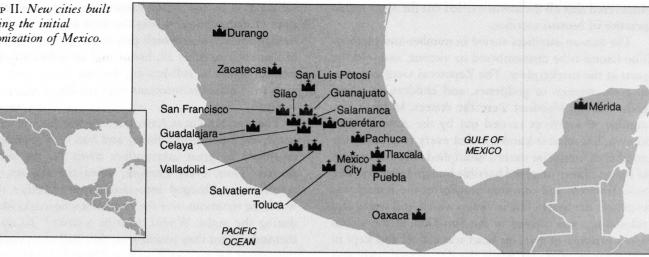
It was necessary to give this New World a new social structure, in which everyone would live under the law; and certainly during this effort excesses were committed, such as the early avaricious mining, which failed completely. Health problems occurred because of the introduction of European diseases, combined with problems such as hunger, and with the diaspora caused by the transition between the freeing of populations under Aztec tyranny and the establishment of the new order. This certainly had an impact, but not such that ninety percent of the population disappeared.

If we assume a population for pre-Hispanic Mexico in accordance with a density sustainable by existing productive methods, we must conclude that there could hardly have been a negative growth rate in the years following the colonization. Rather, quite the contrary occurred, since the Indian population in the pre-colonization period necessarily found itself in a process of extinction, due to its own incapacity to reproduce itself. With the colonization, a slow recovery of the Indian population took place, which became sustained after the first half of the seventeenth century.

This fact is provable simply by considering the effect of introducing large-scale sedentary agricultural exploitation, seeds from the Old World, grazing and reproduction of the animals brought by the colonists, what is generically referred to as a *Christian diet* (meat, bread, butter, and milk, minimally), and above all, beginning in 1524, by the building of cities.

As one can see, Cook and Borah only count the Indian population which lived in *Indian* towns, and their method for obtaining their figures is highly questionable.

MAP II. New cities built during the initial colonization of Mexico.





City Building vs. Perpetual War

AT ALMOST THE SAME time that the alleged "period of progressive depopulation" occurred, an intense process of building new

cities took place (SEE Map II). In 1524, the new city of Mexico was built, together with the surrounding towns of Iztapalapa, Coyoacán and Tacuba; the building of Tlaxcala and Oaxaca began in 1526; the building of Toluca began in 1530, with Lerma as another important center; in 1531, construction began in Puebla, which became the largest city in Ibero-America. This was followed in 1556 by the building of Querétaro. The building of Pachuca began in 1534, followed by Valladolid in 1540.

New areas opened up in 1542, with the founding of Guadalajara to the west, and Mérida on the Yucatán Peninsula. The first settlements in Zacatecas were established in 1547, and 1554 saw the founding of Guanajuato. Even before this, the cities of Celaya, Salamanca, Silao, San Francisco del Rincón, and Salvatierra were founded. Durango was founded in 1563, and San Luis Potosí in 1576.

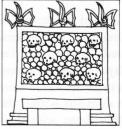
Could such a renaissance have occurred in a society in which there were more deaths than births, and with millions of Indians supposedly dying like flies as they fell from the scaffolding of the buildings?

When the Aztecs arrived in the Valley of Mexico in 1216, the population of central Mexico was made up of wandering tribes and fiefdoms which kept the region in a permanent warlike state of all against all.

As a social, political, and religious grouping, the Aztecs were the product of an increasing social involution which began with the mysterious disappearance of the Olmecs in the sixth century A.D., continuing through the equally mysterious disappearance of the Mayas and Zapotecas in the ninth century. The Aztecs are a product of the destruction of the Toltec culture of the eleventh century, and that of the savage Chichimecas, who were hegemonic before the Aztecs founded Tenochtitlán in 1325.

Prior to 1325, the Aztecs had a history of more than a century of wandering migrations, of bondage to other tribes, and of a life just as miserable as that of others. At the end of the thirteenth century, they bought their freedom from the Texcocos by serving as their mercenary army in the war of the Texcocan nobility against that of Xochimilco.

From here on they dedicated themselves to fulfilling the prophecy which said that the endpoint of their pilgrimage would be when they found an eagle sitting on a prickly pear devouring a serpent. In 1325, the prophesy was fulfilled, when on the site of today's Mexico City, the first temple for human sacrifice, known as the Templo Mayor, was founded, around which Tenochtitlán was built. On the basis of this prophecy, the Aztecs subjugated other populations, and in 1352 established a monarchy which ruled until 1521.



Human Sacrifice And Cannibalism

THE GENERALIZED practice of human sacrifice is one point that cannot be omitted in any attempt to analyze the relationship

of pre-Hispanic man with nature.

From a bit north of the twentieth parallel, down to Nicaragua in Central America, evidence has been discovered that all the towns carried out the abominable practice of human sacrifice.

The human sacrifices varied in number and method. The Otomi tribe dismembered its victims, and sold the parts at the marketplace. The Zapotecas sacrificed men to gods, women to goddesses, and children to infant gods. But the bloodiest were the Aztecs. In truth, the number of sacrifices carried out by the Aztecs is unknown, but what is known is that every four years, the number of sacrificial victims multiplied. The celebration of Fuego Nuevo involved horrible human butchery. The most frequent and common practice of the Aztecs was to extract the heart of their victim which, still warm and palpitating, was offered to the Sun God. If the victim was a prisoner of war, his head was cut off and kept in a storehouse of skulls, while the decapitated body was rolled down the stairs of the temple. If the victim was a slave, the owner collected the body in order to eat the thighs and the arms; the rest was fed to savage beasts and birds of prey which adorned the royal palaces and the homes of the nobility.

In the ceremony to the Mother of the Gods, held on the eleventh month of the Aztec calendar, the woman who represented the god died with her throat slit, on the back of another woman. During the twelfth-month celebrations, the victims died by fire. In one of numerous ceremonies dedicated to Tláloc, children were sacrificed in some "sacred" place in the lake. In another ceremony, children were walled up in caves until they perished from starvation.

Gladiatorial sacrifice held the most "honor": Prisoners of war were tied down by one foot and made to fight against four gladiators.

In Cuauhtitlán, two slaves were sacrificed to inaugurate the ceremony in honor of the gods of fire. Their thigh bones were extracted, and used by the priests as walking staffs. The Aztecs often flayed their victims, and the priests would cloak themselves in the bloodied skins.

The priests did frequent penance, through fasts and permanent cloistering. They also bloodied themselves, piercing their ears, their lips, their tongues, their calves, their arms, and their genitals.

Their idolatrous practices were carried out through a network of priests and priestesses from different orders, who were prepared from childhood, by caste and for life. The priests in the Templo Mayor alone numbered in the thousands. At the top of the social structure were great lords, who controlled entire domains within the cities under the control of imperial tribute, with their own temples and family priests who carried out their own sacrifices.

By the sixteenth century, the native populations under

subjugation by the Aztec Empire were in an absolute state of degradation. It was the total aberration of the human imagination which prevented the reproduction of that society. After all, how could an individual who prayed before a still-beating human heart come up with the kind of innovations required by an advancing society?

The central point of Aztec doctrine was that humanity had lived four distinct times, and had been repeatedly destroyed by great catastrophes when the sun disappeared. Thus, every evening, when the sun set, the Aztecs were plunged into doubt over whether they would be victorious over their enemies who might attack during the night. Would there be a dawn? To assure themselves that they would win, they had to strengthen themselves for nocturnal combat. The only food for such warfare was human blood, which proved indispensable for the survival of their people and led to the ruin of neighboring populations, from which the Aztecs chose the great majority of their victims.

This bloody "worship" was what extinguished all sensitivity from the human soul of the natives, and any sort of loving sentiment toward their fellow man. In their world, the individual soul did not exist. It was this, more than anything else, which prevented the successful reproduction of Aztec society.

The ruin of the Aztec Empire was fated to occur, and it took place as does the destruction of all empires. Every province that the Aztecs subjugated became a new enemy to their dominion. Each one of these peoples awaited the first opportunity to rise up and fight for the independence that they had had before becoming subjects of the Aztecs. By the sixteenth century, the Indian world found itself at the height of a war of each against all. War became the sole driving force, whether provoked by economic or religious factors. Thus, the Aztecs represented the end of the Indian world.

If we wanted to indulge in conjecture, we could say that had the Spanish conquest occurred much later, the Spaniards would have found a few insane survivors scattered across the former Aztec lands, perhaps trying to eat their own arms and legs. Only in this sense is it valid to assert that what happened five hundred years ago was a "meeting of two cultures." The Conquest was, in fact, a fortunate occurrence that permitted the reproduction of humankind to retake its course in these lands.

NOTES

- Lyndon H. LaRouche, Jr., So, You Wish To Learn All About Economics? (New York: The New Benjamin Franklin House Publishing Co., 1984).
- Lyndon H. LaRouche, Jr., There Are No Limits to Growth (New York: The New Benjamin Franklin House Publishing Co., 1983).