

THE URBAN GROWTH PROCESS IN PERU

by

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INTRODUCTION

This report studies the morphology of the representative urban centers in Peru and the forces that contributed to its formation and development throughout history. To this end, the physical structure, lay-out and clustering pattern and land use distribution are investigated for specific cities at different stages of their development.

A brief description of the country followed by the highlight of the process of urbanization until the present is presented first. Then, the physical structure of the selected cities is analyzed using a three-period historic approach. The first period goes from the early presence of the aboriginal human settlements to the arrival of the Spaniards in the 1500's. The second period extends roughly to the turn of the present century, that is, the colonial period. And, finally, the third period covers the present century when cities adopt a complex pattern. In each case a relation is established with specific events that contributed to tipify each stage.

In each period the chosen urban centers are studied in terms of primarily four physical elements: size of the settlement, land use distribution and allocation, lay-out and finally urban features, that is, plazas, open spaces, and so forth.

The point of view with which this study is undertaken then, is that of a physical urban designer concerned with the formation and development of the morphology of the Peruvian cities which, ultimately, will be his working element.

An undertaking of this type of study for Peru is of particular relevance to the author because of his concern about the development of the urban pattern in

his native country, and also because most of the studies dealing with cities in Peru, and in South America, have been generally done from a strict social science approach i.e. urban anthropology, urban sociology etc: but few from the urban designer's approach. As Jorge E. Hardoy states "Urbanization has been presented as evidence of Latin American societies' modernization process and also of their political and economic development, yet, it is a topic about which much has been written, very little research conducted, and still no formal thought given."

It is the desire of this report to provide a point of departure for the study of the physical aspect of urbanization in Peru as a dynamic dimension in the overall development process of the country.

C H A P T E R 1

THE PROCESS OF URBANIZATION IN PERU

Throughout this study, different terms will be used to convey specific ideas that refer to different modifications of the forms in which human habitation takes place. For this reason, some basic definitions will be attempted in the following paragraphs in order to establish a basis for the analysis.

DEFINITION OF TERMS

First of all, the term Human Settlement will be used to refer to any form of physical evidence, man made or otherwise, showing the presence of human use for habitation and survival. This term has been widely accepted since 1976 when the United Nations organized the Habitat Conference in Vancouver (Canada) to study the characteristics of the forms of human habitation throughout the world. This category does not have any implied characterization as to the activities or organization of people residing in any area. There is no reference in this definition as to the rural or urban role in habitation patterns.

Village refers to a human settlement in which the inhabitants are part of a basic societal organization, have certain elements in common and share certain services. It is mostly understood that village inhabitants are devoted to agricultural activities primarily, as well as to hunting and gathering for survival. Since very few people hold specialization in terms of productive activity, the village is associated with the early states of development of a society.

City, refers to a human settlement in which specialization of productive activity takes place in order for the inhabitants to survive. The occupation of most of the people is no longer mainly agricultural but transformative. The patterns of organization of the physical structure of the city follow certain concepts for the provision of internal circulation, and the hierarchization of land uses.

According to Max Weber, a city is analagous to a market, in which product exchange activities take place in a collection of "separated yet relatively concentrated dwellings."¹ Louis Wirth indicates that a city is a "permanent establishment relatively large and thickly populated by heterogeneous individuals...to classify a community as urban on the sole basis of its size is totally arbitrary."² Gideon Sjoberg sees a city as contrasted to a village as "having greater size, density and heterogeneity and including a wide variety of non-agricultural specialists among the most significant are the literati."³

For Harland Bartholomew , (urbanist), the city "...is a permanent establishment, relatively dense and large, occupied by people engaged in different economic activities."⁴

Ralph Linton states, "The difference between the city and the village is described by the city as a community of people whose survival depends on the exchange of products and services for food and raw materials."⁵ Le Corbusier very briefly indicates that the city is "...an object to be used, a center of intense life and activity";⁶ Finally, Jorge E. Hardoy establishes that "...the concept of city changes with time and place, conditioned by the environment, socioeconomic structure and technological level of the observer's own society."⁷

It is obvious then, that the concept of City may become very elusive,

according to the different approaches that could be taken to define and study it. All would appear to vary somewhat, but essentially some characteristics remain constant. For this reason, we agree with Hardoy's statement that the interpretations of the City change according to the observer's perception of the environment. Furthermore, he states that "...the city is the center of government, and the military; a market place for all the products manufactured by its inhabitants whose subsistence depends on agricultural activities in which they do not participate directly; a place where the population lives and works and which serves as a center for technological progress and services; exchange and innovation for its surrounding rural area; a social phenomenon inhabited by a heterogeneous society which had developed a different psychological attitude; a core from which the future cities radiate with growing social interaction; a focus for the development of a distinct way of life."^{7a}

The term Town will have a very loose meaning, because it refers to a state of development rather than a final product in the urban history, therefore its applicability will range in this study to denote early colonial settlements as well as current settlements that have been constant for a period of time in their size, population and density.

ELEMENTS OF STUDY IN THE MORPHOLOGY OF URBAN AREAS

Once basic characteristics of urban areas have been set, more specific determinants and elements must be established in order to undertake the systematic analysis of the development of the urban structure. Four main categories are:

-Size

-Land Use

-Layout

-Urban Features

Size: It refers to the physical size of the settlement although it does not constitute an element of urban characteristic in itself. It is in conjunction with other elements that it should be examined in order to arrive at valid conclusions as to the morphology of the area.

Land Use: The different uses to which land is allocated in the city is considered important due to its direct effect upon the morphology.

Layout: Layout refers to the spatial organization and distribution of land uses in an urban area, thus, it constitutes an important element in the study of the morphology of the city.

Urban Features: There are some specific features that characterize cities of different cultures, that is, that make them peculiar. This peculiarity often stems from the way these features are organized, presented and connected to the city as a whole. The urban features to be analyzed are:

-Plazas: Open public or semipublic spaces used for social gathering or as ceremonial centers.

-Streets: Transportation routes within the city whose importance varies according to their intended use as evident in the physical characteristics.

-Parks: Open spaces with similar characteristic to plazas, but devoted primarily to recreational uses. Landscaping elements are usually used heavily in parks.

OVERVIEW OF THE COUNTRY

Peru has quite a long history in terms of the presence of urban areas in America. Some areas of the country have been found to be inhabited as early as 7,700 years ago, although not very many remains of this age can be found at the present. There are certain cities that have been continuously inhabited for some 800 years.

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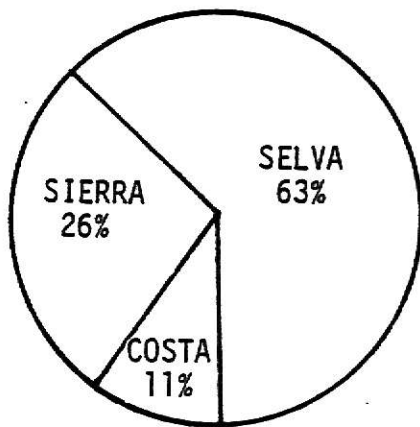
Peru is located in the western part of South America and is bordered by Ecuador and Colombia (North), Brazil and Bolivia (East), Chile (South) and the Pacific Ocean (West). According to the latest published census information, the population was 13,538,208.⁸ The area of the country is 1,285,215 sq km (496,223 sq mi). Lima is the capital city with a population of 3,158,417, which represents 18.76% of the national population; other major urban centers are Arequipa (304,653), Trujillo (241,882), Chiclayo (189,685), Chicbote (159,045), Piura (126,702), Cusco (120,882), Huancayo (115,693) and Iquitos (111,327)

The country has a peculiar geographic form due to the presence of the Andes Mountains which cross the territory in a north-south fashion. Thus three eco-geographical areas are formed vertically. The Costa (Coast) is formed along the Pacific Ocean and is defined between the litoral and the foothills of the Andes. Its width varies from 16 to 160 km (10 to 100 miles). It has some 50 valleys that cross it perpendicularly with rivers flowing from the Andes to create propitious areas for human settlement. The area of the Costa comprises 11% of the total area of Peru. Lima and the five largest cities in the country are located in this area. The transportation system along the Costa is achieved easily due to the flatness of the land and the presence of the Panamerican Highway.

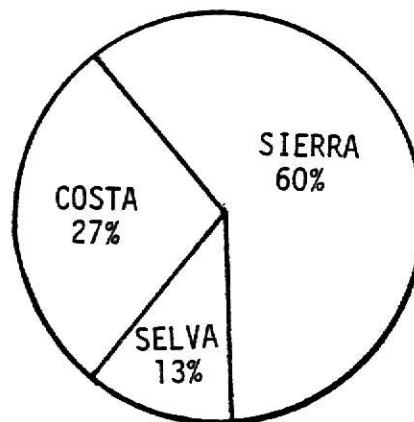
The Sierra (highlands) is the area immediately east of the Costa, and runs along the Andes Mountains forming a continental divide for the country. It is formed by three Coordilleras (mountain chains) running in the north-south direction, converging at two nodes, one in the central part of the country and the other in the southern part. The tallest peak of the country Mount Huascaran, is located in the central part of the country and has a height of

6,768 m (22,205 ft). The Sierra covers 26% of the national area. The Sierra⁸ habitat is varied, from the low Sierra where the climate and the agricultural potential provide appropriate conditions for the development of human settlements to the high Sierra Puna where it proves to be inhospitable.

The Selva (jungle) east of the Sierra covers the remaining 63% of the territory. Most of this area is not settled yet, and remains mostly in a natural state. This area of the country forms part of the Amazon area which extends across Brazil.

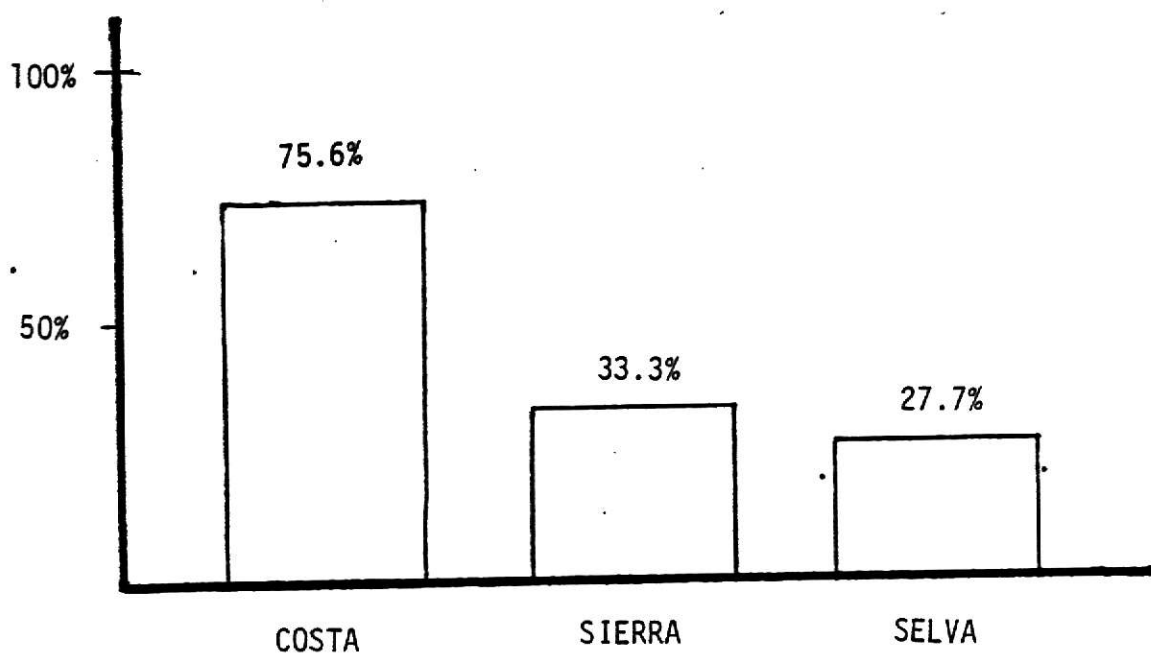


Graph 1
Territorial extension of the
three natural regions



Graph 2
Population distribution by
natural region

Approximately 27% of the population lives in the Costa, of which 75.6% is concentrated in urban areas. Although 60% of the national population is in the Sierra, only one third is located in urban areas. The remaining population is in the Selva with only 27.7% in urban areas. According to official standards, urban areas are defined as places with over 2,000 people or as District capitals.⁹ The annual rate of urban growth is over 5%, which is approximately double the rate of national population growth. Overall, nearly 60% of the population lives in urban areas.



Graph 3
Population concentration in urban areas by natural region. (percent)

This unbalanced population distribution is exacerbated by the migration patterns to urban areas. The typical trend starts in the Selva and/or Sierra and continues to the Costa, and in most of the cases ultimately in Lima. Lima quadrupled its population in the period between 1940 to 1971.

The political organization of the country is a democratic system.

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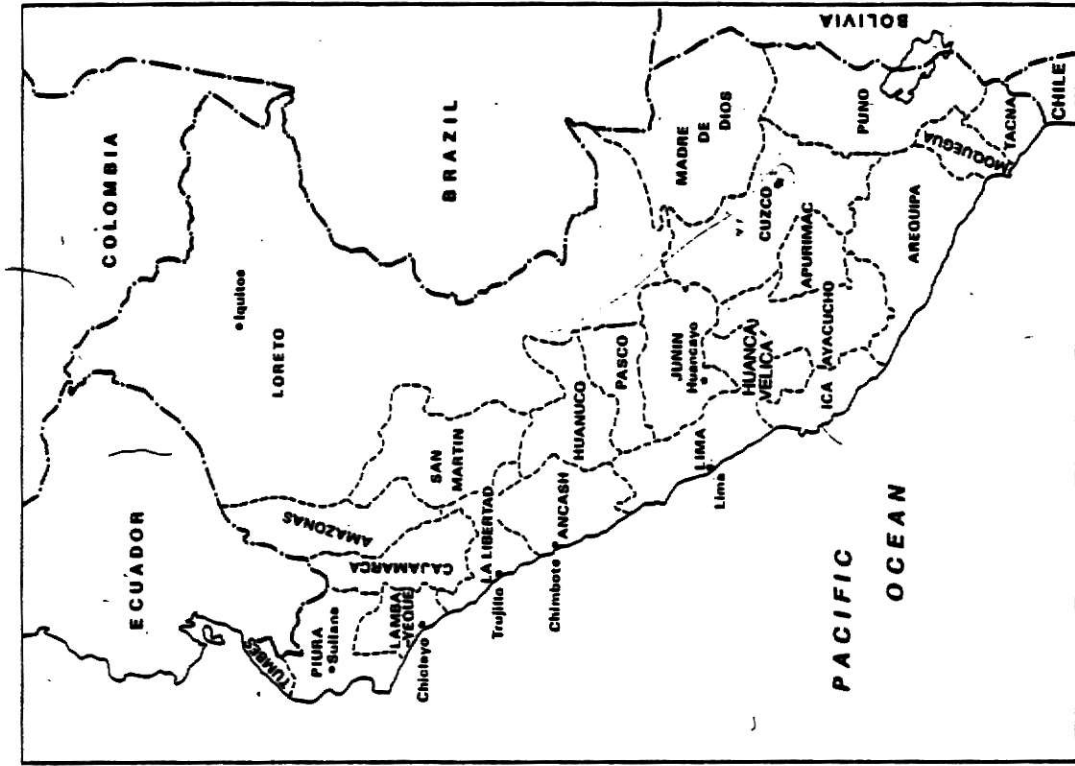
According to the constitution the President is elected every four years in general and mandatory elections. Along with the President, Senators, and Diputados (representatives) are elected for the higher and lower chambers of the legislature. The Government is organized in Executive, Legislative and Judicial branches. Peru has recently adopted a new Constitution (1980) replacing the 1930 Constitution. The current President was sworn into office in 1980, after a Military Junta had been in power since 1968.

During the military regime substantive changes in policies regarding land ownership, the educational system, industrial production, resource allocation, and public services were implemented. The nationalization of natural resources and the restrictions on foreign capital were intended to build up a national economy on the basis of import substitution; political activity was banned officially.

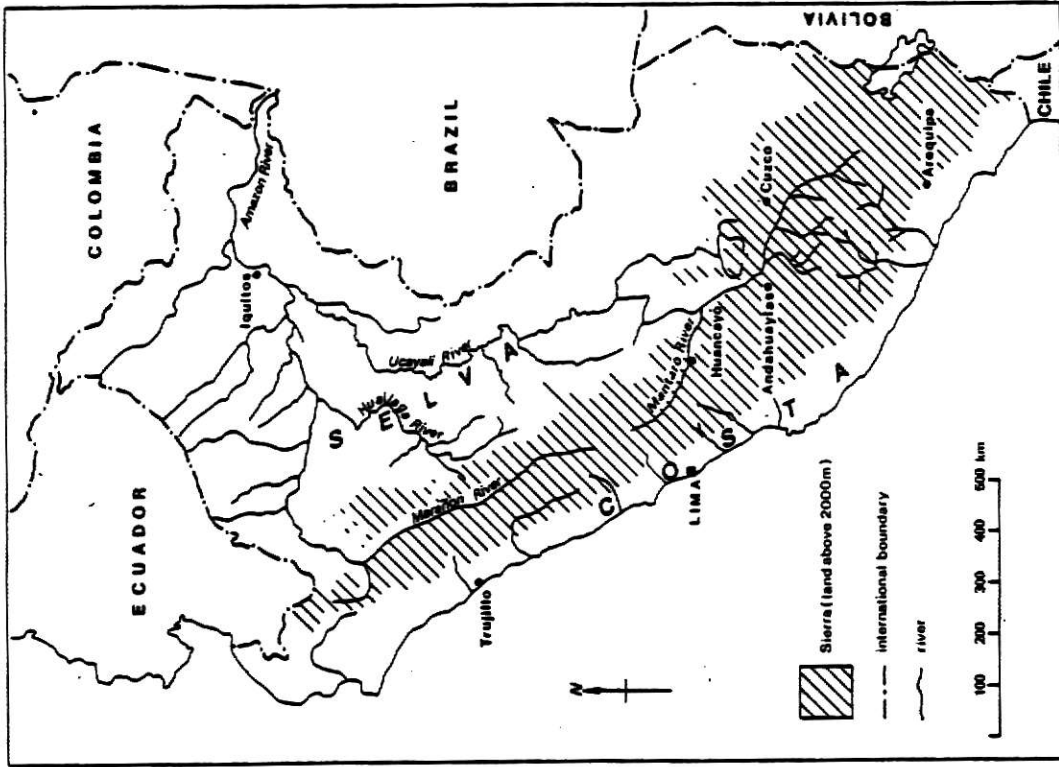
The return to the democratic system in 1980 constituted a great political change whose economic consequences are yet to be studied.

THE PROCESS OF URBANIZATION

The presence of large human settlements in this part of South America is a phenomenon that dates from long before the discovery of America by the Europeans. When Christopher Columbus discovered the New World in 1492, there were already some cultures which were in quite advanced stages of development. The Aztecs and the Mayas in Central America, and the Incas in South America were the most advanced and representative of these cultures. However, even before the emergence of the Incas, there were other South American cultures that achieved levels of development which puzzle many scientists.



Map 2
Peru: Political Division



Map 1
Peru: Physical

There were a number of isolated cultures that developed in the coastal area of Peru whose remains are still being discovered and researched. La Paloma, the oldest human settlement known to date in America, is located in the central coast of Peru. It was discovered in 1965 by a French Archaeologist, Frederic Engel. It was not until 1981 that through the use of Carbon-14, analysis of the remains, including human skeletons and artifacts, has determined its age to be approximately 7,700 years. Because of its compounding elements, it is considered the oldest human settlement in America. Evidence of dwellings, ceremonial centers, food storage areas, and tombs have been excavated. As of yet, there are no calculations of the total population that may have lived there, nor is there a clear idea regarding the characteristics of the activities of these people. Apparently, archaeological work is still in progress at the site and therefore no graphic representation of the distribution of the buildings has been published.¹⁰

According to established archaeological chronology¹¹ La Paloma belongs to what is called the Pre-Ceramic period, that is, the period of development until around 2500 B.C. in which the earliest ceramic remains have been found in this part of America. There are some archaeological sites that have been studied and researched dating this period, but in general they constitute isolated constructions that are not relevant to the purposes of this study.

It is during the Ceramic Period¹², which extends from 2,500 B.C. until the arrival of the Spaniards to Peru in 1535 that most of the important human settlements, and therefore the initial process of population concentration, inherited from these cultures had been formed.

The Tiwanaku culture flourished between 500 B.C. to 1,000 A.D. in the

southern part of the Andes. The Huaris had a considerable shorter period of life in the Central Andes, only 500 years, from 700 A.D. The Chimu culture in the northern coast, also flourished for about 400 years, in ca. 1,000 A.D. Practically all these major cultures were conquered by the Incas, who developed in the southern part of the Sierra from ca. 1,100 A.D. until the Spaniards arrived.

These cultures built a number of settlements in what is now Peruvian territory and although most of them are in ruins, they show the creativity, skill and attitude of these people to create an environment for human habitation.

Most of the pre-Inca settlements can be generally qualified as "city-state" settlements¹³, because of the lack of societal and governmental integration and existence of a system of cities. The urban remains dating from the Inca period reflect a hierarchization of functions and more advanced quality in both city building and architectural techniques. The Inca Empire had a socio-politico organization as well as a regional-spatial conformation. A system (network) of transportation was built covering most of the four regions of the Empire. Each region had definite roles within the overall context, and the center of power and administration was Cusco.¹⁴ Prior to the arrival of Pizarro, the Inca Empire was approaching its development peak, it covered approximately half a million of square kilometers and comprised an estimated population of 6,000,000.

The main activity of the incas was agriculture, consequently the population was scattered throughout the territory, the ruling elite and noble class resided in cities primarily with people devoted to their service and artisans. Unfortunately, the Spanish conquest aimed at destroying the empire - and their cities - succeeded in this aim. Nowadays all, but two, of the Inca cities are in

ruins. The two cities that have been continuously inhabited ever since are Cusco and Ollantaytambo, north of Cusco.

SPANISH-COLONIAL PERIOD

The European discovery of America in 1492, marked the beginning of a period of heavy population and urbanization of the New World. The Spaniards began their effort to conquer these new territories and to subjugate the aboriginal Americans in the Carribbean. A substantive part of this effort was carried through the founding of cities. It should be noted that the main thrust of the conqueror was not in founding new cities and promoting urbanization per se, but in controlling and overtaking the territory as fast as feasible.

In the Fifteenth Century, Spain was in a period of war against the Moors in the Iberian Peninsula. For this reason, Spain was not in the forefront of the Renaissance in terms of cultural, artistic, architectural or urban expression as were, at the time, the French, with the Villes-neuves, England or Italy. Spain in general followed the urban trends that emanated from these countries, especially Italy. Some Spanish cities followed the urbanistic principles of Rome.

So, the thrive of creation of urban places by the Spaniards in America was not all based in an experienced attribute of town-founding. There was not a real original preoccupation as to the form, shape, internal conformation of land uses, or even to the location of the towns in America; in fact, the idea of a preconceived pattern for a human settlement was very much foreign to the conquistadores that originally arrived to America.

The Spanish foundation of cities started in the northern part of what is now Peru, San Miguel de Piura is the first settlement founded by the Spaniards

in 1532. As the conquerors went south along the coastal area, their labor of¹⁵ settling and subjugating the aboriginal population also continued. In this way, Cajamarca, Tumbes, Lima and Jauja were founded and populated with the increasing number of Iberians. Jauja, towards the Andes, was determined as the capital city of the newly discovered Inca Empire. Cusco was destroyed partially and founded again as a colonial city, its original name Qosqo (in Quechua) was in this way transformed. In March of 1535, Lima was founded and by 1580 had become a prominent city in South America. Earlier, it had been selected as the capital city, replacing Jauja, of the Vice-royalty of Peru.

The Spanish conquerors continued with their invasion and exploitation of the native population, to this end they used the strategy of city founding nearby the original native settlements of the Incas, or wherever mineral resources were discovered. In this way, Chincha was founded in 1537, Chachapoyas, in the selva region, in 1538, Huanuco in 1539, Huamanaga in 1540, Arequipa in 1540, and Huancavelica as a prominently mining center. Parallel to the towns of the conquistadores, the policy of the Spanish Crown was to found settlements for the indians. In order to subjugate them¹⁵ the native population was forced to live in the "reducciones". The reducciones were settlements solely and exclusively for the indian population, the Spanish population was prohibited to enter the reduccion. Only priests were allowed into these settlements in order to carry on evangelization task.

The population had grown in their iberian population and reduced in the indian population, there are a variety of accounts of chroniclers refering to the population during this period. An account by Pedro de Avendano¹⁶ states the

following figures for 1561:

	Persons of all age
Lima	99,600
Cusco	267,000
Arequipa	201,830
Huamanga	112,520
Piura	16,617
Trujillo	215,000

In this way, the Sixteenth and Seventeenth Centuries witnessed the creation of most of the Peruvian cities and towns currently inhabited. The reducciones pervaded and became the indian villages still populated by the direct descendants of the aboriginal Inca race.

As colonization continued, an urban network was created and cities played different roles according to their economic importance to the Spanish Crown. Lima, due to its adjoining port El Callao, became the capital city and the place where both the administrative and economic power was located. On the other hand, Cusco, which had enjoyed enormous importance during the Inca period, lost this status essentially due to its location, that is, distant from the ocean, the only link with Europe. Huancavelica grew tremendously in population, by 1600 its population was over 20,000¹⁷. Apart from this city in the Andean region, most of the population growth took place in the coastal region, primarily centered in Lima which by the early Nineteenth Century had approximately 70,000 people.¹⁸

It is in the late Eighteenth Century that the socio-economic scheme imposed by the Spanish colonialistic forces in South America in general started to yield adverse effects on the growing American population. This facts plus the heavier