

A Socialist Empire

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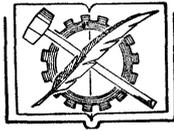
by Bruno Leoni

A Socialist Empire

THE INCAS OF PERU

by

LOUIS BAUDIN



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D. VAN NOSTRAND COMPANY, INC.

PRINCETON, NEW JERSEY

TORONTO

NEW YORK

LONDON

D. VAN NOSTRAND COMPANY, INC.
120 Alexander St., Princeton, New Jersey (*Principal office*)
24 West 40 Street, New York 18, New York

D. VAN NOSTRAND COMPANY, LTD.
358, Kensington High Street, London, W.14, England

D. VAN NOSTRAND COMPANY (Canada), LTD.
25 Hollinger Road, Toronto 16, Canada

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WILLIAM VOLKER FUND

Published simultaneously in Canada by
D. VAN NOSTRAND COMPANY (Canada), LTD.

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PRINTED IN THE UNITED STATES OF AMERICA

Foreword

I. The inborn inequality of the various individuals of the human species poses the most intricate problem for all interhuman relations. In any social system the main issue is how to promote peaceful co-operation among people markedly different from one another not only in bodily characteristics but also in mental capacity, will power, and moral strength.

For thousands of years people knew only one method of dealing with inborn inequality: to make the superiority of the stronger over the weaker prevail throughout. The stronger beat the weaker into submission. A hierarchical order of hereditary castes was established under which the kings and aristocrats administered all affairs for their own benefit, while the lower strata of the population had no other function than that of toiling for their masters and of making life as agreeable as possible for them.

The modern system of the market economy—capitalism—radically differs from the status system of the *ancien régime*. On the market the consumers, i.e., all of the people, are supreme. They determine by their buying or abstention from buying what should be produced, in what quantity, and of what quality. By the instrumentality of profit and loss, the entrepreneurs and the capitalists are forced to cater to the wishes of the consumers. There is only one method for the acquisition and preservation of wealth, viz., to supply the consumers in the best possible and cheapest way with those commodities and services which they ask for most urgently. Thus, the more gifted members of society are induced to serve the concerns of everybody, including the hosts of less efficient and less gifted people. In the status society private property served the owners exclusively. In the capitalistic society private ownership of the means of production virtually serves all those who

consume the goods produced. On the market a daily repeated plebiscite of the consumers determines who should own and run the plants and the farms. Thus, private ownership of producers' goods turns into a public mandate, as it were, which is withdrawn as soon as the owners—the mandatories—no longer employ it for the best possible satisfaction of the wants of the public.

The chief characteristic of the capitalistic system is precisely that it leaves for the most eminent individuals only one avenue open to deriving greatest advantage from their intellectual and moral superiority, viz., to minister to the best of their abilities to the well-being of the masses of less endowed fellow men. The captains of industry vie with one another in endeavors to supply the much talked-about common man with ever better and cheaper goods. An enterprise can grow into bigness only by serving the many. Capitalism is essentially mass production for the satisfaction of the wants of the masses.

In the political sphere the corollary of the market economy is government by the people. Representative government assigns to the citizen the same role in the conduct of public affairs that capitalism assigns to him in the conduct of production affairs. The market economy and popular government are inseparably linked with one another. They are the products of the same intellectual and moral evolution, and they mutually condition each other. Capitalism can thrive only where there is political freedom, and political freedom can be preserved only where there is capitalism. Attempts to abolish capitalism work toward the abolition of democratic institutions, and vice versa.

II. Capitalism and its political counterpart brought to the masses civil liberties and unprecedented well-being. It gave to practically everybody the opportunity to acquire knowledge and to cultivate his talents. But it could not remove the intellectual inertness and lethargy of the crowds of commonplace people. In offices and factories they are committed to routine jobs without any comprehension of what makes the wheels turn and what magic rewards the unvarying performance of some simple manipulations with products of the most refined accomplishments of scientific tech-

nology. Their ignorance, coupled with their resentment against all those who eclipse them in any regard, makes them an easy prey to the inflammatory propaganda of the prophets of an earthly paradise to be achieved by the establishment of the total state.

It is paradoxical indeed that the economic order that forces the most eminent individuals to serve the welfare of the masses of ordinary people is decried as a system in which the common man is "exploited" and "sinks deeper and deeper." While the average manual worker enjoys in the capitalistic countries amenities of which the well-to-do of ages gone by did not even dream, the most successful and most popular ideology of our age, Marxism, is based upon the doctrine that the laboring masses are being impoverished more and more. The masses who in their capacity as customers are "always right" and in their capacity as voters determine all political issues passionately advocate a system in which they are bound to be content with what the dictator deigns to give them and every kind of opposition is a capital offense.

III. Economic theory has exploded all that the harbingers of socialism have said to discredit the market economy and has clearly demonstrated why a socialist system, being unable to establish any kind of economic calculation, could not function. Yet the popularity of the anticapitalistic battle cries and of the prosocialist slogans has not subsided.

Recent socialist propaganda does not know of any other method of answering the devastating critique which their plans met on the part of economics than recourse to the inane subterfuge that they are "merely theoretical." Experience, they pretend, evinces the excellence of the socialist method.

To meet these objections, let us look upon the teachings of experience. It is an uncontested fact that the standard of living of the average common man is incomparably higher in the capitalistic sector of the world than in the socialist or communist sector. All socialists implicitly acknowledge this fact in their endeavors to "explain" it. They refer to various facts which, as they declare, are the reason why the socialist scheme has not brought to Russia and to the satellite countries those benefits which, *according to*

the socialist doctrine, they were expected to bring. As the unsatisfactory state of Russian affairs is to be ascribed to these merely accidental facts, it is fully justified to presume that the Soviet experiment has proved the soundness of the socialist doctrine.

This way of arguing is in itself entirely based upon "theory" and actually amounts to a radical rejection of experimentalism. The experimental method says: As *a* has been tried and resulted in *b*, we infer that *a* produces *b*. But it must never say: Although *a* has been tried and resulted in *c*, we still infer that *a* produces *b* because we *think* that the outcome *c* was caused by the interference of some factors that prevented the emergence of *b*.

The advocates of this allegedly empirical way of reasoning fail to realize that any experience in the field of social events is experience of complex phenomena, i.e., of the joint effects of a multiplicity of chains of causation. It is specifically historical experience as distinct from the experience of laboratory experiments, in which we are in a position to observe the effects of the change in one factor only, while all other factors that could possibly influence the outcome remain unaltered. Historical experience can therefore neither verify nor falsify any theorem in the sense in which verification or falsification of a hypothesis can be attained in the experimental procedures of the natural sciences. In order to learn something from history, we need a theoretical background. We can understand the records of the past only if we approach them equipped with a body of doctrinal knowledge acquired from other sources than the study of history.

No discerning advocate of socialism must question the correctness of these statements. For the socialist scheme itself is not derived from historical experience. What history shows us is the unprecedented improvement of the average standard of living under an economic system based upon private ownership of the means of production and private initiative and entrepreneurship. Against this stark reality the socialist doctrinaires have posited the scheme of an authoritarian society in which all economic affairs are managed by a supreme power that deprives all individuals of their autonomy and self-determination and whose own master plan precludes any planning on the part of other people.

The design of this utopia is certainly an a priori construction. Its proponents must not wax indignant if its critics too resort to a priori reasoning.

Incidentally, there is need to stress the fact that the Marxian doctrine as interpreted by its most distinguished adepts asserts that the alleged beneficial results of socialist management that are supposed to transform the earth into a land of Cockaigne will be reaped only when the whole world is under the rule of socialism. Socialism in one or in a few countries only is in their eyes not yet genuine socialism. This dogma aims at securing the socialist concept against any adverse criticism based upon the unsatisfactory effects of the various socialist "experiments." To all those who refer to the failure of these experiments, the socialists and communists answer: Wait until the whole of mankind is under the sway of socialism; nothing that happens before this glorious goal has been achieved can disprove our assertion that socialism is the best of all conceivable modes of social organization and will establish an earthly paradise.

IV. It is most important to keep in mind these epistemological facts in order to appreciate duly Professor Baudin's book, *L'empire socialiste des Inka*,* which is now—very late indeed—for the first time made available in an English-language translation. It is not the author's aim to prove or to disprove any thesis. He is fully committed to the famous principle of Ranke, to relate things as they really were.

M. Louis Baudin, Professor of the Faculté de Droit of Paris and member of the Académie des Sciences morales et politiques, is the most eminent representative of contemporary French economic science. In his writings he has done a brilliant job in analyzing the fundamental problems of the market economy and in exploding the basic errors of many widely held doctrines. His book, *Le mecanisme des prix*, is certainly one of the best descriptions of the market process. In another book—*L'aube d'un nouveau liberalisme*—he developed all those ideas that animate

* First published in 1928 as Volume V of "Travaux et memoires de l'Institut d'Ethnologie, Université de Paris."

the attempts to preserve the individual's freedom and initiative and to stem the flood of totalitarianism. Professor Baudin is not merely a great scholar and teacher. He is one of the foremost intellectual leaders of our age.

Professor Baudin's analysis of the—unfortunately only meagerly available—knowledge about the social affairs and conditions of the Inca regime in Peru is a classic of history as well as of ethnology, economics, sociology, and social psychology. The author does not approach the subject of his studies with any preconceived idea. He proceeds, as the great historians have ever tried to proceed, *sine ira et studio*.

It is a strange world with which his studies acquaint us. Let us quote his own résumé:

One sees how difficult it is to characterize social conditions in the empire of the Incas. Exceedingly backward in some respects, very far advanced in others, the Peruvians elude every classification. Their technology was at once primitive and highly perfected; they treated men like cattle, but they knew how to reward merit; they made drums from the skins of those who had revolted against them, but they loaded the leaders of their conquered enemies with gifts and allowed them to retain their status; they were ignorant of the wheel, but they presented plays; they did not know how to write, but they kept faultless statistics. How can it be said that the human spirit everywhere follows the same course of development and must inevitably evolve in the same way? The empire of the Incas cannot be compared with any of the great civilizations of the ancient world.

V. There is no doubt that this book, *A Socialist Empire: The Incas of Peru*, is of the highest importance for the historian, for the ethnologist, and for the economist. But in establishing this fact one has not yet fully appreciated the value of this unique masterwork.

The innumerable books dealing with the main issue of our age, the conflict between individualism and collectivism, provide us with a description and analysis of the economic, political, legal, and constitutional problems involved. The best of them have given us all that is needed to form a well-founded opinion about the feasibility or unfeasibility of socialism as a system of social

co-operation and human civilization. They have treated their subject exhaustively from the scientific point of view and in this sense one may say that they have well performed their task.

But Professor Baudin's work brings to the thoughtful reader something that these praxeological and historical volumes did not and could not take up. From the pages of his treatise there emerge the shadowy outlines of life under a collectivist regime, the spectre of a human animal deprived of his essentially human quality, the power to choose and to act. These wards of the Inca were only in a zoological sense human beings. Actually they were kept like cattle in a pen. Like cattle they had nothing to worry about because their personal fate did not depend on their own behavior, but was determined by the apparatus of the system. They could in this sense be called happy. But theirs was a peculiar brand of happiness. *Une ménagerie d'hommes heureux*—a menagerie of happy people—is the heading of the chapter in which Professor Baudin analyzes the conditions of this bizarre world of uniformity and rigidity.*

This brilliant examination of the human angle of the Inca system is the main merit of this magnificent book. Marx and his followers rave about the freedom that socialism is supposed to bring to mankind, and the communists tell us again and again that "true" freedom is to be found only in the Soviet system. Professor Baudin shows in what this freedom really consists. It is the freedom that the shepherd grants to his flock.

New York, April, 1960

LUDWIG VON MISES

* See also Professor Baudin's book, *La vie quotidienne au temps des derniers Incas* (Paris: Hachette, 1955).

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Introduction

Ellos (los indios) eran soberbios, leales y francos, ceñidas las cabezas de raras plumas. ¡Ojalá hubieran sido los hombres blancos como los Atahualpas y Moctezumas!

—Rubén Darío, *A Colón*

They (the Indians) were proud, loyal, and ingenuous. Their heads were encircled with plumes of great value. Would to God the white men had been like Atahualpa and Montezuma!

Far from the populous and noisy cities of the white man's restless life, protected by the double rampart of the Cordilleras, "the bronze race" pursues its monotonous existence. The outsider who impartially contemplates it feels it to be very remote and very different from his own. Indeed, it is hard for him to discern its misty outlines at all against the uniformly gray background of the Andes from which it seems to emerge. He has the impression of finding himself on the threshold of an unknown world, in which man and Nature, in complete harmony with each other, are alike hostile to him. But he also senses spiritual vibrations that set him atremble with apprehension and curiosity. However little he may have read of the ancient history of this land, however little he may have heard of its legends and its myths, he catches the reflection of the past in the present and begins to understand the soul of the Indian. He vaguely divines the hopes and regrets that lie hidden beneath conformity and routine. Then this whole tableau, which appeared frozen into immobility, becomes strangely animated, and Nature itself, full of lingering echoes, seems to come to life. The past springs up

imperiously on all sides; it is the ground in which the present has its roots.

To the mind that is capable of detaching itself from the present, all now becomes clear. The shepherd, leading his flock of llamas through the solitude of the plateau, draws from his reed flute melancholy notes in a minor key that have come down to him across the ages. The farmer, squatting before the door of his mud hut, remains for hours hunched up, his legs and feet pressed close together and his knees drawn up level with his chin, without moving, without thinking, immersed in a vacuity congenial to his dreamy spirit. All these people live at a slackened pace, at one with their environment, defying time. They speak the language of their ancestors; they marry within their clan; they live a communal life; they invoke their ancient idols under new names. The form may have become Spanish and Catholic, but the substance is as immutable as the mountain and the forest. One would think this a world held in abeyance. A parenthesis was opened at the moment when the white conquerors came; it has not yet been closed. The course of history has remained suspended for four hundred years. If the Inca were to come back to life, he would find his people as he left them long ago, ready to welcome him. An instant would suffice to efface the memory of the white man's interregnum.

What, then, is this empire that defies the passage of time, that survives in spite of all the upheavals that have convulsed the world, an empire whose mark four centuries of history have not been able to blot out?

Let us transport ourselves in time and space and set our mind's eye upon Spain at the end of the fifteenth century. On this sun-scorched earth fecundated by the Goths, the Romans, and the Arabs, in this kingdom of Castile whose unity is perpetually being threatened by political dissensions and religious schisms, an intense individualism has sprung up, incarnated in the person of the conquistador, athirst for adventure and glory. The Mediterranean basin has become too small and too familiar a stage for the exploits for which the romances of chivalry have given

him a taste. And just at this moment he learns that the westward route to the Indies has been discovered, that somewhere toward the setting sun there are lands to be explored, gold to be dug from the earth, men to be converted to Christianity. Noblemen with thin purses and long swords, scholars surfeited with Latin, priests with nothing to occupy them since the departure of the Moors, all rush to the southern ports and crowd aboard the departing caravels, to the accompaniment of prayers, brawls, and drinking songs!

Many years were to roll by before these men were to fulfill their destiny. Many of them were never to return from the cities of death and the lands of famine whither their evil fate had led them. But a handful among them, after seven years of arduous effort, were to reach Peru. It is easy to understand the intoxication of those who first set foot on the shores of this promised land as they disembarked, in 1531, at Tumbez, the great port of the Inca empire.

Certainly Francisco Pizarro and his companions were expecting to find great riches, the echoes of which had reached them as far away as the Caribbean Sea. But what took them completely by surprise, what they were utterly unprepared for, was the extraordinary system of social organization that they encountered. This they did not, and, indeed, could not, understand.

The Spanish conquest of Peru marks a crucial date, a turning point in history. Unyielding and implacable, the two great concepts of life into which the world was divided found themselves face to face. On the one side—a people ebullient with life, restless, bold to the point of rashness; on the other—a great empire inflexibly organized along rigid lines. On the one side, a liberalism that would have degenerated into anarchy had it not been for the King and the Church; on the other, a socialism that would have leveled existence to a complete and suffocating uniformity had it not been for an elite. On the one side, men; on the other, a State. And the drama of South America began—a drama that continues to our own day, the drama of two races superposed, but not mixing.

That drama is also the one that all of us are witnessing today.

It is the drama in which the East and the West now confront each other. The history that we are evoking here, which seems so far removed from us, is, in fact, our very own. It is the history in which we ourselves are the actors. The conflict with which it is concerned has become one of the most burning issues of the present day. The two civilizations, the two social systems whose impending clash fills us with anxiety today are the very same that confronted each other at the dawn of the sixteenth century; and under the impact of their violent collision, one of them, the empire of the Incas, collapsed.

We have characterized this empire as "socialist." What this term means will become clear in the course of the exposition of the organization of the Inca empire that we propose to give later on. However, a brief justification of its use would seem to be in order at this point.

The word "socialism" easily lends itself to confusion. It is constantly made use of without being defined and has nowadays been so much abused that it has become for many a rather vague label applicable to theories that are very different from one another. We do not propose to enter upon any extended discussion of this preliminary problem, which properly belongs to the domain of political economy.¹ Suffice it to say that socialism, in the sense in which we shall speak of it here, involves the substitution of a rational plan of organization, based to a certain extent on collective ownership, for the spontaneous equilibrium achieved by the operation of individual self-interest and the free play of competition. This means, in our day, the more or less complete destruction of the mechanism of the pricing process. *An authoritarian system of planning that involves the suppression of private property*—such, in brief, is the definition of socialism that we shall here ask the reader to accept as a postulate.

We shall see that, according to this definition, the Peru of the Incas was by no means a purely socialist state, but that in certain respects it calls to mind other countries of antiquity, notably Egypt.² Pure socialism, as a matter of fact, does not exist, any more than does perfect individualism. These absolute forms de-

fine the extreme limits of the frame within which economic life actually takes place and are worth studying solely in virtue of their simplicity, as a first approximation to reality.

But that reality itself is much more complex. Anticipating our conclusions, we may say that *both agrarian collectivism and state socialism existed in Peru*; the one dating back to a time long before the Incas, the other established when they conquered the land; one the result of a long evolution, the other the creation of the human mind.

This superposition of agrarian communities and state socialism makes it possible to resolve the contradictions that we find in a great number of works on this subject,³ and the real problem confronting us is to discover how it was actually put into practice. We must not lose sight of the fundamental fact that the process by which the Incas extended their dominion over various South American tribes was a gradual one and was completed only a short time before the coming of the Spaniards; hence many territories had formed part of the empire for only a very few years. Now the Inca monarchs made it a rule to give the customs of conquered peoples the widest possible measure of respect. The system they established was thus applied differently at different times and in different places. To understand it, *we must envisage the Indian tribes as forming a series of communities upon which the Incas imposed the framework of a socialist organization*, but with none of the rigidity that most writers have assumed. *On the contrary, it was extremely supple and was more or less adapted to the organization that already existed*. It is this uneven adaptation that has led certain authors to deny the unity of the empire. The framework left room for a certain amount of free play; and in the end, for the tribes of central Peru that had been a long time conquered, it came to form a structure precisely fitted onto the ancient foundation.

The study of this empire of the Incas is of special interest on three grounds. The first is its isolation. If any influence whatever from the Old World made itself felt in the Americas before their discovery by Columbus, it goes back to times so remote that it can be considered as virtually insignificant. The great civilizations

of the Mediterranean all reacted upon one another, but the people of the Andes did not receive the sacred torch from anyone: it was they themselves who had to set it alight.

In the second place, the study of South America at the time of the Incas by no means takes us back to the misty ages of pre-history and could not be compared to the study of ancient Egypt or Assyria. It was at the time of the discovery of the New World—that is, at the end of the fifteenth century and the beginning of the sixteenth—that the Inca empire reached its apogee. If this state seems to us so ancient that we have to make an effort to recall that elementary fact, it is because of its isolation. Distance in space becomes the equivalent of a remove in time.

Finally, recent though its date may be, the last great Andean civilization of the pre-Columbian epoch still remains mysterious. Though many have delved into the past to wrest its secrets from it, they have been more concerned with reconstructing the chain of events than with investigating the character of its institutions. The historian has performed his task; he has beaten a path for us. But we shall make use of the results of his researches only to a limited extent. We shall recall the sequence of events in a few words, so as to set our subject in its place, but we shall in no wise seek to take a stand on the controversies that have broken out on the subject of royal genealogies or the exact dates of conquests.

Even on the threshold of this work many difficulties await us. It is not that documentation is lacking, though one might be tempted to think that it would be. On the contrary, there is a superabundance of it; but the study of it leaves the mind with a collection of confused ideas. Ancient chroniclers recount contradictory facts without any sense of inconsistency, and modern writers reproduce them, without commentary, with a beautiful indifference. Someone will assert that trade did not exist, and then, a little further on, will describe the fairs and the markets. Someone else will picture the Andean tribes before the Inca conquest as plunged in barbarism and then will speak of their methods of agriculture and of their tribal organization. These

are so many evidences of the uncertainties that continue to exist in the minds of the authors. Thus, the result of reading and research is very deceptive. The empire of the Incas is presented to us, in turn, as the normal development of the society that preceded it, or as the realization of a definite plan conceived by a sovereign; as the most atrocious regime of tyranny that the world has ever known, or as an ideal organization of society whose destruction must move us to tears; as the consummation of the slave state, and as an idyllic earthly abode. Every writer, ancient or modern, has presented us with a Peru fashioned according to his own tastes, aspirations, ideas, and feelings; and the impartial critic asks himself in astonishment what this strange empire was that some good minds could regard as a hell on earth and others as a paradise.

What Menéndez says at the beginning of his manual of the geography and statistics of Peru is unfortunately true: "None of the European states that belonged to the Spanish monarchy was the object of so many studies as Peru, but none has, at the same time, given rise to so many inaccuracies and errors."⁴

But the economist is not the only one who can profit from the study of the Inca system. The historian, the sociologist, the archaeologist, and the ethnologist also have an interest in knowing it well, for the better orientation of their own researches. And we, on our part, shall have to make inquiries of them all, either to illuminate the past with the help of the vestiges brought to light by excavations or to reveal in the present the survivals that can explain the ancient customs of which they are the last reflection.

Unfortunately, it has not been possible for us to confine this work exclusively to the economic domain, as we should have liked to do. The inadequacy of the works devoted to pre-Columbian South America has compelled us to examine and consider certain historical and sociological questions of which a knowledge is indispensable for the understanding of this book. However, the treatment of these problems has been made as brief as possible.

The purpose of this work, it need hardly be said, is purely scientific. Comparisons between economic systems established at different times must always be made with the greatest circumspection, and we propose to call particular attention to the exaggerations of those authors who seek in the Peruvian experiment either an apology for or a condemnation of modern socialism. To measure the distance that separates the society of the Incas from our own, it suffices to point out that in the Inca empire the management of the economy was in the hands of an elite that was destroyed by the Indians themselves in the course of their civil wars and by the Spaniards at the time of the conquest.

And even though we may be deluding ourselves concerning the extent of the interest that this study of the past could have for our contemporaries, we do not consider it profitless to investigate this singular empire, taking apart its complicated machinery and stripping away all its military and political exploits, all the anecdotes and all the legends, unobsessed by names and dates. It is surely no detraction of the economists to assert that they are almost completely ignorant of ancient Peru. If only, thanks to our efforts, some of them decide to study it with greater penetration than has been possible for us, we shall not regret having tried in these few pages to bring the extraordinary enterprise of the Incas to life again.⁵

I

The Hostile Environment*

Beyond the steps of the steep Cordilleras,
Beyond the mists where the black eagles soar,
Higher than the summits hollowed out into funnels,
Where the familiar lava boils in bloody flow. . . .

—Lecomte de Lisle, *Le sommeil du condor*

Those determinists who seek at any cost to explain every social order in terms of its natural environment would be greatly embarrassed by the case of the Incas. They will not find here the essential elements that, according to them, make possible the birth of a great civilization.¹ The cradle of the Inca Empire is an area situated far from the sea, without any navigable river, afflicted with a harsh climate and a barren soil, broken up by mountains and torrential streams, and surrounded by deserts and virgin forests. No country in the world seems better to have deserved the praise of which Europe was deemed worthy than does this plateau lost in the center of a vast continent: everything here was inferior except man himself.

To understand the attraction of a place where Nature is so niggardly, one must have seen this part of South America, so distant and so little known. It is a region that the traveler hesitates to traverse, but where he discovers such marvelous horizons that he

* [In the present translation, the chapter which appeared first in the original French edition has been placed in the Appendix, under the title "The Historical Sources."—EDITOR.]

cannot tear himself without regret from their contemplation and remains haunted by the memory of them long after he has left them behind.

Briefly, Peru is made up of three strips of land running from north to south and separated from one another by the two parallel chains of the Andes. They are known as the littoral (*costa*), which skirts the Pacific Ocean; the plateau (*sierra*), between the two Cordilleras; and the virgin forest (*montaña*), which stretches over present-day Brazil. Accordingly, the traveler making his way from the Pacific toward the Atlantic must cross the two Andean chains, the passes of which are rarely less than 13,000 feet above sea level and whose highest peaks rise to almost 23,000 feet. He will journey, in consequence, through all degrees of altitude and meet with an astonishing variation in landscape, climate, flora, and fauna. On the other hand, if he were to set out from what is now Colombia and proceed southward down the length of the inter-Andean plateau, he could continue for months to enjoy the same temperature, contemplate the same scenery, and eat the same food. Thus, in the first case, the predominant impression would be one of diversity; in the second, of monotony.²

Let us examine each one of these three zones.

The Peruvian coast is entirely without rain. The cold ocean current from the polar regions of the Pacific, known as the Humboldt Current, flows along the shore from south to north. It makes the sea colder than the land and removes the humidity from the ocean breezes, allowing the aqueous vapors to condense into fog.³ On the other hand, the winds that come from the east, freighted with moisture, dissolve into rain in the region of the Amazon and strike against the Cordilleras, where they lose their humidity under the influence of the glacial temperature and thus give rise to those immense rivers that return to the Atlantic across Brazil. It is only at certain times, and hardly even then, that the Peruvian hillsides adjacent to the sea are bathed in a dew that makes some growth of vegetation possible; but this comes to an end very quickly, the plants die, and the sun effaces the last vestiges of that ephemeral springtime from the arid soil. Farther north, on the contrary, the Humboldt Current veers westward toward the Galapagos Islands,

the sea becomes warmer than the land, rain falls on the coast, and a lush tropical vegetation springs up in the maritime provinces of the present Republic of Ecuador. Thus, the lengthy seaboard of Peru offers centers of habitation only along the watercourses that descend from the Cordillera. The littoral consists of a series of fertile transverse valleys, separated at their beginning by the spurs and foothills of the Andes and then by deserts that are sometimes more than sixty-two miles long. That is why, in our day, no railroad like the one in Chile has yet been built down the length of Peru. At some points, however, as at Trujillo (Chimú), there are several valleys adjacent to one another, thus offering greater possibilities for human habitation. In spite of the latitude, the climate is temperate because of the southwest winds that constantly cool the air.

The Incas conquered the seaboard only after they had established themselves in the interior. Their empire came into being on the inter-Andean plateau, at an altitude of from 5,000 to 13,000 feet. It did not blossom in the gentle warmth of the tropics, as Spencer has mistakenly supposed, but in the icy blasts that blow down from the Cordilleras.

At first sight, this plateau appears like a corridor laid out between the two ramparts of the Andes, but it is a corridor through which passage is not always practicable, for it is cut across by the ramifications that, at wide intervals, join the two mountain chains. These "knots," to use the local expression, appear on the map like the rungs of a gigantic ladder of which the two Cordilleras form the sides, and they divide Peru into clearly distinct geological basins.⁴ The rivers themselves, none of which is navigable, have very precipitous banks and constitute further barriers between the habitable regions. They do not flow to the coast, but toward the north or the east in the direction of the forests, thus isolating the interior completely. Only one, the Santa, traverses the western Cordillera, while six of the principal rivers cut through the eastern range. Contrary to what we might think, the Peruvian plateau faces the Atlantic.

The forests of the eastern slope of the Andes form the third zone, and on the east of the Inca empire they constituted a barrier as

impassable as the deserts and the snow-capped peaks, as mysterious as the ocean. Their great luxuriance and alluvial soil extend to distances that the Indians of the plateau in earlier days could perhaps not even imagine. The Spaniards, though they shrank from nothing, could not make their way through these dense South American "rain forests" for a long time. Gonzalo Pizarro, who, in search of cinnamon, was the first to venture into these inhospitable areas, wandered around for two and a half years and lost more than half his men; and when at last he returned to the plateau, he was so changed that people did not recognize him at all.⁵

To be sure, there is no fixed line of demarcation between the zones: the sierra begins at the place where the rain falls, and the montaña where the forest grows. For all practical purposes, the transition from the coast to the sierra can be noted by the difference in the roofs of the houses: they are flat in the first region, and sloping in the second.⁶

As can be seen, the characteristic feature of all this part of South America is what may be called its *cellular structure* (*cloisonnement*). The habitable regions are far apart and often separated by obstacles difficult to surmount. Conditions such as these are prejudicial to the establishment of a unified state and favorable to the growth of regionalism and social conservatism. One can well imagine how centers of civilization may have sprung up in the different basins, how migrations from one to another may have occurred, or how influences may have made their way through the notches in the mountains; but it is hard to understand how an empire could have been built up under such unlikely circumstances.

Let us pause now on the plateau that was the center of that empire. Depending on the altitude, we shall find valleys with a temperate climate (*bolsones, cabeceras, quebradas*), and broad expanses of cold (the *puna*). Above a height of 15,000 feet the barren *puna brava* climbs to the eternal snows.

Beyond the limits of the fertile valleys that are scattered here and there, the plateau presents the most striking spectacle of desolation imaginable. An ocean of stunted grass stretches north and

south into infinity, cut by courses of solidified lava and strewn with stones spewed out by the volcanoes. To east and west, the two ranges of the Cordilleras reach out to touch the horizon with their ramparts of rock and snow. There is nothing here that can give life to these solitudes: no man; no tree, except for a few scant resinous shrubs; hardly any animals—only a few plovers and some ducks by the shores of the lagoons, some falcons, and the condor that soars in high circles in the icy air.

Sometimes a knot of mountains fissured by earthquakes rises up, blocking the horizon from view; sometimes there will be a long stretch of sandy desert with a deformed and nettlesome vegetation of giant torch cactus, spurge, and aloe—enormous and grotesque growths that brandish their needles and spearheads in the air and lift up cleft stumps adrip with blackish sap; occasionally one comes upon an array of undulating grass-covered hillocks watered by a fine drizzle of rain that soaks into the spongy soil and veils the mountains in a transparent mist; and then once more the gray immensities stretch away to the north as far as the eye can see, in the direction of Quito, between those colossi of the Andes that have created a triumphal approach, bordered by volcanoes, to the present capital of Ecuador.

Everything here is monumental, awesome, and mysterious. The very rivers flow toward unknown horizons. The Egyptians could not discover the sources of the Nile; the Peruvians, on the contrary, saw rivers arising all around them without ever knowing what distant sea received their waters.

Nothing relieves the starkness of this landscape. The alternation of the seasons is scarcely noticeable, and day and night in these latitudes never vary their length. The dry grass, without disappearing, blends its faded drab tones with the green of the new shoots and carpets the soil with a gray uniformity. There is no winter or summer here, nor any spring; it is the land of eternal autumn.

There is no word to express the intense poetic quality of these solitudes when the sudden tropic night falls upon the colorless landscape. Life and death seem to lose all significance in this tran-

quill and silent immobility where nothing has been made for man, where the mountains are barriers, and the rivers torrential floods.

Is it surprising that such a country should be poor? ⁷

Among the few fertile valleys that open out on the intermontane plateau, there is a narrow one, roughly from eighteen to twenty-five miles long, situated between the canyons of the Apurimac and the Urubamba, at an altitude of 11,380 feet, surrounded by treeless limestone plains, and dominated by mountain peaks that rise to some 17,000 feet above sea level. This oasis of fertility is the site of Cuzco, ancient capital of the Incas, the "navel of the world." It is a place of salubrious climate, which can be compared to that of southern France; there is rainfall from December to March, and a dry season from May to November. Although isolated at the bottom of this dip in the terrain, the city is really in the center of the plateau. Lima, the present capital of Peru, on the coast, is separated from the provinces of the interior by the barrier of the Andes, which is traversed by the railroad of the Oroya, the highest in the world.⁸ The capital ought logically to be a plateau city like Quito in Ecuador. Pizarro chose Lima in order more easily to maintain direct relations with the mother country, but it is a metropolis that faces outward, and its situation makes it more international than Peruvian.

Farther to the south stretches another region that is equally celebrated, that of Lake Titicaca. It is hard to imagine it as the center of a great civilization that has since vanished. The vegetation is so scanty that the wild olive is the only shrub that can gain a foothold there, the water of the lake so cold that a man could not bathe in it in safety. Torrential rains, scorching sun, freezing nights succeed one another, although the presence of a body of water mitigates to some extent the extremes of temperature.

As it is, this land exercises a singular fascination on those who have come to know it. Like the desert or the ocean, the *puna* holds the soul of its people captive.

If the environment has not determined the social order here, it has nonetheless set its mark upon the inhabitants. Contemplation

of the imposing vistas of the plateau has made the Indian grave and pensive. Gray tones and infinite horizons have disposed his temperament to sadness and revery. If the Peruvian is mild and docile today, it is probably because of the political and social regime to which he submitted; if he is indolent, this may be due to his Amazonian origin, though the latter is still uncertain; but if he has no notion of time and if respect for the ancient nature-gods still has a place in his heart, it is beyond any doubt because generation after generation he has led his flocks of llamas in the gray silence across the Andean solitudes.

The social characteristics derived from this environment—attachment to tradition and dispersion into isolated communities—reappeared after the Spanish conquest. In the middle of the seventeenth century Father de Villagomes wrote a book on the Peruvian religion in which, in a curious chapter on local conditions as the “cause of idolatries,” he explained that the Indians, on account of the mountains, the deserts, the *puna*, and the ravines, had hardly any contacts with one another, and the devil therefore found it easy to tempt them.⁹ Even now these habits of isolation are a great obstacle in the way of the Lima government’s efforts at unification. Today as in the past, merchants and officials are the only ones who really succeed in freeing themselves from the grip of these geographic impediments to communication. The various agricultural communities, living remote from one another, still remain suspicious and hostile and endeavor to perpetuate the country’s state of anarchy.

But there was a time when all these Indians were closely united under a common dominion. Speaking of it as something already past, Cieza de León sadly declares: “Great wisdom was needed to govern nations so diverse in so rugged a terrain.”¹⁰ An empire existed in spite of the hostility of the environment; and this simple statement suffices in itself to suggest the measure of its power.

2

The Dominance of the Past

The Indian of the plateau—the Quechua—is a very clearly marked physical type. Short in stature, stocky, solidly built, as D'Orbigny described him;¹ with a complexion that is neither red, as is generally believed, nor bronze, as Humboldt has written,² nor copper, as P. Bouguer asserts,³ but olive-brown; the skin tough in texture, the face oval-shaped and wide, the head large, the brow slightly bulging; a wide mouth, strong jaws, thin lips, very white and even teeth; dark, arched eyebrows; small, dark, sunken eyes with long lashes and the whites of a yellowish cast; high cheekbones; a rather long nose, with wide nostrils; thick, black, long, glossy hair, but a sparse beard—all in all, his features are regular, but lacking in delicacy. His prominent muscles, broad chest, and well-set shoulders make him seem rather strong and heavy in spite of his small hands and feet and slender ankles.

The women, of a similar build, lack the grace and suppleness of their taller and slenderer rivals of the forest tribes. On the other hand, both men and women give an impression of physical well-being; few are hunchbacked, bandy-legged, or bald.⁴

Where did this Indian come from? This is an important problem, for societies are not built in a day, and the one we are about to study was preceded by a long evolution that at least partially explains it. It is a difficult problem to solve because of the ignorance of the Indians themselves and the accumulated errors of the Spanish chroniclers, who, with the exception of Montesinos

and Román y Zamora, limited the whole history of Peru to the period of the Incas. According to them, before the Inca empire there were in Peru only scattered tribes consisting of barbarous idolators with no common ties. Some of these writers—Garcilaso, for example—blacken the picture as much as they can in order to set the Inca civilization in a better light, representing the Indians of an earlier day as dissolute cannibals who feasted on the flesh and blood of their enemies;⁵ as perpetually at war with one another;⁶ and as without leaders except for the captains whom they chose as their commanders in time of war.⁷ And the same word keeps recurring in the writings of all these chroniclers in their references to the native communities of the pre-Inca period as veritable *behetrias*.⁸ This was the word used in Spain to denote a free town whose inhabitants had the privilege of electing their own lord, either from among the members of a particular family (*behetria* by lineage), or as they pleased (*behetria* “from coast to coast”). The use of this word thus signifies that the Indians would obey only the leaders whom they themselves chose.⁹ These chroniclers, moreover, are far from clear. Some speak of elected sovereigns, others of hereditary monarchs, and still others of caciques or *curacas*, without being any more specific.¹⁰ Many chroniclers insist upon the disorder that was rife among the tribes. Herrera remarks that in his time the situation had not changed in this respect in Chile, New Granada, or Guatemala;¹¹ and Ulloa compares the Indians of the pre-Inca period to wild beasts.¹²

This basic error on the part of the first historians has given rise to numerous inaccuracies among later writers.

In the course of recent years archaeology has brought to light an entire past whose existence had hardly been suspected. We propose to reconstruct it here, though only very cursorily, in its major outlines, without subjecting it to any critical examination, which would be outside the scope of this work, but simply with the object of situating the Inca civilization historically.

The first point to be noted, about which there is no longer any question today, is the *Asiatic or Australian origin of the Indians*. Holmes, Brinton, Boule, Verneau, Rivet, Hrdlička, and others

have all declared themselves in favor of this view. The "red man" is the son of the "yellow race." Not only do both resemble each other at many points in racial type and in their artifacts, but the Hoka language of California and that of the Patagonians are related to the Malayan-Polynesian languages; and a number of objects in current use are to be found in both Melanesia and South America, such as the throwing stick, the blowgun, the signal drum, the panpipe, and the club with a wooden handle and a head of spiked stone.¹³ The most convincing argument is that recently presented by E. Palavecino, who, in comparing the Quechua language with that of the Maoris of New Zealand, has discovered that thirty per cent of the words of these two languages were formed from the same elements and that a great number of them had identical meanings.¹⁴

How did this identity come about? Certainly not as a result of anything so fortuitous as a shipwreck, as the so-called "stranded junk" theory maintains, for the southeast trade winds and the Humboldt Current, which likewise follows a northerly course, tend, on the contrary, to drive back any newcomers who approach these shores from the north. It would have been easier to cross from America to Polynesia, as the voyage of the *Kon-Tiki* demonstrated, but the natives of South America were very indifferent navigators.¹⁵

Can it be assumed, then, that the Asiatics crossed over by way of Bering Strait, taking advantage of the chain of the Aleutian Islands? We can find no reason for such a fantastic expedition. In Asia there was neither a lack of living space nor a deterioration in the climate nor any pressure brought to bear by conquerors. Besides, this migration would have left some trace behind. Did the Polynesians make their way over the South Pacific at the time of the advance of the polar ice? There is nothing to confirm this bold hypothesis.¹⁶

We believe that a comprehensive explanation must be sought that will be able to deal with all the different unsolved problems of prehistory in the South Pacific. The statues of Easter Island, the Fiji monolith, the tombs of Paracas—the necropolis of a vanished city—the sign of the stairway frequently found in the Andes, the

bas-reliefs at the Gate of the Sun in Tiahuanaco: these await the single theory that will explain them all.¹⁷

We know only that the key to the problem is to be found on the western side of the South American continent, and not on the east, as many have believed, and that man's arrival in America took place a very long time ago. Indeed, the difference between the potatoes that the Indians obtained at the time of the Incas and those that still grow wild in Peru would suggest centuries of cultivation; and centuries too were needed to transform such timorous and intractable beasts as the guanaco and the vicuña into peaceful llamas and alpacas, different in fleece and color and incapable of living without the aid of man.¹⁸

The brightest beam of light that illuminates American prehistory is that cast by the civilization of the Mayas in Yucatan. It spread over the southern continent, and its influence is no longer contested today.

On the other hand, there is much debate over the thesis that migrations from the shores of the Caribbean Sea reached the Andean plateau by way of the rivers across those territories of Venezuela and Brazil that still remain almost entirely unexplored. This would explain the traces of Amazonian invasion that have been attributed to remote epochs. The Urus, who live on the banks of the Desaguadero south of Lake Titicaca would, according to this hypothesis, be the descendants of the ancient Amazonians (Arawaks). They have continued to be hunters and fishermen. They must once have inhabited a vast stretch of land extending as far as the Pacific Ocean, and their language was still spoken over a large part of the plateau at the time of the Spanish conquest.¹⁹

It is only recently that the connecting links have been discovered in the long chain of civilizations that unites Central with South America. The natives came from the north by way of the Andean plateau; but the stream of migration sometimes divided, and some of them would retrace, in the opposite direction, the road taken by their ancestors. Flux was followed by reflux. "South America is like a bottle with a narrow mouth; it is naturally filled from the top, but the excess liquid overflows from the same opening."²⁰

Since a great deal of uncertainty still prevails in this whole area

of American prehistory, we shall not attempt to take a stand in regard to controversies that it is for the archaeologists and ethnologists to resolve, but shall confine ourselves to presenting in composite form the various items of information provided by the specialists.

The different civilizations are distinguished from one another primarily by their styles of sculpture, pottery, and textiles.²¹ The "flux" we have spoken of comprised the civilization of Chavín and those of the coast; the "reflux" refers to the northward expansion of the great civilization of Tiahuanaco.

1. The connecting link between Central America and Peru was formed by the civilizations that developed on the territory of what is now the Republic of Ecuador. The brachycephalic people who came from the north drove back the dolichocephalic natives, first from the coast and then from the plateau. The vanquished peoples were to become the Jivaros, who now inhabit the forests in the eastern part of Ecuador (*Oriente*), and who have attained a sort of celebrity through their skill in the preparation of shrunken heads. Marshall Saville has made a study of the bas-reliefs, stone seats, and statues found on the coast, all of which evidence a culture that seems to have remained primitive.²² Jijón y Caamaño, exploring the plateau, has brought to light the civilization of Cañar (in the south of Ecuador) and of Tancahuán (in the region of Riobamba).²³ And Max Uhle has established the connection between these cultures and that of the Mayas, on the one hand, and those of the Peruvian coast, on the other.²⁴

2. The most ancient civilization of Peru has recently been identified by J. Tello as that of Chavín, situated in the northern reaches of the sierra. That its architects had a feeling for space is attested by their truncated step-pyramids—the great Chavín pyramids of Huántar, for example. Its sculptors had a delirious imagination, which imbued them with a love for the monstrous and the horrible, and which clearly distinguishes them from those of Tiahuanaco. The famous stone bas-relief of Chavín, with its complicated, fantastic, and absolutely symmetrical details, was designed to make a strong impression upon simple minds.²⁵

3. On the Peruvian coast, two important civilizations arose:

Chimú, to the north, and Paracas, in the center.

The state of Chimú once extended from Tumbes, on the Gulf of Guayaquil, to Parmunca.²⁶ It even spread out over the plateau, and the Incas had had to build fortresses to stop its advance before they could succeed in subduing it toward the middle of the fifteenth century.²⁷ Perhaps it was to protect themselves against the Incas that the Chimús constructed in the Santa valley, at right angles to the coast, a great wall forty miles long, into which they built a number of small forts.²⁸ Parmunca, or Paramonga, is itself an impressive stronghold; the central building stands on three concentric quadrangular terraces, with the lowest defended by a bastion at each corner.

The capital of Chimú, Chanchan, must have been a large and important city, for the vestiges that are left of it cover a wide territory.²⁹ Although these ruins have suffered from the rains, which are as devastating as they are infrequent, there are still places in the walls where one can see examples of beautiful linear ornamentation, molded in relief with potter's clay. The language of Chimú has almost completely disappeared; hardly any examples of it are to be found except at Eten.³⁰ The textiles, woven in the manner of high-warp tapestries, are chiefly decorated with geometrical figures and stylized designs, but the pottery, which exists in abundance, is often realistic and is extremely interesting to the sociologist. It is sculptural in character, at first done in white and ochre red, and later in black. The vessels are surmounted by a stirrup-spout formed by a pair of arched tubes joined together at the mouth. The scenes depicted on the vases are varied and often very vivid: battles, banquets, hunting and fishing, a chief carried in a litter, household work, etc. Taken together, they reveal the existence of a well-advanced state of civilization: a sumptuous court, officials, artisans, servants—a whole social hierarchy. They also show us that certain immoral practices were not uncommon.³¹

Much more mysterious is the civilization of Paracas. Thanks to the dry climate, the heat, and the strong currents of air that freshen the atmosphere, the objects dug out of the necropolis of that name have remained intact. Wrapped around the mummies were found fabrics of cotton and wool in a variety of vivid colors (as many as

sixteen different tonalities have been counted). The motifs, representing felines (wildcats or pumas), birds, fish—either humanized or fantastic—and men—linear, polygonal, or naturalistically drawn—are well proportioned to the dimensions of the fabrics and are harmoniously and symmetrically distributed.³² Most of them have a mythological character. Several pieces of material bear a motif, often very complicated, which is repeated several times, but always with some change of detail, very much like a theme and variations.³³

4. Two other important cultures, less ancient than those of which we have just spoken, developed side by side: that of Recuay and that of Nazca-Ica. The remains of the first are found in the Huaylas corridor: pottery of white clay, vases with cylindrical necks, with scenes in high relief depicted on their upper parts, and black geometrical designs. More beautiful and more celebrated are the polychrome pottery vessels of Nazca, adorned with highly complicated drawings of mythological beings, of men either stylized or realistically depicted, and, above all, of fish, for the inhabitants of the area were fishermen. Ica pottery is in three colors and rich in geometric designs.³⁴

5. At some time subsequent to the Chavín civilization on the plateau, an empire that came into being toward the south invaded the whole inter-Andean corridor. Its capital, Tiahuanaco, was situated on the shores of Lake Titicaca in an area so desolate that some authors, in order to explain its presence there, have thought it necessary to assume that the climate of the area must have undergone a change. Such modifications have, in fact, occurred in various places: in upper Argentina, in the region of Atacama, and in Ecuador.³⁵ It is also certain that in ancient times the Andes were not so high as they are today; they used to permit moisture-laden clouds to pass over them, and the Peruvian littoral, in consequence, was once damp and wooded. In those days Lake Titicaca poured its waters into the Amazon, and “the largest lake on earth fed the largest river.”³⁶ But the Andean plateau had this appearance in very ancient times; and it seems unnecessary to have recourse to such an explanation when we reflect that, though the site of Lake Titicaca is strikingly arid, the neighboring areas are not barren,

as is generally believed, but watered by rainfall, and maize is grown there.³⁷

On the subject of the Tiahuanaco civilization a great many theories have been held, of which we shall not make any thorough examination here. According to H. Urteaga, Tiahuanaco was probably Quecha, and not Aymara as is generally believed.³⁸ According to Posnansky, the first inhabitants must have been Arawaks, who were themselves later conquered by the Collas.³⁹ The bas-relief on the celebrated Gate of the Sun has been interpreted by H. Cunow as the symbol of the tribal organization of the Incas,⁴⁰ and by Cúneo Vidal as representing the migration of the tribes that had come from the east.⁴¹ We do not even know whether the fortress of Saxahuaman, which dominates Cuzco, or that of Silustani, or the citadel of Machu Picchu and its sisters in the canyon of the Urubamba belonged to this vanished empire.⁴²

We know nothing of the daily life of the people except that most of them were farmers, for their language is rich in agricultural terms; that they knew how to work in stone, construct objects in copper and bronze, and make pottery; and that they carried on trade with the coast: vases in the Tiahuanaco style have been found in Ecuador, ornaments of this provenance reached the shores of the Pacific, and this commerce perhaps extended as far as Central America.

Nor do we know anything about the capital itself, save that it still lifts its beautiful monolithic Gate of the Sun in the midst of a desert landscape and that it keeps its stone foundations hidden in the soil, from which they are only just beginning to be unearthed.⁴³ It was undoubtedly a great center, both political and religious, for excavation has brought to light skeletons, implements, and vases coming from all over Latin America.⁴⁴

Other cities must have belonged to this empire, but all we have been able to do is find vestiges of their cyclopean walls, at Taraco on the shore of Lake Titicaca, at Ollantaytambo in Peru, at Pachacamac under the ruins of the temple of the Chimú period, which is later than that of Tiahuanaco, and finally in the province of Carangas in Bolivia.⁴⁵

All that we know of this empire is that it was spread over a very

wide territory. Aymara place names are to be found today in northern Argentina,⁴⁶ and Aymara dialects in the province of Huarachiri in Peru and in the region of Arica on the Chilean seaboard; and the style of Tiahuanaco deeply influenced the ceramics and textiles of the coastal areas.⁴⁷ The only impression we get from this conventional style is that the people who originated it must already have been conforming to a strictly regimented mode of life and were probably subject to an absolute and theocratic central power.

What remains to us from this people is its language: Aymara.⁴⁸ Lay opinion may be inclined to regard a linguistic survival as of little consequence, but this is a mistake. Language is the living expression of a segment of humanity. If it is rich in abstract words, it points to a high degree of intellectual culture. If it abounds in technical terms, it indicates an advanced economic development. If it is complex and skillfully put together, it attests a long period of evolution. When a word expresses an idea, it is because that idea has been conceived; and when a word denotes a place, it is because that place has been occupied. Every word marks, in some domain or other, a conquest by man.

Now the Aymara language is exceedingly rich. It possesses formative affixes that permit the modification of verbal roots and contains a great number of synonyms capable of denoting the most delicate shades of meaning, so that Max Uhle finds it superior to the Quechua language itself.⁴⁹

The Tiahuanaco civilization was destroyed by some cataclysm—invasion, epidemic, or earthquake.⁵⁰ It was followed by a period of disorder and dissension until the time when the second reflux movement of which we have spoken swept across the scene—that of the Quechuas under their Inca chiefs, whose origin is as mysterious as that of the Aymaras.⁵¹ No doubt the Quechuas and the Aymaras resembled each other in some respects, and it is natural that D'Orbigny and Markham should have been tempted to declare that the one was derived from the other. Nevertheless, there are certain differences between them. In physique, the Aymaras have a more oval- or lozenge-shaped face; they are a little taller,

and the upper torso is proportionately higher; and slanting eyes are more frequent among them than among the Quechuas.⁵² In disposition, the Aymaras are more taciturn, more suspicious, less submissive, and less gentle than their neighbors.

A still more striking fact is that while the languages spoken by these two ethnic groups have forty per cent of their words in common, there are differences of syntax between them that are inexplicable on the assumption that one is derived from the other.

At the present time, the boundary between the Aymaras and the Quechuas runs on the northeast from Lake Titicaca to Cojata and on the northwest from this lake to Puno.⁵³

The Incas were in all probability something quite other than "the last sigh and the last glimmer of that civilization without a name, without a past, without known history, which has left us no other perceptible evidence of its existence than the silent ruins of Tiaguanaco."⁵⁴ And it is of the Incas that we propose to speak here. Yet before taking up the study of the Incas themselves, and in order to make our picture complete, we must add to the preceding brief sketch some mention of the peoples of Ecuador, such as the Caras, the Puruhas, the Cañaris, of whom we have but scanty information,⁵⁵ and the Chilean tribe of the Chinchas-Atacamas, which attained great prosperity between the twelfth and the fourteenth centuries.⁵⁶ As for the Chibchas of Colombia, who had an interesting social organization, their territory always remained outside the sphere of Inca influence and activity. There may have been other important centers of life and culture elsewhere, but not enough is known about them to enable us to speak of them here.⁵⁷

This rapid survey permits us to focus our attention on a few essential points.

First, we see what a mistake it would be to regard the Incas as a *primitive* people. Even before their time there had already been alternate periods of prosperity and depression. No one is in a position to say whether the Indian of the fifteenth century was superior or inferior to his precursor of the Tiahuanaco period. Progress does not follow a straight line, and the notion of a continuous or even intermittent evolution toward a better state of

affairs is a postulate no longer encountered anywhere but in textbooks.

Next, the civilization of Peru was not subjected to any influence from the Mediterranean. Hypotheses concerning Jewish or Egyptian immigrations must be rejected, for the Indians at the time of the Spanish conquest had no knowledge of iron or the wheel or glass or wheat, and it is known today that they themselves had discovered copper and bronze.⁵⁸ We are thus confronted with autochthonous civilizations, a fact that makes the study of them singularly interesting.⁵⁹

In the third place, it is evident that natural obstacles, however difficult to surmount, did not prevent numerous migrations from taking place. It would be a mistake to suppose that what we have called the cellular structure of these regions had the result of keeping people forever bound to their native valleys. We are astonished, in fact, to find that so many changes of domicile could have occurred, for, in addition to those we have mentioned, there were a number of secondary movements here and there in South America. Thus, the inhabitants of the Atacama district emigrated toward the north and the sierra;⁶⁰ and groups of Guaranis who had come from the middle of South America settled in the north of what is now Argentina; later the Andean tribes drove them back, and they then returned to their point of departure.⁶¹

Fourthly, there exists in South America a common substratum of Amazonian origin. The similarity of the complicated implements discovered in different regions and made from local raw materials proves that there is a "kinship among Andean civilizations."⁶² It is in reality the same civilization, which evolved differently in different regions, whether that of the Caras to the north or of the Calchaquis to the south.⁶³

This homogeneity of culture, reappearing beneath local differences, makes it easier to understand the Incas' rapid assimilation of the conquered tribes.

We see too that Uhle is not wrong in characterizing as "ungrateful" those sovereigns who, having inherited the culture of their ancestors, carefully concealed the source from which it came.⁶⁴

The history of the great Inca dynasty is itself extremely confused

in many respects, and we shall not undertake to make it clearer here. The names of monarchs and the precise dates of events are matters of indifference to us; we are interested only in the nature and order of those events and in the development of institutions. In order to orient ourselves, however, we shall indicate briefly what seems to have been the Inca sovereigns' genealogy.

Most of the Spanish chroniclers, including Garcilaso, call the first of these rulers by the name of Manco Capac, and the second Sinchi Roca. But Montesinos and Acosta trace the Incas to a later monarch named Inca Roca.⁶⁵ Where is the truth to be found? As we have seen, after the civilization of Tiahuanaco had flourished in all its splendor, a long-continued eclipse took place. Then the *sinchis* took over the direction of the different tribes.⁶⁶ These *sinchis* were temporary chieftains named by the primitive clans (*ayllus*) to lead them in hunting, fishing, or war. No doubt, once they had achieved permanent status, they were the first sovereigns. Hence, it is easy to understand that there is a tendency today to regard Manco Capac and Sinchi Roca, not as two individuals, but as two dynasties, as legendary beings. Indeed, the mythological character that the chroniclers themselves attributed to the first of them confirms this interpretation.⁶⁷

What is certain is that at a given moment in history the Incas established themselves, by fair means or foul, as the dominant class in the valley of Cuzco, which was already inhabited. They forthwith began their conquest of the plateau and concurrently developed an increasingly efficient organization. The great struggles with the rival tribes—first the Collas and then the Chancas—served to strengthen the central power and enabled the upper class to free itself once and for all from its original geographical limits, to increase its knowledge, and to enlarge its means of action. Thus, the elite came to stand out more and more conspicuously from the mass of the people.

It is not known how long the Incas reigned: from 500 to 600 years, according to Blas Valera; from 300 to 400 years, according to Ondegardo and Acosta; more than 500 years, according to Balboa; and nearly 1,000 years, according to Sarmiento. Garcilaso lists thir-

teen monarchs, but he probably names some of them twice, for the number given by Balboa and Montesinos is not so large.

What follows is the approximate line of succession of the sovereigns. We shall not set down the dates of their reigns, for these vary from one author to another; we shall merely indicate the century in which each of the Incas probably lived.⁶⁸

SOVEREIGNS ⁶⁹	PERIODS	CHIEF CONQUESTS	REMARKS
Manco Capac			} Legendary figures
Sinchi Roca			
Lloque Yupanqui	Late twelfth or early thirteenth century		Belongs to the Hurin-Cuzco
Mayta Capac	Thirteenth century	Alcabizas	
Capac Yupanqui	Thirteenth century	Alliance with the Andahuaylas	
Inca Roca	Beginning of the fourteenth century	Beginning of the Chancas war	The first Sapa-Inca (supreme Inca) and the first belonging to the Hanan-Cuzco
Yahuar Huacac	Fourteenth century	Obscure reign	Probably murdered
Viracocha	Fourteenth century	Chancas war (continued); northern expansion toward Huamanca, southern toward Chucuito (Lake Titicaca)	

Viracocha's illegitimate son Urco, whom his father nominated as his successor, may never have come to power; or, if, as Herrera and Cieza de León maintain, he really did reign, it was only for a very short time.

SOVEREIGNS ⁶⁰	PERIODS	CHIEF CONQUESTS	REMARKS
Pachacutec	Fifteenth century, probably 1438	In the north toward Tarma, Huamachuco, Cajamarca; on the coast toward Pachacamac, Par-munca; conquest of the Chimú kingdom	
Tupac Yupanqui	Second half of the fifteenth century to 1493	In the north toward Chachapoyas and Muyubamba; south toward the river Maule; surrender of the Cañaris; war with the Caras	
Huayna Capac	From about 1493 to 1527	In the north, surrender of the Caras; in the east, repulse of the Guaranis	

The last sovereign, Huayna Capac, had, contrary to custom, divided his empire, which had become too large, between his two sons, the legitimate heir Huascar and the bastard Atahualpa. On the death of the monarch, civil war broke out between these fraternal enemies, and Atahualpa, the conqueror, had Huascar and his family put to death. The Spaniards arrived just in time to take

advantage of the existing disorder and establish themselves as masters. At this moment the empire extended for more than two thousand five hundred miles from the river Ancasmayo, two degrees north of the equator, to the river Maule, thirty-five degrees south of that line, and its area was approximately six times that of France.⁷⁰

We propose to examine here the social structure of that empire at this time. Before the fifteenth century, the Incas' economic, political, and social system had not attained its perfection; after 1531 it was still maintained, but internal disturbance had impaired its operation. The entire history of the Incas, in fact, ran its course in the span of four hundred years: the twelfth and thirteenth centuries, during which the sovereigns were hardly more than tribal chieftains or at best the chiefs of a confederation of tribes like so many others (Chachapoyas, Huanucos, Chinchas, Chancas); the fourteenth, which was the century of preparation; and the fifteenth, when they reached their apogee.⁷¹ The Inca empire was actually in existence for only two centuries—little enough time for the establishment of so vast an organization on solid foundations. And yet so brilliant was its short day of splendor that dazzled historians even up to the present have failed to perceive, in its shadow, the great civilizations that preceded it; and so deeply did the Incas stamp their imprint upon their people that the passing centuries have not yet been able to efface it, and the ethnologist continually rediscovers it among the Indians of today.

3

The Economic Basis of the Empire: The Principle of Population

There are very few countries in which one does not observe a constant pressure of the population toward an increase beyond the means of subsistence.

—Malthus, *An Essay on the Principle of Population*

Rarely does a country offer a more beautiful illustration of Malthus' law than the empire of the Incas. The increase of population in relation to the means of subsistence was one of the dominant factors in the imperial policy; and the conquests, the technical progress, the social organization all expressed the continuous effort of the Quechuas to extend and intensify the cultivation of the soil.

To be sure, vital statistics are lacking, not because they are nonexistent—on the contrary, the gathering of statistics had attained a rare degree of perfection, as we shall see—but because we no longer know how to read the quipus by which they were recorded. Nevertheless, the increase in population before the Spanish conquest is evident not only from the statements of the chroniclers, but from a study of the facts. Ondegardo declares that the number of native inhabitants had increased “in a marvelous man-

ner" under the rule of the Incas and that there were few mountain areas where the inhabitants could sustain life without seeking elsewhere for the satisfaction of their needs. Sarmiento remarks that in Pachacutec's time there was a shortage of arable land around Cuzco and that the Inca was obliged to "transport to a distance" the people who were settled within a radius of two leagues around the city so that he could give their lands to the residents of the city itself. The earlier expansion of the Chimú empire had been due, if we are to believe Balboa, to the lack of arable land; and agriculture had already reached a highly intensive degree of development on the coast for the same reason, for nothing appears to support Cunow's statement that the Chimús were better farmers than the Incas.¹

At the time of the conquest the population of the Inca empire was probably between eleven and twelve million.² This figure decreased under the Spanish occupation because of the degeneration of the native stock (work in the mines, alcoholism, etc.), civil wars, and especially epidemics of measles and smallpox.³ In 1580, according to a census taken under Philip II, the population was eight million.⁴ Later there was an increase, but it was slow and was due to the influx of foreigners of the white race.⁵ We do have statistics for our own day, but they are far from accurate. We shall return to this point later. Here we shall note merely that in 1914, on the eve of the war, the total population of all races within the limits of the ancient Peruvian empire was scarcely larger than that which lived under the rule of Huayna Capac.⁶

That ancient Peru had a considerable population is attested by the existence of large cities; but one must be on one's guard against reckoning the number of inhabitants by the extent of the ruins, for very often the towns and citadels sheltered ploughed fields within their walls.

There should be nothing surprising in this predominance of the demographic factor. In assuring peace and security within his frontiers and decreeing a stern code of moral behavior, the Inca promoted the growth of the population. Infanticide and adultery were severely punished, prostitution was almost completely suppressed, and marriage was made obligatory. Every year, or every

two or three years, at a fixed date, the young women from eighteen to twenty and the young men from twenty-four to twenty-six were solemnly assembled. The Inca's delegate would then distribute the girls from the "Houses of the Virgins of the Sun" (of which we shall speak later) as gifts from the sovereign. The young men and the young women would be lined up in rows facing each other and would be told, "You take this one; you take that one."⁷ Yet the number of marriages arranged in this way was actually very small. Most people were married, not by royal authority, but in accordance with local custom. *Here we encounter that duality upon which we shall later shed a fuller light, and without which it is impossible to explain the Inca system: the coexistence of rational planning and local custom.* In marriage, as in other matters, the custom varied with the region; but, in general, the Indian who wanted to marry a girl would buy her by making presents to her father and the local chief—the *curaca*—and the representative of the monarch would have nothing more to do than to register the agreement of the parties.⁸ Thus, marriage by gift was superimposed upon marriage by purchase without prejudice to either the one or the other; a man who already had a wife could nevertheless obtain another as a reward for his services. In brief, the Indian was obliged to marry, but he could receive additional wives at the hand of his sovereign.

The Spanish writers, describing only one or the other of these two forms of marriage and generalizing from it, could, according to their bent, represent the Inca as a tyrant officially assigning husbands and wives to each other, or as a good paterfamilias who confined himself to approving his subjects' choice.⁹ It is certain that throughout the greater part of the plateau parental authority was and continued to be very great, and we can well believe that parents sometimes betrothed children without their knowledge.¹⁰ A marriage performed without the consent of the parents was considered invalid unless later ratified by them.¹¹ As for the gift—that is to say, the wife's purchase price—its value corresponded to the rank of the parties concerned and ranged from a simple earthenware vessel to livestock and objects of gold and silver.¹²

It seems beyond dispute that the confirmed bachelor—that is,

the young man who had not made up his mind to take a wife by the age of twenty-five or twenty-six—was married by authority. In any case, the choice of a spouse remained extremely circumscribed, since it could be exercised only within certain limits of age, social class, and territory. Any union outside the community was prohibited.¹³

Marriage was indissoluble except in the case of adultery on the part of the wife, which, in certain provinces, could lead to her being repudiated, subject to the authorization of the Inca if the woman concerned was the wife of a *curaca*, or of the *curaca* if she was the wife of an ordinary Indian. Generally speaking, however, adultery, whether on the part of man or woman, was prohibited on pain of death.¹⁴

Polygamy is met with only among the high officials or local chiefs in command of more than a thousand families, and especially in the household of the Inca sovereign himself.¹⁵ Among the former, the practice of polygamy gave official sanction to a custom commonly accepted by most of the South American tribes, whether or not they were subject to the Peruvians. It was a custom that granted every man the right to have as many wives as he could support. In practice, this meant, in most cases, only one.¹⁶ This custom existed among the Caras,¹⁷ the Puruhas,¹⁸ the Cañaris,¹⁹ and the Chibchas.²⁰ Even today polygamy is practiced among the Jivaros of the virgin forests on the eastern slope of the Cordillera in Ecuador.²¹

For the Inca monarch, polygamy was a political necessity. His family, which to a considerable extent constituted the ruling class, had to be large enough to assure a sufficient recruitment of military leaders and civil administrators. While the local chiefs could have as many as five or six wives, the Inca could have an unlimited number.²²

These polygamous practices are often cited as a cause of the increase in population.²³ The custom had, of necessity, a reverse side, for it was bound to make women a rarer commodity in the marriage market, even allowing for the loss of men involved in the sovereigns' wars.²⁴

Such a conception of marriage seems surprising to us today; yet the Spaniards themselves adopted the principle of obligatory

unions shortly after the conquest in an effort to put an end to the immorality prevalent among the white men. In 1551 a royal decree ordered the *encomenderos* (whose functions we shall describe later, and whose number included all the conquistadors or their descendants) to marry within three years under pain of losing the *encomienda* that constituted their means of livelihood.²⁵ Even in modern times, chiefs of state, in exceptional circumstances, have had recourse to analogous measures: the first French colonists who settled in Canada in the seventeenth century were obliged, under threat of severe penalties, to take wives from among the young women sent out by the government.²⁶

It may be added that compulsory marriage is entirely logical in a socialist system. Socialism, defined as the absorption of the individual by the state or the local community, must inevitably lead to official mating, as communism must inevitably lead to the communal sharing of women.²⁷ The socialist state, organizing everything in accordance with rational principles laid down *in abstracto* and applied by way of authority, must not allow the responsibility of assuring the future of the race to be left to the inclinations of individual fancy. The laws of Lycurgus deprived the unmarried man of his rights of citizenship; Plato pressed this idea to its farthest extreme when he envisaged yearly unions only among couples so matched as to assure the improvement of the race; and Campanella, in his famous *Civitas solis*, did not confine himself merely to setting the dates when nuptials were to be officially solemnized, but required that conjugal relations should take place on days fixed by authority in accordance with the counsels of astrologers and physicians. The Incas, for all their detailed regimentation, did not establish such a "human stud farm," but limited themselves to sanctioning existing custom to the greatest possible extent. As their arable lands were limited, they did not deem it essential that the population should increase.²⁸ But neither did they wish to see it diminish, for it was one of the sources of their empire's power.²⁹

Another cause of the increase in the population was undoubtedly the system of labor, which we shall have to study. The Indian had his family assist him in the accomplishment of the task that was assigned to him by law. He tended, in consequence, to consider children as "capital," all the more to be sought after as other

forms of capital were rare. Thus, it was altogether logical that marriages should be accounted as "rich" if they were fruitful, and "poor" if the wives remained childless.³⁰ The character of the Indian family is naturally utilitarian, and this has continued to be true to our own day, as we shall see—a wretched family, in which the wife and children are valued primarily in terms of the services they provide.³¹

Thus far we have seen no more than a part of the agonizing problem with which the Inca sovereigns were faced: *The population was increasing. What were its means of subsistence?* From the description we have given of the Peruvian plateau it can well be imagined that they were far from sufficient. For the most part, arable lands were few and poor; the valleys themselves, like that of Cuzco, were incapable of feeding groups even moderately prolific. Thus, the population was unevenly distributed. It was so dense in the fertile regions that Squier compared Peru to China.³² To save soil, the Indians used to go so far as to construct their villages on barren land only. Thus, Cuzco and Ollantay were built on rocky slopes, and the coastal towns of Pachacamac and Chíncha were situated outside the territory that the rivers could render fertile.³³

The staple food of the Peruvians was maize. This plant is remarkably well suited to poor soil and primitive processes of cultivation. Because of the way it grows, the number of stalks it can put forth in a given space is severely limited, and this makes it easier to cultivate. It is not necessary for the entire surface of the field to be conscientiously ploughed; it is enough to dig holes in the ground at the proper intervals and to bury the seeds in them. No cereal produces such a crop as this, and its stalks provide a fodder that is superior to wheat straw. It is of better quality in the cold regions, where it has a long period of nurture, than in the warm valleys of the coast. Maize is the sacred grain of the New World. In the words of the graceful American poem, it is indeed the gift of "the friend of man."³⁴

Gómara maintains that the grain-producing areas are fertile in Peru, but this is the case only in a small number of privileged

areas. Ondegardo tells us that the harvests were poor three years out of five and that in certain villages, notably in the Collao, the Indians reaped only a fifth of what they needed to support life. He adds that in a good many districts there were harvests only every six or seven years.³⁵

Next to maize, it was vegetables that played the most important part in the diet of the Peruvians. The potato, which was unknown to us, and which is still to be found growing wild in the mountains of Ancachs and the valley of the Rio de Santa;³⁶ the *oca*, another edible tuber (*oxalis tuberosa*); the *apichu* or sweet potato, yellow white, red, or violet-colored; the pumpkin, the bean, the cassava tree, the tomato, the pimento, the quinoa (*chenopodium*), which the Spaniards called "little rice" because of the shape of its berries—all these grow in poor soil up to an altitude of more than 13,000 feet. A number of other plants also provided food for the population. "All are good for the Indian to have," remarks Garcilaso.³⁷

In the warm valleys and the fertile regions of the coast, the basic foodstuffs were the yucca and, in Ecuador, the flavorsome fruits that are the delicacies enjoyed by today's travelers.³⁸

Salt was plentiful in Peru and was found near both Tumbes and Cuzco.³⁹ The honey hidden in the hollows of the sierra's trees was famous among the Indians, but they did not know the art of keeping bees.⁴⁰

Wild animals—the guanaco, the vicuña, the stag, the partridge, the wild duck, and other game—were abundant on the plateau, but this was due solely to the measures taken by the Incas for their protection. As we shall see later, hunting was strictly regulated.

There were few domestic animals. The Indians had a sort of duck,⁴¹ a great many guinea pigs—the only animals on the coast—and dogs. A few tribes of northern Peru enjoyed the flesh of these last, but in the central provinces dogs were considered more of a liability than an asset because they had to be fed; this is the reason why only a small number of them were to be found in pre-Columbian America, although they multiplied rapidly after the Spanish conquest.⁴² The house cat was unknown. Lastly, the inhabitants of the plateau used to eat certain rodents (the abrocome, the

viscacha, and the agouti) and certain marsupials (the opossum), the bones of which have been found in the tombs of Machu Picchu.⁴³

All these animals, however, were of very slight importance as compared with the *Auchenia*, of which two species, the guanaco and vicuña, remained wild, and two, the llama and the paco or alpaca, were domesticated. Not only were these two species used as beasts of burden, but their wool served as raw material for the manufacture of textiles, their flesh as meat, and their dung as fuel. *Along with maize, the llama formed the basis of the whole economy of the plateau.*

The Spanish conquerors, at a loss for a name to denote this animal, with which they were unacquainted, would sometimes call it the big sheep and sometimes the small camel. The latter appellation is rather felicitous, for the grass of the puna (*ychu*) is all the food the llama needs to satisfy it, and it can go entirely without food and water for several days. It does not need to be shod, for it has cloven hoofs, nor to be saddled, for its thick fleece is sufficient protection; it has no fear of the cold, and it likes high altitudes. It is rarely encountered north of the equator, where there is a dearth of *ychu*.⁴⁴ As a pack animal, the llama is decidedly mediocre. It can scarcely carry more than a hundred and ten pounds for a distance of twelve and a half miles a day. A man's weight is too heavy for it; one cannot "ride a llama." The Indians always take care to have the loaded animals followed by a certain number of beasts without any packs, to serve as replacements for their weary comrades. When one of these animals is mistreated, it defends itself by spitting in its enemy's face; when it is tired, it lies down, and no one on earth can induce it to take to the road again. It is not very intelligent, for a rope stretched in front of it below the neck is enough to keep it from moving forward; it does not have the sense to take a slight movement backward and lower its head so as to pass under this obstacle. This makes it easy to pen up whole flocks of them. It eats only during the day and chews its cud at night.

The alpaca, or paco, the wool of which is longer and silkier than that of the llama, is even less suited for use as a beast of burden.⁴⁵

At the time of the Incas, the members of the ruling class possessed great flocks of llamas, frequently numbering more than five hundred head. Among the common people, every head of a family owned a pair of llamas. He had the right to kill and eat the young offspring, and, in addition, to receive some sides of meat at the time of the royal hunts; but (with certain exceptions that we shall consider later in discussing livestock allotments) this amounted to a rather meager total. The Indians did not use the milk of the llama; it was reserved for the animal's young.

No one knows whether the llama really prevented cannibalism, as some maintain,⁴⁶ but this beast was certainly a blessing to the poor Indian of the plateau. It constituted an article of exchange of the first rank and made it possible for the inhabitants of the very cold regions to procure by this means the maize they needed. And the Indian showed his affection for the llama in a thousand touching ways. Sometimes even today, when a young llama has grown big and strong enough to begin work, a festival is given in his honor, he is decked out for the occasion, and the people dance around him and shower him with "a thousand caresses."⁴⁷ It is not without reason that the chroniclers saw in the llama a manifestation of divine goodness. "God has provided the Indians," says Acosta, "with an animal that serves them at once as a ewe and as a mare, and He wished this animal to cost them nothing, for He knew that they were poor."⁴⁸ Some ill-disposed Spaniards, on the other hand, did not fail to ridicule the Indian's affection for the beast. "The regard of the Indians for the llama," wrote Ulloa, "passes the bounds of reason and clearly reveals their ignorance."⁴⁹

The llama is not only a useful animal; it is graceful as well. Cieza de León used to take pleasure in seeing the people of the villages of Collao bringing their beasts home in the evening loaded with wood.⁵⁰ A drove of these creatures is indeed a charming spectacle, as they move with slow and steady steps, always dignified and unconcerned, with their delicate heads and mobile ears, along the paths of the Cordilleras. No doubt the llama of today carries much merchandise unknown to the Incas, but the animal itself has not changed since pre-Columbian days any more than the man who drives him or the profile of the mountains and the horizon of the

plateau. He is indeed the Indian's fitting companion: gentle, placid, grave, and a little sad, like him.

In brief, the Peruvian's means of subsistence were and continued to be very limited. On the coast, fish naturally occupied a large place in his diet, but it was very rare on the plateau, for no fish could live in those torrential streams.⁵¹

*The diet of the Peruvian Indians was thus primarily vegetarian.*⁵² At the end of the eighteenth century Del Hoyo remarked that the Indians ate very little meat;⁵³ and the same is true today in a number of regions.⁵⁴ For a long time after the arrival of the Spaniards the natives of Peru and especially those of Chile made use of only the hide and the tallow of the cattle imported from Europe and did not consume the flesh.⁵⁵

Garcilaso, who tried to enumerate all the things the Peruvians lacked, was obliged to draw up a list of impressive length.⁵⁶ Never, in fact, did any great civilization of antiquity have at its disposal such limited resources. Desolate stretches of grass, rocks, or sand; a dearth of water on the coast; insufficient warmth on the plateau; a scarcity of animals—all made for a perpetual struggle for survival and growth. In the myths and legends, the conquerors are "seekers after fertile lands," to quote the phrase of L. E. Valcárcel. The Indian is a man continually on the defensive in the struggle for existence.

Only external conquest and an internal organization that left no place for waste could enable a people to live under these conditions. No doubt it would be a great mistake to believe, with the Marxists, that economic factors explain everything; for the troubled times that followed the disappearance of the civilization of Tiahuanaco could have continued, the excess population could have been wiped out by civil wars or in the wake of a series of famines, and the Spaniards would have found the country in the state in which they found the coasts of Darien and New Granada. But from the moment when an intelligent and ambitious leader stood forth and asserted himself, he was obliged to begin the struggle against Nature. The pressure of population on the means of subsistence was one of the determining factors in Peruvian policy, and we feel its influence acting throughout all phases of the drama in which the Incas played their historic role.⁵⁷

4

The Social Basis of the Empire: The Rulers and the Ruled

What are these old and dried-up truths upon which we are feeding? One is that axiom according to which the lower classes, the masses, are the elite of the nation, that they constitute the People itself, and that the common man, with all his inexperience and imperfections, has the same right to pronounce judgment, to direct, and to govern as the few men of truly noble mind.

—Ibsen, *An Enemy of the People*, Act IV

Even before the Incas consolidated their power, the pressure of population had obliged the Indians to improve their methods of agriculture by joint labor, irrigation, and the building of terraces. This was a task that had demanded constant and concerted toil and had favored the development of a centralization of which we find examples in Chimú and Tiahuanaco. A chief was needed for the tribes that lacked land and had to unite their efforts to draw sustenance from an unproductive soil, and their lives came to be governed by passive obedience.

When the *sinchi*, at first a temporary leader, achieved permanent status, he found men ready to submit to his rule. Breaking through geographical boundaries, he subdued the neighboring peoples by fair means or foul. Uprooting some of his subjects from the soil, he made them government officials and thus formed the nucleus of the class that was to be his mainstay.¹ It may thus be

assumed that the principle of hierarchy was, to a certain extent, a corollary of the principle of population.

The hierarchical arrangement of Inca society was carried to astonishing lengths, and this in itself is enough to distinguish it from all the modern socialist systems built upon egalitarian principles. Equality, in Peru, existed only between individuals of the same social rank; it was the military system of equality among soldiers.

1. *Religion and Law*

The supreme chief, the Inca, assumed a divine title that increased his prestige and facilitated his conquests, "which all the nations of the world have done, however barbarous they may have been."² He was the Child of the Sun. Even before the Incas there had been kings on the Peruvian coast who had had their subjects worship them.³ That is why all historians have insisted on the theocratic character of the Peruvian state. This is certainly true if we take the view of the common man, the *hatunruna*, but it should not be forgotten that in Peru there were different conceptions of the Inca that corresponded to the differences in social status.

Let us consider first this *hatunruna*, the humble denizen of a village on the plateau. For him the Inca was an infallible being worthy of divine honors; his mandates were absolute; the conflicts in which he engaged were holy wars. "The Incas," says Velasco, "built their throne on ideological forces, and not on the blood of their vassals."⁴

Here, then, alongside the economic basis of the empire, is its religious foundation. It is certainly true that the social organization of the Inca empire was the "parallel" of the currently accepted religious ideology and manifests an essential unity, natural events being considered as expressions of divine power;⁵ but it is an exaggeration to compare the Quechuas to the disciples of Mohammed,⁶ or, as Prescott does, to the Crusaders who went forth to fight the infidel,⁷ or to write that "the Incas were a sort of cross between missionaries and conquerors: they preached with sword in hand and fought with the catechism under their arm."⁸

So far was the feeling for hierarchy carried that we discover it even in matters of religion. Popular cults existed side by side with the beliefs of the elite; and if writers have often hesitated to characterize the Quechua religion, it is perhaps because they have not always made this distinction.⁹ Yet it is natural to adapt knowledge to the understanding of those who receive it.

First, let us consider popular worship.

The mass of the people practiced a variety of cults, the most widespread being the worship of the Sun. It is certainly understandable that after a long, freezing night in the *puna*, the Indian should prostrate himself before this celestial body, which suffuses him with such an abundance of light, warmth, hope, and good cheer. The sun was the beginning and the end of the world; the moon was at once its sister and its consort; the stars, its servitors; the Inca, its offspring; the thunderbolt, its malediction.

However, these external manifestations give only a very incomplete idea of the popular religion. The latter, in fact, permeated and continues to permeate the whole mentality of the Indian. It pervades his entire life. Our categories of thought do not exist for him. His thinking is essentially monistic: the heavens and the earth are for him the two faces of the same homogeneous universe. The limitations apparently imposed by Nature, space, and time can be overcome if one has the will and the power. Stones and plants are living things like animals and men. There is nothing surprising about the phenomena of ubiquity and prescience. The entire world forms one delicate and vaporous whole, peopled with beings whose forms and positions are never definitive. The individual himself is not a cohesive entity; whatever belongs to his person (hair, fingernails, etc.), if possessed by another, makes that other his vassal. Even his head can be temporarily detached from his body and lead an autonomous existence for a certain time.¹⁰ The person is thus imprecise, provisional, fugitive, and fragile.

Thrust into such an unstable universe, the Indian is understandably hesitant about venturing on any action that might risk unloosing a thousand unforeseen reactions. The wisest thing is to repeat those acts whose effects he already knows. Conformity and

routine are measures of prudence. The abnormal, the rare, the unique are disquieting and become objects of veneration: a high mountain peak, a grotesquely shaped rock, a strange flower. Each of these was called a *huaca*. There were three hundred and forty *huacas* to be counted in the city of Cuzco alone.¹¹

The only constant acknowledged by the Indian was the principle of all things, the prototype; the little llama made of terra cotta, for example, was the material representation of the essence of the llama, to which one made offerings of grains of maize.

The popular religion assumed different forms in different regions. The Inca had tried to unify it to some extent by superimposing on it the cult of the Sun, of which we have just spoken, in places where it had not sprung up spontaneously. In addition, he had ordained the belief in his own divinity, thereby adroitly putting religion at the service of politics.

Next, let us consider the beliefs of the elite.

Although we possess many sources of information about the popular cults—representations in art, chronicles, folklore—the beliefs of the upper class remain mysterious, for they were kept secret. We thus know very little of the religious ideas of these initiates of ancient Peru. According to the chroniclers, the members of the elite believed in a single Supreme Being, Pachacamac, abstract, ineffable, unknowable, and inconceivable. They had gone so far in this direction that only two temples were dedicated to this divinity, whereas temples to the Sun were set up in all the towns and cities. For this god was a superior spiritual being that did not have to be localized; and no offering was made to him, since no one could offer him anything that he did not already possess. "The Indians worshipped this god in their hearts; that is to say, in spirit," says Garcilaso,¹² and he is right in insisting at length upon translating the word "God" by the name of Pachacamac. "If I were asked, I, who, by the infinite mercy of God, am a Catholic Christian, what God is called in my language, I should reply, Pachacamac, because in the current speech of Peru there is no other name than that to denote God."¹³

On this religious foundation was based the power of the law.¹⁴ The law was the will of the Inca. It thus had no element of stability within itself, but the remarkable spirit of continuity of which the sovereigns gave proof made up for the absence of a written constitution. So perfectly did each successive ruler follow the policy of his predecessor that one and the same man living for two centuries would not have acted otherwise. The decisions of the sovereign were, so to speak, codified by the keepers of the quipus, who preserved the record by means of their mnemonic knotted cords, and the *amautas* or scholars were made responsible for their interpretation.¹⁵ Wiener professes to be able to "reconstruct" the Quechua code according to Blas Valera and Garcilaso; and Brehm, faithfully copied by Hanstein, enumerates twenty-four laws laid down by the Inca,¹⁶ but such lists are purely hypothetical.

Local customs continued to exist side by side with the laws decreed by the Inca. "There was nothing so fixed," remarks Ondegardo, "that the will of the Inca could not change it, but he never altered custom to give to the one what belonged to the other."¹⁷

We touch here upon an important principle of Peruvian policy—*respect for established institutions*. The sovereigns always endeavored to introduce the least possible modification in the mode of existence of the tribes they subdued, although at the same time they imposed upon them certain common regulations designed for the unification of the empire. In this way they demonstrated that they were great chiefs of state. Their task was facilitated, moreover, by the cultural homogeneity of all the Andean peoples, itself the result of their identical origin, i.e., by that ethnic substratum to which we have already referred. The regulations established by the Peruvian conquerors were grafted upon ancestral customs that constituted a kind of common law, and the adjustment of the one to the other was carried out with a great deal of prudence and moderation by letting time do its work.

The religious tolerance of the Incas was a consequence of this principle. The gods of the conquerors did not replace the local gods, but were superimposed upon them. The idols of the conquered provinces were sent to the Temple of the Sun at Cuzco, a

sort of "Roman pantheon,"¹⁸ where, at the same time, they served as hostages, and their worshippers were free to continue to venerate them on condition that they venerated the Sun as well.

The law, being divine, had to be obeyed. Herbert Spencer, relying on the authority of Prescott and Garcilaso,¹⁹ rightly pointed out that every violation of law was treated as a sacrilege, and the penal code built upon this idea was one of implacable severity.

As for the general promulgation of the laws, this was assured by officials who proclaimed the sovereign's decisions in the markets where it was the Indians' custom to go.

2. *The Ruler*

And truly it demands something godlike in him who has cast off the common motives of humanity and has ventured to trust himself for a taskmaster.

—Emerson, *Self-Reliance*

At the summit of the hierarchy was the chief, the Inca.

Many accounts have helped to popularize the figure of this man-god, who sums up in himself the entire Inca empire.²⁰ The sovereign's clothing was of the finest wool of the vicuña: a loose sleeveless tunic that came down to his knees and a large mantle. His feet were clad in white woolen sandals; a pouch full of coca hung by his side; a many-colored braid was wound five or six times around his head; the insignia of his power—the *lautu*, or *borla* as the Spaniards called it—stood out on his forehead, held by a narrow scarlet ribbon at both temples;²¹ enormous jewels were suspended from his ears; and above his hair, which was cut very short, rose two feathers from the *curinquinque* bird.²² He never wore the same garment twice. He never drank twice from the same vessel. His wife and his sisters were the only ones considered worthy of waiting upon him. His dishes were of gold, his massive golden throne rested upon a great square board of gold, and the litter in which he was carried was covered with sheets of precious metal.

To form some idea of the court of Cuzco, one must read the accounts in the ancient chronicles of the arrival of Atahualpa and

his suite at Cajamarca, where Pizarro was awaiting them: warriors in costumes of blue and gold; nobles clad in gorgeous array and decked in gold and silver ornaments; and finally the Inca upon his golden throne, with a collar of emeralds around his neck and the feathers of the sacred bird on his head: a veritable scene from fairyland.²³

No one dared to look the Inca in the face. No one could approach him without removing his sandals or without carrying a light burden on his head in token of submission. What spectacle could be more touching than that of the Indian general seeing his sovereign again for the first time as a prisoner of the white men? Barefooted, his shoulders bowed by his burden, he fell upon his knees and was unable to hold back his tears, while the Inca remained dignified and impassive, as befitted a monarch.²⁴

The Spaniards on many occasions paid tribute to the character of those Incas whom they had the opportunity of knowing. Atahualpa, though of illegitimate birth and scarcely worthy of being taken as the type of the sovereign, nevertheless won the admiration of his executioners by his valor, his discretion, and his majesty.²⁵ Later the Inca Manco showed himself to be courageous and intelligent in his struggle against the invaders.

Magnificent and awe-inspiring—thus it was that the Inca appeared to the people. His vast power rested less upon the material strength of his armies than upon the moral force of knowledge and religion. He was not only the ruler; he was also a scholar, for he had followed the course of instruction given by the *amautas* who taught at Cuzco, he liked to converse with them, and sometimes he himself did the teaching.²⁶ He was the spiritual father of his subjects, by whom he was bound to be both feared and loved. His authority, says Prescott, extended to the most secret action, to the very thoughts, of his vassals.²⁷

No doubt the Inca regarded his people with “feelings of commiseration like those a kind master might feel for the poor animals committed to his charge,” Prescott adds.²⁸ But bad masters have been known to mistreat the animals entrusted to their care, and the Inca was not one of those. He deserves great credit, for the chiefs of most of the neighboring tribes were bloody tyrants who

set him a bad example. There was sodomy on the coast, and cannibalism was prevalent in the eastern forests and even on the plateau.²⁹ Garcilaso reports that the Caranquis revolted against the Inca because they could no longer eat human flesh and that they slaughtered the Peruvians and devoured them.³⁰ According to other chroniclers, the tyrant of the island of Puná reduced his enemies to slavery, had his women guarded by eunuchs, and gave himself over to acts of cannibalism.³¹ The Chibcha chiefs in Colombia kept slaves and used to hang their subjects en masse.³² In Peru, on the contrary, murder, theft, and adultery were so severely punished that they were, so to speak, nonexistent in the empire. When Cabet described a society where crime was unknown, he did not suspect that his dream had been a reality.³³

The Inca cannot be said to have given his people an ethical code. What he gave them was a penal law. He was concerned not with the individual conscience, but with a general system of legal regulations. And, of course, he himself was not obliged to conform to the laws he decreed, since he was, by virtue of his position, beyond good and evil.³⁴

What higher praise could be given to the empire than that contained in the testament of a soldier who was seized with remorse for his part in the conquest: "The Incas ruled their people in such a way that there was among them neither a thief nor a vicious man nor a sluggard nor an adulterous or dissolute woman. . . ." ³⁵

It is evident that the Inca was by no means the tyrant that some have thought him. There are many indications of the greatness of his character and the nobility of his mind. In the midst of the most bloody wars he was always ready to listen to proposals of peace. He respected the customs of the local inhabitants and kept their chiefs in power. He heaped gifts upon his former enemies to bind them to him. He required the Indian communities to cultivate the lands of widows, the elderly, and the infirm. Above all, he was just: no guilty person, great or small, could hope to escape his punishment. He wished his laws to be respected. He knew that any weakness toward the guilty is a danger for the innocent and that it is often more meritorious to punish than to pardon.

It would be an error, nevertheless, to look upon the Inca as

fatherly. He was often cruel. The slaughter of those who revolted against him, the merciless punishments meted out for the slightest shortcoming, the system of *mitimaes*—the forcible uprooting and transplantation of multitudes of people—which we shall study later, all indicate that life under the empire was hardly idyllic. Yet in the eyes of the people the Inca was, as the novelist has said of Pharaoh, “God minus eternity.”

But did the people form a sound judgment of their master? Nothing is more dubious. Was the Inca not concealing a boundless ambition beneath a clever policy? Very probably. Did he even have absolute power? Brehm, Lorente, Buschan, Martens, and others have insisted on the “unlimited power” of the Inca. H. Trimborn has prudently qualified this power as “almost absolute.”³⁶ There were, in fact, limits to the power of the sovereign, but these were not apparent to the mass of the people. The elite of the nation ratified the acts of the ruler. C. de Castro tells how Huayna Capac convoked the *cortes* (*tubó cortes*) when he was about to leave Cuzco on a distant expedition, explained the necessity and the purpose of the war he was undertaking, and designated his successor.³⁷ Cieza de León speaks of a council that the Inca consulted before important decisions and relates, moreover, how the Inca Urco, having fled before the Chancas, was deposed and replaced by Pachacutec.³⁸ All this testimony accords with that of Anello Oliva, who says that the oldest and most capable of the chiefs formed a sort of Senate that Huayna Capac used to consult in difficult situations.³⁹ Morua refers to a “council of *orejones*” made up of the leading caciques—that is, no doubt, of the most important men in the empire—which directed public affairs during the time before the Inca received the *borla*. Farther on in his book he speaks of a council of four *orejones*—probably the four viceroys—which must not be confused with the one just mentioned. The latter remained close to the Inca, as Cobo says, and one of its members had more power than the others and was like what we should call the “president” of the council.⁴⁰ It is certain, therefore, that the monarch was not absolutely free to act altogether arbitrarily. Traditional rules imposed themselves even upon

the man-god. The position taken by Fidel López in regard to this question is perhaps the correct one: "The will of the sovereign was limited by a court ritual and by a sort of quasi-masonic initiation whose rules and sacramental formulas guaranteed the rights of diverse state bodies and of private individuals."⁴¹ This initiation was an integral part of the very complete education which the monarch received; for this ruler, far from being brought up in luxury and idleness, was more harshly treated during his youth than any of the other children of royal blood.

This check on the imperial power was not unnecessary; for the Inca, though the Child of the Sun, was also a man, and he could be stupid or wicked, like the cowardly and vicious Inca Urco, whom we have already mentioned.⁴² Divine in the sight of the multitude, the sovereign was not so in the eyes of those nearest him;⁴³ and if he found himself outside the common moral code, appearing to the people as the very symbol of goodness, he was nevertheless not above all moral law.⁴⁴

The power thus defined was hereditary, but this statement too requires precise qualification. The Inca had several wives, who, like all the other inhabitants of the empire, were themselves arranged in hierarchical order: first, the eldest sister, the *Koya*, whom the Inca, like the Pharaohs of Egypt, married in order to preserve the purity of the royal blood;⁴⁵ next, the concubines of the blood royal; and finally, the concubines from outside the circle of the family.⁴⁶ The legitimate heir had to be a son of the legitimate wife, i.e., the Inca's sister, but it was not always the eldest son who ascended the throne. The reigning sovereign chose the son who seemed to him the most capable. Thus, a certain place was always left for merit.⁴⁷ If there was no son by the *Koya*, one of the illegitimate sons would be designated as heir.⁴⁸

Las Casas describes the predicament of Pachacutec on finding that he could not teach the arts of government and war to the son whom he had chosen as his heir. The sovereign replaced him by another. And Garcilaso tells how the Inca Yahuar Huacac, distressed by the cruelty of his eldest son, who took pleasure in tormenting the other children of his age, shut up the young ruffian in

a paddock, where he was condemned to keep watch over the herds of the Sun, and chose another heir.⁴⁹

The only example we know of violation of the rule of legitimate succession is that of Huayna Capac, who espoused the daughter of the vanquished king of Quito and placed the son of this union on the throne of that kingdom, leaving the rest of the empire to his legitimate heir. This violation did not have a happy outcome for the Peruvians, for from it sprang the civil wars that facilitated the Spanish conquest.

When the Inca died, great demonstrations would take place in all the towns, and his wives and retainers would immolate themselves voluntarily in order to follow him into the hereafter. At such a time, in order to prevent a usurper's taking advantage of the disorder, several hundred warriors would mount guard before the royal palace.⁵⁰ Then the body of the deceased monarch, mummified as in Egypt, would be placed in the Temple of the Sun at Cuzco, and a new Inca would come to preside over the destinies of the empire.⁵¹

3. *The Elite*

The advance of civilization is the work of superior men, not of the masses.

—V. Duruy, *Histoire des Romains*, VI, 392

From the preceding account one can already gain some idea of the gulf that separated the elite from the mass of the Peruvian people. Without a strongly constituted upper class, no civilization could have been brought into being, no empire could have existed. In the methodical way that was characteristic of them, the Incas therefore took the greatest pains with the physical, intellectual, and moral education of those who were to be the mainstay of their throne. We cannot here set forth the modern theory of the elite, but we give to this word, in contrast to the word "mass," a very precise meaning that must not be lost sight of.

It is a characteristic of the mass to form a unit by reason of the strict interdependence of those who compose it. It is not an entity

distinct from its members, but gathers together the traits they have in common, that is, instinctive and passional elements, which it unifies and renders homogeneous. Its great law is that which governs mob psychology, viz., conformity. Thus, it distrusts all forms of personal superiority and practices a violent intolerance. All the movements that animate it originate from without. The mass itself remains inert, first opposing them altogether and then aggravating them. The motive force is represented by a chief or an agitator, a demagogue who acts through suggestion by means of slogans.

The elite, on the contrary, is individual. It has three distinctive characteristics.

First, the member of the elite asserts himself by virtue of his superiority. This is the expression of his personal qualities and not the result of external conditions of which good luck has made him the beneficiary. He must not be confused, therefore, with the rich or the well-born. Fortune and birth create a privileged class, not an elite. The prestige that "people of note" enjoy among their compatriots does not in itself imply any valid superiority. In brief, the results of action are not, as such, the criterion. The member of the elite is of worth for what he is in himself, not for the opinion others have of him or for the success he may have been able to attain.

Secondly, the elite attracts to itself all men of good will. It is a group that is open to membership. All those who show that they possess the requisite qualities are part of it. The possibility of this accession does not stand in the way of either specialization (an elite of employers, of laborers, of agricultural workers, of artisans) or the formation of a hierarchy (from the ordinary member of the elite to the hero and the saint).

Thirdly, the member of the elite helps others. He does not remain inert. He acts for the common good. His action thus takes on a moral value. Not only does he form his own individual character in detaching himself from his group by an effort of will, but he also seeks to help others to do likewise. He is first obedient to his own vocation and then becomes aware that he has a mission to fulfil.

The mass admits of no elite. It is hostile to it by nature. Hence, the elite can never be chosen or elected by the mass. It recruits itself, and the mass has no rights over it.⁵²

In Peru *education was a privilege reserved for the elite*. "The common people," said the Inca Roca, "should not be taught what only great personages must know."⁵³

Herein we see the significance of the Inca policy. No one can command if he is not instructed, but what is the use of instructing those who must merely obey? Why launch upon the world an army of the half-learned, of whom Europe has seen so many, and whose arrogance reduces the true thinkers to silence and keeps them in obscurity?

The schools of Cuzco were built on the principal public square near the royal palaces of Roca and Pachacutec. The teachers were those famous *amautas*, jealous guardians of knowledge, who in former days, according to Montesinos, held power and kept in their hands the lighted torch of civilization in Tampu Toco, the mysterious city hidden in the midst of inaccessible mountains, while foreign invasions were devastating the land.⁵⁴ The learning inculcated by the *amautas* was both religious and secular. None of the accumulated knowledge of their time was alien to them: mathematics, astronomy, statistics, theology, history, politics, poetry, music, medicine, and surgery—they taught them all. They composed tragedies and comedies in which they themselves acted, and they were charged with the responsibility of interpreting the law.⁵⁵ They may also have performed the functions of engineers, directing the construction of canals, roads, fortresses, and cities, and manufactured certain ornaments of ritual use and certain articles of value intended for the great dignitaries.

According to Morua, the first year of instruction was devoted chiefly to the study of the language, the second to that of the religion and its rites, the third to the mastery of the quipus, the fourth to the study of history.⁵⁶ The whole course of instruction culminated in an examination of a military nature, called *huaracu*, which took place every year or every two years at Cuzco, and which made it possible for the Inca to assure himself that the future members of the elite were competent to be army leaders. The can-

didates were first put on a diet of pure water and raw maize, without pimento or salt, for six days. Then they were properly fed and took part in a race at the gates of the city under the eyes of the various families, who encouraged them by their shouts, extolled the winners, and flung reproaches at the laggards.⁵⁷ After this, the youths, divided now into two camps, would fight against each other with such zeal that occasionally some of them would be wounded or even killed. The physical exercises were concluded with bouts of wrestling and with archery and slingshot matches. These were followed by the moral tests. The candidate had to stand watch ten nights in succession, receive hard blows without uttering any cry of pain, and remain impassive even when a chief made a feint of smashing his skull with a club or running his face through with the point of a lance. Finally, he had only to prove his technical knowledge by making a bow, a sling, and a pair of sandals.⁵⁸

The candidate who at any moment whatever evinced fear or fatigue was eliminated in disgrace. On the other hand, the youth who had been judged well-trained, skillful, courageous, and endowed with sufficient resistance to pain, was received by the Inca, who, in the course of a magnificent ceremony, himself pierced the lobes of his ears. The young man had the right, from that time on, to wear enormous earrings, the dimensions of which were proportioned to his social rank. That is why the Spaniards called the Peruvian nobles *orejones*, which means, literally, *lop-eared*.⁵⁹

The character formed by this course of training was the common possession of all members of the elite and was shared by the Inca himself. Its essential traits emerge clearly in the only pre-Columbian drama that has come down to us: pride of birth, chivalry, filial devotion, compassion for the vanquished, royal magnanimity.⁶⁰

The elite of the Peruvian empire comprised several categories. First, there were the Incas properly so called, descendants of the original conquerors. There were a great many of them, since under the system of polygamy the sovereign had sometimes several hundred wives.⁶¹ Next came the *Incas by privilege*, to whom Garcilaso refers.⁶² Fernández de Palencia speaks of them in very specific

terms: "There were, besides, a great number of persons in the kingdom who were held to be Incas and had their ears pierced, but who were not held in the same regard as the others. They were retainers, henchmen, and friends of the lords, captains and servitors of the Inca, whose ears were perforated." ⁶³

All these *orejones*, except those who held high posts in the provinces, lived in Cuzco or in its immediate environs and thus conferred still more lustre upon the capital.⁶⁴ It was from among them that the principal civil and military officials were recruited.

The governors and generals had privileges of the same order, each of them, under the Inca's express authorization, being surrounded by a suite of servitors and artisans. Calicuchima, an army commander, had at his disposal stewards responsible for the provisioning of his household, skilled laborers for working in wood, three or four doorkeepers, and a great number of other Indians to wait upon him.⁶⁵ We shall return to the higher officials when we come to examine the administrative organization of Peru at the time of the Incas.

The religious hierarchy was entirely distinct from that of civil society, although the two were combined at the summit in the person of the Inca. The head of the religion, the high priest—whose origin remains obscure—was an *amauta* who lived in eternal contemplation, eating no meat and drinking only water. On festival days this pontiff would wear upon his head a tiara adorned with a golden sun, covered with gold plate and jewels and surmounted with plumes; a silver half-moon was fastened beneath his chin; precious stones and golden ornaments sparkled on his red-bordered robe of white wool; and golden bracelets encircled his arms. A large number of priests were under his jurisdiction, many of whom lived in the provinces and took turns officiating for a certain number of days. Finally, in the lower reaches of the hierarchy, there were the soothsayers, who would stay in the vestibules of the temples, and the guardians of the holy places.⁶⁶

Likewise arranged in hierarchical order, as we have seen, were the Inca's wives. The titular consort of the Inca, the *Koya*, wore a garment at official ceremonies that was almost as magnificent as that of her spouse. She was draped in a large cloak of many colors

made of the finest cloth and fastened with a large pin of chased gold, and her head was adorned with a diadem of gold and of flowers. Everyone who approached her had to prostrate himself, and no one might look into her face. She was surrounded by a great number of retainers, who, in order that she might avoid all contact with the earth, would lay fabrics on the ground before her feet and take them up again when she had passed.⁶⁷

We should mention here two institutions that seem greatly to have astonished the Spaniards: that of the "Chosen Women" and that of the "Virgins of the Sun." The first were young girls who were selected for their beauty by the governors in all the provinces and brought together in community houses where they spent a certain number of years. They were divided into six categories according to their social rank. The first was made up of the daughters of the great men of the empire. The second comprised the daughters of the less important dignitaries, and their task was to spin and weave for the Inca. The daughters of the *orejones* were grouped together in the third category. The fourth was composed of singers. The fifth consisted of the most beautiful Indian girls, and in the sixth were the foreign girls in Cuzco, whose task was to work in the fields of the Inca.⁶⁸ These maidens lived in palaces surrounded by gardens, where they received practical instruction in sewing and cooking, and religious training in the care of the temples and the ritual. These institutions served a definitely utilitarian function. As L. E. Valcárcel says, they were centers of industry for the young girls of the elite who would later become the Inca's concubines or be given in marriage to the great dignitaries.⁶⁹

The "Virgins of the Sun" were never allowed to see a man, not even the Inca. They were waited upon by girls of high rank and spent their time offering sacrifices to the Sun, spinning garments for the monarch, and preparing the food and drink set apart for the religious services of the great festival days. The chroniclers describe them as nuns and their house as a convent.⁷⁰

There were, then, two different kinds of community houses for women, which have often been confused by the Spaniards as well as by many contemporary authors.⁷¹ On the one hand, there were

the houses of the "Chosen Women," serving both a religious and a secular function; and, on the other, the houses of the virgins, which were purely religious establishments.⁷² The first could be considered as "storehouses of women," as Bandelier somewhat contemptuously calls them.⁷³

And finally, a distinction must be made between the cloistered nuns of whom we have just been speaking and the women who had taken vows of chastity but lived in their own homes, greatly respected by all. Such vows were not to be taken lightly; for the least dereliction the guilty woman would be burned at the stake. As for the Virgin of the Sun who lost her honor, she was buried alive, her companion in sin was hanged, and the very town where the guilty man lived was destroyed.⁷⁴

Another social category that must be included among the elite, but was not of Inca stock, was that of the local rulers or *curacas*, whom the Spaniards incorrectly called *caciques*, a word borrowed from the vocabulary of San Domingo. The Incas, with the deference they habitually showed to established institutions, used to allow the chiefs who had accepted their suzerainty to remain in their positions even after long wars.⁷⁵ Thus, there were in all the provinces two classes of higher local agents: on the one hand, those appointed by the central power, and, on the other, the *curacas*, many of whom held hereditary office, as we shall see later. The latter differed from the former only in their origin. They were integrated into the same administrative hierarchy so completely that identical functions would be performed, in the various districts, sometimes by Indians who came from the capital and sometimes by Indians native to the region. Only in the provinces adjoining Cuzco, which formed the nucleus of the empire, had the *curacas* disappeared.⁷⁶

Some of the Spanish writers—Cobo, for example, and even Santillán⁷⁷—have confused these two groups of office-holders. The Viceroy Francisco de Toledo carried this confusion to its greatest extreme when he sought to prove that the Inca appointed and dismissed the *curacas* at will. Considering the King of Spain as having taken the place of the vanished monarch, Don Francisco counted on taking advantage of this principle by replacing the

Indian chiefs with Spaniards and thus destroying every vestige of regional autonomy.⁷⁸ On the other hand, the local rulers appointed by the Inca attempted, when the empire was crumbling, to pass as *curacas* so that their position might become one of hereditary right, and the *curacas*, for their part, tried to do away with these governing officials and regain the power they had had before their submission to the Incas. The difficulty encountered first by the Spanish investigators and later by the modern historians in orienting themselves in this chaos is easily understandable.

The information about the *curacas* provided by the earliest chroniclers, although clear as to their office, is vague and contradictory on the subject of their prerogatives. This is not surprising. The powers possessed by these chiefs would naturally differ in accordance with the rank they occupied in the administrative hierarchy. Yet there were certain regulations that referred to them in particular. Every year or every two years, depending upon their distance from Cuzco, they were obliged to betake themselves to the capital, and their sons had to live there in order to receive their special education.⁷⁹ In addition, the Inca would give every *curaca* a wife of his race. All these were very shrewd measures of assimilation that seem to have met with general success.

The laws of succession in regard to the *curacas* differed in the different regions of the empire. Cobo writes that the office passed to the eldest son, or, if he was incapable, to the second son, or, in default of a son, to a brother. Herrera places the brother first in the order of succession, and the eldest son second; or else the eldest son and then the younger. In the region of La Paz, the first in line of succession was a brother, or, if not a brother, a nephew.⁸⁰ Sometimes the subjects of the *curaca* would themselves select the son whom they preferred—one of the very rare instances in which the choice was left to the people.⁸¹ Garcilaso writes that Pachacutec confirmed the system of succession “in accordance with the ancient custom of each province.” Likewise in the northern part of the empire, according to Gayoso, “the order of the caciques’ succession varied from one province to another: in one place a son, in another a brother, in still another a nephew.”⁸² It should be noted, however, that the Inca himself used to intervene frequently.

In the province of Huamanca he would choose one of the sons, or, if there was no son, a near relative.⁸³ Betanzos reports that the successor was named from among the children of the wife whom the Inca had given to the deceased *curaca*.⁸⁴ It is even possible that in certain provinces the Inca deemed it necessary, in complete disregard of local custom, to deprive public office of its hereditary character altogether.⁸⁵ On the whole, it seems that the Inca generally appointed the successor to the *curaca*, but with respect for local custom.⁸⁶

4. *The People*

In the course of this work we shall study the condition of the common people, the *hatunruna*. Some of them occupied a place in the social hierarchy a little above that of the mass of the taxpayers. The small officeholders formed an embryo middle class, and perhaps also the smelters, the silversmiths, the gem-cutters, and other craftsmen, whom Velasco calls "honored citizens."⁸⁷ But the great majority of the population worked on the land.

Here we shall confine ourselves to a few specific details about the private individuals who were known as the *yanacuna*.

This class of Indians stood on the fringes of Inca society. It included persons who were actual slaves and others who had become great dignitaries. Theirs was an altogether anomalous status in the highly stratified society of ancient Peru.

The earliest meaning of the word *yanacuna* was certainly pejorative. At a time when there was a conspiracy against Tupac Yupanqui, led by one of his brothers, six thousand Indians who were convicted of having manufactured weapons for the rebels were assembled in the town of Yanayacu to be punished in a way that would make an example of them. The sister and consort of the monarch asked that they be granted mercy, and they were pardoned by the Inca; but he condemned the guilty men and their descendants to serve the conquerors.⁸⁸ The *yanacuna* were, as Cieza de León puts it, "hereditary servants" (*criados perpetuos*).⁸⁹

This is the only case in Peru in which a tribe was reduced to

slavery; and even so, it was a humane action, because the conspirators and their accomplices had incurred the death penalty. Though the sovereigns had abundant forbearance for their vanquished enemies, they had no pity for those of their subjects who revolted.

To be sure, it will perhaps be said that if slavery did not exist in Peru it was because the entire population was enslaved. It must be acknowledged that under a quasi-socialist system the line between the free man and the slave is sometimes hard to draw.

Now it happened that these Indians were mixed with other servants with whom the monarch was supplied by way of tribute, as we shall later see, and from whom they seem to have been distinguished only by the hereditary character of their service. They were all known as *yanacuna*. As time went on, their number naturally increased, the more so as every new Inca had a right to a domestic staff of his own, and the same term was likewise applied to the servants of the *curacas* and of the high officials. The sovereign distributed *yanacuna* as gifts to his subjects in the same way as he did wives and chattels.⁹⁰

The *yanacuna* were not under the jurisdiction of the ordinary magistrates and were not attached to any local organization. They were not counted in statistical reports, their labor belonging exclusively to their masters.⁹¹ In the army they accompanied the troops as baggage porters.⁹² Several of them were employed in the service of the temples.⁹³

But the evolution of the *yanacuna* did not stop here. A little of the Inca's glory was reflected upon those who surrounded him, and the service of the man-god was considered an honor. The provinces used to send him the best of their young men as tribute to be *yanacuna*. Moreover, the retainers attached to the person of a high official or a royal prince ended by becoming part of the household, winning the master's confidence, obtaining favors, and receiving prerogatives. Some of them became, in this way, considerable personages in their own right. The Inca appointed them as local rulers and gave them wives.⁹⁴ Thus, by a singular paradox, those who performed the most menial services sometimes succeeded in

breaking through the barriers that separated the social classes and raising themselves to the highest positions.

During the time of the Incas the number of *yanacuna* (even in the most extended sense of the term) was relatively small as compared with the mass of agricultural workers. But during the period of the Spanish domination they became extremely numerous. It is true that the meaning of the word was still further broadened after the conquest. The conquerors applied it to the natives who were "voluntarily," so to speak, attached to the Spaniard's person or estate, in contrast to the *mitayos*, or those held in forced labor; and from this usage they came in time to designate all servants as *yanaconas*. A royal order of August 16, 1569, speaks of "the Indians in service called *anaconas*";⁹⁵ and Balboa writes, "All the Indians employed in domestic service who are neither per diem workers nor *mitayos* are called *yanaconas*."⁹⁶ According to the anonymous author of the *Relación sobre el servicio personal de las Indias*, the *yanaconas* were servants who worked in the fields, received a piece of land, food, and clothing, but could not leave the estate.⁹⁷ Matienzo distinguishes among four classes of *yanaconas*: those who waited upon the Spaniards in their homes; those who worked in the mines of Potosí and Porco; those who cultivated the coca plant; and those who worked the land on their own account.⁹⁸ In Paraguay the word was used anew to designate men vanquished in war who merited punishment and were constituted as a hereditary class of servants. Thus, by a long detour, the word reverted to its original meaning.⁹⁹

The situation of the *yanacuna* became much worse after the Spanish conquest. The bishops often denounced the veritable slavery that was imposed upon these poor folk.¹⁰⁰ In fact, the Spaniards did as they pleased with the *yanacuna*, and "as they did not hold them of any account, they would gamble for them, so that everybody came to have *yanaconas*, even the Negroes."¹⁰¹ This behavior on the part of the conquerors brought its own punishment upon them, for it created a vicious class of domestic servants ready for any crime and expert in the practice of espionage, which was the plague of Peru, and which the Spaniards could not manage

to get rid of. A large number of these servants who had deserted their masters and were making their living in disreputable ways, even going "so far as to steal the lamps from the churches," formed a kind of circle of the outcast and the destitute.¹⁰²

In pre-Columbian society the *yanacuna* provide an example of Indians who succeeded in passing from one social class to the other. It seems that their case was not unique. Velasco states that several persons "with small ears"—to quote his amusing expression—were appointed by Huayna Capac to high civil office in Ecuador, and he mentions a Cañari named Chapera who became a provincial governor, although he was not an *orejón*.¹⁰³ The military hierarchy also held out certain possibilities for individuals to rise in the social scale. Calicuchima, a military commander who was a native of the province of Puruha, was not an *orejón*.¹⁰⁴

Thus, the sovereign would sometimes permit Indians from among the common people who distinguished themselves by their outstanding ability to raise themselves to the level of the elite. But these cases were and continued to be exceptional. The principle was one of separation, not between victors and vanquished—since the chiefs of the conquered nations belonged to the upper class—but between the rulers and the ruled.

The outward mark of class status consisted in one's clothing. The *hatunruna* were obliged to wear identical garments, only the headdress being different in the different provinces. This was truly an Inca innovation, for the designs on the pottery found along the coast indicate that in earlier days the inhabitants of these regions were allowed a wide latitude in their choice of clothing and headdress.¹⁰⁵ The elite, for their part, displayed the insignia of their higher status in the way they cut their hair, the bands across their foreheads, and their special garments. The common people could obtain the right to wear earrings provided they were made of very ordinary material—wood, wool, cane—and did not exceed certain dimensions. The hole pierced in the ears of a common man always had to be less than half the size of that in the ears of the Incas.¹⁰⁶

Within the class of the elite itself, the Incas occupied a place

apart. They may have had a special language, distinct from the Quechua imposed upon the people—at least so Garcilaso maintains. It is extremely regrettable that we should be reduced to mere conjectures on this point, for knowledge of the language of the Peruvian conquerors would throw much light upon their origin.¹⁰⁷ What is certain is that the Incas alone could wear ornaments of gold and silver, precious stones, the plumes of birds, and garments of vicuña wool; yet the sovereign would often grant some of these rights by way of reward to the great men of his empire.¹⁰⁸

In general, as we have seen, the categories of the population were kept clearly separated, and differences in education and mode of life corresponded to differences in social rank. In all domains of existence a precisely defined hierarchy held parallel sway. Power always came from above, and the members of the ruling class were educated to exercise it for the greatest good of all. It was on these fruitful principles that the fortunes of the empire were built.¹⁰⁹

In the ancient Quechua drama *Ollantay*, the Inca makes the following reply to a general who has been so presumptuous as to ask him for the hand of a princess: “Remember that you are merely a subject. Everyone to his place! You have wanted to climb too high.”

Unfortunately, this elite, the object of so much solicitude, was destroyed within a few years, first by Atahualpa, the usurper, who, to assure his own rule, undertook a vast slaughter of the Incas, and later by the Spaniards, who killed Atahualpa himself. Then the social equilibrium was upset, knowledge fell into oblivion, and the people, trained in the habit of obedience, wandered like a dog without a master, leaderless and lost.

5

The Substructure: The Agrarian Community

1. *The Clan*

The basis of all regional organization, the agrarian community, was invested with such importance before the time of the Incas that Cunow and his disciples regard it as the very foundation of the social system of the empire.¹ This community appears to have been the result of a centuries-old evolution. Its origin is lost in the ages before the dawn of history, and in many parts of South and Central America we find it still today virtually unchanged. Through it the empire of the Incas thrust its roots deeply into the past and continues to maintain a kind of penumbral existence in the present within the framework of modern legislation.

The primordial cell of Peruvian society was the *ayllu*, a clan made up of all the descendants of a common ancestor, real or supposed. Every *ayllu* had its totem (*pacarisca*, the engendering being). Garcilaso reports that the common people believed themselves to be descended from animals—puma, condor, snake²—and, indeed, some of the Nazca pottery represents beasts so stylized that they seem human.³ But the totems were not only living creatures; sometimes they comprised inanimate objects, such as mountains or rivers, and sometimes natural phenomena like thunder and lightning.⁴

For the Indian, men, animals, vegetables, and minerals were all divided into *ayllus*.⁵

Markham, Cunow, Joyce, Bandelier, and Saavedra agree in believing that the *ayllu* is of very ancient origin and that it rests upon a religious foundation. The group had its guardian deities, the *huaca*, which were distinct from those of the family properly so called, the *conopa*, and its own ancestors, which it confounded neither with those of the family nor with those of the tribe or group of *ayllus*.⁶ These ancestors were themselves divinities, and their mummies were the objects of a cult. The religious character of the *ayllu* and the Indians' veneration of the deceased and of the aged are traits still found today on the inter-Andean plateau. Thus, at the present time ritual ceremonies precede community toil in the province of Huarochari in the region of Casta,⁷ and Europeans are astonished by the authority of ancestral tradition and the respect inspired by the aged which they observe in upper Peru, "as opposed to the situation in so many country districts."⁸

Was it from this family community, this kinship group, that the village community sprang? Saavedra maintains that this is the case.⁹ Even before the time of the Incas, according to him, the *ayllu* by lineage was becoming slowly modified; it was gradually losing its personal character and tending to assume a territorial dimension. When an association of families settles in a given area, the soil comes to replace the ties of consanguinity as the basis of social organization.¹⁰ In the Aymara language, the term *ayllu* denotes either a family or a territorial association; but the bond created by place of residence did not eclipse the bond created by blood, because the Aymara family had two classes of members—the original kin who formed the ancient *ayllu* and the members by adoption. Thus, in ancient times, perhaps in the Tiahuanaco era, the *ayllu* was already an economic and territorial association.

It must be acknowledged, however, that the Incas were an exception. Their *ayllus* remained pure kinship groups—which is natural, since their territory comprised the entire empire and the maintenance of racial purity was one of their essential preoccupations. But this *ayllu* of the Incas grew and multiplied according to a rule that was peculiar to it. The heir detached himself from his

ancestral stock as soon as he took power and founded a new *ayllu*. In other words, every Inca gave his name to an *ayllu* that included all his descendants except his heir, who in turn formed an *ayllu* in his own name. This is the reason why the goods of the deceased sovereign passed to his *ayllu* and not to his reigning successor, who was obliged to have a new palace built and to acquire, by tribute or as gifts, whatever articles he needed.¹¹

Although this evolution of the *ayllu* seems probable, in spite of what Ugarte may say of it,¹² great uncertainty nonetheless prevails on the subject of the *marca*—an Aymara word which, by a surprising coincidence, is identical with a German word of analogous meaning. According to Saavedra, the *marca* represents the final phase in the evolution of the *ayllu*: it is the *ayllu* concentrated in the village. Payne holds the same view.¹³ Ugarte, on the contrary, sees in the *marca* an association of *ayllus*, most often two;¹⁴ and for Markham the *marca* is the arable land of the community.¹⁵ As for Cunow, he identifies the *ayllu* with the Inca household unit of one hundred (*pachaca*), of which we shall speak later, and calls the *marca* its territorial division.¹⁶

From the multiplicity of expressions used by the chroniclers to translate the word *marca* it may be concluded that the meaning of this term is very close to that of *ayllu*, yet is not interchangeable with it. The *marca*, as we understand it, denotes the village and its land, comprising one or more *ayllus*.¹⁷

The division of the people into *ayllus* undoubtedly existed in the cities as well as the rural areas. Each of these groups would establish itself in a particular block of buildings in one of those large square enclosures containing a series of courtyards and dwellings that De Rivero and Tschudi have taken for palaces.¹⁸ In Machu Picchu each *ayllu* occupied from six to ten houses, and every such group of houses was distinguished by some particular characteristic, chiefly in the way the stones were dressed.¹⁹

The association of a large number of *ayllus* formed a tribe.²⁰

Finally, families continued to exist as such within the *ayllu*. The Inca organization, which respected the community, was in no way destructive of the family, in spite of what Suárez says to the con-

trary.²¹ As we shall see, children assisted their parents to the exclusion of other members of the group; assessments were always made by households; and the head of a family was the unit in terms of which the statistics were compiled. The family tie was also apparent in the common law, which expressed the customary practices of the land: children orphaned at an early age would be taken in charge by the eldest brother, or, if there was no brother, by the next of kin;²² and a widow would be entrusted to the care of her son, or, if she had no son, to that of her brother-in-law.²³

The *ayllu* continued to exist after the Spanish conquest, but as a territorial unit. It was essentially an agrarian community, its characteristic feature being collective land tenure. When an *ayllu* moved from one place to another, it took with it the name of its original home. In Coni, for example, there is an *ayllu* called Tiahuanaco.²⁴

It is this agrarian system that we propose to study now.

As is natural in a country where the soil is poor and the population is constantly increasing, agriculture presented a very important problem in Peru. The Inca himself on certain days would take the plough in his hands—as the Emperor of China used to do—and, accompanied by a numerous entourage, would work the field of Colcampata, which was consecrated to the Sun. Every official would follow the ruler's example in his own province.²⁵ In the Peruvian calendar, several divisions of time bore names that alluded to agricultural tasks.²⁶ When an Indian died, a little bag of seed would be left beside him so that he might be able to sow his field in the next world. "What the Indians love above all is the land," wrote Francisco de Toledo;²⁷ and Cobo marveled to see that the artisans of his time, in spite of the objurgations of the Spaniards, could not resist the pleasant temptation of going to the assistance of their neighbors as they worked in the fields when the time for ploughing came.²⁸

If the physiocrats had known Peru, they would no doubt have praised it even more highly than they did China!

2. *Collective Ownership of the Soil*

The juridical form of land tenure corresponds to the group's degree of individualization. Collective ownership by the clan is in keeping with the structure of the clan as a social cell. The character of the land in Peru assured the cohesion of the clan; for, in order to obtain produce from the soil, it was necessary to perform tasks in common, especially in carrying on large irrigation projects. The same condition brought about the same result in Java; the Javanese family community, the *desa*, exists to this day by virtue of the necessity of undertaking the irrigation of the rice plantations, and these remain common property. Thus, the agrarian system of the Incas is not to be thought of as a necessarily provisional regime.

The Peruvian method of land tenure has been described as "communist" by several writers, but such an appellation is inappropriate. In fact, three different kinds of collective land tenure need to be distinguished. The first consists in the common cultivation and distribution of products according to need. In general, the members of the community are assumed to have equal needs and a consequent right to equal shares in the crops. This system was still in existence at the end of the nineteenth century in some parts of Spain, notably in the northwest of the province of Zamora and in upper Aragon. It is communism in the true sense of the word.

The second type of organization involves the right of each member of the community to enjoy for life the fruits of the soil produced on the land allotted to him and to dispose of the produce of his labor as he sees fit. Consequently, inequalities arise among the members of the community in accordance with their strength, industry, or foresight. This is the type of certain Swiss *allmende*.

The third form of collective land tenure consists in a periodical redistribution of the land, with private cultivation of the allotted parcels for the benefit and at the risk of each individual. This is the type of the Russian *mir*²⁹ and of the collective land of Morocco. It was also that of the Indian community of Peru.

This was evidently far from being communistic. It necessarily involved submission to a chief or to a council responsible for the maintenance of order. It also gave rise to certain inequalities because of differences in productivity between the industrious and thrifty families, on the one hand, and, on the other, the families who worked little or badly and were wasteful. These inequalities were held within limits, however, by periodic allotments.

Before the establishment of the Inca system of centralization, there existed among the Peruvians, generally speaking, both private property (house, paddock, orchard, personal possessions)³⁰ and collective property, owned by the *ayllu*, which was used either in common (pastures and woodlands) or by each family through a method of periodic distribution (tillage). In addition, there were some commodities that all the Indians owned in common, really constituting wealth without a proprietor: sea salt, fish, wild fruits, the fiber of vegetable plants.

This system was similar to that which obtained among a great many ancient peoples. In the Germanic *Mark* one part was held in common, and one part, made up of arable lands, was divided into lots and distributed to families. In the Hebrides, Ireland, Scotland, Russia, North Africa, India, Mexico, and northern Italy,³¹ one also finds this system of periodic redistribution of the collectively owned land.

It may be that a fiscal idea to some extent determined the Inca policy. Perhaps the agrarian communities were respected by the Peruvian monarchs because, thanks to the joint and several responsibility of their members, they were excellent collectors of taxes. Historically, this has been a motive sufficiently powerful to induce certain peoples to preserve groups that were threatened with extinction, as the Turks did in the case of the Jugoslav *zadrouga*, or even to lead them to create entirely new associations, as happened in the province of Kaga in Japan in the feudal age of Tokugawa or in Russia when the lords made the *mir* general in the reign of Peter the Great. In Peru, at least, although the sovereigns laid a very heavy burden of taxation upon their subjects, they sought first to put them in a condition to support its weight. In order to obtain abundant revenue from taxes, one must begin by

increasing the supply of goods that can be taxed. This is a truth it is well to remember at all times.

The slightest exaction imposed on groups wresting a poor living from unproductive soil would have been equivalent to a sentence of death. The principle of population was the basis of the Incas' agrarian policy.

3. *Agrarian Policy*

To understand this policy, let us put on the *cushma*, or Indian shirt, and follow one of the last Incas, who has just conquered a province on the plateau and who, after great festivals at which he has fraternized with the vanquished, announces that he is about to organize their territory in such a way as to make it as rich and prosperous as the other lands that have already submitted to his power.

At first nothing is changed. The *curaca*, or local chief, still retains his position, and the *ayllus* keep what belongs to them. But soon a swarm of government officials arrives from Cuzco and sets to work. Before distributing the lands, they must enlarge their extent, and this means a struggle against the environment that continues in intensified form.

The Inca's representatives begin by collecting into villages those Indians who have withdrawn to isolated areas, to *pucarás* or fortified positions, either through fear or from the wish to be close to some venerated spot.³² This is the same operation which the Spaniards were later to attempt under Francisco de Toledo and which they were to call the *reducción de los pueblos de naturales* ("settlement of the native population").³³ Then the surveyors, by means of strings and stones, proceed to the measurement of the arable lands, and the statisticians to the enumeration of the inhabitants. Men, women, children, animals, houses, woodlands, mines, salt pits, springs, lakes, streams—everything is duly noted down and counted, and a relief map of the entire area is drawn.³⁴

In the light of these data the Inca decides whether there is reason to send to the district colonists, teachers, materials, or supplies of seed, and what public works it would be suitable to under-

take there. Then the engineers call the natives together and have them build terraces and dig canals. Along the slopes of the mountains the land must be leveled by means of embankments supported by uncemented stone walls from two to three yards high and a yard thick, with a slight backward inclination so as better to resist the pressure of the retained earth. In this way a series of terraces is constructed in successive tiers—the *sucre* of the Quechuas, the *andenes* (“platforms”) of the Spaniards—which are connected with one another by stone stairways.³⁵

The Indians were not only thereby adding to the acreage that could be cultivated; they were also avoiding the devastating effects of the rains that would wash away the seeds. No doubt this system of cultivation antedated the period of the Incas, for it is found in Malaya and Polynesia and, in America itself, in regions where the sovereigns of Cuzco never penetrated and where it seems to go back to very ancient times. But the terraces of the Incas were of better construction than any of the others.³⁶ Where the mountainsides are steep, the building of terraces demands great skill.³⁷ Alonso Ramos Gavilán tells how the terraces built on Titicaca Island for coca planting collapsed and buried the plantations.³⁸ Today’s traveler is still amazed to see how the smallest parcel of land was utilized and what prodigies of labor were sometimes performed to bring water to such tiny patches.

For it was not enough to make arable land available; the necessary water had to be procured to make it fertile. The importance of hydraulics here can be understood when we consider that the water to irrigate the upper terraces on the slopes of the high mountains had to be transported from a great distance in jars carried on men’s backs.³⁹

The works of irrigation carried out by the Indians are such as to appear to us nothing short of fantastic. Canals sometimes more than sixty miles in length were cut in the rocks, sent through tunnels, and carried across valleys on aqueducts fifty to sixty feet long. Often they were fed by reservoirs like that of Nepeña, which was formed by a stone dike built across a gorge and measured some 4,000 by 2,700 feet. On Mount Sipa, opposite Pasacancha, subterranean canals formed a system of communicating basins.⁴⁰

Here again, in canalizing water, the Indians had started well before the Incas came. The Calchaquis and the Caras seem to have been very expert in this operation, as were the Chimús, since the Incas were obliged to destroy certain aqueducts in order to reduce them to the point of surrender.⁴¹

The use of the water brought to the fields at such great cost was very strictly regulated. Each Indian had to avail himself of the precious liquid for a certain time and at a moment fixed in advance. If he neglected to do so, he would be punished.⁴² This rationed usage recalls that of the Spanish *comunidades de aguas*: "There is nothing better in Murcia," Acosta wrote.⁴³

Irrigation ditches and canals were constructed not only in the dry regions of the Inca empire, but also in rainy areas, where their object was to prevent damage from floods. By requiring the execution of common tasks and a stern regimentation, water was everywhere a factor in cementing solidarity.

Once the acreage of arable land had been increased and the fields irrigated, the next step was to fix the boundaries of the fields. To avoid any confusion, the experts sent by the Inca would give a name to each rise in the land or confirm that already in existence. Then they would put up markers to indicate the limits of each community's territory.⁴⁴ All they had to do after that was to distribute the land.

4. *Distribution of Land and Livestock*

In theory, the territory of each community was divided into three parts: the first was assigned to the Sun, the second to the Inca, the third to the community itself. Such a division is to be found also among other peoples. Even in Spain there were in certain provinces royal and manorial lands that the inhabitants were obliged to cultivate,⁴⁵ and lands dedicated to the uses of worship (*hermandades ó cofradías de tierras*) which were improved by the members of the community, and the produce of which served to cover the costs of religious festivals, funerals, and the saying of Masses.⁴⁶

There is no doubt about this tripartite division. Some authors,

such as Reclus, Wiener, Lorente, and Pret, mistakenly speak of four parts, adding to those we have just mentioned either the territory assigned to widows, orphans, and the sick, or that allotted to the local chiefs.⁴⁷ But were these three parts equal? A number of writers believe that they were: Algarotti, Marmontel, Spencer, Markham, and Lindner.⁴⁸ Martens is more guarded, affirming merely that they were "just about" equal.⁴⁹ Reclus asserts that the four parts that he envisages were equal and that "the Inca was, in consequence, the actual owner of half the national territory."⁵⁰ These judgments seem to us to be erroneous.

Let us first go back to the sources. Ondegardo declares that the portions varied according to the quality of the land and the number of the inhabitants,⁵¹ and Cobo repeats what Ondegardo says.⁵²

In the second place, the inequality of the three parts is in accord with the spirit of the Inca system. The sovereign's first concern was to allot to each community enough land for its people to sustain life. It follows that the portions assigned to the Sun and the Inca would remain relatively small in heavily populated regions where the sterility of the soil did not permit of an increase in the acreage of arable land. Where this was not the case, these portions would be more considerable. Acosta is explicit on this point. He writes: "The Inca gave the community a third part of the land. Now, although it cannot be truly said whether this portion was larger or smaller than that of the Inca himself or that allotted to the Sun, it is certain that care was taken to make it large enough to feed the inhabitants of every village."⁵³

Finally, the fact that the tripartite division of the land was unequal becomes clear from the manner in which the share allotted to the community was parceled out. The acreage recognized as sufficient to feed a married couple with no children was an economic unit called a *tupu*, an Aymara word meaning "measure." The distribution was thus based on needs which were assumed to be uniform, but this distribution was applied to the means of production, not to the products. On the day when the Indian took a wife, he would receive a *tupu* and would no longer be supported by his parents. He would receive another for each son and for each servant and only half a *tupu* for each daughter.⁵⁴

What exactly was the *tupu*? Prescott remarks that, according to Garcilaso, it amounted to a *fanega* and a half of land, which was as much land as could be planted with a hundredweight of maize.⁵⁵ Beuchat writes that a *tupu* was a unit of area equivalent to a Spanish *fanega*, or about seventy-seven square yards (*sic*).⁵⁶ J. de la Espada and Markham assert that the *tupu* was sixty paces long and fifty paces across.⁵⁷ Castonnet des Fosses estimates it at 6,900 square yards, and Perrone at 7,700 square yards.⁵⁸ If one accepts these statements, the *tupu* seems to have been somewhat elastic, and so it probably was.⁵⁹

It is our conviction that the efforts of the historians to estimate the area of the *tupu* are futile because this measure was bound to be variable. It would have been absurd to standardize the areas of parcels of land in regions that were so different from one another. The acreage that would have provided subsistence for a family in a fertile area would have been altogether insufficient in a barren region. *The tupu was simply the parcel of land necessary for the sustenance of a childless household*, as we have said, and no figure should be used to define it. This is why Ondegardo writes merely that the allotments did not greatly exceed what was necessary for bare subsistence.⁶⁰ We find a confirmation of this point of view in the system adopted in our own day in the neighborhood of Casta in Peru. The job to be done, in this case a canal, is divided into a number of *topo* equal to that of the workmen involved, but varying in extent according to the difficulty of the terrain and the age and strength of each worker. It is thus not treated as a fixed unit of measurement.⁶¹

This method of distribution by *tupu* shows that in reality it was the community that was served first, since its portion had to be equal to the number of its members multiplied by the area of the *tupu* needed to provide a livelihood for each one. The Sun and the Inca got what was left, the surplus of available soil. (This agrarian policy is curiously similar to that which France has adopted in Morocco and which may be considered as the last word in modern colonialism.)⁶² The surplus thus obtained was divided between the Inca and the Sun, not, it seems, in accordance with any precise rule, but simply according to circumstances. In the

vicinity of the temples, for example, the larger portion of the land would be reserved for religious use, whereas around citadels and strongholds it was the state that was favored.

Garcilaso points out that the Inca's portion consisted to the greatest possible extent of lands that had been made available for cultivation as a result of terracing undertaken by the conquerors themselves—a wise policy that shows the pains the sovereign took not to appear before his subjects in the role of a despoiler.⁶³

Let us see, finally, how the apportionment by *tupu* was carried out among the members of the community. When the terrain was of varied character, the *tupu* would consist of several parcels at some distance from one another, so that each of the coparceners might have land of different kinds to cultivate. The same is true in our own day on the shores of Lake Titicaca, where every Indian receives at the same time a parcel of land by the lakeside, where he will sow his grain, another on the slope of the hill, where quinoa can ripen, and a third on the heights, where nothing but potatoes will grow.⁶⁴

The division of land among the members of the pre-Columbian community in Peru granted no rights beyond that of usufruct. The distribution took place every year, and all heads of families, able-bodied or not, shared in it; that is to say, they participated as consumers, not as producers. Although all authors agree that the allotted parcels could not be alienated in any way, whether by sale, exchange, or gift, since their holders were only usufructuaries, there are, nevertheless, certain modern writers who do not accept the view that the land was redistributed every year. Prescott in particular sought to anticipate an evolution that seemed to him inevitable, by a hypothesis that has nothing to justify it: "It is probable," he writes, "that under the influence of that love of order and aversion to change which marked the Peruvian institutions, each new partition of the soil usually confirmed the occupant in his possession, and the tenant for a year was converted into a proprietor for life."⁶⁵ The ancient chroniclers, however, are explicit on this point. "The land belonging to the community was parceled out every year," says Acosta.⁶⁶ Ondegardo repeats this and adds that in his time these annual redistributions were still being

made "in the greater part of the kingdom." ⁶⁷ Garcilaso speaks to the same effect,⁶⁸ and Cobo tells of having been present at such partitions in certain provinces.⁶⁹ It should occasion no surprise that such a custom should have prevailed in a country where the land was left to lie fallow for long periods of time. What interest could the Indian have had, in fact, in getting back and cultivating once again the identical plot of ground that had been assigned to him four or five years previously?

Here again the Peruvian system did not differ greatly from that which obtained among many ancient peoples. In Germany land was redistributed annually, but as the country was thinly populated, every family received as much acreage as it wanted.⁷⁰ The periodic redistribution of collectively owned land took place in Spain in the nineteenth century as often as every two or three years in the district of Sayago in the province of Zamora.⁷¹ In Morocco the tribal assembly (*djemâa*) apportioned the land every four or five years among the douars, and the assembly of each douar would, in turn, make an annual distribution among the heads of families.

When the population of the Peruvian community increased, where would the necessary supplement to the *tupu* come from? Trimborn, who sees the Incas only as conquerors, maintains that in this case the communities would have no recourse but to clear more land or intensify the cultivation of what they already had. In a country with an increasing population, like Peru, such a system would soon have resulted in mass starvation. But the Incas have given too many proofs of their desire to provide their people with the means of livelihood for us to believe that they would have allowed this to happen. When times were hard, the people were fed from the stocks in the Inca's own granaries. What would he have gained, then, by preventing them from getting the extra land they needed when the scarcity of food threatened to become permanent? We prefer, rather, to follow Garcilaso in believing that the new *tupus* were deducted from the acreage allotted to the sovereign.⁷²

The actual distribution of the land was probably carried out by

the community itself.⁷³ Once the different *tupus* had been designated, they were marked off by encircling rows of stones.⁷⁴

Similar regulations applied to the distribution of the livestock. However, the number of animals allowed each Indian was very small indeed, while those at the disposal of the ruler and the priesthood was considerable. In the division of the pasture lands, the share assigned to the communities was smaller than the portions allotted to the Sun and the Inca.⁷⁵ Every head of a family received a pair of llamas, which he was obliged to take care of and which he was not allowed to kill except when they became old. In Collao, however, where these animals were always very numerous, there was no such prohibition, and the people were permitted to cure the meat and sell it.⁷⁶ In addition, a few communities kept flocks of llamas which were not subject to distribution, but whose wool was divided among their members. At certain periods some of these beasts would be slaughtered and their meat eaten.⁷⁷

However, to draw from these facts the hasty conclusion that the Inca reserved the lion's share of the livestock for himself would be wholly to misunderstand the character of the system. The sum total of what was set aside for the Indian in the manner here described constituted, strictly speaking, his *subsistence minimum*, and the surplus reserved for the Inca was not consumed by the sovereign alone. It reverted in great part to the Indian himself, not only by way of gifts, but also through the distribution of accumulated stocks. We shall later return to these two methods of disseminating wealth, but we mention them at this point in order to avoid giving the reader a false impression. Thus, the Inca would bestow upon the *curacas* or upon deserving individuals flocks that were known as "poor flocks" in contradistinction to the "rich flocks" of the monarch.⁷⁸ In reality, these last were the flocks of the state and constituted a *national reserve set aside for breeding*, to meet the needs of the entire population.

Each flock was distinguished by its color. When a young animal differed in color from its dam, it would be removed from the flock and placed in one where it would be indistinguishable from the rest. The cord in the quipu had to have the same shade as that of the flock.

The grassy plateau served as pasture land, since all the soil that could be irrigated was under cultivation.

5. *The Cultivation of the Soil*

Once the work of reclamation had been completed and the land parceled out, the cultivation of the soil would begin. Ploughing started at the end of July, and sowing was done in September and October, when all other work would be suspended so that nothing might keep the Indian from this task. The potato and the quinoa, however, had to be sown as early as August or September in order to be ready in time to be gathered in the general harvest, which took place in the month of May. Finally, in June, the crops were garnered in the houses and public granaries.⁷⁹

Theoretically, every Indian family cultivated its own *tupu*, but the neighbors would lend their aid in case of need. This practice of mutual assistance (*minca*) has continued into our own day.⁸⁰ The fields of the sovereign and those of the Sun, on the other hand, were cultivated by the whole population of the community working in concert under the guidance and direction of their chief. It must be noted, however, that in order to prevent each member of the community from a shirking reliance on the work of the rest, even this co-operative enterprise necessarily gave rise to a division of labor and the allocation of specific tasks to particular individuals. "When several groups of Indians undertake a piece of work," says Ondegardo, "they begin by dividing and subdividing the job so that each individual gets his share, which is called a *suyo*. The first man to finish does not give any assistance to the rest, who otherwise would do nothing at all, since each of them would be counting on his neighbor and would laggard as much as possible."⁸¹

The *suyo* or *suyu*, then, consisted of long, narrow, parallel strips of land assigned to the *hatunruna* on the fields belonging to the Inca and the Sun. These plots must not be confused with the *tupu*, which were taken out of the communally owned land and the produce of which belonged to those who cultivated them.

It is greatly to the credit of the Inca that he made this work in

the fields a real pleasure. "The Incas had arranged and regulated this service in such a way that the Indians treated it as a form of recreation and diversion," says Cobo, adding further on: "Work on the land was the occasion of the greatest celebrations and festivities."⁸² The cultivation of the sovereign's fields in particular took on the aspect of a veritable jubilee. The Indians, decked out in their gayest apparel, would sing the praises of the monarch as they went through the labors of the day. We can well understand the astonishment of the Spaniards, who were little accustomed to regarding work as a pleasure. Never has Fourier's dream of the "attractions of labor" been more perfectly realized in this world.⁸³

6. *The Order of Cultivation*

The order of cultivation, as indicated by Garcilaso, was as follows:⁸⁴

First, *the fields of the Sun*. The divinity had first place. This was as it should be. It must be remembered that it was for the divinity, and not for the priests, that these lands were set aside. The priests could have the use of the harvests of the Sun only during the time that they took their turn in the service of the temple. When the priests were not on duty, they had to work their own lands, and they received allotments for this purpose just like the other Indians.

The fields of the Sun should properly be called "fields of worship" or "fields of religion," for the Sun was not their only beneficiary. All sorts of secondary gods and local idols had a share in the produce.⁸⁵

Secondly, *the fields of the incapacitated*—those whom the Spaniards called *impedidos* ("handicapped"): widows, orphans, the disabled, the blind, the ill, and soldiers absent on military duty. All those who could not or who could no longer work thus had a *right to assistance*. In each community certain Indians were designated to take charge of these lands. When they judged the moment opportune, they would climb to some elevated spot, sound the trumpet, and summon the able-bodied inhabitants to work.

Thirdly, *the fields of the capable Indians*, that is, all those who were able to work.

Fourthly, *the fields of the curacas, military leaders, and high officials*.

Fifthly, *the fields of the Inca*. The labor service thus exacted constituted the chief tax paid by the people to the sovereign. It was no innovation, for the *sinchis* of earlier days had generally demanded it of their subjects.⁸⁶

This order of cultivation is very remarkable in that it gave those unable to attend to their own concerns priority over those who were fit and placed the needs of the common people before those of the officials and the monarch. However, several of the chroniclers are not in accord with Garcilaso in regard to this point. Ondegardo maintains that the Indians worked on their own lands after those of the gods and the sovereign, and Cobo repeats the same statement. From these discrepant accounts no conclusion can be drawn.⁸⁷

During the time that this work was being performed, the workers lived at the expense of the beneficiary. This practice was universal and extended, as we shall see, to all fields of production. Whoever held the land, even a god, was obliged to support those who worked on it for as long as they remained on the job.

7. *The Methods of Cultivation*

The Incas strove not only to extend the area of cultivation, but also to intensify it. Whenever they brought a new province under their rule, they would have studies made of the nature of the terrain to determine the kind of cultivation for which it was best suited. Unfortunately, the poor soil of the plateau often had to be allowed to lie fallow for long periods of time. Even today the fields around Lake Titicaca are left untilled for as many as three, four, seven, or ten years,⁸⁸ and in the Carangas district of Bolivia this period may extend as long as twenty or even thirty years.⁸⁹

Agricultural implements were very primitive. The ploughshare (*taklla*) consisted of a piece of tough wood about a yard long, flat-

tened at one end, to which were attached two crossed sticks. The ploughman would press his foot on these sticks to drive the flat end into the soil. As Beuchat remarks, this was, in fact, a kind of spade.⁹⁰ The *laya* in use among the Spanish Basques is similar to the *taklla* except that it is made of metal.⁹¹ The ploughman's wife accompanied him, picking up pebbles and breaking the sods either by hand or with a curved stick, a stone, or a piece of metal. The Indians did not cut a furrow with their *taklla*. As Father Cobo says, they turned up *camellones*⁹²—a picturesque word well known to everyone who has traversed the virgin forests of South America. *Camellones* are the deep and regular depressions beaten into the ground by the feet of animals along well-trodden paths; they mark the trail of animals in very much the same way as ruts mark the route of carriages. The Indian would make a line of these holes with a skill that surprised the Spaniards.⁹³

While they labored at these tasks, the Indians chanted songs, as, indeed, they did while performing most of their duties, regulating their movements to the rhythm of the music and breaking the ground in measured strokes in time with its beat. When they worked together, they arranged themselves in a single file—each one, if possible, in his own *suyo*—and drove their spades into the ground in concert with the cadences of their song. Bingham gives us a picture of this communal ploughing as he saw it near La Raya in upper Peru:

The men, working in unison and in a long row, each armed with a primitive spade or "foot plough," to the handle of which footholds were lashed, would, at a signal, leap forward with a shout and plunge their spades into the turf. Facing each pair of men was a girl or woman whose duty it was to turn the clods over by hand.⁹⁴

The other agricultural labors—hilling potatoes, weeding the sown fields—were performed by hand or with a kind of hoe.⁹⁵

Only men between the ages of twenty-five and fifty were liable to agricultural service, with the exception of the *orejones*, *curacas*, and *yanacuna*. The children had the task of protecting the seeds by chasing away the birds. To keep wild animals away, the Indians

surrounded their fields with a hedge of quinoa, and to prevent frost they burned leaves and dry plants so that the wind would spread the smoke over the area under cultivation.⁹⁶

The ancient Peruvian husbandmen were by no means unacquainted with the different kinds of fertilizers. At first they used human excrement and animal manure, but when the Incas conquered the land along the Pacific coast, they had at their disposal the famous guano, still so highly prized today, and they exploited this with the same methodical and provident care which characterized everything they did and which is so rarely to be encountered among governments of the present day. The Chincha Islands, where these valuable deposits of bird droppings were to be found, were parceled out among the different provinces of the empire, so that no one province could establish a monopoly for its own benefit. It was forbidden, on pain of death, to kill the birds or even to disturb them by setting foot on the islands during the season for breeding.⁹⁷

Another fertilizer much used in the seaboard provinces was fish, which was abundant all along the coast.⁹⁸ Cultivation would proceed by sinking a number of deep pits into the ground until a layer of dampness was reached. The earth would then be buttressed with brick walls, and the sowing would be done by digging holes with a sharp-pointed stake and burying in each of them two or three grains of maize with several fish heads.⁹⁹

Such, in brief, is that agrarian system which Count de Carli and Florez Estrada regard as the best ever known, and which is in no way communistic, as so many writers have averred.¹⁰⁰

Privately owned goods included the produce of the *tupu*, homes, farmyards, orchards, some domestic animals, and personal property consisting largely of household utensils. Landed property limited to the home and the adjoining garden was also known among many ancient peoples—the Romans of antiquity, the Germans, the Javanese, and the Russians.¹⁰¹

All these goods no doubt constituted but a “paltry estate,” as Lorente says, but others of greater value could be added to them at the sovereign’s will, as we shall shortly see.¹⁰²

8. *Private Property Among the Elite*

The principal source of private property was gifts from the Inca. The sovereign alone could graft upon the existing regime, which he had not altered, a new form of ownership that he himself devised. These gifts included wives, lands, llamas, clothing, and various articles of value. They were designed as a reward for services rendered—exemplary conduct in war, for instance, or the construction of important public works.¹⁰³ Such grants might also have a political object when they were made to the *curacas*.¹⁰⁴ Land thus received as a gift was not transferable. It could be handed down as a legacy, but could not be divided among the heirs. The latter possessed the property collectively, but one of them, representing the deceased, would be responsible for its administration, according to Ondegardo,¹⁰⁵ and would make a per-capita apportionment of the produce of the land so that each descendant would have an equal share. This was typical of the way in which property was transmitted.¹⁰⁶ The children of the deceased were considered as having equal rights, but this did not mean that the property itself was divided into equal parts and distributed among them. Everything was held in common. Only the produce was divided, and this had to be done even if the descendants became so numerous that each of them received only one ear of maize. But this system in no way involved any relaxation of the rule that *no one could share in the enjoyment of a product that he had had no part in producing*, save in those exceptional cases provided for by Inca law. Whoever was absent at the time of the sowing had no right to any portion of the crop.¹⁰⁷

As the Inca was especially generous toward his *orejones*, who for the most part lived in or around Cuzco, it naturally followed that the closer land was to the capital, the more likely it was to be privately owned. The Incas as a class, then, had no special sympathy for agrarian collectivism.

The Peruvian system, contrary to that proposed by Plato, reserved the right of private ownership to the elite.

It is possible, however, that private property may have had another source. Among the Indians, as among the ancient Germanic peoples, whoever cleared an untilled and unappropriated piece of land had a right to the exclusive use of it.¹⁰⁸ But the acquisition of usucapionary rights by way of this kind of appropriation must have been rare in Peru, where there was a scarcity of arable land. The chroniclers do not speak of it. Latham regards it as a present survival from the past.¹⁰⁹ According to him, private ownership of land must have been instituted for the benefit of the *curacas* before the Inca conquest and naturally continued to exist under the rule of these sovereigns.

Property that comes from gifts is indeed private property, but in Peru it presented some special characteristics that distinguish it from quiritarian ownership under Roman law, since title to it was not absolute. At the same time, it remained very different from collectively owned property, for the lands thus held were excluded from the periodical redistributions and were handed down to the descendants of the owner.

Two pitfalls must be avoided in examining the history of property rights in Peru: that of trying at any cost to discover in the facts an application of the classical law of evolution—an orderly succession from common to collective to family and finally to individual ownership—and that of denying entirely the existence of such a law on the ground that it cannot be clearly or un-faillingly verified. On the whole, it would seem that an evolution did take place that, in its general outlines, conforms to this law, but it proceeded spasmodically and was interrupted by partial reversals.¹¹⁰ Valdez de la Torre, a defender of the classical thesis, points out that the right of inheritance was more widespread in the province of Huánuco than in the provinces of Cuzco and Charcas.¹¹¹ What does this mean if not that in the first district, conquered at a later date by the Incas, certain institutions had continued to evolve, while this evolution was suspended in the other territories, which had come earlier under the rule of the Peruvian sovereigns? It must be emphasized that there were two different lines of development: the property of the masses was socialized; the elite, on the contrary, was in the process of acquiring privately

owned holdings by way of donation.¹¹² The opposition between these two classes of the population was thus accentuated.

Velasco maintains on two occasions that among the Caras of Ecuador, land was privately owned and transmitted by inheritance; but he confines himself to making this statement without offering any explanation, and we consider this information suspect. The author has obviously not appreciated the importance of his assertion; he is trying to establish a contrast between the Caras and the Incas. Here are the two passages: "The right of [private] ownership was usual, and houses and furnishings were transmitted by inheritance," and "In the kingdom of Quito the lands had formerly been [privately] appropriated, and the same inequalities and miseries were to be seen there as everywhere else in the world; that is why the inhabitants adapted themselves to the new institution, not only without aversion, but even with pleasure."¹¹³ The last part of this second sentence is manifestly misleading; for the people of Ecuador put up a desperate resistance to the Incas and were not reconciled to them even at the time of the Spanish conquest; it is therefore probable that the first part of his statement has no more validity than the last. Moreover, if property had been individually owned among the Caras, the Incas would not have made it collective, since they allowed local customs to continue as they were. The people of Quito, in consequence, would not have been obliged to "adapt themselves to a new institution."

Cevallos¹¹⁴ and Suárez reiterate Velasco's assertions, but the former is generally lacking in critical acumen, and the attitude of the latter can be explained by his confusion of agrarian collectivism with the socialist organization set up by the last sovereigns of Cuzco. It seems to him that the Caras before the conquest would naturally have known nothing whatever of the socialist system established by the Incas and that, in the absence of conclusive evidence to the contrary, we must believe in the existence of private property among them. This, at least, is the sense in which we understand the word *indudablemente* ("undoubtedly") which appears in the statement of that eminent historian: "The oppressive communism of the Incas had not been established among the Caras, and individuals undoubtedly enjoyed the right of private ownership, possessing their own property and leaving it to their heirs."¹¹⁵ Suárez draws no distinction at all between the "oppressive" socialist regimentation and the system of the agrarian communities. The first is peculiar to the Incas; the second, on the other

hand, is to be found among all peoples. The Caras were ignorant of the one, but not of the other.

According to Restrepo, among the Chibchas of Colombia land was privately owned. Both real and personal property passed by inheritance to wives and sons; only the woodlands remained common property.¹¹⁶ Piedrahita adds that the sovereigns of Bogotá inherited the property belonging to those of their subjects who died without legitimate heirs.¹¹⁷ But these indications are inadequate, since the Spanish historians, as Beuchat remarks,¹¹⁸ scarcely paid any attention to anyone except the "caciques," and the right to own private property and to inherit it might well have applied only to the members of the upper class.

In some parts of Chile the private ownership of land had gained a certain foothold before the Inca conquest, but it was not absolute, for the owner could sell his land only to another member of the same community. Latham cites the curious declarations made by witnesses at a trial which took place about 1560 and which referred back to conveyances effected before the arrival of the Spaniards. These property rights were maintained, like other local institutions, under the rule of the Incas.¹¹⁹

Taken as a whole, this Peruvian system was very complex. The Spaniards could scarcely have been surprised at the collective land tenure they found in America, since it existed in their own country at that time; but they must sometimes have been puzzled, at least at first, by the multiplicity of "rights" that they encountered. A certain number of them asked themselves whether, in the last analysis, it was not the Inca who was the actual owner of all the land in the empire, retaining the right of eminent domain and ceding only usufructuary rights (*domaine utile*). This theory had the advantage of making it possible for the Spanish government to regard all lands as *vacant* property after the Inca's death and to dispose of them as it saw fit. It was a doctrine that would naturally have been upheld by Don Francisco de Toledo, and it is set forth explicitly in the conclusions of the report on the inquiry carried out under this viceroy.¹²⁰ A great many authors have repeated it—such as Anello Oliva, Beuchat, and Brehm—simply because it fitted into the framework of their conception of an autocratic state.

Hanstein writes that "all land, all property, all produce of the soil belonged to the Inca," and C. Mead says: "Everything in the empire belonged to the Inca."¹²¹ But other writers, such as Cunow and Trimborn, anxious to show that rights anterior to the Inca's rule continued in force and that this monarch's sole objective was to collect taxes, consider that it was the *ayllus* that were the true proprietors of all the soil of Peru.¹²²

It does seem, in the first place, that the *common lands* belonged to the *ayllus*. Father Cobo expresses the belief that the Inca owned these lands and the people enjoyed only usufructuary rights.¹²³ But Falcón, who was trained in the law, is positive on the subject. "Those who contend that the Inca gave and took back lands as he wished are mistaken," he writes, and a little farther on he points out that if the Indian communities had not been the owners of their lands there would have been no strife among them on this matter and no lawsuits tried before the Inca's tribunals.¹²⁴ Ondegardo likewise observes that in the early days of the Spanish conquest conflicts in regard to landed property used to break out among the various village communities (*pueblos*).¹²⁵

Secondly, as regards the other lands, we find very clear information in the account of Damián de la Bandera. According to him, the lands spoken of as the Inca's did not belong to the monarch at all, but were the property of the village communities.¹²⁶ P. Rodríguez de Aguayo declares that the tax paid to the Inca was not due to him as rent, since the soil belonged, not to him, but to the caciques and the Indians.¹²⁷ Ondegardo too asserts that the lands whose produce was used in paying taxes were the property of the inhabitants and declares it an injustice to give possession of these lands to the Spaniards.¹²⁸

It was only with the coming of the Europeans that the question whether the Inca enjoyed a sort of eminent domain became a live issue. So long as the sovereigns of Cuzco held sway, their property rights, if any, remained as purely theoretical as the principle in England that all land belongs to the Crown. These rights were probably never even defined; and controversies on this point are therefore very likely to prove quite futile.¹²⁹

To sum up: there were three coexistent kinds of land tenure, of which the third was by far the least considerable.

First, *national (state) property*: public buildings, fields, pastures, forests in districts where there was little woodland, coca plantations, and mines.

Secondly, *land held collectively by the community*, either to be used in common (forests in thickly wooded districts, pastures) or to be cultivated by families (arable lands). When several *ayllus* inhabited the same village, it is probable that the forests and perhaps also the pasture lands were common to all these *ayllus*, i.e., to the *marca*.¹³⁰

Thirdly, *private property*—houses, farmyards, etc., and lands received as gifts.¹³¹

9. *The Agrarian Community After the Spanish Conquest*

At the time of the discovery of Peru, a school of thought arose in Spain that sought to have the right of eminent domain recognized over all territory under the jurisdiction of the Crown. Gregorio López, Pedro Belluga, and Jacobo Cancr held that the sovereign had the right of expropriation without compensation; Sepúlveda, Herrera, and Cevallos, applying these doctrines to the new possessions overseas, proclaimed the Peruvian soil to be the property of the King of Spain; and it was in vain that Covarruvias, Acosta, and Las Casas called attention to the fact that the Bull of Pope Alexander VI conferred upon the Spaniards the right to convert the Indians, not to despoil them of their possessions.¹³²

The regulations that the King, as owner of all the land, promulgated in conformity with the terms of the Decree of November 1, 1591, were nevertheless exceedingly moderate. In principle, he himself kept the domains of the Inca and delivered those of the Sun to the Catholic Church, a division that has continued to exist into our own time in the province of Puno under the name of *aymas del Estado, aymas de Iglesia*.¹³³ The lands and pastures belonging to the communities were left alone.¹³⁴

In fact, however, the institution of the *repartimientos* upset everything. The King of Spain parceled out the lands among his

subjects with the proviso that they be cultivated by the native population.

As soon as Peru was discovered, this system was replaced by that of the *encomienda*, by which the King ceded to privileged grantees (*encomenderos*), by way of reward, his rights and duties in the allotted domain. The *encomienda* involved real co-operation between the Spaniard and the native. The *encomendero* was obliged to guide and protect his Indians and instruct them in the Catholic faith; the latter had to work for their teacher and protector. This royal delegation of power was merely temporary. It could last only during the lifetime of the grantee and of his heir. "La *encomienda* era por dos vidas" ("it was valid for two lifetimes") and could be granted only to persons of merit.¹³⁵ The *encomendero* was obliged to live on the land that had been assigned to him; and if he mistreated the Indians, his privilege would be revoked.¹³⁶

This system, which was imported into Peru at the time of the conquest, was in force during the sixteenth century, in spite of two temporary abrogations, first in 1523 and then again in 1542. In fact, however, the *encomenderos* took unfair advantage of their position to reduce the Indians to servitude, in spite of the protective measures taken by the Crown and the efforts of the clergy. Francisco Pizarro gave his brother Gonzalo, as a *repartimiento*, the entire district of Charcas, which contained the mines of Porco and Potosí. It was such abuses that gave rise to the orders of the Spanish sovereigns to reduce the excessive size of the *repartimientos*.¹³⁷ The tendency of the *encomenderos* was to take full possession of the land and to regard the Indians as chattels to be rented or sold along with it.¹³⁸ As a result, the communities were absorbed by the great Spanish landowners and saw their rights of ownership transformed into the right of collective use.¹³⁹ But the communities continued to exist and to remain attached to their native territory.¹⁴⁰

Nevertheless, it often happened that an *encomendero* would profit by his position to possess himself of a part of the collective domain and evict the lawful owners completely. This was the regular practice when an Indian died without heirs, and it perpetuated itself in spite of the official provisions of the Decree of

July 12, 1720. In such cases, the encroachments of the white men could finally lead to the disintegration of the community.

Even more destructive was the system known as the *mita*, which involved obligatory personal service assigned by rotation—whence its name, which, in the Quechua language, means “turn.” In principle, one-seventh of the inhabitants, or sometimes one-sixth or one-fifth, could be employed by turns for a maximum period of one year.¹⁴¹ The *mitayo* would work in the mines, postal service, and coca plantations. He could not be employed at more than a certain distance from where he lived, and when his time was up, he had to be paid and sent home. But often he was wrongfully retained under some pretext or other, his wages would be completely consumed by the exorbitant price of the food supplied by his employer—what we should call today the “truck system”—and the worst consequences would ensue: an excessively high incidence of mortality in the mines, the flight of the Indians, and the depopulation and destruction of the agrarian communities.¹⁴²

The *mita* fell into decay rather quickly as a result of the negligence of the Spanish officials; yet the viceroys made constant efforts to preserve this institution, which they considered of vital importance. In 1608, the Marquis of Montesclaros required the corregidores to deliver to the chief of each group of *mitayos* who were leaving their district a signed list of its members so that they could be kept under surveillance.

In spite of everything, however, the community continued to exist under the domination of the Spaniards, and the viceroy Francisco de Toledo officially recognized it in 1581.¹⁴³

It was the Republic of Peru that dealt the Indian system its hardest blows. A pronounced trend toward individualism made its appearance at the time of the War for Independence, and communal associations were abolished by Bolivar in the decrees of April 8, 1824 and July 4, 1825, although the great South American statesman was not unaware of the dangers involved in such a measure. Abruptly thrust upon his own with no one to protect him, improvident and dazzled by his good fortune, the native was an easy prey for the foreign speculator. All experience with the dividing up of land has demonstrated that, side by side with the prudent

and the energetic, who see in the possession of property a motive for exertion and a means of progress, there are the weak, the indolent, the incompetent, who sell their portions and, once detached from the soil, drift through life like boats that have slipped their moorings. Private property, like liberty, requires an apprenticeship and can bring only disaster to people who are not ready for it.¹⁴⁴

Accordingly, Bolivar limited the Indians' property rights by forbidding them to sell their lands for a period of twenty-five years—a measure similar to that which the French, after some bitter experiences in Algeria, have applied in Morocco.¹⁴⁵ But the Peruvians did not understand how prudent the Liberator's provisions were. A law of March 31, 1828, declared that the Indians who knew how to read and write might sell their lands freely, and the Civil Code of 1852 established quiritarian ownership and the equal division of inherited estates. Abuses inevitably followed, giving rise to complaints and even to threats of rebellion. It must be admitted that in this respect the viceroys of Spain had been immeasurably wiser than the republican assemblies of Peru.

Happily, the power of tradition is so strong in South America that agrarian communities have continued to exist in spite of the statutes that have condemned them to annihilation. At the end of the nineteenth century the law persisted in ignoring these associations, but at least the government was no longer bent on destroying them. It has thus been possible for the Indians themselves to develop a kind of common law based on custom, which jurists have studied. The family has remained an enterprise of collective labor in which the children, even after they come of age, continue to be dependent upon the father so long as they are unmarried.

Little by little, meanwhile, theories have had to give way before facts. The *comunidades de indígenas* (native communities) have had the benefit of favorable decisions handed down by the Supreme Court (March 31, 1909; July 1, 1911; April 2, 1912; December 6, 1917; and May 1, 1918). Special laws (Article 235 of the Water Code) have been passed on their behalf, and, finally, Article 58 of the Constitution of 1920 recognized their existence, and Article 41 declared that their property is imprescriptible.¹⁴⁶ Since then

there have been a number of new provisions that concern these communities: a decree of July 24, 1925, prescribed the surveying of all lands collectively owned; a decree of August 28 of the same year established an official register of the communities; and a decree of January 8, 1926, regulated the irrigation of lands belonging to these associations.¹⁴⁷

No law at that time provided for the legal representation of the communities. An action against a community had to be directed against all those who composed it, and no member could make a contract on the others' account; for example, no one could obtain a loan by mortgaging the common land. Consequently, when disagreements arose among the members of the community, the group found itself paralyzed, and internecine quarrels broke out by which strangers tried to profit in order to gain possession of the parcels of land.¹⁴⁸

In complete reaction against the policy previously followed, the Constitution of March 29, 1933, confers legal existence and juridical personality upon the communities, guarantees the integrity of community property, and declares it imprescriptible and inalienable. It empowers the state to procure lands for communities that do not have enough to meet their needs and to expropriate private property for this purpose after payment of due compensation. By the terms of the Civil Code of August 30, 1936, elected delegates who can read and write are empowered to represent the group.¹⁴⁹ We are thus witnessing a curious reversion of the Peruvian economy to its pristine form.

While preserving its own character, the community has undergone a certain internal evolution by reason of the extension of the principle of free elections.¹⁵⁰ However, in the region of Casta today it is under the direction of a council of elders, who delegate their powers to those members of the community that have shown outstanding intelligence. Most often it is the elected authorities who allot the lands every year; and sometimes they reserve certain portions for new purposes, as, for example, to cover the expenses of legal actions. The parcels allotted are not always equal, the most considerable being assigned to those among the joint owners who have rendered service to the community. Every piece of land is

cultivated by the head of a family, assisted by his wife and children and, if need be, by his neighbors. Very often, when the distribution is being made, the Indian will ask to cultivate the same lot as was previously assigned to him, thereby building up a sort of usufruct for life, which can sometimes be transmitted to his heirs; but the community itself always reserves the right of ownership.

The communities in Peru have been urged to inscribe themselves in a special register, and a survey of them has been planned, but in 1938, only six hundred and fifty such associations were inscribed in the official report of the Department of Native Affairs (created by a law of June 11, 1937, in the Ministry of Public Health, Labor, and Social Insurance). Their actual number is estimated at anywhere from two thousand to forty-five hundred.¹⁵¹

In Bolivia, the communities were abolished several times, but the law remained a dead letter in many of the districts. McBride reckons that sixty-seven per cent of the Indians of the high plateaus of that country—that is to say, in the five provinces of La Paz, Potosí, Oruro, Cochabamba, and Chuquisaca—live in such communities and that they cultivate one-twentieth of the territory of the republic.¹⁵²

On the shores of Lake Titicaca, in the Aymara region, the head of a family hands down his allotment of land to his heirs, who keep it undivided.¹⁵³ At Susques, in the Atacama area, the land is the property of the community, but this may be a creation of the Jesuits.¹⁵⁴ Bandler reports that every Indian family of Titicaca Island receives from the cacique a plot of land which he cultivates for a year and which is then left to lie fallow for several years.¹⁵⁵ McBride notes the existence of communities that cultivate the soil in common to the northwest of Lake Titicaca; and at La Collana, near La Paz, in a location difficult of access, he cites a group whose system of land tenure is identical with the one that we have just been studying: pastures held in common and the periodic redistribution of parcels suitable for cultivation.¹⁵⁶ According to Tello and Miranda, the *tupu* is now a family heritage in the region of Casta. The repair of irrigation ditches is a community project. Dressed in festive array, with a band to lead them, the inhabitants assemble for work, and their labors are punctuated by songs and dances.¹⁵⁷ In the district of Coporaque, along the Apurimac River, the

lands are redistributed every five, eight, ten, or twelve years, according to their quality.¹⁵⁸ In brief, we find on the plateau a whole series of different forms of tenure, corresponding to different stages of development ranging all the way from collectivism to individualism.¹⁵⁹

Does this mean that the system of agrarian communities is to be considered superior to any other? By no means. Often in Peru, the lands belonging to collectives are less well cultivated than those in private hands.¹⁶⁰ The proverb, "Property in common is property doomed," is true everywhere. Having little interest in the construction of terraces or the digging of irrigation ditches by which others will benefit, the temporary possessors do not improve the parcels of land they receive. The communal system greatly encourages the natural indolence of the natives. It maintains a part of the population in idleness while hands are needed in South American industry. This consequence is all the more serious in that those Indians who by their industry and thrift do succeed in laying by a little capital are obliged to bear the expenses of the religious festivals.¹⁶¹ Deprived of the stimulus of personal interest, the communities frequently remain backward and incapable of adopting modern agricultural methods and they have taken hold particularly in areas where the soil is poor, in the *puna*.

Yet these arguments do not justify us in concluding that private property is superior to collective ownership in the South American countries, for we have to take into account the mentality of the inhabitants. The Indians who are left on their own do not know how to protect themselves, and collective ownership of land has the great advantage of keeping them from sinking into the condition of a proletariat. It is the only thing capable of arresting the encroachments and usurpations of the white men, and especially of the mestizos, who are always ready to take advantage of the inexperience and apathy of the native to despoil him of his patch of land.¹⁶² Collective ownership is a guarantee of life and independence for the peasant of the Andean plateau. "The Indian question in Peru," says Means, "is that of the native community."¹⁶³ All authors realize that the community system has its disadvantages, but they all acknowledge that it would be unwise to

suppress it outright and that the Spanish viceroys were well advised in preserving it.¹⁶⁴ One is tempted to repeat, apropos of Peru, what Sir Henry Sumner Maine said of the village community of British India: "Conquests and revolutions seem to have swept over it without disturbing or displacing it, and the most beneficent systems of government in India have always been those which have recognised it as the basis of administration."¹⁶⁵ The Incas acted no differently, but the problem did not present itself in the same way in their time. The disadvantages of collective ownership—the premium placed on laziness, the exhaustion of the soil—did not exist in an era when work was compulsory and strictly supervised; they are the results of a regime of freedom.

Let us recognize, then, the wisdom of the agrarian policy of the ancient rulers of Peru. It is in vain that Cunow tries to dim the Incas' glory by explaining that the foundations of their much-acclaimed organization had been laid before their day. On the contrary, it is greatly to their credit that they preserved within the framework of an empire institutions that had been established in parochial societies.

But something more than these survivals from an earlier day remains to be studied in the Peruvian system.¹⁶⁶

6

The Superstructure: State Socialism

The essence of the state is to be the power of reason expressed by law, and not of the perverse impulses of individual caprice.

—Dupont-White, *L'individu et l'état*, Introd.

It is because of the existence of these agrarian communities that a great many authors have chosen the term “socialist” to describe the Inca empire. No doubt the community, as organized and maintained, does appear to be a collectivist association, since it involved the common ownership of the means of production; but it was the resultant of a long, natural evolution, the origin of which is lost in prehistory. It was a spontaneous development, and not a reasoned creation; a system to which man yielded, not one that he deliberately willed.

On the other hand, the regime that we are now about to examine does bear the characteristic stamp of socialism, for it is *an attempt at the rationalization of society*. Its author is man himself. It is he who conceived the plan and imposed it, and *this plan tends toward the virtual absorption of the individual by the state*, for the well-being of the former is assured only as it leads to the aggrandizement of the latter.

We have adopted the term “state socialism” to describe this phenomenon in order to denote an organization of the whole of society to conform to a certain ideal to be realized by way of authority. To be sure, the doctrine of state socialism has not been formulated with much theoretical rigor. As expounded by Rod-

bertus, Lassalle, or Wagner, it is loosely defined and appears primarily as a reaction against the Manchester School. But in spite of its vagueness it is based on the idea of the "regulative action of a central power in social relations."¹ Never has this action made itself felt more powerfully than in Peru, where demand was precisely calculated to meet implacably fixed needs, where supply was determined by a meticulous regimentation of production, and where the adjustment of supply to demand was assured by a system of statistical tables and reserve stocks.

In Europe the modern state socialists propose to respect the existing order, that is, private property and individual initiative. In Peru this same regard for established institutions led the Incas to preserve the agrarian communities, which represented the existing order of their time. Thus, in the Western Hemisphere, state socialism took on a much more pronounced form than it has in the countries of Western Europe, with their long tradition of private property. In Peru it rested on a foundation of collective ownership, which, to a certain extent, facilitated its establishment, because the effacement of the individual within a limited group prepared him to allow himself to be absorbed by the state.² Nevertheless, the Peruvian system cannot be called socialist without some qualification, because the sovereigns not only spared the small enclaves of private property that were already in existence, but themselves contributed, by their gifts and grants, toward the formation of others. It was, rather, as C. Rist says, in speaking of state socialism, "a particular idea of the general interest," the feeling that the state has a function to perform in promoting "civilization and well-being."³ In fact, it was an extreme form of interventionism, a veritable despotism conceived, not in the interests of the sovereign, but in those of the entire people.

What is really extraordinary is that a rational and strictly planned empire could have been constituted at the beginning of the fifteenth century in a country whose terrain is badly broken up and whose people lived in communities that were shut in upon themselves. The establishment of an empire under such untoward circumstances serves to provide us with some measure of the achievement of its founder, the Inca Yupanqui, called Pachacutec,

that is, "the reformer of the world" (from *pacha*, "world," and *cutec*, "modified" or "changed").⁴ The image of this sovereign dominates the whole pre-Columbian history of Peru, and his name is repeated by all the chroniclers. "The Indians had such a reverence and respect for this Inca," writes Garcilaso, "that they have not been able to forget him to this day."⁵

We have already seen that the Inca Pachacutec intervened in the agrarian system, settling the territorial boundaries and making various officials responsible for gathering the Indians together and counting them, for having neglected fields cultivated, for seeing that irrigation canals were dug and terraces constructed, and for drawing maps of the provinces and towns. According to Betanzos, the distribution of land and the building of public granaries took five years, at the end of which time the Inca distributed gifts among those who had most distinguished themselves, and laid down the rules for compulsory labor and military service. A year later, he had the *curacas* summoned to Cuzco, ordered great festivals, and busied himself with the clothing of the Indians—the number, quality, and design of their garments—and with taxes and centers of provisions. Then he instituted the practice of obligatory marriage. The same Spanish writer recounts how Pachacutec established the class of the *orejones*, reformed the calendar, and had Cuzco rebuilt, and how he engaged in great military expeditions for the extension of the borders of his empire. According to Garcilaso, it was this Inca too who commanded the people to speak Quechua, decreed sumptuary laws, regulated commerce, reformed the army, founded cities, and raised temples to the gods. His prodigious activity seems to have touched every department of life.⁶

The way in which the reconstruction of Cuzco was carried out is typical of this monarch's mentality. First, he had a plan in relief made of the city as he envisioned it. Then, he evicted the inhabitants and settled them in the neighboring provinces. Once the work was completed, he assembled the heads of families in a field near the capital and assigned each one a dwelling as shown on the plan, declaring that no other Indian would be permitted to take

up residence in Cuzco, since it was to remain a "city of distinction."⁷

The Inca's way of dealing with his whole empire seems not to have differed from his conduct in setting up his capital. His procedure there too was marked by the elaboration of a rational program, its execution by authoritarian decree, and finally the laying down of regulations designed to prevent any occasion of disturbance and to render the organization definite and permanent. Naturally, this system, so logical in its plan, was bound to encounter obstacles in adapting itself to realities. We shall see how these obstacles were surmounted by the progressive assimilation of the peoples newly subjugated and by the arrest of the processes of natural evolution, i.e., by an economic crystallization.

The information we have just presented provides a general picture of the superstructure of Indian society, but certain details need to be added.

In the first place, we are assuming that the portrait of Pachacutec given us by most of the chroniclers is a faithful likeness.⁸ It is possible that some of their statements may be exaggerated and that several sovereigns should receive the credit for the measures of which we have spoken, since a number of different emperors seem to have borne the name of Pachacutec. But this in no way changes anything essential to our thesis. If the plan was elaborated little by little and put into effect gradually, the facts are less spectacular, but the picture of the organization of the empire remains the same.

In the second place, we have noted that the Incas found an environment favorable to the establishment of socialism, without which they would probably have failed. The limitation of demand, for example, was imposed by the niggardliness of Nature, which restricted the supply. The execution of a master plan was greatly facilitated, on the one hand, by the need for communal labor in barren areas without domestic animals, tools, or slaves, and, on the other, by the persistence within the *ayllu* of an actual community not all of whose members may yet have been invested with individual rights. But this in no way diminishes the originality of the Peruvian system, which consisted in co-ordinating existing elements by working them into a plan on an imperial scale, and it is certainly a distortion of the facts to view these

elements, as H. Castro Pozo does, as themselves the motive forces that brought the plan into being.⁹ After all, other peoples have found themselves in a situation similar to that of the Quechuas and have adopted very different solutions. Thus, the Chibchas, under conditions quite like those of the Incas, had recourse to a system other than that of the Peruvians and were acquainted with the institution of private property.¹⁰

Thirdly, it is obvious from what has been said in the two preceding paragraphs that the plan of imperial organization very probably did not spring complete and fully formed from the brain of Pachacutec like Minerva from the head of Jove. In this respect G. Muñoz Puglisevich is right, but why does he then proceed to exaggerate by writing that the Inca system was due to a combination of different factors "like a process independent of the human will"? He adds, nevertheless, his acknowledgment of the influence of eminent individuals or powerful personalities and states that he does not mean to dim the glory that belongs to Pachacutec as the organizer of the empire.¹¹

Fourthly, having defined the sense in which we understand the word "socialism," we are at a loss to comprehend the stubborn opposition of certain critics to the use of this term. "It is an obvious error," writes Emilio Romero, "to try to apply the terminology of the modern social sciences to the facts of the ancient past."¹² This mode of reasoning is inadmissible. Should we forgo the right to characterize as communistic the city of the future envisioned by Plato, on the ground that Greek society differed from our own? What, then, should we call it? Are we to be forbidden to speak of the controlled economy in Egypt in the period of the Lagides because we are dealing with a time that antedated the Christian era? Sr. Romero believes he is being relativistic, but in fact he is stultifying science by preventing the observer from drawing comparisons between one era and another. The definition of an economic system is and must be independent of historical circumstances. Whether there are machines or not, whether we are concerned with agriculture or with industry, whether men make use of horses or llamas, makes very little difference in this respect.¹³

Finally, an even worse error is committed by a socialist who writes: "Autocracy and communism are incompatible in our era, but they were not so in primitive societies."¹⁴ Socialism—and especially communism, which is the most stringent expression of it—is authoritarian by definition, by reason of its internal structure. Not only are autocracy and communism compatible; they are necessarily connected. Recent

German and Russian experience should be enough to enlighten us in this regard. This author states that the Peruvian regime was despotic, and he is right; this is all the more reason for affirming its socialist character.¹⁵

Let us now take up, point by point, the work of Pachacutec, the Peruvian prototype of Sesostriis, the Egyptian king who is supposed to have divided the land among his subjects, giving an equal square plot of ground to each.¹⁶

Before individuals are condemned to be nothing more than numbers, they must be made as nearly alike as possible—an unpromising project in a country where every tribe had its own dialect.¹⁷ The first concern of a reformer who wants to build a durable structure is to avoid the fate of the men who raised the tower of Babel. Hence, Pachacutec required all the Indians to speak one and the same language—the language of Cuzco, that is, Quechua.

The chroniclers called it the “*lengua general*.”¹⁸ It was a language marvelously adapted to the civilizing role that had been entrusted to it, being extremely rich and euphonic. It makes use of a large number of affixes, which, in modifying the meaning of verbal roots, render it possible to express all the nuances of thought, including the most abstract ideas; and it lends itself to a very special rhythm, which is created, not by the alternation of short and long syllables, nor by accentuation, but by a symmetrical alteration of vowels.¹⁹ To propagate its use, Pachacutec decreed that teachers be sent into every province and resolved that no dignity should be conferred upon anyone who did not speak Quechua. Moreover, the sons of the *curacas* of the conquered provinces were already being brought up at Cuzco, where they learned the usages of the court as well as the language. But since a large part of the empire had been reduced to submission only a short time before the coming of the Spaniards, the peoples of these areas had not yet forgotten their own tongue, and since, in addition, the Incas frequently settled in newly annexed provinces tribes coming from a considerable distance away that had not lost the use of their native language either, the result in certain local-

ities was a triple superposition of dialects. Thus, in the province of Puruha the native language, the compulsory Quechua, and the Aymara of the transplanted *ayllus* all existed side by side at the same time.²⁰ The men who did the most to spread the Quechua language were, in fact, the Catholic missionaries, who, unable to master a hundred different dialects for preaching the Faith, taught the catechism in the language of Cuzco.²¹ Calancha reports that in certain villages at the time of the Incas almost every family had its own language, so that the preachers were reduced to silence, and he saw in this strange situation an ingenious stratagem on the part of the Evil One.²² Today Quechua still continues to struggle against Spanish and is spoken throughout the inter-Andean plateau.²³ Meanwhile, a great many Quechua words have passed into Spanish, without, however, affecting its syntax.²⁴

It was naturally easier to impose uniformity in the economic domain than it was to achieve linguistic unity, since the resources of the soil were very limited and the entire population of the plateau was engaged in agriculture. The people had already become accustomed to a frugal existence; the Inca had only to complete what Nature had begun. "It is incredible that people can live on so little," remarks Del Hoyo.²⁵ Pachacutec established and enforced sumptuary laws forbidding the *hatunruna* to eat anything but common fare or to wear clothing of fine wool, ornaments, or jewelry. The Indians were thus obliged to speak the same language, eat the same food, wear the same kind of clothing, follow the same mode of life, and worship in the same faith. The only break in this uniformity was the variety of insignia used to distinguish people of different provinces or different social rank. For the mass of the population it was a true leveling.

We shall analyze the Inca system by successively examining demand and supply and the equilibrium established between them.

7

Demand

Capitalism can be seriously threatened only by a great ascetic movement that will permeate the masses and divorce them from the vices and luxuries to which they have been accustomed for a century.

—Ferrero, *Discours aux sourds*

However perfect statistical tables may be, they are not enough, in a socialist society, to compensate for the mechanism of the pricing process unless demand is simplified to the utmost. This was precisely the case in Peru, where the needs of the population were very limited, and the Incas contrived to prevent them from increasing.¹ Not only were the Incas' subjects satisfied with very little food, but their manner of preparing and cooking it remained primitive, and they were forbidden to introduce any changes in their cuisine. Maize was eaten roasted or boiled, sometimes with a seasoning of herbs or red pepper; on exceptional occasions it served to make the bread and cakes for festivals and sacrifices.² To grind the grain, the women would place it on a broad slab and crush it with a heavy stone muller, long, narrow, and semicircular in shape, which they would hold at each end and rock back and forth over the kernels. The leaves of the maize plant were used as vegetables, and the unripened seeds yielded a sort of oil.

Fresh meat was hardly ever eaten except on special holidays. Generally the flesh of animals was cut into thin strips that would be salted and allowed to dry in the sun for preservation; it was then known as charqui.*

* [This is the origin of the English term "jerked meat."—EDITOR.]

Potatoes were sometimes boiled or baked, but most often they too were prepared for preservation by a process still in use today. The Indians sprinkle them with water, expose them alternately to the night frost and the midday sun, and pound them into a meal, called *chuño*, which can be kept for a very long time.³

The leaves of the quinoa plant were used in making soups, and its seeds were likewise ground into meal. Oca tubers were dried in the sun and boiled. Other vegetables were eaten with a seasoning of pimento. There were several varieties of this condiment, of which the people used a great deal. The Indians rarely added salt to their food, preferring to lick this seasoning from time to time from a slab that they kept beside them as they ate.⁴ One of the most common dishes, however, called *tsupe*, consisted of water, salt, pimento, and sometimes potatoes.⁵

The Indians also made vegetable preserves by cooking bitter herbs in two or three waters and then drying them in the sun.⁶ Thus, the greater part of their food—charqui, *chuño*, and vegetables—could be kept in storage, and the demand could easily be made uniform over any period of time so as to avoid seasonal variations.

The food was prepared in each house on a little clay stove, the upper part of which was perforated to admit the insertion of two or three earthenware vessels.⁷ Fire was obtained by the friction of two small sticks. The Peruvian never went on a journey without taking along several of these primitive matches.

The Indians made use of spoons, but forks were unknown to them. Their household utensils were little more than stone mortars, pots and dishes cut from gourds, earthenware vessels, jugs, and jars. Meals were taken twice a day, once in the morning and once again at sunset; never at any other time. The Spaniards themselves were surprised at such moderation. "It is unbelievable that these people can manage to nourish themselves on so little," writes Ondegardo. "A dozen badly cooked potatoes, a little half-roasted maize with nothing more to season it, is enough to feed a whole family for a day."⁸ Moreover, a severely restricted diet, which might last from a few days to an entire year, was in many circumstances obligatory. It was imposed, for example, upon the care-

takers of the maize fields, parents who had given birth to twins, and the families of the candidates who were undergoing the tests of the *huaracu*.

The national drink was identical with the present-day *chicha*. Kernels of maize, after being chewed by the women and the old men, were thrown into water, taken preferably from stagnant pools, and the mixture poured into vessels that were then buried to keep them warm.⁹ The *chicha* had to be prepared every week because it turned sour at the end of eight days.¹⁰ Unfortunately, the Indians drank this beverage to excess. Drunkenness has always been their chief vice. All the chroniclers speak of it,¹¹ and conditions have only become worse since the establishment of the republic. The Incas themselves, in spite of all their efforts, could not succeed in ridding the country of this plague; but at least they checked its advance by allowing the Indians only the least harmful brews, such as the one we have just described or those made of quinoa seeds or maguey leaves.¹² They prohibited dangerous drinks, such as *sora* or *viñapu*, and they used to punish those who became so drunk as to lose rational control of themselves.¹³

The use of coca was likewise forbidden in principle—a wise measure, for it is excessive indulgence in the use of this weed that has done much to reduce the Aymaras to their present state of brutish besottedness. Only the Inca might distribute coca leaves by way of reward. The dried leaves would be stacked in baskets, and the Indians would mix them with *llypta* and chew them. The mouth of the Indian, it has been said, was the first laboratory to produce cocaine.¹⁴ As for tobacco, it was used only as a medicinal plant.

No less severely limited than the dietary needs of the Peruvian Indians were their housing requirements. Their dwellings have remained today essentially what they were in ages past: simple windowless huts of stone, adobe brick, or beaten earth. The roofs were thatched with straw. Sometimes an inner partition of brick or reeds separated the main room from a corner meant to serve as a storeroom or as a pen for the guinea-pigs.¹⁵ In certain regions the Indians lived in round huts covered with branches and earth.¹⁶ Then as now, all these dwellings were small, dark, and dirty.

Guinea-pigs and human beings lived together in crowded disorder.¹⁷

The furniture in these houses was extremely scanty.¹⁸ Clothing was hung on pegs projecting from the wall or thrown over ropes stretched across the room or even kept in large earthenware jars.¹⁹ Woolen blankets or skins—or, in the *curacas*' households, straw—thrown on the ground, served as beds. On the coast the hammock was used. Only the homes of important personages were furnished with chairs; the common people squatted on the ground with legs folded, feet together, and knees raised level with the mouth.²⁰

Among their toilet articles we may mention pyrite or obsidian mirrors for the women,²¹ metal pins, flint razors, and wooden combs. A few pendants of stone, metal, seeds, or tufts of wool, and a number of religious figurines, notably the *encas*, or little llamas of hollowed-out stone, in which an offering of coca or alcohol was placed, and which were characteristic of Inca civilization,²² complete the brief catalogue of the Indian's personal possessions.

On his wedding day each Indian received two garments of cotton or wool, taken from the national stores,²³ one for everyday wear and the other for festivals, in addition to a large cloak to be worn at work when carrying materials. These garments had to be kept and cared for until they were entirely worn out. The Indians "thus avoided the tedious vexations of a well-stocked wardrobe," remarks Ondegardo.²⁴ The poncho, today so widely used that it is almost impossible to imagine a denizen of the plateau without one, began to be worn only after the Spanish conquest.²⁵ The Indian of ages past wore the *huara* (a pair of trousers) and the *cushma*, "a piece of cloth doubled and sewn together along the edges up to four or six inches from the fold so as to leave two armholes; in the upper portion a perpendicular slit at the top edge was cut through the two thicknesses of the wool to permit the passage of the head."²⁶ The *cushma*, then, was a sort of sleeveless shirt. Over it was thrown the *yacolla*, which served as a cape.²⁷ While the Indian was at work, the two corners of this cape would be fastened together over the left shoulder.

The Indian women wore the *anacu*, a tunic reaching to the ankles and bound at the waist by a broad sash of cloth (*chumpi*),

and the *licla*, a mantle or shawl thrown over the shoulders, crossed over the bosom, and held in place by a large-headed pin (*tupu*).²⁸

All the common people, men and women, went barefoot. Personages of importance wore sandals (*usuta*), the soles of which, made of braided leather or maguey (Agave) fiber, were held by two straps. When they slept, the men removed only the *yacolla*, and the women, the *licla*.²⁹ These garments were generally dirty and malodorous.³⁰

In short, the Indians were easy to satisfy. "The sun warms them, the river quenches their thirst, the earth serves as their bed," says Morua.³¹ In preventing, by their sumptuary laws, the multiplication of these requirements, few as they were, the Incas made their own task very much easier and rendered it possible for a system of production that threatened to prove inadequate to adjust itself to a strictly limited consumption.³²

8

Supply

If one of the objectives of socialism is to organize human labor as in a "single factory" and to "suppress all national and international competition,"¹ then the regime of the Incas was, in this respect at least, socialist indeed. Everything was regulated by authority, whether the introduction of an innovation or the sanction accorded to some custom already well established.

1. *Obligatory Labor*

Labor was obligatory, but the term "labor" was understood in its broadest sense, and it differed according to one's social rank. Each class had its several role to play in the empire.

The upper classes were obliged to perform intellectual labor, in management, organization, or supervision. All the Incas worked, for they all held posts in the government service, the priesthood, or the army. No one could live in idleness. The only persons exempt from labor were those who were aged, disabled, ill, or for some other reason incapacitated.

This principle was so extensive in its application that children from the age of five were required to perform some task in keeping with their strength, and women on their visits to one another would take their distaffs along with them and go on with their spinning as they walked and chatted. The princesses too would have their distaffs with them when they went to see one another.²

Even the blind were employed in stripping the kernels of maize off the cob.

Obligatory labor obviously made possible the intensification of production, but this was not its only purpose. It aimed above all at combatting idleness. This point of view, diametrically opposed to our own, gave the Inca regime the character of what we should call today a "non-Euclidian economic system."³ *Work was regarded more as an end than as a means.* Its essential function was to assure, above all, the physical and moral health of the worker.⁴ According to Father Acosta, it was a maxim of the Incas that the Indians "must always be kept busy."⁵ Whereas today's lawmaker seeks to add to the hours of leisure of the mass of the population, even to the detriment of production, the Peruvian monarch would go so far as to have useless labor performed rather than leave his subjects in idleness.⁶ He knew that it is not a good thing to bestow leisure upon those who are not capable of making intelligent use of it. He himself used to set the example. When the *orejones* went to the palace, Betanzos tells us, they would find the sovereign engaged in painting or drawing.⁷ The first beggars who made their appearance in the colonial era were treated with contempt and derision.

That it was one of the principal concerns of the monarchs of Cuzco to eliminate every occasion for laziness is altogether understandable in a country whose inhabitants, as the Spaniards soon learned to their despair, have a natural inclination to that vice.⁸

But though work was required of the Indians, we must not think of it as having been uninterrupted and toilsome. In the first place, it was broken up by periods of repose, and a great many holidays were celebrated throughout the year. "They used to join hands with one another," charmingly reports Suárez.⁹ Tschudi counted one hundred and fifty-eight in a year, not including those given in honor of the *conopas* and the celebration of family events.¹⁰ There was thus a great deal of leisure, but its enjoyment was removed from the sphere of individual initiative. A holiday did not mean a day that could be passed in freedom or idleness. The Indians had to take part in public celebrations—banquets, songs, and dances.

On the other hand, the sovereigns of Cuzco took care to prevent the workers from exceeding the limits of their strength and always kept in view the age, sex, and physical constitution of the laborer and the nature of the work to be done. No chief of state was ever more concerned with the health of his subjects or took greater precautions to accommodate the distribution of labor to the capacities of the workers. Labor as injurious to health as the mining of mercury, whose noxious vapors produce "tremors and nervous spasms," was forbidden,¹¹ and so was pearl-fishing.¹² Only a small number of Indians were sent to the coca plantations in the hot and unhealthy regions, and they always had to be men who themselves came from a warm climate and were accustomed to tropical conditions.¹³

For tasks that were toilsome but necessary, a system of rotation was established so that no one should be overburdened. Garcilaso calls this "alternating labor,"¹⁴ and it later became the principle of the Spanish *mita*.

Two classes of work were obligatory for all able-bodied men between the ages of twenty-five and fifty: agricultural labor and military service. From eighteen to twenty-five they helped their parents; from ten to eighteen, they led the llamas; children between the ages of five and ten chased the birds away from the fields; and before they were five they would be set to catching lice, in order, says one author, that no one should be without some occupation.¹⁵

Work to be done for the benefit of the state was allocated by the chiefs and had to be scrupulously performed with the raw materials supplied by the government. No one had a right to do less or more than the amount of work assigned to him; for in the first case he himself would have remained idle, and in the second, he would have been the cause of someone else's idleness.¹⁶ On the other hand, the custom of mutual aid, which, as we have already seen, prevailed in regard to all work done on the land, was given the status of a law, which Garcilaso calls the "law of fraternity."¹⁷ When a worker was unable to attend to his allotted task, his neighbors were obliged to help him, and he was expected to do the like for them if the need arose.

The provinces of the empire were grouped in pairs, each member of which was bound to come to the aid of the other in case of necessity. Thus it was that the European conquerors saw Indians rushing to the assistance of their compatriots in certain places in rebuilding the villages that had been destroyed by the war.

Later, the Spanish kings, noting the tendency of the Indians to lapse into idleness whenever they were granted a certain amount of freedom, recommended that the viceroys establish a system of compulsory labor. They seem to have been very hesitant to give such instructions, for they were well aware that coercion, if it was not exercised by *encomenderos* who were conscientious in the performance of their duties, would serve as a pretext for tyranny and the reduction of the Indians to slavery. They specified, therefore, that the rule of compulsory labor should be enforced by "the gentlest means."¹⁸

2. *The Division of Labor*

Plutarch is mistaken when he says that there is no one who is not dependent on the knowledge and skill of his neighbor.

—Cobo, *Historia*, Vol. III, Bk. XIV, ch. xv

A household economy prevailed among the Quechuas, and the Incas preserved it. The empire presented the curious spectacle of a civilization that remained hostile to the division of labor. That division existed, to be sure, between the sexes, since women specialized in spinning and household tasks; but the general rule was that everyone had to provide for his own necessities—food, lodging, clothing, weapons. So far was this rule of self-sufficiency carried that even the sons of the most highly placed dignitaries and of the Inca himself, though they would later be called upon to perform specialized managerial tasks, also had to master the arts of agriculture and industry. Teachers would make sure that young men possessed this knowledge before admitting them to the upper class. To this end, the candidates, at the time of the great initiation tests (*huaracu*), would be asked, as we have seen, to make weapons—at least those that did not require the assistance of a smelter—

and sandals made of a piece of llama's skin or braided fibers.¹⁹ There was no tailor or shoemaker or armorer in the empire.²⁰

There were, however, a small number of artisans who were entrusted with work that required some special knowledge or skill. Only the arts and crafts that were not indispensable—jewelry, painting, pottery, the weaving of fine fabrics—were practiced by professional workers.²¹ Their products were the luxuries of the period, and they therefore worked exclusively for the Inca.²²

How were these craftsmen recruited? Probably, as Garcilaso declares, theirs were hereditary occupations. The child served his apprenticeship by helping his father, in accordance with Inca law, and so became skillful enough to replace him later.²³

Pachacutec seems to have taken steps to have particular tribes specialize in the arts or crafts for which they had a particular aptitude, so that certain regions acquired a great reputation throughout the empire.²⁴

3. Measures of Provisionment and Conservation

Few monarchs have had so keen a sense of the continuity of the generations as the Incas.²⁵ Living in a country of meager resources, they sought to assure the future of their people, whose very existence was perpetually menaced. Unlike the Spaniards, who killed cattle for pleasure and emptied the magazines without need, or those modern nations that exhaust their natural wealth and themselves undermine the foundations of their strength, the Incas were always thinking of the future and curbed present appetites in the interests of perpetuity.

We have seen how solicitous the Peruvian monarchs were of the health of their subjects. We shall now see that they were no less concerned with the conservation of natural resources.²⁶

In regions where there were few trees, the use of wood was regulated and supervised—a wise provision to prevent the deforestation from which so many ancient and modern peoples have suffered.²⁷

Domestic animals were protected. To promote the increase of livestock, the killing of females was prohibited. Even wild animals were the object of measures of protection. No one might hunt

without a permit or kill game outside the territory of his own community.²⁸

The hunts organized by the Incas were conducted in the following way:²⁹ Several thousand Indians, arranged in a circle around a vast extent of land, would drive the game before them, with loud cries, toward the center.³⁰ The animals enclosed in this infernal and ever-narrowing circle would finally be caught by hand or in nets. The dangerous beasts were killed. A great many vicuñas and guanacos, leaping at the hunters and spitting in their faces, were captured, counted, shorn, and then allowed to go free, except for a small number of males, which were also slaughtered. These, as well as the animals that had been wounded, were used as food. Females, as in the case of domestic animals, were spared. They were not even offered in sacrifice.³¹

At a considerably more recent date these battues were still taking place on the high plateau in accordance with ancient custom. The only difference was that the circles were narrower and that, to make up for the smaller number of beaters, a rope of a hundred yards or so, hung with red streamers, would be stretched across a defile. The vicuñas, bewildered by the yells of the beaters, would hurl themselves against the rope in panic; but it was important that there should not be a guanaco among them, for this creature, being bolder, would jump over the rope and all the vicuñas would follow it to freedom.³²

Thanks to the foresighted regulations of the Incas, Peru teemed with game under their rule. If Garcilaso is to be believed, stags were so numerous that they came into villages, and a soldier of the conquering army could kill six or seven a day with his *harquebus*.³³

When we think of the animals our contemporaries have exterminated, such as buffaloes, elephants, birds of paradise, beavers, whales, and seals, and when we consider how much game is destroyed by shameless poaching in modern France, we must acknowledge that the Incas had a high conception of their mission. It is very difficult today to counter the trend by the regulation of hunting or by the establishment of national parks and game preserves.

Fishing under the Incas was not controlled by any provisions like those that governed the hunting of game. Special officials kept

account of the fish taken, reserved a certain number for the Inca, and claimed some for themselves as remuneration for their work.³⁴

4. *Industrial Techniques*

I believe that the most skillful artisan in Europe would be at a loss if he were commissioned to produce such works with a piece of copper or a few stones, without being permitted to employ any other tool.

—A. de Ulloa, *Relación histórica del viaje á la América meridional*, 1748

Let us look first at the general stock of tools. It staggers the imagination to consider the results the Peruvians obtained with the primitive means at their disposal. Even Ulloa, who was always ready to disparage the American natives, did not conceal his astonishment. The Indians had no knowledge of the saw, the center bit, the screw, the gimlet, the file, or the plane, of scissors, bellows, tongs, nails, glue, glass, or even the wheel. Their only implements were the stone hammer, the bronze chisel, the copper ax, and the feather brush. The hammer, indeed, hardly deserved the name. It was a rather bulky stone or a lump of bronze with rounded corners, elongated and polished, without any handle, which the Indian would grip firmly and use for striking and pounding.³⁵ For the rest, copper pipes did the work of bellows, string was used in place of nails, and thorns or splinters of hard wood served as needles, although metallic needles were also in use. To this day the natives of the region around Lake Titicaca prefer to use a stone instead of a hammer, some Bolivian Indians cut their hair with a flint,³⁶ and the Colorados of the virgin forests of western Ecuador fasten together the soft timbers that form the framework of their huts with pieces of hard wood (*chonta*) instead of nails.³⁷

Tools were not then as specialized as they are today, and sometimes served several different functions. They were gradually transformed in order to be better adapted to the end in view. This evolution proceeded more rapidly in the southern part of the empire than in the north.³⁸

Such were the implements with which the Indians built pal-

aces, laid out roads, and bridged torrential streams. It was man power alone that accomplished this prodigy, for even animals could not be of much assistance in performing tasks like these. Abbé Raynal has correctly stated that "labor, time, and patience took the place of the tools that the Peruvians lacked."³⁹

The Indian of the time of the Incas seems to have had little inventive ability, but a great deal of skill. He never devised certain very simple tools that would have greatly facilitated his work, but he made excellent use of those he did have. He also took full advantage of some of the resources that Nature had placed at his disposal. Certain plants provided not only food and drink, but also the raw materials for building houses and making clothes. Maize, for example, was at once bread, vegetable, and beverage, and did not the maguey—of which the juice was used to heal wounds, the leaves to brew a liquor, the fiber to make thread and rope, the roots to wash the skin and make the hair grow, and the trunk to form the framework of houses—indeed deserve the name that Acosta gives it, the "tree of marvels"?⁴⁰ And Las Casas hardly exaggerates when he says that from this plant is to be obtained bread, wine, vinegar, honey, sugar, clothing, sandals, needles, fuel, and wood for the building and roofing of houses.⁴¹

The skill of the Peruvians was fully recognized in the colonial era. In 1533, the Licentiate Espinosa wrote to Commander Francisco de Los Cobos, the Emperor's secretary, asking that two thousand Indians be sent from Peru to Panama to construct roads and public buildings there.⁴²

Let us next turn to mining and metallurgy. The Peruvians were acquainted with lead, tin, copper, silver, and gold. They were either ignorant of iron or did not wish to mine it. Suárez maintains that the Incas were acquainted with iron, because there is a word for it in the Quechua language, but that the sovereigns did not have it mined because of the excessive labor it involved.⁴³ Platinum was known to the inhabitants of the coast of Ecuador and was worked by sintering. It was contained in gold-bearing ores, and the presence of the gold, which perceptibly lowered the melting

temperature of these ores, probably enabled the Indians to separate the metal.⁴⁴

Geographically, there is a sharp division between the countries where copper was prevalent—Ecuador and the Peruvian coast—and those where bronze predominated—upper Peru and Bolivia.⁴⁵ The center of bronze production would naturally be located where tin is abundant, i.e., in Bolivia. This metal must have made its appearance after the Tiahuanaco era, probably in the intermediate period, since the cramp irons on the walls of the great Aymara city are of pure copper,⁴⁶ and it was the Incas who spread its use in the coastal regions and in Ecuador.⁴⁷

The goldsmith's art, which originated on the Peruvian plateau, was likewise taught to the people on the coast by the Quechua conquerors, but the conquered tribes were already working this metal by processes brought from Guiana. Thanks to this superposition of techniques and to their discovery of silver, the people of the coastal regions became the greatest metallurgists in South America.⁴⁸

There were gold mines at Carabaya, Zamora, and Parinacocha,⁴⁹ and in the Curimayo valley near Cajamarca; and there were silver mines at Porco and Andacaba. But gold was chiefly secured by placer mining.⁵⁰

It was the Spaniards who discovered the famous mine of Potosí. According to a Peruvian legend, the Inca knew about Potosí, but he did not want to exploit this mine because the first Indians sent to begin work there heard a voice which said to them, "Do not take the silver from this hill; it is destined for other masters."⁵¹ In Ecuador, gold was used principally in three regions: among the Cañaris to the south, the Pastos to the north, and the Esmeraldas on the northwest coast.⁵² Wolf, speaking of the panning of gold in the province of Azuay in Ecuador, remarks that the ore was just as abundant there in former times as it is now, but that the manual labor at the disposal of the Incas was more plentiful and more patient than that of the present day.⁵³ To explain the abundant wealth of the temples and palaces of ancient Peru, there is no need to have recourse to legends of hidden mines. It is man that has changed, not Nature. The only secrets of the Incas were discipline and work, and these are indeed not to be found today.

Ore was extracted by hewing out low, narrow, dark galleries with a hammer, a chisel, and a wooden bar with a copper tip.⁵⁴ Copper ore was smelted by being placed in terra-cotta crucibles over a flame that was fanned by from eight to a dozen Indians blowing through tubes.⁵⁵ This process could not be employed for silver, which does not melt when it is heated. However, the Indians discovered that this metal could be made to flow if one took pains to add a certain quantity of lead to it, whence the latter metal received the name *garuchec*, "that which causes flowing."⁵⁶

The smelting was done in the following way: The ores were crushed with a stone and placed in kilns (*huaira*) shaped like flowerpots and perforated at the base. Charcoal was put on top of the ore in the kiln, and the metal, on reaching the point of fluidity, would drop into earthenware receptacles beneath. These kilns were set up on hilltops where there was a strong wind; and, if we are to believe the chroniclers, when the Spaniards began to exploit the mines of Potosí, it was an enchanting experience to see twelve or fifteen thousand fires lighting up the evening skies over the mountains.⁵⁷

To separate the lead from the silver, this first operation had to be followed by a series of further smeltings, but these took place in the houses. The silver was put in little vault-shaped terra-cotta kilns, a perforated muffle would be inserted, and the free space between the muffle and the inner side of the dome would be filled with charcoal.⁵⁸ So that the metal could be pulled out of the fire without tongs, it was taken up on rods of wood or copper and thrown on the damp ground or else stirred until cool, when it could be picked up with bare hands.

As a general rule, the mines belonged to the Inca, who would determine the amount of metal to be extracted each year. A few of them, however, had been given to the *curacas*. The labor was performed in rotation, each assignment lasting for a period of about three months, and engaged the services of one per cent of the population in the mining provinces. The miners always had to be married men, so that their wives could look after their food.⁵⁹

Mercury was also known to the Peruvians, but, as we have seen,

because of its noxious exhalations, it was not mined. However, the Inca did permit the extraction of vermilion (prepared from cinnabar), which was obtained by crushing the ore and then washing it.⁶⁰ The princesses used this as rouge,⁶¹ and it was employed in the same way by the Indian women in the provinces adjoining the places where it was mined.⁶² The principal mercury mine in Peru was that of Huancavelica. Since the Indians had kept its existence a secret from the invaders, the Spaniards did not discover it until 1564.⁶³

We shall next consider work in wood, bone, and stone.

White wood, or deal, was rare, and the Indians made use of *chonta*, a very hard timber, in the manufacture of weapons and household utensils. They worked it, as they still do, with great skill, making spindles, cups, throwing sticks, litters, and looms.⁶⁴ Unfortunately, most of the things placed in the tombs on the plateau have been destroyed by dampness.

Bone was employed in the manufacture of musical instruments, spoons, and certain kinds of pins.

Work in stone required particular patience. The Indian would choose, by preference, rocks of fine grain that were resistant and would take a high polish.⁶⁵ He would then carve them with a silver wire and hammer them with a flint. He polished them by rubbing them with a stone and water mixed with emery. He would pierce them by rapidly twirling a piece of cane or bone coated with fine, hard, wet sand. To obtain a mortar, he would bore a series of holes close together, then break the intervening walls and level the bottom of the shallow basin thus formed by rubbing it with a hard pebble.⁶⁶ He would also split stones by heating them and then plunging them into cold water, a procedure that is still followed in our own day.⁶⁷

Let us next turn to the art of building. In this field different techniques were employed in the various regions of the empire. On the coast the natives built walls of adobe, that is, of brick made from an argillaceous marl mixed with reeds or tough grass and dried in the sun. Sometimes, instead of making bricks, they would

set up a framework of reeds held together with ropes and would pour the clayey substance into the mold thus formed.

The larger and more important dwellings had foundations of *pirca*, which was clay mixed with uncut field stones and husks of maize, sunk to a depth of between two and three feet below ground and projecting about two feet above.⁶⁸ The superstructure would then be built of adobe.

On the plateau, adobe and *pirca* were used for ordinary dwellings, but important edifices were constructed of stone. Sometimes the walls were made of ashlar of hard rock—granite, porphyry, diorite—mortised together so exactly that it was impossible to introduce even the blade of a knife between them. "All the stones seem to be one, so well are they joined," says Las Casas.⁶⁹ This fine adjustment was achieved by rubbing the newly placed stone against its neighbor after a thin layer of wet sand had been laid between the surfaces. Few spectacles have evoked greater admiration on the part of the Europeans. "It is," observes Monnier, "veritable lapidary work."⁷⁰

It should not be forgotten that Peruvian architects were acquainted with neither T square nor compass. A huge stone in the wall of the palace of the Inca Roca at Cuzco, fitted in between its neighbors at twelve different angles by means of indentations or projections, is called by the natives "the stone with twelve corners." At Machu Picchu houses have been built on the rock by simply placing one block on top of another, without cement, even where the rock has a gradient of forty degrees.⁷¹ Often the stones of these Inca buildings, slightly convex at the center of the outer surface and cut straight toward the lines of juncture, recall those of certain Florentine palaces.⁷² The re-entering angles of the fortress ramparts are "generally right angles, so continued that every part is seen, and as perfectly flanked as in the best European fortifications of the present day," and Ferguson adds enthusiastically: "It is not a little singular that this perfection should have been reached by a rude people in South America while it escaped the Greeks and Romans, as well as the Mediaeval engineers."⁷³

Sometimes the blocks of stone would be held together with *pirca*, which thus played the role of cement, as in the walls that are

still standing at Curampa, near Abancay, and at Viracochabamba.

Finally, the retaining walls that held up the terraces were often made of flat stones laid one on top of the other, sometimes reaching to an imposing height.⁷⁴

It may be wondered how the Indians succeeded in transporting the heavy blocks of stone of which their walls are made. Probably each block was dragged by cables and pushed by hand. Sometimes one of them, resisting all efforts, would oscillate precariously, fall upon the workers, and crush them under its weight. Often a block would have to be abandoned on a slope up which it could not be dragged. Then it would become one of those "tired stones" (*piedras canzadas*) that are shown to travelers today. In spite of everything, the transportation of these enormous masses remains a mystery, and we ask ourselves whether the Indians may not have made use of some procedure—for example, a hydraulic system—which has since been lost.

Perhaps we may accept the hypothesis—advanced by Déchelette in explanation of the manner in which the dolmens were set up—that these blocks of stone were first raised to a considerable height by means of crowbars and levers, then underpinned by tiers of embankments, and slid up ramps, and that progress was effected by repeating this operation several times at successively higher levels.⁷⁵ The discovery of wooden rollers under an abandoned block of stone at Ollantay between the quarry and the fortress suggests an explanation along these lines.⁷⁶ G. de Santa Clara also asserts that the slabs of stone were put into place by being raised on successive platforms to the height desired and then pushed over on the other blocks that were already in position.⁷⁷

Garcilaso tells us that when one of these blocks for the fortress of Saxahuaman at Cuzco was being transported by twenty thousand Indians, it tipped over and crushed two or three thousand of them. It was after this catastrophe, according to Morua, that the Indians revolted and killed prince Urco, the son of Viracocha, who had ordered the transportation of the rock.⁷⁸

How did they even get these blocks out of the mountain quarries? We may accept the assumption of Joyce that the Indians made holes

in the rock into which they inserted bits of wood and then filled them with water so that the expansion of the wood would break the stone.⁷⁹

Earth and gravel were carried in pieces of cabuya cloth distributed for this purpose by the Inca, one end of which was knotted around the neck. This method is still in use in the villages of Bolivia.⁸⁰

The outside surfaces of some of the walls so constructed were faced with clay mixed with wool and cactus juice, and the inner walls were frequently plastered over with a sort of red stucco.⁸¹

The buildings were very low, generally of only one story, but, in rare instances, as at Viracochabamba, Huamachuco, and Machu Picchu, with a small number of upper floors.⁸² They offered the maximum of resistance to earthquakes and stood up better than the houses subsequently built by the Spaniards,⁸³ but a certain number of them were destroyed by the hand of man himself. Thus, the great city of Tomebamba, where the Inca Huayna Capac was born, was razed by Atahualpa before the coming of the white man.

It is generally agreed that the Indians were unacquainted with the arch, and Acosta speaks of their astonishment at the sight of the first arched bridge constructed by the Spaniards. They all expected it to collapse.⁸⁴

Windows were very rare. The Indians of Ecuador knew nothing of them,⁸⁵ and neither did the inhabitants of the coastal regions,⁸⁶ but some windows have been found in the interior, at Huamachuco, Tarmatambo, Vilcabamba, Viracochabamba, and Machu Picchu.⁸⁷ Doors were generally narrow—but very high in the palaces in order to permit the passage of the royal litter—and always in trapezoid form like those of the Egyptians; that is, the lintel was appreciably shorter than the sill and might be made from either a single slab of stone or two slabs out of the perpendicular. The same arrangement was followed in windows, where there were any, and in wall recesses. The door itself was sometimes made of wooden beams attached to the wall by ropes strung through holes made in the stones,⁸⁸ but in a number of public buildings and in all private houses the door was closed merely by a rush

mat or curtain that covered the entrance and could be held in place, if need be, with a few stones.⁸⁹

Most of the roofs of the public buildings of ancient days have disappeared.⁹⁰ From designs on pottery we know that they were constructed with a double slope and supported by wooden beams, and Jerez tells us that they were made of straw and of wood.⁹¹ No doubt they differed in the various regions of the empire, and sometimes must have been of thatch (grass, straw, and reeds) and sometimes of maguey leaves, which are as impermeable as stone. On the coast, where there was no rain, the houses would often be open to the sky.⁹²

Generally simple and conceived on a uniform plan, buildings nevertheless differed from one another in accordance with their purpose and importance. First place was naturally occupied by the temples. The most famous were those of the island of Titicaca, of Cuzco, and of Pachacamac, but there were many others, at Vilcañota, Cacha, Vilcas, Coropuna, Tomebamba, and elsewhere.

What the chroniclers say of the great temple at Cuzco erected by Pachacutec is so prodigious that we would be tempted not to believe them if they were not all in agreement. The principal building was "literally a mine of gold."⁹³ Its walls were paneled with plates of gold and silver, and a frieze of gold encompassed the whole interior and exterior of the building. A golden egg, signifying the initial essence of everything, gleamed above the altar, between two discs (a golden sun and a silver moon). All around them were drawn plain images representing the cosmological ideas of the Indians—stars, men, llamas, mountains, rivers, lightning. Along the walls, like a guard of honor, were ranged the mummies of dead kings. Outside there were two stone benches encrusted with gold and emeralds.⁹⁴

By the side of this edifice rose five buildings of smaller dimensions. In the first, the Moon was represented by a silver disc; the mummies of the queens formed his entourage, and plates of silver covered the walls. The same precious metal adorned the surface of the second chapel, which housed the planet Venus and the stars, the servants of the Moon; while gold made its appearance once again in the third and the fourth, dedicated respectively to

lightning, servitor of the Sun, and to the rainbow. The fifth of these buildings contained the audience chamber of the priests. Niches in the form of tabernacles were cut in the outer walls of these chapels, and they too were bespangled with gold and encrusted with precious stones.

The garden that stretched out beyond the buildings offered an even more astonishing spectacle. Everything here was of gold. The trees and their fruits, the birds perched on the branches, the ears of maize, the shrubs, the reptiles, the insects, a flock of llamas with their shepherd—all were of gold. Gold was everywhere, as if Nature itself, by some magical enchantment, had been suddenly transformed into that metal. How could the conquerors not be bewitched by such a vision? ⁹⁵

In no way less magnificent than the temples were the palaces, but they were more imposing than beautiful, and more spacious than comfortable. The absence of columns, cornices, and those other architectural embellishments whose happy variety contributes so much to the beauty of European buildings must have given these Peruvian structures a bleak and monotonous quality altogether in keeping with the landscape of the *puna*.⁹⁶ The only notable features relieving the plainness of the walls were some niches and projecting stones. The niches in the interior, which were decorated with figurines of animals made of precious metals, were generally used as closets.⁹⁷ Those on the outside, often rather large, may have served as sentry boxes.⁹⁸ The projecting stones were probably used as clothes pegs.

F. de Jerez has described one of these palaces situated at Cajamarca. Four rooms surrounded an inner court or patio, adorned with a pool fed by two conduits, of which one brought in cold water and the other water naturally warm from a spring in the sierra. The Inca would spend the day in one of these rooms, which looked out on a garden; he slept in an adjoining room, which was lighted through a window opening on the patio. The walls were covered with a lustrous red glaze, and the framework of the roof was painted the same color. Near this dwelling was another pool, surrounded by stone steps, in which the Inca was accustomed to bathe.⁹⁹

In the palace at Tomebamba the inner walls were adorned with marquetry in *mullu*, a kind of shell with a color resembling that of coral.¹⁰⁰

These palaces were exceedingly numerous, for the Inca had one in every important city, and none was ever inherited from his predecessor.¹⁰¹ Yet some travelers seem to have exaggerated their number. They saw "palaces" in all the notably spacious constructions of which they discovered the ruins, but these buildings may often have been merely collective dwellings such as we have already mentioned.

They were generally designed according to the following plan: An entrance cut in the encircling wall opened into a corridor, which led to a quadrangular court surrounded by square rooms without windows. These rooms did not communicate with one another, and each had its private roof. From the first court another corridor would sometimes lead to a second court, again surrounded by rooms, and so on. All these dwellings had only one means of entrance and egress, the door in the outer wall.¹⁰²

Such houses were rarely to be found anywhere but in the towns. Elsewhere the homes of the Indian families were generally small isolated houses made of earth or brick, as we have already indicated, these materials being strongly resistant to bad weather even in rainy areas.¹⁰³

The villages were irregular in their general form and had no public square.¹⁰⁴ The important towns, on the contrary, were constructed according to a definite plan. Like everything in the empire, the palaces, temples, dwellings, warehouses, monumental stairways, and terraces were designed with an eye to symmetry. Cajamarca had a large public square,¹⁰⁵ a temple to the Sun, reservoirs, and two fortresses. The public square of Vilcas was spacious enough to hold several thousand men.¹⁰⁶ Huánuco, in a pre-eminently strategic position between north and south, served as the base of operations against the people of Quito and the Chimús and had squares, baths, and paddocks for llamas.¹⁰⁷ Incatambo or Coyor, a short distance from Cajamarca, situated on a granite rock for fear of floods, was built in the shape of a circle and divided

into four practically equal parts by walls radiating from the center.

On the outer rim of the rocky platform of Coyor the houses were arranged in a circle, and in the vacant area thus enclosed mausoleums were erected. Then, as the population continued to increase and the cemetery became completely filled with mausoleums that rose to the height of the houses, no more space was left in the middle of the town, whereupon new houses were erected upon this singular platform, with new mausoleums in their midst; and so the dwellings of the living were superposed on those of the dead until the time came when, the circles having gradually contracted in area, there was nothing left but a narrow platform, the apex of an almost perfect pyramid.¹⁰⁸ Here was the finest possible example of economy in the use of land being pushed to its furthest extreme, and of a logical plan of construction being followed generation after generation, its ordered regularity completely undisturbed by the intrusion of any touch of fancy.

Several of these cities served at the same time as fortresses, and we shall come back to them when we discuss the organization of the empire's defenses. They were naturally situated in places that were difficult of access and confined within narrow surrounding walls.

We have mentioned only the towns of the plateau, but the large cities conquered by the Incas on the coast were no less prosperous: Tumbes, the mercantile center, whose rafts plied the estuary of the Guayas; Chimú, renowned for its artists; and Pachacamac, which attracted throngs of pilgrims to its famous idol.

But none of these cities could be compared to Cuzco, which fifty thousand workers had toiled for twenty years to rebuild.¹⁰⁹ Its dark and gloomy little houses of brick and pisé were grouped around palaces of stone and temples with friezes of silver and gold. Through it ran a well-canalized stream, the Huatanay, crossed by bridges constructed of heavy slabs of stone.¹¹⁰ The streets were narrow, but regularly laid out, crossing at right angles, and generally paved. There were five public squares, two of them adorned with fountains.¹¹¹ The principal one was in front of the palaces of

the Inca Roca and of Pachacutec and of the schools where the *amautas* taught. It was very large and was used for ceremonies, as its name, *aucaypata*, "place of rejoicing," indicates. The stream traversed its center but was entirely covered over. The city was surrounded by a great wall consisting of a terreplein between two ramparts and was dominated by the somber and imposing stronghold of Saxahuaman with its gigantic masses of stone. In the valley beyond the city were the country houses of the chief dignitaries of the government, placed at some distance from one another, and the granaries or storehouses belonging to the state.¹¹²

Cuzco was the point of departure for the great highways of the empire. The east-west road cut the city into two parts, *hurin* and *hanan*, the high and the low. Every Indian who came into Cuzco was obliged to lodge in the quarter that corresponded to the position of his province in the empire. For example, if he lived in a distant northwestern province, he would have to choose his domicile at the northwestern extremity of the city. Cuzco was a microcosm.¹¹³

The chroniclers assert that in ordinary times two hundred thousand Indians lived in the capital, but this figure must be taken with considerable reservation.¹¹⁴ Let us say merely that Cuzco gave the chroniclers the impression of being a very large city. Certainly the concourse must have been enormous on the day when the high officials entered the capital with their retinues to celebrate the festival of the Sun.

But what a strange spectacle it must have been for Europeans—a city of low houses where granite and porphyry stood side by side with beaten earth, and where vast riches were sheltered under thatched roofs!

Let us next look at the arts of spinning and weaving. On the plateau the women spun and wove wool, and on the coast, cotton, which was of good quality.¹¹⁵ The spindle consisted of a wooden needle "from eight to twelve inches long, with a cylindrical wooden weight or whorl a third of the way up from the bottom."¹¹⁶ The spinner would draw out and twist the strands of raw fiber so as to convert them into yarn and would wind the finished thread on

the spindle, which, held in her hand by one end, also served as a simple bobbin.¹¹⁷ There existed in Peru a loom made of parallel staves fixed in the ground to stretch the threads to the necessary tension, but the weaver could make only very short pieces of cloth on this apparatus; the strips thus woven had to be sewed together to make a complete fabric.

In spite of the primitive character of these implements, the Indians succeeded in producing marvels.¹¹⁸ One has only to look at the pieces on exhibition in the Musée de l'Homme in Paris* to be convinced of the really prodigious skill of the Peruvian weavers. Cieza de León writes that the native tapestries from the province of Cajamarca are as good as those of Flanders and so well made that they would seem to be of silk, and he several times calls attention to towns whose textiles are especially remarkable—for example, Chachapoyas and Pomatambo, near Cuzco.¹¹⁹

Although the tools were simple, the technique was very expert. One finds on certain textiles perforated lozenges that are like drawn work.¹²⁰ Ordinarily the fabric was woven by the raising of alternate warp threads—which were always of cotton—by means of a “long flat knife” that the Indian would insert between them, “taking up every second one. This knife would thus lift up half of the warp and make it possible to throw the shuttle with the weft through the shed thus formed.”¹²¹ Sometimes, as Capitan and Lorin explain,

two warps would be used of a color and quality different from those of the weft, and often the latter too would be multiple and in a variety of colors. With incredible dexterity the weaver would pass his weft threads, in markedly diverse ways, around the threads of the warp, frequently, moreover, changing his threads. This method obviously lends itself to a wide variety of effects in both texture and coloring. It is, in fact, the high-warp method employed at the Gobelin factory and at Beauvais. Indeed, certain Peruvian textiles which we have shown to artists at the Gobelin factory have been acknowledged by them as equal to theirs and sometimes even finer. . . . Often the

* [The Brooklyn Museum in New York also contains a remarkable collection of Peruvian textiles.—EDITOR.]

fabrics have been embroidered in places with such great skill that, according to specialists, it could not be surpassed today.¹²²

In certain fabrics it is possible, with the aid of a microscope, to count as many as one hundred and twelve weft threads to a square centimeter (0.155 square inches).¹²³

Separate mention must also be made of the feather fabrics that are among the most remarkable of the craftsmen's achievements. Each feather, flattened and twisted into a curl, would be caught in a loop of cotton thread and laid over a backing, also of cotton, in such a way that the successive rows overlapped and partly covered one another like the plumage of a bird.¹²⁴

We conclude this chapter with some brief notes on other crafts. First among them we may mention the dyeing of fabrics. The Peruvians attained a high degree of perfection in this field also. The color was fixed by immersion, cold or hot, or on an alumine mordant. "If we except the last few years, during which chemical research has provided us with very stable new pigments, it may be said that the pre-Columbian peoples pushed the processes of dyeing as far as was practicably possible."¹²⁵ The colors of the fabrics shown in the museums are still very vivid. The red came from cochineal, the yellow from ochre, and the blue from indigo.

Mention must also be made of the work in leather, in which, on the contrary, the Peruvians never went beyond extremely primitive processes. They would stretch the skins on the ground, allow them to dry, and cut them up to make sandals. Sometimes they would leave them to soak in vessels or pits filled with earth and urine and then would beat them.¹²⁶

There was also, of necessity, a rope industry. Rope was used to make suspension bridges, hammocks, and nets, to join together the framework of houses, and to drag blocks of stones. It was thus of very great importance in the lives of the Peruvians. The Indians made it from the fiber of the maguey or henequen (*Agave Americanum*), which they saturated in the water of the streams, beat, and left to dry. By braiding several strands together, they could make very thick cables. In several regions of the plateau

one may still encounter Indians, especially women, preparing fibers for rope-making in this way.¹²⁷

Finally, let us glance briefly at the ceramic arts. Since the Indians were unacquainted with the potter's wheel, their vessels of baked clay were cast in a mold, generally in several sections, which were then assembled. When the molds were in two parts, they were joined like the valves of a casting, and on many pieces of pottery one can still see the ridge made by the settling of the clay at the line of junction.¹²⁸ To keep the clay from cracking while being baked or dried, the potter would mix it with graphite ash or with maize straw chopped to the fineness of powder.¹²⁹ Pots would often have rounded bases so that they could be sunk into the ground. These vessels are known as aryballuses.

9

The Equilibrium Between Supply and Demand

We now come to the essential problem that every socialist system must solve: How replace the mechanism of the pricing process and achieve by way of authority an equilibrium between supply and demand? The retrenchment of needs and the regulation of production make it possible to simplify all computations and to proceed to calculate approximately the total demand and the total supply at a given moment and as anticipated throughout the year.

Such calculations require statistical data. In the light of the figures obtained, the government will take the necessary measures to procure the quantity of products sufficient to meet those needs which are deemed to be the irreducible minimum and will have these products delivered to the places where they are to be consumed. To keep its forecasts exact, it will forbid any change of residence on the part of anyone save in exceptional cases which it will be obliged to take into account. But as it is not infallible, and as chance may upset its calculations, it will create reserve stocks as a means of correcting any unanticipated imbalance. The transmission of the information it receives and the orders it sends out will require a network of communications and the establishment of a corps of messengers. In addition, since personal interest is to a

great extent eliminated, severe penalties will be needed to take its place.

This rigid system, however, will of necessity allow for a certain amount of free play because of the retention of elements of earlier date that the monarchs do not believe it useful to suppress by force and because of the substructure, which still leaves some room for personal interest. Thus, a certain amount of trade will continue to be carried on at the periphery of the socialist regime.

Such were the factors in the Incas' solution of the basic problem, and such are the different aspects of their economy that we must successively examine.

1. *Statistics*

It is ridiculous for a man who knows nothing of the art of counting by means of knots to presume to reckon up the number of the stars.

—A maxim of the Inca Pachacutec¹

The slightest insufficiency, the smallest error, in the statistics of a planned empire runs the risk of entailing a catastrophic glut or famine. Fortunately, the Incas attained a rare degree of perfection in this field.

The decimal system of numeration was in use in the Inca empire, which is remarkable when we recall that a vigesimal system was the rule among the Chibchas, as it was among the Mayas to the north. Statistics were compiled by means of a knotted cord called the quipu, of which an intensive use was made. Everything was counted, even to the wild animals captured in the hunts and the slingstones deposited in the public storehouses.²

Before we examine in greater detail the manner in which the statistical tables were drawn up and preserved, a very puzzling preliminary question must first be raised: Did any system of writing exist in those days? Montesinos maintains that the ancient Peruvians used to write on banana leaves³ or on the foliage of trees⁴ and that the practice of this art had been forbidden by a sovereign at a period antedating that of the Incas. According to this chronicler, an *amauta* who had invented characters for writ-

ing was burned alive. Modern historians are in disagreement on this question. R. Porras Barranechea, considering the hieroglyphic inscriptions found on stones, the use of paintings in the temples to record historic events, and especially the existence, before the conquest, of a word in Quechua and Aymara that was equivalent to the word "writing" (*quilca*), concludes that a form of picture writing did once exist in Peru.⁵

Finally, there is still some mystery in regard to the real nature of a certain rod of which Balboa speaks and on which Huayna Capac is said to have drawn stripes in different colors to mark his last wishes before his death.⁶

The quipu was not peculiar to the Peruvians. The Colombians of Popayán, the Caribs of the Orinoco, the Mexicans before they used the codex, certain North American tribes, the Chinese, and the inhabitants of the Marquesas Islands were all acquainted with it. On the other hand, some peoples quite close by, such as the Caras, were unfamiliar with it.⁷ The Caras brought together pieces of wood, in which they had cut notches, and in these notches they would set little stones of different shapes and colors according to the ideas they wished to express.⁸

The Cañaris of Ecuador, who were not subdued by the Incas until rather late, also made use of little stones which they placed in the compartments of a special apparatus. Wiener, who found a stone object of this type, calls it a computer.⁹

It consists of a rectangular slab of stone, into the upper surface of which are cut a number of square and rectangular compartments so as to leave a free octagonal space in the center. A prismatic projection, itself surmounted by a secondary projection, extends upward from each end.¹⁰ According to Wiener, the accounts were kept by means of kernels of maize, beans, or pebbles. A pebble placed in a small compartment would denote one unit. Its value would be doubled if it were put into a larger space and tripled in the central compartment. It would be multiplied by six if placed on the first of the upper levels and by twelve when put on one of the topmost platforms. The color of the pebble indicated the nature of the object that was being counted.¹¹

In spite of what Suárez says,¹² it is certain that the quipu with its cords and knots is immeasurably superior to the system of the

of weapons, the first string would denote the number of lances, these being considered the noblest of all arms; then would come the arrows, bows, javelins, clubs, axes, and slings. Often the pendent cords would themselves have smaller strings attached to them to represent subdivisions. Attached to a cord that recorded demographic statistics, for example, these subsidiary strings would refer to the year's widows or widowers.

Knots of various types and positions were tied in the cords to mark units, by tens or multiples of ten, according to where they were placed. The lower end of the cord would correspond to unity; the upper end, to ten thousand units. Every interval between the tens, the hundreds, and the thousands had to be long enough to provide room for nine simple intermediary knots or for a single large knot formed by passing the string two, three, four, or up to nine times through the loop of the simple knot.¹⁴

Sometimes the principal cord would have knots at its two ends to indicate the total from the small strings; in other cases an extra thread would mark the sum reached on the others, forming, as Mead says, "a sort of double entry bookkeeping."¹⁵

An example (which we have simplified) is provided by A. de la Calancha.¹⁶ Let us suppose that an official wished to express the fact,

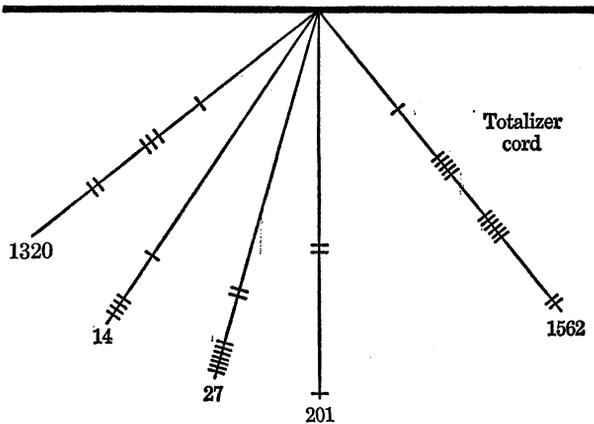


Diagram of a Quipu

first, that before Manco Capac, the first Inca, there was neither king nor chief nor any form of worship or religion; and then that in the fourth year of his reign this emperor subdued ten provinces, the conquest of which cost him a certain number of men and in one of which he seized a thousand units of gold and three thousand units of silver; and finally that in thanksgiving for his victory he had a feast celebrated in honor of the Sun-god.

The *quipucamayú* (i.e., the keeper of the quipus) would take a black cord—the color that denoted time. From it he would suspend a large number of uncolored strings, and in it make a quantity of little knots. Then, when he reached the center of the cord, he would make a thick knot and run it through with a crimson thread, the color denoting the Inca. The reader, seeing the quipu divided into two halves, the first strung with uncolored threads and dotted with a mass of knots, would say to himself: Before the first sovereign (scarlet thread), for a very long period (many threads and knots), the people had no king, since none of the threads is scarlet; no chief, since none is deep purple; no religion, since none is blue; and no administrative departments, since there are no variegated threads; and he would conclude that there was nothing at all.

In the scarlet thread the *quipucamayú* would make four small knots to explain that the events he was recounting took place in the fourth year of the monarch's reign; and to the central knot he would attach a gray thread on which would be ranged ten small knots, indicating the conquered provinces. To each of these he would fasten a green thread, indicating, always by means of knots, the number of the enemy killed, and would add little strings of diverse colors to denote their native provinces, for every province was represented by a mixture of different shades. In the same way, he would attach a red thread—the color of the imperial army—to make known the number of warriors who had been slain and the provinces from which they came.

To indicate the nature and amount of the booty taken, the *quipucamayú* would suspend, from the knot of the province in question, a yellow thread, signifying gold, with a knot to indicate one thousand, and a white thread, for silver, with three of these knots. Finally, he would add a small twist of blue, white, and yellow to designate the god who lived in the sky (blue) and created silver (white) and gold (yellow) and to let it be understood that a celebration had been held in his honor.

All told, the quipu was a very difficult rebus! ¹⁷

The use the Indians made of these quipus astonished the chroniclers, even those who were the most hostile to the natives and the most ready to disparage them.¹⁸ But modern authors, comparing the quipu to systems in use among other peoples, are less enthusiastic than their predecessors.¹⁹

In spite of the fact that the first Council of Lima in 1583 ordered the quipus to be burned because of the magic formulas and prescriptions they contained, many have been preserved and are on exhibition in our museums today.²⁰ But most of these, as they were found in tombs, were probably calendrical in nature and used in divination, for it is doubtful that administrative documents would have been buried with the dead.

To this day the shepherds in the Peruvian *puna* keep track of their flocks with the aid of strings, the first representing the bulls, the second the milch cows, the third the barren cows, the fourth the calves; and then the wool-bearing animals, the number of foxes killed, expenditures for salt, and so on.²¹

In the region of Casta, when the canals are being repaired, the officials in charge make use of small wooden boards on which the names of the workers are inscribed. Beside every name there is a hole with colored threads strung through it, which indicate the quantity and the quality of the work performed, the number of implements used, and even the zeal displayed by each worker.²²

The statistical reports in pre-Columbian Peru enabled the Inca and the higher officials to know exactly what the economic condition of the empire was and to act accordingly. The mass of the population, to be sure, had less interest than the upper class in keeping these records, since their subsistence minimum—a *tupu* and a pair of llamas—was assured in any case. Yet even this minimum could disappear in the wake of some chance occurrence such as an abnormal drought or an invasion, in which case the government would come to their aid, as we shall later see.

Of all the statistics the most important were undoubtedly the census figures. For this purpose the Indians were divided into ten age groups: those over sixty, who did no work and were sometimes called upon to give advice to the local chiefs; those between fifty

and sixty, who were assigned to light work, such as planting vegetables; those between twenty-five and fifty, the *hatunruna*, who were subject to compulsory labor service; those between twenty and twenty-five (those under twenty-five helped their parents), and then into groups from sixteen to twenty, eight to sixteen, six to eight, four to six, two to four, and infants under two. This register was kept up to date each year.²³

The governmental service of statistics was in the hands of three different categories of officials: the ordinary administrative authorities collected the data, special accountants set up the tables, and others were charged with their preservation. At the base of the hierarchy the chiefs of ten households reported the number of births and deaths each year²⁴ and kept the complete record of their group. This information was passed on to the chiefs of fifty families, then to those of a hundred households, and so on up to the *tucricuc*. Accountants at these upper levels of the hierarchy would integrate the data supplied by subordinate officials and set up general quipus for each of the large administrative units. The *tucricucs* would take these statistical summaries to Cuzco when they went to make their annual report to the Inca and to celebrate the great festival of the *Raymi*.²⁵ Finally, in the capital, the keepers of the quipus would collect the statistical tables of the entire empire and would make a point of preserving in their own memories what was only imperfectly indicated by the little cords. Each of these last-named record-keepers had his specialty. One took care of the war quipus, another of the statistics on festivals, a third was responsible for records of population figures, and so on. They were very highly esteemed, paid no taxes of any kind, and lived at the Inca's expense. This was the Bureau of General Statistics and, at the same time, the National Archives.

Accuracy in the statistical tables was assured by the imposition of severe penalties for any dereliction. The *quipucamayu* who did not know what it was his business to know or who falsified his reports received a sentence of death "without remission," says Calancha,²⁶ and an Indian who hid to escape being counted was struck over the shoulders with a club.²⁷ The supervision of the

census was exercised by the Inca's special envoys, who would assemble all the Indians in the village to be counted, "even if they were on the point of death."²⁸

2. *Population Movements*

For such a statistical system to serve an administrative function, its basis must remain unchanged. It was no idle fancy that moved the great founders of utopias to forbid the inhabitants of their ideal cities to travel about as they pleased.²⁹ Population movements upset production and distribution quotas and throw the whole mechanism out of gear. The raw materials allocated to one province will exceed its actual needs, while its neighbor will suffer from a shortage. One granary will not receive the amount of maize that should have been provided for, while another will be glutted with cereals. The tax assessments imposed on each administrative unit will be too low or too high, depending upon the increase or decrease in population figures. No matter how carefully the statistical tables are compiled, they will never succeed in keeping up to date, and the administration of such a restless society will be continually plagued by unforeseen and inextricable complications.

Accordingly, the Inca in his wisdom took the only step compatible with his system of government: *He forbade his subjects to move from one place to another without special authorization.* No individual caprice must disturb the socialist order. Long after the conquest, Ondegardo and Santillán, struck by the difficulties the Spaniards were encountering in collecting the taxes imposed on communities whose composition was perpetually changing, demanded a return to the ancient rule.³⁰ In the empire of the Incas, the Indian had to live and die in the place where he was born.³¹

The enforcement of this legislation was assured in the simplest possible way. The natives of every province carried some distinguishing mark that they were not permitted to alter under pain of death. The Collas, for example, wore the woolen cap that they have kept to this day, and the headdress of the Cañaris was a slender circular band of wood.³² Officials would take up positions at the entrances to the towns and note all the Indians who passed

by. Others would be stationed at the entrances to bridges to make sure that no one crossed without the necessary permit.³³ At Cuzco no one could enter or leave the city after sunset or before sunrise.³⁴

On the other hand, the Inca did not hesitate to move families or groups of families from one place to another when he deemed it necessary, and this had to be taken into account in the quipus. These forcibly uprooted and resettled groups were called *mitimaes* by the Spaniards, from the Quechua word *mitmac*, which means "a man sent elsewhere."³⁵ This term was used with several different meanings, however, and we feel that we should define it in all its senses here, even at the risk of encroaching upon the content of later chapters.

There were four categories of *mitimaes*.

First, there were the men sent to occupy the military posts that had been established on the frontiers to defend the empire against invasion. These detachments were chosen from the most dependable and most courageous tribes and were shown particular marks of favor. The Inca presented them with objects of value, with clothing, and with wives. Their military vocation by no means prevented their cultivating the land and taking part in the construction of public works. The captain who commanded them was of the Inca race and was under the orders of the governor.³⁶

Secondly, there were the colonies of Indians sent from overpopulated districts to sparsely inhabited areas with the object of adjusting population to the resources of each region. Even before the establishment of the Inca empire, Aymara colonists, driven from their homes by the scarcity of food, had settled on the coast, where they continued to carry on trade with their former compatriots.³⁷ These *mitimaes* would often be charged with the task of revictualing their places of origin. Before the period of the Incas, the Chinchas and the Chimús had the use of lands in the sierra where certain of their number would pasture flocks of llamas whose wool would be used to make clothes.³⁸ Later the sovereigns of Cuzco assigned domains in warm regions—sometimes very far away—to most of the districts where the climate was cold.³⁹

In order to facilitate their resettlement, such *mitimaes* were granted certain privileges. The most notable of these was the en-

joyment of a long period of tax exemption. Moreover, they remained subject to their own chiefs and free from the domination of the chiefs of the districts to which they had been moved.⁴⁰ Indians from their native territory would come to help them in the ploughing and planting seasons.⁴¹ Ondegardo shows what a mistake the Spaniards made in disregarding this system. The Marquis of Cañete, after an investigation, ordered the return to the province of Chucuito of lands on the coast that it had formerly possessed and from which it had obtained its food supplies.⁴² It is obvious that in such circumstances the Indians were forced to live in a climate different from that of the area in which they had been born. This was contrary to the Incas' general rule. But it is also evident that this was one of the sovereign's most effective means of preventing a deficit in production in certain parts of his realm.

We shall follow Ondegardo's terminology and refer to these colonies as *suyus*, to distinguish them from the others.⁴³

Thirdly, certain exchanges of population were made with the purpose of improving production. In these cases, what counted was the quality, not the quantity, of the individuals who were resettled. The central authority would send families of skilled farmers to the regions that needed them and would transfer families of artisans from areas where they were too plentiful.⁴⁴ It is possible that individuals or groups from among the conquered peoples may have been sent to Cuzco and the provinces adjoining the capital to serve as instructors of one kind or another.⁴⁵

Finally, there were the cases of forcible deracination and resettlement of whole populations. The Inca effectuated exchanges of population not only for economic but also for political reasons, to insure order and to maintain peace within the empire. He would uproot loyal tribes and transplant them in newly conquered provinces, sending disaffected tribes from these areas to occupy the places thus vacated. In such cases, the *mitimaes* would be completely separated from their compatriots and brought under the domination of the *tucricuc* of the district to which they had been transferred. All ties with their native land were severed.

The newcomers thus settled in a conquered region, being altogether reliable and capable of quelling revolt, served both as

teachers of the natives and as watchdogs and spies for the Inca. The latter was not sparing in his favors to them. He gave them clothing, jewels, and wives, and he always took care to send them to a region with a climate similar to that of their native province.⁴⁶

Nothing gives us a better idea of the power of the Inca and the astuteness of his policy than this barbarous, but effective, procedure. How painful it must have been for these farm folk to be compelled to leave their ancestral lands and go to live among hostile peoples! Some grumbled; others rebelled.⁴⁷ But the Inca, unswerving in his determination to regulate everything strictly in accordance with the implacable dictates of reason, thought nothing of sacrificing the interests of the individual to the general welfare for the greater good of the empire.⁴⁸

There were a great number of these *mitimaes*. "There is hardly a valley or a village in all Peru where there is not an *ayllu* or a faction [*partialité*]." ⁴⁹ For example, the Incas had loyal tribes transported into the kingdom of the Caras,⁵⁰ and this is the reason why at Zambiza, near Quito, there are Aymara Indians today whose ancestors were brought from the Bolivian frontier.

It is curious to note that, in spite of everything, the resettled Indians did not become as attached to their new territories as other Indians generally were to theirs. Ondegardo remarks that the *mitimaes* left their lands to serve the Spaniards more readily than did the other Peruvians.⁵¹

Besides these wholesale transplantations of entire tribes, the Incas also undertook, in the same spirit, the resettlement of smaller groups, consisting of carefully chosen families entrusted with the mission of acting as guardians of law and order. These *mitimaes* were obliged to learn the language of the natives among whom they were sent and had the right to enter their homes by day or night in order to be able to warn the nearest official in authority of any attempt at revolt.⁵²

In a word, the Inca regulated all changes of residence. He settled good farmers where there was a shortage of them, gave teachers to Indians who lacked instruction, put restless and arrogant tribes close to those that were submissive, set down his subjects with a sovereign hand in the different parts of his territory as one moves

pawns on a chessboard, and shuffled people around as he wished in order to unify his empire.⁵³

3. *Administrative Organization*

Every socialist system must rest upon a powerful bureaucratic administration. In the Inca empire, as soon as a province was conquered, its population would be organized on a hierarchical basis, and the officials would immediately set to work.⁵⁴ The table of organization listing the principal offices to be filled in the administration of a collectivist regime covers almost two pages in P. Bourguin's *Les systèmes socialistes et l'évolution économique*.⁵⁵ Even recognizing that the society of ancient Peru was immeasurably less complex than ours is today, we are still amazed that the Inca government should have succeeded in getting all these functions performed.

The empire was called *Tawantinsuyu*, i.e., "the four parts of the world," and its capital was named *The Cuzco*, i.e., "the navel." These "four parts" were the North (*Chinchasuyu*), the South (*Collasuyu*), the East (*Antisuyu*), and the West (*Contisuyu*). Each was under the direction of an official, whom the Spaniards called the viceroy. The four viceroys perhaps constituted that upper council of the empire which we have already mentioned.

The chroniclers always speak of provinces or valleys as the basic administrative districts, and by these words they denote the centers of population, the mountain hollows, and the little vales along the coast. They are purely geographical expressions, referring to natural groupings to which the Incas endeavored to apply, as well as they could, a rational decimal system.⁵⁶

In each of the four sections of the empire, the heads of families, or *purics*, who were subject to compulsory personal service by way of taxation—that is, men between the ages of twenty-five and fifty, and in consequence either married or widowers—were divided into groups of ten.⁵⁷ One member of the group, the decurion (*chunca-camayú*), held sway over the other nine.⁵⁸ Five decurions were under the authority of a superior decurion (*pichca-chunca-camayú*), and two groups of five decuries formed a century (*pachaca*) under

the direction of a centurion (*pachaca-camayu*), who was assisted by a deputy. Five centuries (*pichca-pachaca*) were subject to a captain, to quote the term used by Garcilaso,⁵⁹ and two groups of five centuries (*waranca*), that is, a thousand families, were under the command of a special chief (*waranca-camayu*). Above him, the *hunu-camayu* was in command of ten thousand families (*hunu*), and the governor (*tucricuc*, i.e., "he who sees all") was the ruler of a group of four *hunas*. The governor, finally, was subject directly to the viceroy.⁶⁰

The Inca appointed the viceroys and the *tucricucs*. These, in turn, would name the heads of the *hunas* and *warancas*; the heads of the *warancas* would choose the chiefs of the *pachacas* and the subordinate officials, subject to the customary local regulations in regard to inheritance or election, which continued to be applied to the *curacas* or local chiefs, at least so long as there was no risk of placing incompetent, immoral, or politically suspect persons in positions of power.⁶¹ It is possible that in some regions a sort of election, as a survival of ancient custom, may have played a certain role in the nomination of subordinate officials, but this method of nomination tended more and more to disappear, if, in fact, it was even still in existence at the time of the Incas. We say a "sort of election" because probably there was no vote properly so called. The chief himself took command by virtue of his natural superiority.⁶²

The *curacas*, however chosen, would find themselves placed in the hierarchy in the position befitting the numerical importance of their tribe. Sometimes they would be *pachaca-camayu*, sometimes *waranca-camayu*, but probably not *tucricuc*.⁶³ It is possible that in practice the title of *curaca* was extended to include all officials, as Zurkalowski contends,⁶⁴ but to adhere to such a loose interpretation of the word would be to lay oneself open to confusion.

In order to qualify for these offices, one had to meet certain age requirements. No one below the age of twenty-six could hold any of the lower positions, and one had to be at least fifty to be a *tucricuc*.⁶⁵

The responsibilities of all these officials extended over an ex-

tremely broad field. They were in general charge of the preparation of the statistical tables, the requisitioning of the supplies and provisions needed by their group (seeds, staple foods, wool, etc.), the distribution of the products obtained, the solicitation of assistance and relief in case of need, the supervision of the conduct of their inferiors, and the rendering of complete reports and accounts to their superiors. These operations were facilitated by the fact that those under their supervision were obliged to admit them to their houses at any moment, to allow them to inspect everything in their homes "down to the cooking utensils," and even to eat "with their doors open."⁶⁶

The decurion, the mainstay of the whole system, was called in Spanish *procurador* and *fiscal*; that is, he not only had to oversee the work done and make sure that the workers received adequate maintenance, but was obliged to denounce delinquents and demand their punishment. He worked like and with the men he was in charge of, assigned strips of land to the Indians for communal labor, distributed seeds, and saw to it that the crops were garnered in the granaries.

The particular responsibility of the higher officials was to supervise the collection of taxes. The governing *tucricuc* selected the men for the army and the women for the virgins' houses and was obliged from time to time to visit the Inca and report fully on conditions in his province. He was in command of the *mitimaes*, and he could even raise an army to quell a revolt.⁶⁷

The whole system was kept under the watchful eyes of inspectors, *orejones*, who made general tours of the empire every three years,⁶⁸ and of the Inca's secret agents, called by the Spaniards *veedores* or *pesquisidores*, who made their way incognito into all the districts and were commissioned to observe, listen to complaints, and report, but not to take any repressive measures on their own account.⁶⁹ Several brothers of the Inca Tupac Yupanqui were successively appointed inspectors of this sort.⁷⁰

Finally, the officials of all ranks were expected to gather vital statistics, arrange marriages, and punish delinquents. Those responsible for inflicting punishment were particularly dreaded—as we may well believe.⁷¹ The task of ultimate review was reserved

to the Inca himself. He would travel throughout the empire in his golden litter, and during the whole period of his tour—which was very long, for he was sometimes absent from Cuzco for three or four years at a time—he would listen to complaints and render justice.⁷²

The total number of administrative officials, aside from viceroys, governors, inspectors, deputies, and special agents, is difficult to establish, and it is understandable that various authors should be in disagreement in this regard, but the figure was probably very high in proportion to the population. In any case, any strictly arithmetical expression of this ratio can have only a limited validity. Even supposing that it could have been accurately calculated for a given date, marriages and deaths would have been bound to destroy its accuracy in a short space of time. In the opinion of Cunow and Trimborn, all these administrative units were only the transposition of the earlier Indian classifications: the *hunu* corresponded to the tribe, the *waranca* to the phratry, the *pachaca* to the *ayllu*; and the figures given for these divisions recalled their ancient importance, but no longer had any connection with reality by the time the Spaniards arrived.⁷³ However, this opinion seems to us to go too far. The vital statistics were undoubtedly kept up to date, and the officials could base their calculations on the actual figures thus established, not on outdated figures that, as the German authors would have it, served merely as labels for the administrative divisions.

Nevertheless, the distribution of jobs, services, raw materials, foodstuffs, and manufactured goods could not easily have been carried out in this vast empire if differences in the size of groups of the same name had not been held within narrow limits. Harmonious organization demanded that this should be the case, and we have the testimony of two chroniclers, Santillán and De Castro, that it was. The first of these authors affirms that the century could not comprise more than one hundred taxable subjects and that if the number increased, the unit would be divided.⁷⁴ The second explains that the officer in charge of preparing the statistical tables would remove the *yanacuna* and the women destined for the Inca and the Sun from the groups in which the population was in-

creasing, and, if this subtraction still proved insufficient, would ask for the creation of a new unit.⁷⁵ The sovereign could also attain the same end, that of adjusting the population to the necessities of statistics, and not the statistics to the population, either by resettling *mitimaes* or by changing the boundaries of a district. Better still, Otto von Buchwald tells us that in the province of Imbabura the Incas broke up the age-old communities and divided the population into *pachacas* and *waranacas*, adding families taken from other groups to fill up *pachacas* that were below the prescribed number.⁷⁶

The agrarian community could sometimes receive new elements in this way or lose some of its own members.⁷⁷ The strictest adherence to the decimal system of grouping was all the more necessary in dealing with recently conquered peoples with a high degree of civilization, such as the Chimús, where the former tribal organization had disappeared.⁷⁸

It is curious to note that the Germanic *pagus* was a century, that is, originally a group of one hundred heads of families, like the *pachaca*. But the number was exactly one hundred only at the beginning, at the time of the initial organization, and it probably varied as time went on, although the unit continued to be called by the same name. On the other hand, we read in Sir Thomas More's *Utopia* that when families lacked the prescribed number of members, "this measure or number is easily observed and kept by putting them that in fuller families be above the number into families of smaller increase. But if chance be that in the whole city the store increase above the just number, therewith they fill up the lack of other cities."⁷⁹

The Incas seem to have avoided both of these extremes. They sought to lessen the discrepancy between the number of families actually counted in each unit and the number by which the unit was designated, but they did not succeed in making the two figures identical. *They contented themselves with an approximation.* It is thus an exaggeration to say that the numerical system existed only in the statistical tables.⁸⁰ The most reasonable opinion seems to be that of D'Harcourt that the division into groups of families by tens and hundreds did not have to be strictly exact, but had to

serve merely as a convenient base for distribution and that an effort was made to make it fit existing conditions.⁸¹

Another administrative division was superimposed on the one we have just examined, but it remains very obscure. All the inhabitants of the empire, and the residents of Cuzco in particular, were divided into two strata (*partialités*), the upper and the lower, *hanan* and *hurin*, those of *hanan* being considered the superiors of those of *hurin*. This division goes back, according to C. de Castro, to Tupac Yupanqui; according to Las Casas, to Pachacutec; according to Montesinos, to a certain Inti Capac Yupanqui.⁸² If one is to believe Sarmiento, its original purpose was to facilitate the tabulation of statistics. According to him, the Inca Roca, realizing that his ancestors had always lived in the lower part of Cuzco, decreed that his successors were to live in the upper quarter and thus created the *hanancuzco* segment of the population; and that is why the later Incas were all from this group.⁸³ This is hardly a satisfactory explanation. Las Casas and Montesinos attribute the creation of these two strata of the population to the desire both to facilitate computations and enumerations and to arouse a feeling of rivalry between the two quarters thus formed in Cuzco.⁸⁴ Cobo adds to this aim the wish to set up opposing factions and thus prevent rebellions, since each side would have its eye on and be ready to denounce the other.⁸⁵

Perhaps this duality should be viewed as a survival of the phratries of which the primitive tribe was composed.⁸⁶ It is possible also that the *hanan* may have consisted of the descendants of the original inhabitants of Cuzco, and the *hurin* of the descendants of immigrants who had entered at some distant period. This would explain the pre-eminence of the former over the latter.⁸⁷ Cúneo Vidal observes that the *hanan* were the first occupants, who took the best lands, and that the *hurin* were the latecomers, who remained at the bottom of the valley.⁸⁸ If, nevertheless, it was the *hurin* who once held the pre-eminent position, as Sarmiento contends, the passing of power from one party to the other must have been the result of a revolution rather than the consequence of an order from the Inca, the reason for which eludes us. As opposed to the authors cited above, H. Urteaga, following Latham in this

respect, believes that the *hurin* were the original inhabitants, who settled in the fertile lower quarters, and the *hanan* were the newcomers, *mitimaes*, for example, who occupied the upper sections and were looked upon with disfavor.⁸⁹

4. *The System of Compulsory Personal Service*

In a socialist regime the taxes paid or services exacted are not a contribution to the public expenditures that is levied according to the citizens' ability. They are an instrument for the distribution of wealth. Economic activity is centralized in the hands of government officials.

It was an absolute principle under the Incas that *all exactions consisted of personal services*. No deduction was levied upon the personal property of the taxpayer, on the products of the *tupu*, or on the clothing made by the Indian from his llamas' wool.⁹⁰ In the Inca empire it was the cultivation of the lands of the Sun and of the Inca that formed the chief service exacted of the citizens. The yield was never constant, since all the risks fell upon the beneficiary. In addition, the Indian was obliged to perform some task, which generally consisted in manufacturing, out of raw materials furnished by the state, articles that would go to swell the stocks in the public storehouses, or he would sometimes be required to serve a certain term in the administration of the government.

Theoretically, the Inca's power to fix the nature and the amount of this personal service was unlimited.⁹¹ In fact, however, the sovereign did not proceed in an arbitrary way. He would send into each one of the four parts of the empire trustworthy individuals who would report to him on the possibilities of every province. He would then call the assembly of the *orejones* into session and base his decisions on the statistics concerning the population and the wealth of each area.⁹² He would also take into account the skills of the inhabitants and their natural aptitudes. The Chumbivilcas were called upon to send dancers to Cuzco, while the Lucanas had to provide bearers for the imperial litter.⁹³

The craftsmen rendered the Inca his due by exercising their

crafts for the monarch's benefit during the season least favorable for work in the fields.

Every precaution was taken to equalize the burden of personal services exacted. If one province had just enough land to provide food for its inhabitants, the Inca did not reserve any of it for himself, but demanded men for public works or to manufacture certain articles. If one district had to provide the Indians for making clothing in one year, another would be assessed for this labor in the following year, and so on in rotation.⁹⁴

The division of the population into tens and multiples of ten made the assessment easy. Thus, in order to supply a thousand men, the head of the *hunu* would simply demand one hundred from each chief of a *waranca* under his command; the latter, in turn, would requisition fifty from each head of a *pichca-pachaca*, and so on down to the decurion, who would have no more than one man to provide. This decurion would then take an Indian to his immediate superior, the head of five decuries, who, in his turn, would go to the centurion with the five men he had thus received, and so on up.⁹⁵

Finally, these exactions were not imposed on uniform dates.⁹⁶ The products were deposited in the storehouses and in great part were brought to Cuzco for the festival of the *Raymi*.⁹⁷

These exactions came to a considerable amount. Indians were needed for the service of the temples and the tombs, of the Inca, and of the courier system; for work in the mines, the guarding of the warehouses, the manufacture of rope, the quarrying and cutting of stone, the construction of public buildings, and the transportation of merchandise. But it should not be forgotten that the considerable resources thus obtained were not destined for the use of the Inca alone. They also served to maintain the entire imperial family, the government, the army, and the Indians engaged in public works; in a word, *they constituted the state revenues*.

In addition, personal services were due to the *curacas* and the higher officials. They were sometimes paid by the members of the *hanan* division of the population to the principal chiefs, and by those of the *hurin* division to the subordinate officials.⁹⁸ All these dignitaries had the right to a number of servitors, amounting to

one or two per cent of the population over which they ruled. Moreover, the communities built their houses, ploughed their fields, and tended their flocks,⁹⁹ without there being, apparently, any precise regulations in this regard.¹⁰⁰

In short, the exactions imposed by the Inca, the personal services furnished to the *curacas*, and the work done on behalf of the incapacitated and the absent corresponded to the three forms of taxes that are to be found in all modern states: national, local, and public relief.¹⁰¹

Among the state taxes, there is one that is worthy of note. It was levied on very poor tribes, such as the people of the Pasto on what is now the frontier of Colombia and of Quillaco at Alausí in the center of Ecuador,¹⁰² and it consisted in the delivery of a certain number of live lice. Sinchi Roca demanded the stem of a feather filled with lice from every taxpayer among the Uru.¹⁰³ This measure, which at first sight seems very odd, was in reality very wise. In the first place, it involved an application—strange, to be sure, but definite—of the principle, too often forgotten in our own day, that all the inhabitants of a country should be obliged to contribute their mite, however small, to the government. It was, besides, an excellent hygienic provision, and one that would still be entirely justified in these regions at the present time.¹⁰⁴

Exemption from all tax burdens was granted to the elite (higher officials, *curacas*, the Inca caste), to widows, sick people, cripples, and others who were incapacitated; to the *yanacuna*, who were obliged to work only for their masters; and to those Indians who, as a result of exceptional circumstances, found themselves without land.¹⁰⁵

The service of the *tambos* was the object of special arrangements of which we shall speak later on.¹⁰⁶

There were both ordinary and special inspectors to make sure that everything was properly checked.¹⁰⁷

This whole fiscal system was destroyed by the conquest, and when the Spaniards tried to establish another in its place, they ran

into great difficulties and were guilty of all sorts of involuntary injustices. They did away with personal service and demanded from certain provinces products that could not be grown on their soil. Indians were thus obliged to acquire llamas by way of exchange in order to give them in payment of taxes, and those who had nothing else would barter their daughters for these animals.¹⁰⁸ Ondegardo in all his writings advocates a return to the principle of personal service and the maintenance of the system of assessments. According to him, only the requirement of personal service was accepted without murmur by the Indians, who felt themselves to be more oppressed when a single bushel of potatoes was taken from them than when they were forced to work fifteen days for perfect strangers. This is an attitude still to be found among a number of the peasants of western Europe.¹⁰⁹

Unfortunately, the obligation of personal service could also give rise to abuses. The tasks imposed by the *encomenderos* were often excessive. The Spanish sovereigns, therefore, in spite of Ondegardo's protests, decreed that taxes be paid either in money or in kind.¹¹⁰

The idea of establishing a fixed per capita assessment was alluring, for this would have made it possible to do without the intervention of the *curacas*, who were only too ready to abuse their powers; but it was not practicable, since the *curacas*, knowing the Indians perfectly, were the only persons capable of getting the taxes paid. Besides, once the principle of assessment had been adopted, it would have been necessary to revise the quotas to keep pace with changes in population, so as to avoid lightening the burden in provinces where the number of inhabitants was increasing, to the detriment of those in which the population was decreasing, and strict supervision as well as severe penalties would have been needed to prevent the *curacas* from oppressing their subjects.

The exactions imposed by the Inca were undoubtedly crushing; but they were so adroitly conceived and so ingeniously apportioned that the Indians endured them with greater ease than they did the Spanish taxes that followed.¹¹¹

5. *Economic Stabilization Through Stockpiling*

Under socialism everything is organized and regulated by authority, according to a reasoned plan.

In the socialist state, "an occasional insufficiency or surplus of products relatively to needs would be compensated by reserves set aside in warehouses that would be veritable public stores."¹¹² This is precisely what took place in Peru. Since the interference of phenomena beyond man's control—such as an exceptional drought—would inevitably make it impossible to assure a perfect adjustment of production to consumption in spite of the statistical tables, the Inca set up a system of reserve stocks in public warehouses.

The supplies thus accumulated constituted not only a consumers' reserve, but an actual fund of "national capital," since they included, besides food and clothing, raw materials intended for distribution in the same way as the products were.

The storehouses (*pirua*) were situated either close to the towns and villages or at intervals along the highways. The first were established outside the centers of population, in cool and airy places, to avoid any danger of dampness, and consisted of a series of small square buildings, set in orderly rows, to the number of twenty, thirty, fifty, or more, sufficiently far apart from one another to prevent the destruction of all of them by a fire breaking out in any one.¹¹³ Some of them contained products destined for the Sun, others the supplies set apart for the Inca, and still others the surplus that was kept as a special reserve in case of famine.¹¹⁴ This specialization was entirely relative, however, for one storehouse would be drawn upon to replenish another, and the products originally intended for the Sun might themselves be allotted to the Inca or to the populace. The only rule was the will of the sovereign.¹¹⁵

The monarch planned so far ahead that these storehouses would sometimes have food supplies for ten years.¹¹⁶ Overseers and accountants were detailed to look after them. Every three years the

governing *tucricuc* would inspect them, and, if necessary, have anything that had deteriorated thrown out or order the distribution of whatever was in too plentiful supply.¹¹⁷ The warehouses of the large cities were literally overflowing with goods of all sorts. "The Christians took away everything they wanted," F. de Jerez reports, "and still the houses remained so full that nothing seemed to have been taken at all."¹¹⁸ The same chronicler goes on to tell of the astonishment of his compatriots at the sight of the storehouses of Cajamarca filled with clothing "piled up to the roof" and arranged "as the merchants of Flanders and Medina del Campo know how to do."¹¹⁹

Besides clothing, these buildings contained stores of maize, quinoa, charqui, *chuno*, dried vegetables, fish, sisal hemp, rope, wool, cotton, sandals, weapons, cabuya, and even shells.¹²⁰

All these things were produced on the lands of the Sun and those of the Inca or were brought in by the Indians as tribute.¹²¹ The sovereign then made such distribution as was necessary to supply deficiencies in the warehouses of provinces where the statistical reports showed that there were needs to be met.¹²²

Exchanges of this sort between warehouses also had the purpose of providing some variety in the supply of consumers' goods. Thus, the Inca would furnish the inhabitants of the coastal regions with the products of the sierra, and vice versa, and such articles were highly valued.¹²³

The state magazines thus served five distinct purposes. First, they constituted a war chest, especially those situated along the highways, which made possible the revictualling of armies. Next, they supplied the Incas, their families, their servants and retainers, the priests, and all the Indians working for them with all the necessary means of sustenance. Thirdly, they enabled the sovereign to make gifts, either by way of reward or as a means of securing some useful co-operation. In the fourth place, they served as a bureau of public assistance and relief, providing needed food for the Indians whose crops had failed because of frost or for any other reason. And finally, they established and maintained reserve stocks of raw materials and consumers' goods.

The raw materials were distributed in accordance with the statistical data. Seeds were taken from the magazines every year, wool and cotton every other year, and divided successively among the *hunu*, *waranca*, and so on, to be finally distributed among the families. It should be noted that each head of a family was assumed to have the same needs, and no account was taken of what his actual necessities might be. Thus, when an Indian had received llamas from the Inca with full property rights in them, his share in the distribution of wool was not diminished on that account.¹²⁴ This was a reasonable procedure, for otherwise merit would no longer have received its reward; but nothing demonstrates the character of the Inca organization more clearly. The scheme of distribution remained abstract and mathematical. That an Indian might have three times as much wool as he could work with was of little consequence; he would still receive his share. Here, indeed, was one source of exchange. Local trade became a prime necessity. Since every family received an equal share in the distribution, with no concern for the exact number of people in it and in complete disregard of the goods that some families might already possess, *the primary purpose of private exchange was to correct what was artificial in this system of distribution.*

As for consumers' goods, they had to be produced in sufficient quantity to make up for the deficiencies of production in famine years. Thus, *the provisions destined for the Inca and for the Sun would in great part return, after a long detour, to the hands of the Indians who had produced them.*

From the economic point of view, it was here, undoubtedly, that the state magazines played an essential part. If the balance between production and consumption was destroyed in one province, the other provinces automatically came to its aid. If the entire territory suffered from a shortage, the surpluses of previous years would at once fill up the gap. Thus, the inhabitants of the empire were jointly and severally responsible for one another in space, and each generation was jointly and severally responsible for the next in time. With such measures of provisionment, no surprise was possible; the future was assured.¹²⁵

6. *Transportation and Communication*

If it is true, as has been asserted, that the nature of a society is determined by the kind of roads it has, then Peruvian society must have been highly civilized, for never did any nation before the nineteenth century have at its disposal such a network of routes of communication. The highways of the Incas surpassed the famous Roman roads both in length and in the solidity of their construction.¹²⁶

Contrary to what history teaches us of the Mediterranean peoples, water routes played only an insignificant role along the Pacific coast of South America before the coming of the white man. Whereas travelers, and especially traders, today make use of boats to go from one point on the coast to another, the ancient inhabitants followed roads laid out along the seaboard.

And yet, what obstacles these roads had to surmount! One must have done some traveling in South America to be able to understand the astonishment of the conquerors at the sight of these paved highways stretching their long lines across the trackless solitudes of the *punas*, up the damp and slippery slopes of the Andes, along the sands of the shore, and through the mud of the tropical forests. The Indians mastered all difficulties. They erected retaining walls on the sides of hills, tunneled through rocks, canalized the flow of rivers, and constructed raised causeways where the soil was marshy. The roads they built were truly those "monuments to human obedience and industry" of which Voltaire speaks.¹²⁷ Wherever possible, they followed straight lines, going over obstacles rather than around them, scaling the mountains by means of great flights of steps—for what was the use of taxing their ingenuity to achieve an easy gradient when the wheel was unknown and the important thing for both soldiers and couriers was to move quickly?¹²⁸

The manner in which these roads were constructed was adapted to the nature of the terrain they traversed. In the sierra they were made of *pirca*.¹²⁹ In the fertile regions they were bordered by low

walls so that the soldiers on the march would not inadvertently trample upon the planted fields. In flat country the highways were from sixteen to twenty-five feet wide, enough for "six horsemen," says Jerez, "to be able to gallop abreast,"¹³⁰ but Cobo remarks that in the valleys the roads were much narrower, being wide enough for only two or three horsemen at a time.¹³¹ Where the incline was precipitous, platforms with stone stairways offered the bearers of the royal litter a place to rest, "while the sovereign enjoyed a marvelous view."¹³² Sometimes markers were erected along the road to indicate distances.¹³³

On the coast the roads were bordered by trees, which offered the traveler shade and fruit, and by canals, which enabled him to quench his thirst. In regions where the roads were in danger of being covered by the shifting sands, the trail was marked by twin lines of posts fixed in the ground, posts which the Spaniards later pulled up to use as firewood.¹³⁴

The Incas insisted that all the roads should be absolutely level, without any unevenness whatsoever, without so much as a pebble to form an obstacle over which the traveler might stumble, for the Indian women often used to spin as they walked and could not look where they were going.¹³⁵

The highways were laid out according to a simple plan. There were two great routes, one on the plateau, the other along the coast; the conquerors called them, respectively, the road of the sierra and the road of the *llanos*. The first ran down from Ipiales (south of Pasto) by way of Quito, Latacunga, and Tomebamba, curved toward the seaboard in the region of Ayavaca, then proceeded on to Cajamarca, Huamachuco, Huánuco, Jauja, Vilcas, and Cuzco, crossed the knot of Vilcañota, followed the west bank of Lake Titicaca, left Chuquiabo to the east, reached Chuquisaca, and came to an end near Tucumán, in present northwest Argentina. The second started from Tumbes, served the coast cities of Chimú, Pachacamac, and Nazca, went down along the Pacific through Tacna, Arica, and Tarapacá, and extended to the desert of Atacama.¹³⁶

A series of secondary roads connected these great highways by crossing the Cordillera, and still others branched out from them

to reach distant regions. Some of them made their way eastward to settlements that have now disappeared, covered over by the forest vegetation.

In certain populous areas a second highway would sometimes be built for a new Inca alongside the first when the sovereign decided to undertake some important expedition, but this happened very rarely. Cieza de León cites one example near Vilcas, where there were three or four roads running virtually parallel to one another, each of them bearing the name of a sovereign.¹³⁷

In this way a vast network of routes was established, a veritable spiderweb in which even the most distant tribes were held imprisoned, with its center at Cuzco. This was the visible link that held together the diverse parts of the immense empire; this was the chief's most powerful weapon, the surest instrument of unification. Primarily strategic, like the Roman roads, the Peruvian highways served both a political and economic purpose, for they made it easy for the Inca, his officials, and his couriers to move rapidly from one place to another and for commodities to be transported quickly to wherever they were needed.

The parallel routes traversed by the two main arteries over a large extent of territory made possible an ingenious arrangement. For every province on the sierra road there was a corresponding province on the *llanos* highways. Whenever the Inca traveled along the mountain route, the high officials of the province he was passing through and those of the corresponding province in the plain would meet in a place agreed upon as the sovereign went by; and, conversely, when the Inca took the *llanos* road, the dignitaries of the mountain provinces would come down to meet him. Las Casas remarks that this arrangement enabled the monarch to receive the products of the coast while on his journey in the mountains, and vice versa, and it also had the effect of forcing the inhabitants of different provinces to make contact with one another.¹³⁸

Each province was obliged to build and maintain the section of highway that traversed its territory. Highway maintenance presented a relatively insignificant problem—for the pedestrians and cattle that gave the roads their only wear could hardly do much damage to them—but their original construction must have been

a gigantic enterprise. It should not be forgotten that in everything they did the Indians depended on sheer muscle-power alone, aided only by ropes, stones, and levers, without the assistance of carts or of any animals except llamas.

Vestiges of roadway are to be seen in many places in Peru and Ecuador today: toward Huamachuco, near Huánuco and Cajabamba,¹³⁹ between Cuenca and Loja,¹⁴⁰ between Quito and Riobamba,¹⁴¹ near Lima, between Chimú and Trujillo, and at other sites as well.¹⁴²

But it was not enough to build a highway. Some facilities had to be provided to meet the travelers' needs for food along the way. For this purpose, the *tampus* (which the Spaniards called *tambos*) were erected at regularly spaced intervals.¹⁴³ They were spacious buildings, sometimes consisting of only a single large room "without any division into apartments and with three doors on the same side at equal distances from one another,"¹⁴⁴ and sometimes divided into halls for men and enclosures for llamas, with small rooms, which were probably reserved for people of distinction, opening out from the larger ones.¹⁴⁵ There are ruins of a *tambo* of this kind at Paredones, between the valleys of Alausí and Cañar, more than 13,000 feet above sea level, and there are others between Cuenca and Deleg, and still others between Cuenca and Pucara.¹⁴⁶

These *tambos* served a dual purpose. They contained stocks of foodstuffs that were often abundant, and at the same time they were places of shelter. This explains why vestiges of some size and importance should have been discovered in desert regions.¹⁴⁷ Troops in large number could find shelter within the *tambo* walls, along with food, clothing, and weapons. Montaigne scarcely exaggerates when he writes: "At the end of each day's journey there are fine palaces furnished with provisions, clothes, and arms, for travelers as well as for the armies that have to pass that way."¹⁴⁸

The Indian appointed to the service of the *tambo*, who was assigned by way of tax payment from the province where a given *tambo* was situated, had to procure food and drink for every official sent by the sovereign and for anyone engaged in work for him, but he was not obliged to feed other travelers free of charge. The

latter always had to carry their own provisions along with them or be prepared to engage in barter in the *tambos* for such supplies as they would need.¹⁴⁹

The Spaniards formed the habit in the early days of the conquest of demanding free hospitality for themselves, so that the *tambos*, from being generally empty, soon came to be always well filled with guests.¹⁵⁰ It was to put an end to such abuses that the *ordenanzas de tambos* of May 31, 1543, were proclaimed. By the terms of these decrees, the *tambos* were placed under the charge of overseers and had to be supplied with food, wood, water, and grass; no one could spend more than one night in them; prices for all goods sold were to be fixed by the corregidor; and inspectors were to assure the strict enforcement of these regulations.¹⁵¹

The most remarkable feats of engineering necessitated by the construction of the roads were the *bridges*. It is true that most of the routes were laid out in such a way as to by-pass the sources of the streams by climbing along the Andean slopes and traversing the knots or the high cold plateaus.¹⁵² But it was not always possible to avoid crossing rivers.

Streams were bridged in a variety of ways, depending on conditions.

Where the current was swift and the banks of the river steep, the builders often resorted to ordinary wooden bridges, made with beams and branches joined together, which have disappeared in the course of time.¹⁵³ Or, if the bed of the river was extremely narrow, it would be spanned by great stone slabs, like the bridge of Chavín, made of three huge monoliths more than six yards long supported by masonry piers.¹⁵⁴

The most common method of crossing streams was by way of the *oroya*. A cable was thrown from one bank to the other and firmly anchored to some trees, rocks, or stone abutments. From this cable a large basket that could hold three or four persons was suspended by a wooden handle and was connected with the farther bank by a rope pulled by the Indian on duty there. On each side of the river, therefore, an attendant supplied by the province had to be stationed at all times.¹⁵⁵ However, a traveler could cross by

himself by standing upright in the basket and sliding it along the cable hand over hand.¹⁵⁶ Even more primitive was the procedure known at the present time under the name of *tarabita*. Here the traveler had no basket at his disposal. He was trussed up with cord like a fowl, suspended from the cable, and pulled by the Indian on duty; or else, with the aid of his own hands and feet, he made the crossing alone.¹⁵⁷ A passage by *tarabita* is no easy matter. The cable sags under the weight of the traveler, so that during the first part of the crossing he is going downhill and gets along easily, but the second half is often laborious, and, because of the slack in the cable, he often finds himself more or less immersed in the water by the time he is halfway across. The present writer saw a *tarabita* still in operation on one of the branches of the Pastaza in the eastern Cordillera of Ecuador.

These rather primitive methods of crossing rivers were retained in places where it was feared that if the bridges were too well made they might be used by invaders.

Suspension bridges—or, to use the Spaniards' term, "hammock bridges"—were less common. Garcilaso speaks of the one over the Apurimac; Cieza de León and Cobo refer to the one at Vilcas; and Calancha and Humboldt mention the suspension bridge at Penipe.¹⁵⁸ They were constructed of two strong parallel cables made of Agave fiber, which were thrown across the stream and fastened at both ends to rocks or masonry abutments. Along the length of these cables hung vertical ropes that supported the platform of the roadway, made of branches covered over with a matting of wattles. These bridges had to be repaired every year. Some of them were almost two hundred feet long,¹⁵⁹ and they were obviously very sturdy, since the Spaniards' horses crossed on them, though not without some difficulty;¹⁶⁰ but the sagging of the roadway under the weight of the burden it had to bear and its constant swaying did not fail to give rise to some apprehensions even on the part of the dauntless conquerors. "It is not without anxiety that one crosses one of these bridges for the first time," Estete acknowledges, "even though there is no danger."¹⁶¹ The oscillation could at least be diminished by attaching ropes to the middle of the bridge, stretching them tight, and fixing them diagonally to the shore.

The mere sight of the suspension bridge that the Inca flung across the Apurimac filled the tribes of the vicinity with such terror that they surrendered to the master of Cuzco without putting up any resistance.¹⁶²

A few bridges were built on piers. The remains of one of them are still to be seen near Ollantaytambo over the Urubamba. Three blocks rolled into position upstream kept the water from undermining the masonry of the piers.

Finally, there were all sorts of rustic bridges, more or less reliable, made of ropes and lianas.¹⁶³ Accidents were frequent on bridges of this type during the colonial period.

Pontoon bridges resting on floating rafts were used to ford quiet streams. The roadway was supported on floats made of rush and thatch and had to be rebuilt every six months to keep it from rotting away.¹⁶⁴

The Peruvians also made use either of a raft composed of several tree trunks lashed together with ropes and pulled across the water by a cable or of a little reed boat which held only one person and which the passenger, lying flat on his stomach, would propel by using his arms as oars or by sitting astride it with his legs dangling in the water and paddling with them.

The chroniclers also make mention of rafts consisting of gourds fastened together to accommodate passengers and freight and either pulled through the water by swimming Indians while others pushed from behind, or punted.¹⁶⁵

Indians on guard at the entrances to the bridges had the duty, as we have seen, not only of collecting the tolls, but also of making sure that everyone who crossed was authorized to do so and that no one was transporting any stolen goods. These Indians always kept a supply of wood and rope on hand to make minor repairs.

So strong was the sense of hierarchy that in several places the bridge was double, one section being reserved for the Inca alone or for the elite or for the army and the elite. Opinions differ on this point.¹⁶⁶

In addition to being used by the Inca and his armies, officials, and agents, the highways were traversed by couriers. Their organ-

ization, though remarkable, is not to be compared to our postal service, since it was established for the benefit of the Inca alone.¹⁶⁷

The couriers (*chasquis*) were fed on roasted maize from their early youth and trained to drink only once a day. They were employed by turns for a month's continuous service.¹⁶⁸ They lived in shelters which the Spaniards called *chozas* or also *tambos*, set up along the highways at distances that varied with the topography, and placed on high ground, so that from any one of them it was possible to see the immediate surroundings of the shelter just preceding and of the one next ahead, if not the actual shelters themselves.¹⁶⁹

On the important highways these primitive habitations were grouped in pairs, one on either side of the road, and in each one of them lived two Indians. Each pair of couriers would be responsible for the service in one direction. On the subsidiary roads there was probably only one shelter, with two Indians at each post, and it is possible too that on certain segments of the great highways there were as many as three such shelters with six runners.¹⁷⁰

The messages were transmitted in relay fashion. A courier would set out on the highway, running as fast as possible. At the next shelter one of the couriers had to be on constant watch in front of his post, his eyes on the road, looking for an approaching runner. As soon as one came into view, he would run to meet him. On reaching the newcomer, he would turn and keep pace with him, receiving the message from him as they ran together, and then would continue on the course alone to the next post, where the same scene would be re-enacted.

These couriers were called *chasquis* because when two of them met, one would call out, "Chasqui!" (i.e., "Receive [the message]!"). Everything was so contrived as not to lose a single instant. As there were two Indians at every shelter, a second message could arrive immediately after the first and be sent on at once.¹⁷¹

This system made it possible for ordinary messages from Quito to reach Cuzco in fifteen days, according to Morua, or in ten, according to Ondegardo.¹⁷² The latter himself, in his day, saw orders transmitted from Lima to Cuzco in four days by a particularly difficult route.

If we take the average distance between the *tambos* as five kilometers (slightly over three miles), and assume a highway of which two-thirds or three-fourths was level, we can estimate the speed of a trained runner at eighteen minutes for this stretch. Nurmi, the world champion, covered the same distance in fourteen minutes, thirty seconds; and Guillemot, the champion of France, in fifteen minutes, eight seconds. The road between Quito and Cuzco must have measured about fifteen hundred miles, taking account of the fact that it made detours. Using as the basis of our calculations the average speed estimated above, we find that a message could go from one to the other of these cities in six days. If we note, on the one hand, that the road crossed the spurs and knots of the Cordillera, and, on the other, that the runners' speed must be less at night than during the day, we see that the figure of six days is a minimum and that Ondegardo's figure of ten days is a likely one.¹⁷³

The messages were either oral or conveyed by means of quipus, sometimes accompanied by a symbol of identification such as a red thread from the *borla* or fringe worn around the temples of the Inca or a stick bearing certain marks.¹⁷⁴ The couriers, like our post-office officials, were bound to secrecy.¹⁷⁵

Near every shelter a pile of wood was kept ready to be set on fire so as to be visible from the next post. In case of rebellion, this signal would make the news known with incredible rapidity, and the Inca would immediately prepare an expedition to suppress the outbreak, even before he had received detailed information.

Sometimes the mail route would be used to carry goods: stones or precious metals, textiles, vessels for various uses, tropical fruit, and even fish, which was brought fresh from the coast in two or three days to the emperor in Cuzco.¹⁷⁶ One of the drawings in Poma de Ayala's manuscript shows a *chasqui* carrying a basket of fish for the Inca and blowing on a trumpet.¹⁷⁷

It is difficult to form an accurate idea of the amount of traffic on the Peruvian highways. No doubt there was a good deal of bustling about on the outskirts of the local markets, but on the vast and far-flung roads that stretched across the wilderness travelers must have been few and far between: couriers, traders, some

pilgrims authorized to absent themselves from their community when their labor was no longer necessary, *mitimaes* on the way to their new homes, armies on the march, government officials, either going to Cuzco for an audience with the sovereign or making tours of inspection in the provinces, and finally the Inca himself with his entourage. The monarch, always remaining curtained off from the eyes of the vulgar, traveled in a litter of solid gold. He proceeded on his way slowly and majestically, covering no more than four leagues a day.¹⁷⁸ The litter-bearers—selected from certain Indian tribes and especially trained for this work—had to be especially careful to avoid stumbling or falling, for this was a bad omen, and the punishment for a fall was death. Hence, the governors of the provinces through which the imperial procession had to pass would take the greatest pains to have the road made perfectly level.¹⁷⁹

Only a few great lords received the Inca's permission to use the litter or hammock as a means of transportation.¹⁸⁰

After the conquest, traffic on the highways increased enormously. The Spaniards always had a great number of men and women in their train to carry their baggage. The *ordenanzas de tambos* specified that a horseman could demand the services of only five Indians in each *tambo*, and a pedestrian was limited to three. These porters were not allowed to pass the boundary of the next *tambo's* territory. No one's burden was to exceed thirty pounds in weight, and everyone had to be paid. No one was permitted to travel in a hammock unless he was known to be ill.¹⁸¹

In spite of all legislative measures, the roads suffered greatly in the colonial era. Some of them were destroyed during the civil wars;¹⁸² others, damaged from constant use, could not be kept in sufficient repair, the Indians of the neighborhood having run away to avoid work that they considered excessive.¹⁸³ It was in vain that the viceroys issued orders for the reconstruction of the bridges, the highways, and the *tambos*. The white men were quite unable to maintain what the red men had built.

Even today there are few highways in many of the South American countries that border the Pacific.¹⁸⁴ Toward the end of the last century Squier declared that "the means of communication were

immeasurably better in the empire of the Incas than they are today.”¹⁸⁵

Of course, railroads now serve certain districts of the interior, but they have been built in just a few places, and it is only recently that engineers have been able to conquer the Cordillera. It is the airplane that, in our day, is becoming the instrument for the unification of the economy of South America.

But it should not be forgotten that the condition of the roads in Spain at the time when the conquistadors were discovering Peru's great highways left much to be desired. “Truly,” writes Fernando Pizarro, apropos of the latter, “there are no such fine roads to be found in all Christendom.”¹⁸⁶ Nothing can be more melancholy than the avowal of Cieza de León, so proud, nevertheless, of his Spanish origin: “I believe that if the Emperor [the great Charles V] wanted to build another royal road equal to the one that goes from Quito to Cuzco or the one that goes from Cuzco to Chile, he would not, in spite of all his power, be able to do it.”¹⁸⁷ In fact, at that time, for a good part of the year it was only with difficulty that the highway linking Madrid and Irun could be traversed at all, and it was not until the end of the eighteenth century that roads worthy of the name could be found in Spain.¹⁸⁸

Although transportation by river and sea occupied a distinctly subordinate position, it nevertheless exercised a certain influence on the economic development of the empire. Here again the Indians accomplished miracles with the most primitive means. They used dugout canoes in the forest areas and boats properly so called, made of bundles of totora reeds, on Lake Titicaca. Elsewhere they relied almost exclusively upon rafts. These were made of a number of logs of light balsa wood lashed together with ropes and laid out so that the longest log was in the center and the others, in graded sizes, diminished in length on either side of it, like the fingers of an open hand.¹⁸⁹ These logs were covered with a light platform of split canes, sometimes surmounted by a reed shelter for the crew. The craft was equipped with a mast and a cotton sail, and sometimes there would be a second deck to keep the cargo from getting wet. A heavy stone on the end of a cable served as an

anchor. Large rafts of this kind could carry from 400 to 500 quintals (about 450 to 550 pounds).¹⁹⁰ Pizarro used such craft as transports for the Spaniards, and the clemency of the Pacific enabled the Indians to venture out in them to great distances from the coast. It was a fleet of these rafts that, under the direction of the Inca Tupac Yupanqui, discovered the two islands of Avachumbi and Ninachumbi, which no one has yet succeeded in identifying.¹⁹¹

The most expert Peruvian navigators were undoubtedly the Indians who lived on the banks of the Guayas estuary. A large number of rafts used in commerce, fishing, and war plied the waters of this wide bay, and veritable naval battles took place on several occasions between the islanders of Puna and the inhabitants of Tumbes. To maintain his independence, the tyrant of Puna set an ingenious trap for the foreign conquerors (i.e., the forces of the Inca) who reached the coast. He overwhelmed them with demonstrations of friendship and suggested giving their armies passage on his own rafts. In the middle of the estuary the Puna sailors untied the ropes that held the logs of the rafts together, and everybody aboard fell into the water. The islanders, being good swimmers, saved themselves, while their adversaries drowned. The first time the Inca tried to subdue Puna, his armies fell victim to this piece of treachery, and a great many of his troops were lost, but he was not discouraged. With admirable patience he trained his Indians as navigators, and, when the time came, he crossed over to the island and avenged his defeat. The Spaniards in their turn would have met the fate of the first conquerors if Pizarro, warned in advance, had not given his soldiers orders to keep a strict watch over the Indians to prevent them from untying the ropes.

The light craft to which the Spaniards gave the designation "little reed horse" (*caballito de totora*) was reserved exclusively for fishing. It was made of a bundle of reeds fastened together in the form of a cigar and raised up at one end. The fisherman would bestride it as if it were a horse, his legs dangling in the water, and steer it with a paddle.¹⁹²

The Changos, finally, made use of inflated skins overlaid with wooden planks. Frézier and Durret at the beginning of the

eighteenth century and Stevenson and Lesson at the beginning of the nineteenth century describe little boats which they saw along the coast of Chile and which were made of two inflated sealskins sewn together. The pilot sat astride the stern and propelled it with an oar which was very broad at either end and which he held in the middle.¹⁹³

7. Sanctions

On the rule of custom, which varied from one clan to another, the Incas grafted their own strict and uniform law. The common law continued to be respected, especially in regard to private rights, as was natural; the second constituted a far-reaching civil and penal code.

The Inca himself acted as arbiter in all cases of conflicts over boundaries arising between provinces and assumed direct jurisdiction over certain crimes and misdemeanors against the state. He would also sit in judgment on the *orejones* and the higher officials up to and including the heads of the *hunas* and would make them appear before his council.¹⁹⁴ The higher officials, in turn, would pass judgment on the holders of subordinate offices and would settle disputes of a serious character. Finally, the minor officials would look into the other cases and have the centurions issue a verdict on the majority of the disputes and inflict most of the punishments. No distinction was made between the respective domains of civil and of penal law.

The *curacas*, who in former days had been accustomed to laying down the law in their respective *ayllus*, saw their judicial power confirmed once they were brought within the administrative hierarchy. Yet this change could not be said to have either diminished or increased that power. For although the most important cases were no longer entrusted to them, neither were they, on the other hand, obliged any longer to take counsel with the old men of the community, as they had often had to do before.

In cases of violation of the Inca's law, the judge had to inflict the prescribed penalty and had no power to modify it. He enjoyed

a certain latitude, however, in the interpretation of local custom, which was a matter of little concern to the public authorities.¹⁹⁵

We have very little information regarding legal procedures in the Inca empire. Judgments had to be handed down within five days, and there was no appeal from them. The Inca, however, had the power to grant pardon, as is shown by the denouement of the drama *Ollantay*, of which we shall speak later on.¹⁹⁶ Soothsayers and exorcists could be called in to pronounce on the innocence or guilt of the accused, and torture was employed to force confessions.¹⁹⁷

The administration of justice was under the supervision of a corps of special inspectors, who went about the empire gathering information on the offenses committed and the penalties imposed and made a detailed report to the sovereign. The statistics were sent to the *tucricuc*, who, in turn, transmitted them to the central authority.

Penalties differed according to whether they were inflicted upon the mass of the people or the elite. They were generally milder for the latter than for the former. The same offense that carried the penalty of death if committed by an ordinary Indian was punishable by imprisonment if committed by an *orejón*. This privilege accorded the upper class, although shocking at first sight, is not to be explained solely by the brute fact of conquest and the "right of the stronger." It was based on the psychological fact that suffering is relative, and a punishment that seems insignificant to a coarse and insensitive man will be very painful indeed to one of cultivated mind. The former, for example, will be little moved by reproof, whereas the second will be extremely mortified. Cobo says, in terms that are perhaps excessive, that for a member of the Inca class, of the blood royal, a public reprimand would be a more terrible punishment than death for a common Indian.¹⁹⁸

Punishments were generally very severe.¹⁹⁹ The death penalty was inflicted more often than not, and almost always for a second offense. This should occasion no surprise, since the people must have viewed the violation of the Inca's law as veritable sacrilege, and even in the eyes of the elite crime had a social character that made the criminal an offender against the state. Certain

authors speak of a prison in Cuzco, "the very name of which would make a man tremble with fear," where wild beasts were kept to which the criminals were thrown.²⁰⁰ Others mention penal servitude in the unhealthy coca plantations to the east of the Andes, the public exhibition of a convict carrying a burden on his back, stoning and scourging, reproof, dismissal from office, and confiscation of property.²⁰¹

The practice of holding an entire community collectively responsible for the offense committed by any of its members, which still survives in many European countries, was limited in Peru to cases in which the crime was considered particularly heinous, such as having sexual relations with a "bride of the Sun." In such cases, the law required that the guilty man's village be destroyed and leveled to the ground, but it seems that this penalty was never imposed, because such a crime was never committed.²⁰²

A father was held completely responsible for the delinquencies of his children and received the same punishment as they did. He therefore watched over them with the greatest care. Children, on the other hand, were not made to suffer for the offenses committed by their parents.²⁰³ If a *curaca* was removed from office, his son would take his place when local custom accepted the principle of hereditary power.

The owner of an animal was responsible for any damage it caused.²⁰⁴

Generally speaking, redress for injury was the responsibility of the person who had caused it. If a man through carelessness set fire to a house, he was obliged to rebuild it.²⁰⁵

A few authors have believed it possible to sum up the penal law in five basic prohibitions: Do not lie. Do not be lazy. Do not steal. Do not murder. Do not live a dissolute life.²⁰⁶

Particularly noteworthy is the recognized rule in case of theft. If the crime was committed for reasons of malice or through laziness, the thief was punished, no matter what social class he belonged to; but if a man had stolen under pressure of want, it was the official responsible for looking after his maintenance who received the punishment.²⁰⁷

Because of these provisions, crimes and misdemeanors were very

rare in the Inca empire.²⁰⁸ The astonishingly high standard of morality which was maintained in Peru at that time was undoubtedly achieved more through fear of punishment than love of righteousness. Although this may be regrettable from the moral point of view, it must be acknowledged that in our own day fear is still the chief means of raising the standard of ethical conduct, even in the domain of religion, where the punishment is merely deferred until some indeterminate date. Man is not an angel; and if the tree is to be judged by its fruit, the society of that time seems to us indeed superior to that of today, when measures of clemency are so numerous. Benevolence cannot be substituted for justice without danger.

“Fear made everyone walk the straight path, and there was neither thief nor vagabond.”²⁰⁹

Things changed completely when the Spaniards arrived. The swift and inexorable justice of the Inca disappeared. Judicial proceedings became interminable. Judges were inclined to be indulgent toward the criminal and the profligate, and the markets of the large cities were thronged with Indians who made their living as witnesses. The litigious spirit developed with great rapidity among the Indians as a consequence of the Spaniards’ deplorable habit, when they considered a case to be of minor importance and could not succeed in disentangling the complexities of Inca law, of dividing the object at issue among the parties to the suit. The result was that an Indian always had an interest in bringing suit against his neighbor even if he had no right whatever, because he could hope to get something out of it for himself.²¹⁰

8. *The Survival of Trade*

We have already seen that the Peruvian system of socialism was not a rigid one. It had a certain amount of elasticity, as was evidenced by the arithmetical division of the population. We shall find the same elasticity in the field of exchange.

In a socialist state exchange does not occur between private individuals. Sale, purchase, and money are things unknown. The only way goods can possibly be circulated is through their trans-

portation and storage in warehouses under the regulation of the central government. There are products, not commodities; there are storehouses, not markets.²¹¹ Hence, we should have to assume, as Nicholson does, that no system of exchange existed in Peru, and end this chapter right here.²¹²

Yet the reading of the chroniclers discloses the existence of markets and fairs.

A. THE FIRST FORMS OF TRADE

Let us first revert to the era preceding that of the Incas. The earliest form of exchange seems to have been that "silent trade" of which sociologists speak. The man who wishes to barter his merchandise sets it out in an open place, in full view of a group of strangers, and withdraws. An individual in this foreign group goes up to the merchandise displayed and, if it suits him, lays beside it a product of his own labor. The first party to the transaction returns and carries away this product if it is to his liking, leaving his own piece of merchandise on the ground. A survival of this system is to be seen in a curious description given by Cobo of a Peruvian market in his day.²¹³ The Indian woman who wanted to sell something would crouch on the ground and set her merchandise—let us say it was fruit—down in front of her in little piles of equal and minimal value. The Indian woman who wanted to buy this merchandise would sit down, in her turn, before the seller and build up a little heap of some product of current consumption—say ears of maize—that she had brought to market in her sack. If the seller of fruit found the pile of maize not large enough, she would once again fall into a reverie without paying any further attention to the woman who was sitting opposite her. Then the latter would add more maize, little by little to her heap, until, at the end of her resources, she withdrew or until the seller, deeming the pile now high enough, would reach out her hand and take it. Then the buyer, in turn, would carry away the pile of fruit—all this without a word. It was "silent trade" to perfection.

The approach to real trade began, it seems, by being *vertical*. Exchange sprang up along the inter-Andean corridor between the farming and the cattle-raising regions and involved the two essen-

tials of subsistence, maize and llamas. Then it became *horizontal*, and its development doubtless must have proceeded much more rapidly, in spite of the difficulties presented by the passage of the Cordillera, because the peoples of the plateau, having for the most part like needs and similar means of supplying them, would seek above all to procure the products of areas with a different climate from their own. A traffic in complementary goods was thus established between the coast, the sierra, and the forests of the Amazon. The first gave cotton, fruit, fish, and shells; the second could offer metals, wool, maize, potatoes, and maguey fiber; the third contributed wood, feathers, and coca. There seems to have been a very active exchange, for example, between the fishermen of the Chilean coast and the farmers of the interior. All sorts of metal articles and woolen fabrics of Argentine origin have been found between Arica and Valparaiso.²¹⁴

As for long-distance trade, it was—as always in ancient times—of necessity a commerce in luxuries: fine textiles, precious stones, metals, and obsidian. Copper was an instrument of exchange between the sierra and the most distant Amazonian forests,²¹⁵ and also between the sierra, northwest Argentina, and the Gran Chaco.²¹⁶ The plateau came to serve as a passageway through which the products of the Brazilian forests reached the shores of the Pacific.²¹⁷

Later on there was a further development of trade by raft along the coast. Shells from certain regions of Central America have been found in Peruvian tombs,²¹⁸ and articles from Mexico have been discovered as far away as Argentina.²¹⁹ Conversely, products of the metallurgical industry of the coast were transported by sea to Mexico.²²⁰ Darien was even then what its geographical position makes it, a great mart where the products of the two Americas were exchanged.

During the Tiahuanaco period there was a general exchange of goods. Pottery from Bolivia used to travel as far as what is now Ecuador. The coast received quantities of ornaments made of the feathers of tropical birds, bows of *chonta* from the eastern forests,²²¹ and stones—obsidian, flint, rock crystal—from the plateau, and

textiles and fine pottery, of which the forms and designs were in the so-called Tiahuanaco style.²²²

This movement of goods does not necessarily imply a movement of men. In many cases the product must have passed from hand to hand and so traversed great distances without being accompanied by a stream of traders, commerce being limited to neighboring tribes.²²³ This is often the case in our own day. The llama herdsman takes his goods to the nearest valley and waits there for other merchandise to take back with him to the valley where he lives.²²⁴ Nevertheless, it is certain that some tribes specialized in carrying on trade, such as the nomadic people living in the then fertile region between the Huasca and the Loa in northern Chile. A rapid worsening of the climate scattered these traders, who became fishermen on the coast or farmers in the valleys. Numerous wooden loading hooks found in tombs show how considerable this commerce once was.²²⁵ Farther south, the "Pehuenches," who inhabited the Cordillera of Mendoza, traveled over the territory between the two oceans and carried on a trade in salt, shells, hides, dried fish, and arrowheads.²²⁶ Lastly, the Chibchas of Colombia took precious stones and especially salt to the Caras of distant Quito.²²⁷ According to Friederici, traders from the plateau reached the banks of the Rio de la Plata and descended into the valley of the Amazon as far as its confluence with the Yapurá.

These exchanges were effected by way of barter, but already certain products in wide demand—like maize and coca—played an intermediary role and were accepted in payment.²²⁸

Not only did the peoples of South America use merchandise as money; some of them even had a monetary token. It is certain that among the Chibchas discs of gold were used to make purchases or to pay tribute. However, these were not used for anything but domestic trade.²²⁹ Shells and axes, on the contrary, seem to have constituted a truly international currency. The axes that have been found in places extremely far apart—in the province of São Paulo in Brazil, in Manabi province and on the island of Puna in Ecuador, and in the city of Oaxaca in Mexico—are plaques of copper in the shape of a T, much too thin for ordinary use as axes, and per-

haps originally serving as gongs in the temples.²³⁰ Shells had a sacred character, and, as often happens, played a religious role before performing any economic function. They served as offerings to the deity because of their rarity and beauty.²³¹ All these shells were naturally selected to become media of exchange because of their great value and their small size. Those colored shells, *spondylus pictorum* and *conus fergusonii*, of which great quantities have been discovered at Copan in Central America, come from tropical seas and are not to be found in the waters that wash the coast of Peru; yet a certain number of them have been discovered at Ancón and Trujillo, at Chordeleg in Ecuador, and even on the Andean plateau. Suárez thinks that they were threaded together to form necklaces.²³²

Finally, in Peru, and particularly in Chile, certain rare stones—obsidian, chalcedony, and rock crystal—likewise performed the functions of money. To be sure, these had no religious character, but they were used for making arrowheads and lance-points and were consequently in constant demand and thus retained a stable value.²³³

We are thus forced to the same conclusion in regard to South America that has come to be accepted today in regard to the Old World, namely, that goods and sometimes men moved about with incredible facility in spite of the lack of avenues of communication. Just as the jade of Tibet, the silk of China, the amber of the Baltic, and the tin of Great Britain went from Asia to Europe or from Europe to Asia, so metals, shells, and feathers crossed the vast South American continent from north to south and from east to west.

Now goods have always carried ideas along with them. Trade establishes a link between peoples and forms the most efficacious means for the propagation of thought. Perhaps, after all, this has been its most important role. It is thus that we can explain how news was disseminated with amazing rapidity across plains and mountains and why it was that the peoples of South America were not without knowledge of one another, as one would have expected them to be. The Inca empire was known in Darien, where the Spaniards heard tell of it,²³⁴ and, conversely, the Peruvians could not have been ignorant of the countries of Central America.

Prescott assumes that Huayna Capac knew of the first expedition led by Pizarro and Almagro in 1517, when the latter reached the Rio de San Juan about four degrees north of the equator.²³⁵ And Nordenskiöld has studied a migration of Guarani Indians who, coming from the lands watered by the Paraguay and Parana rivers, made their way up to the plateau in 1526 and entered the Inca empire to the east of the present town of Sucre (Chuquisaca). All the Spanish chroniclers mention this invasion, which was repulsed by the imperial armies. With the Guaranis there was a white man, a Portuguese named Alejo García. It was he who, even before Pizarro, discovered the empire of the Incas.²³⁶

It is highly possible that certain prophecies, which the Spanish chroniclers attribute to the last Incas, concerning the arrival of strangers may simply have been scraps of information received by the sovereigns of Cuzco and communicated only to the elite in order to allow nothing to disturb the tranquility of the populace. This may account for the prediction attributed to Huayna Capac at the time of his death in 1525.²³⁷ Nevertheless, the knowledge that the South American countries had of one another remained rather vague, as is evidenced by the fact that the first conquerors called the deceased Inca "old Cuzco" and the reigning monarch "young Cuzco." They mistook one thing for another. It is quite clear, moreover, that if the Peruvians had known of the behavior of the Spaniards in the conquest of Central America, they would have been more suspicious of them.²³⁸

Let us then picture the South America of the pre-Columbian era as a network of juxtaposed centers of culture not completely isolated from one another nor yet in constant communication, but traversed in all directions by infrequent migrations of men and by intermittent currents of commodities and ideas.

It was to these societies that the Inca applied his scheme of socialism, which, though destructive of private commerce, was always careful to respect local institutions. We shall see how the establishment of the Peruvian system led to a progressive decrease in trade. Commercial currents continued to flow in the provinces recently conquered and disappeared in the others.

B. LOCAL TRADE

After asserting that production and distribution were regulated by the state, some of the chroniclers go on to speak of fairs.

Estete tells how he found a bustling market on the main square of Jauja.²³⁹ According to Sarmiento, Pachacutec had decreed that they be held on holidays, that is, every nine days, in certain towns.²⁴⁰

In view of what we know of the Peruvian regime, we may find ourselves wondering what could have been exchanged at such markets. We must realize, in the first place, that although the possessions distributed by the Inca were inalienable, the commodities they produced—maize, for instance, and wool—were not. Trade was maintained to the extent that private ownership continued to exist. Moreover, we know that every family had the exclusive right to the crops harvested from its *tupu*. Inequalities were occasioned by the sex of the different members of the family,²⁴¹ their zeal as workers, and their skill; and as the *tupus* were apportioned in such a way as to provide enough food for everybody, there would sometimes be a surplus that could be disposed of. Under a regime of agrarian communism there can be no trade, but in a system of agrarian collectivism, only the means of production are socialized, and the products can be exchanged.

Variations in the yield of crops in different areas occasioned by climatic conditions gave rise to further inequalities and consequently provided new sources of exchange between communities; but since, as we have already seen, the surplus from the *tupus* was extremely small and needs continued to be held down to the minimum, all these exchanges had to be on a limited scale.²⁴² The fairs, the frequency of which must not delude us, were occasions, above all, of festivity. They often assumed the character of pilgrimages, and the sovereign saw in them a means of bringing his subjects together at fixed dates to acquaint them with his will. The fair ground often served at once as a place of festival, a center of devotion, and a forum.²⁴³

The principal articles exchanged were naturally foodstuffs—maize, vegetables, dried meats—and also llamas, since the increase from each pair allotted to a family was its own property, and here too chance might bring about inequalities or a surplus.²⁴⁴

In brief, in a country where everyone had his allotted parcel of land, received his share of raw materials, and manufactured with his own hands the articles indispensable to his subsistence, such

commerce as was carried on could be no more than the exchange of surplus goods and could have only a remote connection with trade as carried on in countries of private ownership, where the division of labor prevailed.

C. FOREIGN TRADE

The principal document of which we are making use here is the narrative of Juan de Sámanos, which is very brief, but contains the description of a sailing-raft coming from the Tumbez region that was encountered to the south of Panama by the Spaniard Ruiz, who was exploring the Pacific on orders from Pizarro. The raft carried a quantity of merchandise—gold, silver, mirrors, vases, textiles, precious stones, and shells—and was obviously a freighter. As Tumbez was under the rule of the Incas at this period, one must conclude that these sovereigns maintained commercial relations with foreign countries.²⁴⁵

Two explanations are possible, and both are quite probable. In a socialist state all foreign trade is a state enterprise, directed by special officials, as it is in the Soviet Union. So it must have been in Peru. In this way the Inca procured by exchange certain articles, such as the shells from Central America, as is proved by the abundance of these on the aforementioned raft. This hypothesis is confirmed by Dorsey's discovery of Quechua vases, unaccompanied by Chimú products, on the island of La Plata, a fact which shows that the sovereigns of Cuzco traded with the peoples in the north of the empire independently of the Chimús of the Peruvian coast. This was an imperial, not merely a regional, commerce.²⁴⁶

But besides such exchanges, which were of necessity very limited, there were others, not centralized, but private, which took place on the periphery of the socialist system. The Incas' conquest of the provinces of the Peruvian coast and of Ecuador was recent, and earlier commercial currents continued to flow. The chroniclers make mention of "merchants" who used to visit different regions of the empire—a fact that cannot be explained either on the hypothesis of purely local transactions or on that of a state monopoly of trade with its center at Cuzco.²⁴⁷

This sort of trade flourished best where the system of centraliza-

tion was least strictly applied. Hence it was most extensive in the provinces that the Inca had attached to his crown only a short time before the arrival of the Spaniards. Sancho de Paz and Ponce de León speak of the traders of the province of Otávalo in the north of Ecuador as a truly privileged social class.²⁴⁸ Cieza de León recounts that the sovereign sent *orejones* disguised as merchants to explore the territory beyond the river Maule, to the extreme south of the empire.²⁴⁹ And according to Suárez, the inhabitants of the island of Puna, across from Tumbes, carried on a thriving trade in salt.²⁵⁰

Prescott and Payne exaggerate when they declare that foreign trade was nonexistent in Peru.²⁵¹ A. de Beauchamp is more cautious: "The Peruvians had no commerce in the strict sense of the word," he writes.²⁵² The truth is that the number and importance of commercial transactions decreased as the system of state socialism came to be more firmly entrenched in a province or district. The inhabitants gradually lost the spirit of initiative so essential in this field, and trade fell into decline.²⁵³ The extent to which shells were used as money provides some evidence in this regard. "They were much more common during the period of the Tiahuanaco civilization, and the number of them in the tombs increased steadily until the time of the Incas, which shows that commerce with Central America continued and grew" *only until the time of the Incas*.²⁵⁴

Such a retrogression was by no means intended by the Incas. Indeed, Tupac Yupanqui gave the merchants permission to circulate everywhere and threatened severe punishment for anyone who dared to molest them.²⁵⁵ But the decline in trade was a necessary consequence of the plan the monarch was seeking to put into effect. This plan was not incompatible with every system of exchange, but it was incompatible with any great expansion of commerce.

We are now in a position to examine two perplexing questions: that of the relations between Peru and Mexico, and that of the tolls. The first has often been discussed; the second is always passed over in silence.

Prescott and Friederici maintain that the Aztecs and the Incas were ignorant of each other's existence.²⁵⁶ They offer as evidence

the fact that the potato, cultivated by the latter, was unknown to the former; that the hieroglyphic writing of the Mexicans had not penetrated into South America; that Mexico had a currency, while Peru had not; and, conversely, that Peru employed a system of weights of which Mexico was unaware. Certainly there were great difficulties in the way of communication between the two countries because of the ocean currents and the primitive character of the little craft in use. But the facts are beyond question, and the existence of trade between Darien and Peru, on the one hand, and between Darien and Mexico, on the other, is indisputable. The arguments of Prescott and Friederici have not, moreover, remained unanswered. The Mexican system of writing was much too complicated for easy importation; and money certainly existed, but was rarely used.²⁵⁷

The presence of toll bridges is certified by the Spaniards who saw them. Jerez states that a guard was stationed in a booth at the entrance to a bridge at Cajas to collect the toll (*portazgo*), which consisted in a duty on the goods transported ("en la misma cosa que llevan"). This was, the same writer goes on to declare, a very ancient custom, and Ataliba (Atahualpa) suppressed it in so far as it applied to articles carried by his troops. No individual with a load of goods could enter or leave the town, on pain of death, by any other route than that on which the guard was stationed.²⁵⁸ Estete, on the way to Pachacamac, likewise encountered suspension bridges guarded by Indians who demanded payment of a toll,²⁵⁹ and near Huánuco he crossed a wooden bridge where he found a toll-collector, "as is the custom."²⁶⁰

These statements would be incomprehensible if Peru had actually been, as so many writers have declared, a communist state. Who would have crossed the bridges except officials of the government? Upon what would duty have been levied, since nothing would have been privately owned? In reality, the man thus subject to tax was the one who was going to barter the surplus of his production at the neighboring market, and perhaps also, but rarely, a real merchant coming from some distant lands.

The corollary to the thesis we are maintaining here is that only in exceptional cases could the Peruvians obtain permission to move

about. The general rule we have mentioned remained in force. No one could change his residence or even make a temporary move, but permits authorizing such movements could be issued for fairly short periods without fear of disturbing the statistics, since the Indian would be carrying his food with him. Thus, the general equilibrium between production and consumption would not be destroyed. But the same would not be true for long journeys, and so commerce continued to decline.

D. MONEY

Currency follows the vicissitudes of trade. In a purely socialist country it disappears entirely. Under a regime of state socialism it plays an insignificant role. In Peru the methods of exchange that antedated the Incas were perpetuated. Barter was the one most frequently used. Commodity-money consisted of pimento, dried fish, copper, cotton, maize, *chuño*, feathers, salt, and coca.²⁶¹ That money tokens were also in use is attested by the many shells carried on the raft encountered by the pilot Ruiz whom we have mentioned. Nor should it be supposed that the Spanish conquest brought this system of exchange to an abrupt end, for at the time when Cobo wrote his *Historia*, barter was still common and the commodity-money most in use was maize.²⁶² Even today, among the Indians of the plateau sales are still rare and exchanges frequent.²⁶³

Gold and silver were not used as money.²⁶⁴ The Peruvians sought them for their beauty alone. As Montaigne says, these precious metals had "no other use than for show and parade."²⁶⁵ The sovereign would bestow them upon friendly chiefs whose loyalty he wished to assure and on enemy captains whom he was seeking to bribe.

The accumulation of these metals in Cuzco is easily explained. First, the sources of such riches were known as a result of the obligation imposed upon those who brought precious stones or metals to the market to declare where they had found them.²⁶⁶ Next, all objects of value found their way to the capital, either as gifts or as taxes, since no one had a right to keep them without specific authorization from the Inca. Finally, gold that had once entered Cuzco was not permitted to leave it.²⁶⁷

These precious metals could be weighed. The Indians, in fact, made use of a veritable Roman balance, which was noted by Cieza de León, Estete, and Sámanos. A scale of which Nordenskiöld made a study is so sensitive that it registers a weight as little as seven-tenths of a gram (Troy weight).²⁶⁸

9. *Characteristics of the Socialism of the Incas*

Thus, in spite of its superficial resemblance to a beehive or an anthill, the Peruvian system did not have the rigidity of a formal, theoretical scheme. Some room was left for *personal interest*. Not only did it continue to manifest itself in the form of family interest in the cultivation of the soil and the manufacture of articles for domestic consumption, but the Inca also endeavored to give it scope by distributing gifts, by publicly bestowing praise or blame, by granting special permits authorizing the favored individuals to possess a chair or to be carried in a litter, and, lastly, in exceptional cases, by allowing ordinary Indians to assume rank among the Incas "by prerogative," to cut their hair in a particular way and have their ears pierced—privileges which Wiener picturesquely calls "decorations."²⁶⁹

The monarch manifested no hostility toward private property as such. On the contrary. It is thanks to his gifts that such property entered history, in Peru at least, not as the fruit of spoliation or of conquest, but under the eminently moral form of a reward for merit. Nor did the Inca seek to limit the exchange of goods among the people. Although wealth circulated by way of tribute, allotments, and gifts more than by way of barter, at least the empire was not sealed off from all contact with the rest of the world, for foreigners, whether traders or pilgrims, traveled through it in all directions. Places were assigned to them in the towns,²⁷⁰ and special officials were made responsible for looking after their security, getting doctors for them in case they fell ill, and assuring them burial if they died.²⁷¹

As we have already seen, the sovereigns were so far from being intolerant that they respected local custom to the greatest extent. But it should not therefore be inferred, as so many authors have

mistakenly done, that they originated nothing and merely confined themselves to the general extension of the systems that had existed before them—though this in itself would be sufficient to earn them a fine title to glory. They themselves actually originated and instituted a plan of production, distribution, and consumption and organized the population into a hierarchy that concentrated all power and all responsibility in the hands of the leaders. In such a system each farmer was acquainted only with his decurion and his centurion, scarcely ever left his own valley, received no education, and had to obey his superiors blindly, under threat of severe punishment. The centurion, in his turn, was familiar with several valleys and had a modicum of learning; and the higher one was in the social scale, the greater was one's power, the broader one's knowledge, the more refined one's sense of duty. Material, intellectual, and moral forces were marvelously co-ordinated.

This social hierarchy rested upon an economic "superorganization." With the aid of the statistical tables, production and consumption seemed bound to remain in equilibrium, and the reserve stocks served to stabilize the whole mechanism.

But this harmony was not quite so perfect as it appeared. In newly conquered regions the plan was not immediately put into effect. Its outlines, left vague for a long while, would become clear and precise as time went on. Consequently, a whole gamut of conditions could be found within the empire, from regions that were completely unified to those where the power of the Inca was demonstrated only by their being constituted as a domain of the state. It is even possible that a small number of tribes, such as the Atacamas, were not actually subjects of the Peruvians, but merely paid tribute to them.²⁷² It is also possible that on certain distant frontiers a few territories enjoyed actual autonomy under governing *orejones*, who must occasionally have caused the monarch some anxiety.²⁷³ In Ecuador, where the Incas ruled for a generation, the rational plan was applied with less rigor than in Bolivia, which had been under the domination of Cuzco for more than two centuries. The strength of the Inca's legislation lay in its flexibility. The mass of the people were not abruptly made to conform to a socialistic pattern of existence; the process of socialization was a

gradual one. The elite, on the other hand, was not individualized; it was in the process of individualization. These two divergent tendencies emphasized, with increasing rigor, the fundamental dualism of Peruvian society. All the limbs had not yet been allowed to atrophy for the sake of the head.

Even in provinces that had been under the rule of the Incas for a long time, their system remained to some degree artificial. It never adapted itself completely to reality, since the consistency of the administrative divisions changed slightly as the population varied. Besides, as the distribution of goods was made without any knowledge of what the recipients already possessed, provisions and raw materials were allotted blindly, in reliance on later exchanges to bring about the necessary rectifications. The plan remained, to a certain extent, theoretical and abstract. It was, in some sort, an ideal to be approached without cessation of effort, but with no hope of its eventual attainment. But could it have been otherwise? A completely rational social system, however perfect in plan, cannot take account of all the manifestations of life, and it would be a waste of time for even the most accomplished thinker to undertake to put it into effect. Every rigid framework will break if one tries to adapt it exactly to a society, even to one that is simplified to excess, and the all-powerful lord of Cuzco himself could not have succeeded in imposing such a Procrustean system on the people of his empire.

10

The Expansion of the Empire

The King: One must call the enemies in a friendly way before fighting them and must speak to them gently. Take care not to shed blood needlessly or to sacrifice the innocent.

—The Peruvian drama, *Ollantay*, scene 3

Many of the most distinguished sociologists have regarded ancient Peru as the very type of a military society, a state designed for conquest.¹ It has pleased some of them to represent the expansion of the empire as a simple matter. According to these writers, the first confederation of tribes must have found it easy to prevail over isolated groups by sheer force of numbers, and the expeditions of the sovereigns of Cuzco were no more than military parades.² Other authors, emphasizing the feeble resistance that the Peruvians offered to the Spaniards, paint such a vivid picture of the Indians' lack of valor that the reader is reduced to imagining Peru as a singular state indeed—extremely militaristic, yet inhabited by people of distinctly peaceable inclinations. These exaggerations are refuted by the facts. It is true that the Incas had a powerful and well-organized army at their disposal and that they subdued a great many tribes, but their conquests were often long-drawn-out and difficult; and although they were indeed vanquished with ease by the Spaniards, this was the result of special circumstances, which we shall describe, and which had nothing to do with the courage of the Indians.

There was nothing especially original about the organization

of the army. Every able-bodied man was called to active service, not regularly, but according to circumstances.³ Special instructors in every village taught wrestling and the military drill to the children over ten. They would then call the attention of the *tucricuc* to those who distinguished themselves by reason of their strength or their bravery and were worthy to be soldiers. The others would become carriers, looking after the baggage and performing similar tasks.⁴ Urgency excepted, the men were called in rotation on terms of service that, on the coast, were very short on account of the climate. The rest of the time they attended to their ordinary occupations.⁵

The army was under the command of the Inca or of a generalissimo, the son, brother, or uncle of the Inca.⁶ This army was divided into troops of 10, 50, 100, 1,000, and 10,000 men, each division having its own commander. But soldiers coming from different parts of the empire were kept in separate divisions. All those of the same tribe remained united under the same command, and those of the *hanan* were separated from those of the *hurin*.⁷ In the midst of the combatants were placed the men and women who carried provisions and laid in supplies at the *tambos* along the route. The armies never had to ask for anything whatever from the inhabitants. They found all they needed—food, clothing, weapons—in the storehouses.⁸ A soldier who took it upon himself to demand so much as a kernel of maize from one of the people or to steal it would have been immediately put to death. What a spectacle these great armies must have presented as they marched through the empire without arousing among the populace the slightest fear of suffering in any way from their passage! And what a difference from the European armies of the past, and even of today! ⁹

Besides the regular army, there was at Cuzco the Inca's permanent guard, made up of Indians from the province of Cañar.¹⁰

All told, the army in the reign of Huayna Capac consisted, according to the chroniclers, of about two hundred thousand combat troops, exclusive of baggage carriers; but this figure must be taken with certain reservations.¹¹

The Peruvian armies were equipped with both offensive and

defensive weapons. Of the first, the most redoubtable was certainly the sling. Children from the age of seven used it in keeping the birds from laying waste the maize fields and thus became very expert. Slings killed many a Spaniard like Juan Pizarro at the siege of the fortress of Cuzco. The band of this weapon was made of wool, leather, or cabuya fiber and was often woven or embroidered. The slingstone itself was round. When it was white-hot, it would set the thatched roofs afire. This is how Cuzco was burned.¹²

To shoot their bolts, the Indians made use not only of the bow, but also of the throwing stick (*estólica*). This implement consisted of a stick from about sixteen to twenty-four inches long, topped by a raised edge at the back end and a hook in front. The shaft was laid along the strip of wood in such a way that its point rested on the raised edge and its butt was lodged in the projection at the distal end. The soldier, grasping the stick firmly in his hand, would swing his arm in a wide arc as if to throw the entire weapon; but he would not let go of it, and only the lance, leaving the raised rim and propelled by the hook, would fly toward its goal. The *estólica* was thus a simple extension of the arm itself, designed to give the shaft greater speed.¹³

The arrowheads were of bone, wood, flint, or metal, but the Inca, with a humanitarian sentiment that was astonishing, would not allow them to be poisoned.

Used especially in hunting, the *ayllo* (the *bolas* of the Spaniards) consisted of a thong divided into three small strings, each of them with a stone or a lump of metal at the end of it.¹⁴ It was hurled at the legs of wild animals and entangled them in the manner of a lasso. The Indians used it later to throw the Spaniards' horses. The Argentine horsemen still make use of it today on the *pampa*.

For close combat, the Peruvian soldiers had the club, the ax, the javelin, and the lance. The warclub was made of wood or metal. It was held in both hands and was carried by straps hung from the left arm, which was wrapped in cotton.¹⁵ The battle ax was made of copper or sometimes silver or gold.

The defensive armor consisted of a wooden helmet padded with cotton; shields, also made of wood and cotton, sometimes of enormous size and capable of protecting as many as twenty men;¹⁶ and

breastplates quilted with cotton and intended as a defense against arrows.¹⁷

All these arms, offensive and defensive, were stored in great number in the public depositories, which A. de Beauchamp calls "arsenals."¹⁸

The Inca carried a broad square shield, made of wood or copper and fringed with some fabric. On the reverse side was a copper loop through which he thrust his left arm. In his right hand the sovereign held a sling or a warclub with a six- or eight-pointed bronze star-shaped head.¹⁹

This powerful army, thus organized and equipped, and subject to a rigid discipline, was a redoubtable instrument of conquest, but the monarchs made use of it only when all other means failed. It is remarkable that the Peruvians never invaded neighboring territories and massacred their inhabitants without further ado, as so many ancient rulers did. On the contrary, the sovereigns of Cuzco sought first to attract other peoples by showing them the flourishing condition of the empire, making a display of their riches, and offering presents to the tribal chieftains.²⁰ Only if diplomacy failed would the soldiery enter the scene, but the adversaries always had at any moment the choice of capitulation. If guilty of no treachery, they were sure of not being subject to reprisals. The Inca never gave himself over to acts of needless cruelty. This policy was certainly not motivated by humanitarianism, but merely by a correct understanding of his own interests. He was not unaware of the fact that he could attach conquered peoples more firmly to his throne by generous treatment than by brutality, and this insight gives us the measure of his political sagacity.²¹

Thanks to the chroniclers, we know in some detail how the Inca proceeded when he wished to conquer a territory.²²

First, the Inca would inform himself concerning the general condition of the tribe that occupied the coveted territory and their alliances. He would endeavor to isolate the adversary by acting upon the neighboring chieftains, either with bribes or with threats. Then he would order his spies to study the avenues of access and

the centers of resistance.²³ At the same time, he would send messengers on several occasions to ask for submission and to offer rich presents.²⁴ If the Indians then submitted, the Inca would do them no harm. If they resisted, his army would march into the enemy territory, but would avoid pillaging or devastating an area that the sovereign expected to annex.²⁵

The order of battle was as follows: The troops with slings would begin the engagement, then the archers would launch their arrows, and finally, when the time for hand-to-hand combat had come, the axes and clubs would be brought into play.²⁶ There do not seem to have been any strategical plans, but the Inca knew how to adapt himself to the given terrain. When he went into the eastern forests to fight the Antis, for example, he divided his troops into three columns and indicated a point in enemy territory where they were to meet. The commanders too seem to have made use of a number of military ruses, such as pretending to retreat and drawing the enemy into an ambush.²⁷

Once the campaign was brought to a victorious conclusion, the Inca would have the prisoners set free, distribute gifts among the vanquished chieftains, sometimes confirm them in their power, and organize the country as we have seen. The only people punished were the rebels and the traitors.²⁸

Examples of peaceful conquest are numerous.²⁹ But very often independent tribes like the Caras would put up a desperate resistance. These last had formed a veritable confederacy with several of their neighbors to the south—Zarzas, Paltas, Cañaris—but the Peruvians began by detaching the members of this alliance one by one, and the Caras were left with only their own forces. The struggle that the Incas undertook against them dragged on for seventeen years. It was very severe. They proceeded by stages, consolidating the gains already made before registering others, and organized economically every piece of territory they conquered—building magazines, laying out roads, and constructing strongholds to serve as bases for future operations.³⁰

We see now how mistaken it is to assert that the Incas extended their empire without any effort, merely by “military parades.” Even to establish their power on the Peruvian plateau, the sover-

eigns had to wrestle with confederacies that sometimes defeated them, as the Chancas did,³¹ and some of them narrowly escaped death in these battles, like the Inca Roca, who was wounded before Ollantay.³² At the beginning of the war with the Caras, Tupac Yupanqui was defeated before Mocha, and the enemy took possession once more of the entire province of Puruha. Later Huayna Capac was beaten by the Caranquis, his brother was beaten and killed at the siege of Otávalo in northern Ecuador, and the Inca triumphed in the end only by recourse to a military ruse. Revolts likewise were not uncommon, in spite of all the precautions taken by the monarch, and some even threatened the existence of the empire—for example, that of Cuzco itself during the absence of Viracocha.³³ How can Cunow venture to write: "Those effusive reports that recount the glorious victories of the Incas and demonstrate their martial superiority over other tribes, their daring and their invincible valor, are no more than fables [*nicht anderes als Märchen*]. Once the Incas had vanquished the small tribes that were their neighbors, a wider expansion offered no difficulty?"³⁴

The facts also refute the absurd accusation of cowardice leveled against the Indians by Robertson and Pareto. The battles between the armies of Atahualpa and Huascar at Ambato in Ecuador and Quipaypan near Cuzco were furious. Much has been made of the feeble resistance that the Peruvians offered to the Spaniards, but at this time, as we have already noted, the Indians were in the midst of a civil war. The Peruvians, whose legitimate sovereign Huascar had been dethroned by the bastard Atahualpa, looked upon the white men as their saviors, counted it to the strangers' credit that they had taken this usurper captive, and gave them a hearty welcome. It was the Indians of Cuzco who marched against the Indians of Quito under the orders of the Spaniards. In short, *the arrival of the white men was only an episode in the great struggle between the Incas and the Caras.*³⁵

As for the disintegration of Atahualpa's army when it was taken by the Spaniards, this is readily explained. In the first place, there was actual treachery, for the Peruvian monarch received the strangers as friends, without making any attempt to stop them in the passes of the Cordillera, which would have been extremely

easy.³⁶ Then too, the Indians, who had never seen either horses or firearms, were filled with superstitious fear. This terror was no less great among the other native peoples of America.³⁷ Finally, and above all, we must realize that precisely because of the excessive centralization of power in Peru, the loss of the supreme commander was bound to lead to the complete demoralization of the army. The extraordinary discipline that prevailed throughout the country, among civilians as well as soldiers, had so far destroyed the spirit of individual initiative that men no longer dared, or even knew how, to act when they were not under orders. This is shown by the fact that the Indians of the former kingdom of Quito, who had been under the Incas' power for a shorter time than the Peruvians, resisted the Spaniards valiantly. Quisquis and Rumiñauí fought desperately against Almagro and Benalcazar; one of the sons of Huayna Capac retook Cajamarca; the battle of Tio-cajas, in the province of Riobamba, lasted an entire day, and the Spaniards would have had to retreat if a providential eruption of Cotopaxi had not frightened the Indians into withdrawing.³⁸ The Peruvians themselves, when they realized that the Spaniards were destroying their institutions and misappropriating their goods, found energetic leaders among their own ranks, and the white men came near to being driven out of the plateau. The Inca Manco repulsed Pizarro in the valley of the Yucay and laid siege to Cuzco in February, 1536. It was a siege prolific in deeds of heroism. The white men and the red challenged one another and fought hand to hand, the city was burned, and the Indian captain who was defending the fortress chose to kill himself rather than surrender.³⁹ Later, Indian insurrections multiplied, and several of them were extremely serious—for example, those of Huarochiri, in 1570, and Tarma, in 1743. In 1780 Tupac Amaru, at the head of sixty thousand men, conquered no less than six provinces.⁴⁰ Del Hoyo does justice to the soldiers of the Inca in declaring that the weakness and enervation of which the Spanish authors speak existed only in the latter's imagination.⁴¹ It should not be forgotten that the Indians always met the worst of tests—torture and death—with great fortitude. Many writers have paid homage to their "passive courage." These men were by no means cowards, but they had so long

been condemned to docile obedience that they were brave only when they received orders to be. Voltaire has rightly observed that instead of taking advantage of the dissensions that were not slow in breaking out among the conquerors, the Peruvians "stupidly waited to see which party among their destroyers they should submit to."⁴² *It was the socialist regime, far more than the blows of the "conquistadors," that brought about the loss of the empire.* The Inca state disappeared, not because it did not exist, as Cunow says, but rather because it existed too well.

It would be an equally great exaggeration to regard war as the ruling passion of the Incas and to assume that their country was in a state of perpetual conflict. The care the sovereigns took to have recourse to force of arms as infrequently as possible shows how mistaken such an opinion is. One has only to compare the situation of the empire during the reign of Huayna Capac with that of earlier days, when tribes or leagues of tribes were constantly at war among themselves, to appreciate the progress that had been achieved. "The ultimate aim" of the monarchy, according to Prescott, "was domestic quiet. But it seemed as if this were to be obtained only by foreign war. Tranquillity in the heart of the monarchy, and war on its borders, was the condition of Peru."⁴³

That this expansion of the empire did have its economic motives we have already attempted to demonstrate, but it would be falling into an odious historical materialism to regard these motives as the only ones at work. Ambition and the thirst for glory also played their part. It would be difficult to explain on economic grounds the war undertaken against the kingdom of Quito, a country far removed from the center of the empire, which was in no way indispensable to the existence of the Peruvians, and the conquest of which threatened, because of the resistance of the inhabitants, to become a disastrous enterprise even from the economic point of view.⁴⁴ On the other hand, contrary to what Lorente believes, religious motives seem to have been absent.⁴⁵ The gods of the vanquished were brought to Cuzco as hostages, and foreign cults were respected.⁴⁶

The wars in which the sovereign had to engage were not only offensive. He was also obliged to fight in his own defense. The frontiers of the empire were constantly menaced by redoubtable warlike tribes, such as the Guaranis to the east and the Araucans to the south, necessitating the establishment of a whole chain of forts, strongholds, and militarized frontier zones.⁴⁷

The most famous fortress known to us is that of Saxahuaman at Cuzco, which may have been constructed, in part at least, before the Incas came to power, and which P. de Poo has compared to the Pyramids and the Coliseum.⁴⁸ It consisted of a number of concentric walls made of enormous blocks of stone. At its center rose three towers, which were connected by subterranean passages, and a reservoir kept full of water brought in through underground aqueducts.⁴⁹ Compared with this masterpiece of Indian art, the hastily built *pucaras* or *enceintes* and the fortified *tambos* with walls of polished stone would seem to have had only a feeble defensive value.

The great line of fortifications that guarded the routes of access to the empire was in reality fortified and self-sufficient areas. Each of them contained within its walls an entire town, with houses, temples, and planted fields. In case of siege, resistance could be kept up indefinitely. Among them were Pisac, "a whole mountain transformed into a fortress," which, according to Squier, recalled the ancient fortified places of the British Indies,⁵⁰ and Ollantaytambo, with its palaces, houses, stairways, cisterns, aqueducts, terraces, and crenelated walls of red porphyry.⁵¹

On the coast, to the south of Chimú, there was a whole line of states: Cuismancu, Chuquimancu, and the Chincha confederation. It was to overcome the resistance of the king of Chuquimancu that the Incas constructed a fortified city called Cuzco (*Cuzco del Huarco*) to be their capital on the border between the two territories.⁵²

But the most remarkable of these fortified places was Machu Picchu, the white granite citadel that lifts itself above the precipices in the canyon of the Urubamba. Its walls of admirably laid stone have resisted time and earthquake alike; its stairways, cut right out of the granite, still connect the buildings and the terrace

tiers. Everything is either built of stone—houses, temples, ramparts—or hollowed out of it—reservoirs, seats, mortars. The city is surrounded by a double wall, which in turn is surmounted by huge blocks of stone ready to be hurled down upon an assailant. At the end of a rocky spur there is a sentry post, and on the highest elevation rises the sacred rock, “the place to which the sun is tied.”⁵³

Other ancient cities similarly fortified have recently been discovered in the same general locality. Some of them seem to have been rather agricultural centers or religious shrines. They are connected by footpaths with stairways and even a little tunnel. They are not so much fortresses as places of refuge for the entire population.⁵⁴

On the frontiers of the empire there were veritable militarized zones with systems of fortresses commanding all avenues of approach. Thus, the province of Cañar presented the appearance of an entrenched army camp, with the forts of Pucara near the Pelucay River, Pitaviña on the banks of the river Jubones, and Incapirca near the confluence of the Silante and the Huairapungo.⁵⁵ Similarly, the southern regions of the empire between the Choapa and Maule rivers was protected by troops stationed in advance outposts to keep the Araucans in check. As we have seen, the garrisons of these distant military strongholds were granted special privileges.⁵⁶

Beyond the frontiers guarded by the soldiers of the Inca stretched the spheres of Peruvian influence—zones difficult to delimit—which comprised a part of the forests of Brazil,⁵⁷ of Argentina,⁵⁸ of Paraguay,⁵⁹ and even of Colombia.⁶⁰

We know that the empire extended from Darien to Araucania in Chile, and from the Pacific Ocean to the heart of Brazil, over the larger part of South America.⁶¹

II

A Brief Survey of Inca Civilization

Certainly, after the study we have just made, no one will be tempted to say that the Incas were barbarians. But did these great administrators know how to create and develop the higher forms of civilization—arts, letters, science? This is a question not without interest if one wishes to give a general account of life and conditions in Peru, but it is one that we can treat here only in very summary fashion, since a full discussion would require considerable elaboration in detail.

As we have already seen, many branches of industrial art attained a high degree of technological perfection. But did the Indians have a real *aesthetic sense*? There can be no doubt on this score. The pottery, textiles, carved and chiseled articles found in such abundance in the tombs give evidence of it. The gold fillings in the teeth of the people on the coast of Ecuador, the methods employed in Peru to darken hair and stimulate its growth,¹ the use of cosmetics, the marvelous sites selected by the Inca, whether to live in, like the valley of Yucay, or to rest in during his journeys, like the platforms set up along the highways, or to build citadels in, like Machu Picchu, all bear witness to a constant search for beauty.

It is even probable that it was for the purpose of beautifying their children that the Indians deformed the skulls of newborn infants by pressing them between planks placed on each side of the head, as was the custom among the people of the Collao, or between the face and the

nape of the neck, as was done by the inhabitants of the coast; among the former the face was made narrower, and among the latter it was broadened. "The Indians were not content," remarks Father Cobo sadly, "with the head God had given them."² Attempts have been made to explain these deformations by motives of another sort, especially by the desire to differentiate between the tribes by the shape of their heads. This would certainly have been pressing the passion for classification to its extreme!³ It is also contended that the purpose of the distortions was to develop certain of the individual's intellectual faculties by altering the physical structure in which they were contained. This is an idea common to many primitive peoples, and it is not impossible in certain instances that it may have been at work here too, for Santa Cruz Pachacuti relates that the Inca Loque Yupanqui ordered that the heads of newborn infants should be pressed in such a way as to render them submissive.⁴ But in general the molding of the heads probably sprang from a desire to make the children conform to a certain ideal of beauty. This practice, which was followed by other South American peoples—for example, the Paltas of Ecuador, who flattened the skull, and the Quimbayas of Colombia, who made the head square—was forbidden by the Spaniards.⁵

To this day the Indians have kept their feeling for form and color. They like beautiful clothes and things that are well made; they are painters and carvers.⁶

As for the art of design, it often followed geometrical forms. In textiles especially, the animals and plants were often stylized, as if symmetry and order had so obsessed the Peruvian mind that it was led to carry over into the representation of Nature the ideas that had guided the organization of Inca society.⁷

Architecture served primarily practical ends. Hence, all the public buildings that were intended for the same purpose were conceived on the same plan. *Tambos*, palaces, and temples seemed, as Rouma somewhat facetiously remarks, to have come off an assembly line.⁸ Only too rarely did sculptors use their ingenuity to break the monotony of the façades and sheltering walls.⁹

Certainly the art that the Peruvians developed most highly was *ceramics*, whose elements, for the most part, they borrowed from foreign tribes whom the Incas had subdued. A study of it would

require a volume in itself. The earthenware vessels were of all shapes, all colors, and all types of decoration, from tiny goblets to the slender aryballus with narrow neck and wide, rounded base, from the bichrome pottery of Chimú to the polychrome work of Nazca, from the white vases of Recuay to the jugs of Chancay adorned with black designs, from the ingeniously constructed zoomorphic vessels, which, when tilted so that the liquid they contain flows from one chamber to the other and forces air out of the orifice, reproduce the whistling sounds made by the animals they represent, to the large jars that pictured men in every kind of posture. Glaze was unknown, but the surfaces were given a patina by the use of a wooden paddle. The designs on Peruvian pottery would provide excellent motifs for modern decorative art.¹⁰

It is by the work on the vases that Peruvian *painting* can be judged. Battles, dances, processions were generally reproduced in a rudimentary fashion, without any idea of perspective and without any relief, but with a lively feeling for color. The designs on the articles made of gourds were engraved by a real pyrographic process involving the use of a red-hot wire.

The craftsmen of the coast were particularly skilled in the art of ceramics. Their imaginations were stimulated by the shapes and colors they found in their environment, whereas the sierra offered to the inhabitants of the plateau nothing but simple outlines and uniform tones.¹¹

The *goldsmiths* and *silversmiths* had also attained a high degree of perfection. These craftsmen knew how to make very fine threads of gold and of silver, which were used in the embellishment of textiles. They were acquainted with repoussé work in metal and with damascening by the superposition of metals; and they plated copper with either gold or silver, and silver with gold, although we do not know exactly how they did it.¹²

A great many small toilet articles and costume accessories have been found in tombs and bear witness to the skill of those who made them: paring knives with handles (*tumi*), needles, large pins, brooches, earrings of wood, metal, or terra cotta, necklaces of precious stones, coral, seeds, or the teeth of animals.

Finally, the art of *embalming* was practiced by the Peruvians, as is proved by the mummies that have been discovered.¹³

Is it correct to say that the art of the sierra is essentially conventional, that, to quote Wiener's phrase, it "does not speak to the soul"?¹⁴ Perhaps, if what we are referring to is the complicated and tormented soul of the contemporary civilized man. But the simplicity and monotony of the subjects and scenes in Peruvian art could not have displeased a people whose life was itself simple and monotonous. It is no exaggeration to say that the Indians were able to produce works of great beauty. There are on the coast vases that are veritable masterpieces, full of realism and variety.¹⁵

What cannot but jar our sensibilities, however, is the evident passion of the Quechuas for artificial nature. The garden at Cuzco, with its trees and birds, its llamas and their herdsmen, all in gold, dazzles us less than it amazes us; and such an accumulation of metal, however well designed and executed, would seem to us today to be in execrable taste. Yet, as the Abbé Genty wisely said in reply to the criticism of the Abbé Raynal, "To appraise the value of the works of a half-savage people [let us rather say, a people whose civilization is different from our own], we must follow the slow and successive steps in the progress of the human spirit and not judge their industry in the light of the discoveries of our arts and the ingenious methods that long practice and the communication of ideas have enabled us to devise."¹⁶ And if it is objected that the art of the Quechuas is in fact primarily the fruit of contributions from the north and the northwest—from Quito or Chimú—we reply that the sovereigns of Cuzco should be heartily congratulated for not having destroyed any center of culture, but for having, on the contrary, known how to learn from the vanquished.

The art of *music* merits a place apart because of its popular character.¹⁷ The list of musical instruments given by Cobo has been confirmed by archaeological discoveries.¹⁸ The instruments in most widespread use were whistles, ocarinas, rattles, and, above all, the vertical flute, or *quena*, which was made from bone or reed, pierced with three or seven holes, and "generally very highly finished and

accurately pitched.”¹⁹ Another very popular instrument was the Panpipe, or syrinx, consisting of from five to twelve juxtaposed tubes of reed, clay, stone, wood, metal, or quill of different lengths.²⁰ There were no stringed instruments.²¹ In the army a trumpet was used, made of terra cotta or wood, rarely of metal, and a drum of llama skin, struck with a single stick. There was also the *tinya*, which was a sort of large tambourine with a double diaphragm. The Huancas had the deplorable habit of making drums from the skins of enemies vanquished in battle. They thought that on hearing the sound of these instruments the surviving adversaries would flee in terror. The Incas applied this barbarous treatment only to rebels.

The Indian melodies today are generally composed on a pentatonic scale, with a frequent use of the minor mode, which gives them accents of sadness that are in perfect harmony with the character of the musicians.

If the artistic progress of the Peruvians seems to have been considerable, their *scientific* knowledge appears to have remained very superficial and strictly practical. The decimal system was employed in keeping accounts. *Geometry* was limited to some notions relating to the measurement of land, the laying out of roads, or the cutting of stone. *Geography* was confined to the making of relief maps in clay. Garcilaso and Ondegardo tell of having seen a map of this kind.²² A cacique of Tomebamba supplied Benalcazar with a plan of the route to follow in marching to an encounter with the Indian general Rumiñahui;²³ and we have already stated that the Inca Pachacutec made use of such plans, whether to distribute lands or to rebuild Cuzco or to order the movements of *mitimaes* from one territory to another.²⁴

In *astronomy* the Peruvians were greatly inferior to the Aztecs. Their months were adjusted to the phases of the moon. They probably calculated the solstices and equinoxes by observing the shadows cast by a series of stone columns.²⁵ Quito, lying directly under the equator, was looked upon as a holy city because the columns there threw no shadow at noon on the days of the equinox. “The Sun takes pleasure,” the Indians said, “in seating himself in this

place.”²⁶ Eclipses, on the other hand, remained an object of terror, and, like a great many primitive peoples, the Indians used to make as much noise as possible to wake the heavenly body that for a little while had gone to sleep.

Of the *psychical sciences* among the Peruvians practically nothing is known. As with all the great peoples of antiquity, such learning was kept secret, if, indeed, it is to be assumed that it existed at all in Peru. We are acquainted with it only in its grossest forms, in the work of soothsayers, conjurers, and sorcerers.²⁷ The Indians made use of love charms, magic cures, and black magic.²⁸

Uncertainty also prevails regarding their knowledge of *medicine* and *surgery*. The Indians used massage, practiced bloodletting with a flint, treated illness with medicinal plants, and made use of tobacco as a medicine in the form of snuff. If we are to believe Morua, the remedies most frequently employed were within the reach of everyone, for they consisted in “temperance and diet.”²⁹ Penitence was also considered efficacious as a remedy, for illness was held to be a punishment for sin and was regarded as an entity that it was proper to drive out by every possible means. This is the explanation of the *Situa*, that extraordinary yearly festival described by Garcilaso.³⁰ The people would assemble, after a preparatory fast, along the four great thoroughfares of Cuzco. They would throw off their clothes and rub their limbs and faces in order to get the seeds of evil out of their bodies and on to the road; and four *orejones* would go through the crowd at a run, brandishing lances to drive away the diseases and continuing the chase far out into the surrounding country. When darkness fell, the Indians would go through the streets carrying torches to drive their ailments in flight before them and then throw the torches into the river so that its current would carry all their ills far away.

There were also medical specialists who were sent to the Inca as a form of tribute by the Collahuaya, a tribe settled to the east of Lake Titicaca. Even today the inhabitants of this region still travel through South America selling simples and treating the sick with the remedies described by the ancient chroniclers.³¹ The *amautas* must also have fulfilled the function of healers, but they were perhaps more theoreticians than practitioners.³² Morua and Santa

Clara declare that several doctors lived in the royal palace and that the Inca always kept one near him.³³

Had these specialists any surgical knowledge? Skulls which appear to have been trepanned and which carry more or less developed scars that bear witness to the patient's survival have been discovered in the tombs. It is highly possible that the operation of trepanning was successfully attempted in a country where the use of clubs must have made head wounds frequent. It is also possible that the operation may have been undertaken, as it was by the ancient Egyptians, for the purpose of bringing the priests into direct contact with the divinity or of driving out the evil spirit shut up in the sick man's skull. Of the four hundred trepanned skulls discovered by Dr. Tello, two hundred and fifty showed scars.³⁴ Moreover, amputated legs with artificial feet made of wood have been discovered in the valley of Chicama.³⁵

In brief, the Peruvians seem to have had only a mediocre acquaintance with science. Let us not forget, however, that some of this knowledge may have been lost, since it was possessed only by the elite, a class that has entirely disappeared. But there is one sure and strange fact that places the Indians in a position of manifest inferiority in comparison with other ancient peoples: *they were incapable of making use of the idea of the circle*. They formed an image of it, since their representations of the sun and the moon and their vases were circular, but they applied it only in an extremely limited domain, having no conception of the wheel, the lathe, or the arch.

Literature among the Peruvians must have reached a high stage of development, if we may judge from the all too few fragments that have come down to us. The people loved vocal music, and even today the Indian sings his lament as he travels along the trails of the sierra. There was no festival without its official poets (*haravicu*) to celebrate the virtues of ancestors, the glory of the sovereign, or the beauty of imaginary loves. Garcilaso records one of these poems which he borrowed from Blas Valera and which is formed of unrhymed tetrameters.³⁶

The most curious piece of literature we possess is a drama, *Ol-*

lantay,³⁷ probably written by a literate Indian of the seventeenth century. The ancient form was undoubtedly altered profoundly in order to adapt it to the taste of the time: octosyllabic verse, the use of rhyme,³⁸ and division into scenes; but the substance certainly goes back to the pre-Columbian era.³⁹ As Markham observes, the characters of the people in the play are entirely in harmony with Inca tradition and are not lacking in nobility.⁴⁰ The action proceeds in lively fashion, and the events are well linked together. A curious detail of construction is that when a strophe is not completed by one person, his interlocutor does not finish it. Finally, the lover is never left alone with the lady of his dreams, a point that would be enough in itself to mark the profound difference between *Ollantay* and the classic drama of Europe.⁴¹

The plot of the drama has to do with the love of the valiant general Ollantay for the daughter of the Inca, who answers to the graceful name of Cusi Cuyllur ("Star of Joy"), and her love for him. Although he is not of royal blood, he ventures to ask the monarch for the hand of the princess. The sovereign indignantly refuses and has his daughter locked up. Ollantay, in anger and despair, flees from Cuzco, rouses the mountain provinces of the east to insurrection, and establishes his center of resistance in the great fortress of Ollantaytambo. The Indian chieftain Rumiñahui ("Eye of Stone"), attacks the rebel, but is defeated. He then has recourse to a ruse. Pretending to have been tortured by order of the Inca in punishment for his defeat, covered with wounds and crying out for vengeance, he makes his appearance before Ollantay, who welcomes him without distrust. Then, on a day agreed upon, when the insurgents are celebrating a festival, Rumiñahui opens the gates of the fortress to the army of the Inca. But the latter, in a great burst of generosity, pardons Ollantay, gives him his daughter in marriage, and entrusts him with a high command. Several of the characters are well drawn, notably Ollantay himself and his servant, the facetious Piqui Chaqui, who is the clown of the play.

These Peruvian plays were composed by the *amautas* and played by people of importance. In the year 1781, following an Indian revolt, the Spaniards prohibited all performances of Quechua drama.⁴²

A glance at the manners and customs of the period will best give us an understanding of social conditions in pre-Columbian Peru. It has sometimes been said that the *status of women* can be taken as the measure of a people's civilization, but it must be recognized that in this case it would be very difficult to make any judgment. Women, to be sure, did not perform the hardest and most laborious tasks. Their work was confined to helping the farmer to cultivate his fields and the soldier to carry his baggage. They were protected by law. No man might abuse a woman or repudiate her at will. Doubtless, also, many Indian women received a certain amount of education in the virgins' houses and were treated with respect by men. At banquets wives squatted back to back with their husbands, served them, and ate at the same time as they did⁴³—a privilege not yet granted in the France of the Middle Ages. The queen took part in all the festivals, the Inca Huayna Capac consulted his mother on the affairs of the empire, and it was a woman who went to implore that monarch for pardon for the Chachapoya rebels and was successful in her plea.⁴⁴

On the other hand, however, women were in many respects looked upon as commodities. The majority of them, destined to serve the needs of the nation, constituted the minimum necessary to assure the survival of the race. The rest were held in reserve and distributed by the Inca, like clothing and arms, as his imperial policy might demand. It was no more permitted to harm them than it was to waste provisions. Woman, in short, figured as a high-grade article of consumers' goods at the disposal of the state. It may be said that she was not mistreated, but she was enslaved.⁴⁵

Yet man too was treated with very little consideration. He was uprooted from his home and was assigned a job without being asked what he thought about it. We must not consider the position of women, then, from our modern point of view, but must rather ask ourselves whether their status improved after the Incas came to power, for there is no doubt but that the men of the South American tribes adjacent to the Quechuas often mistreated their women and made them perform the most difficult and laborious work, which was not the case in Peru. Among the Araucans, for example, the women were veritable slaves;⁴⁶ and the Indians of

the tribes of the Madre de Dios still treat their women like beasts of burden.⁴⁷

Men and women alike, all the Indians of the Inca empire lived severely regimented lives. From earliest infancy the *child* was subjected to a harsh discipline. He was bathed in cold water and given the breast only three times a day—"so that he would not form habits of gluttony."⁴⁸ The mother never held the baby in her arms. She left him in his wooden cradle so as to accustom him to hardship, and when she suckled him she leaned over him without picking him up. At first the baby received a provisional name. Then, when he was fourteen years old or more, depending on the region, in the presence of relatives and family friends he was given a definitive name.

Gatherings of various kinds were frequent among the people. On holidays public banquets would be held in the presence of the local chiefs. Everyone brought his own food and exchanged with his neighbor, somewhat in the manner of a picnic.⁴⁹ Then dances and songs would alternate with games of chance, some of which have survived to the present day.⁵⁰ The dances were serious, slow, and religious. Huayna Capac's celebrated "golden chain" was intended for use in a dance. The dancers would hold the chain instead of taking one another by the hand.⁵¹ Popular dances recalled such activities as ploughing, hunting, and fighting.⁵²

On this subject of festivals and celebrations, the chroniclers are inexhaustible. The great festival of the Sun (*Raymi*), which probably took place toward the month of June, lasted no less than nine days,⁵³ and the high officials from all parts of the empire came to Cuzco to take part in it. It must have been a very beautiful spectacle, with all the Indians wearing the distinctive headdresses and insignia of their tribes, crowding around the musicians and dancers dressed in puma skins and adorned with feathers,⁵⁴ or saluting the monarch with enthusiastic cheers as he passed by in his chair of solid gold, himself all covered with gold and precious stones, a golden crown embellished with plumes on his head, and a golden disc on his breast, preceded by retainers carrying the royal weapons, and surrounded by a multitude of warriors in many-colored garments.

Even more impressive must have been the first among all the ceremonies of the *Raymi*, the salute to the Sun. The monarch, the princes, and a great number of the inhabitants of the city, bare-footed, assembled before dawn in one of the public squares of Cuzco; and, at the moment when the orb of day appeared beyond the mountains, the multitude would crouch down and kiss the rays of light, while the Inca, lifting a golden vessel, would offer the sacrificial drink to his father the Sun.⁵⁵

The celebrations of military triumphs also stand out among the most important solemnities: processions, religious ceremonies, dances, and songs followed one another, and the affair usually ended, as Indian gatherings often still do, in a general state of drunkenness.

Here is Montesinos' description of the triumphal entry of the Inca Sinchi Roca into Cuzco after the defeat of the rebellious Andahuaylas:

Trumpeters led the line of march, followed by two thousand soldiers in battle formation, the commanders wearing headdresses of multicolored feathers and with plaques of gold on breast and shoulders, their men covered with plaques of silver taken from the enemy. Some of them beat six drums of human shape, made from the skin of the vanquished chieftains. Following the soldiers came prisoners with their hands tied behind their backs, then more soldiers with six more drums like the first, and then the ruler of the Andahuaylas, stretched out naked on a litter and surrounded by drums made from the skins of his relatives. Behind him marched a troop of criers, some announcing how the Inca treated rebels, others recalling the guilty deeds committed by the Andahuaylas. These were followed by three thousand *orejones*, richly clad, adorned with plumes, and chanting a hymn of victory. After these came five hundred young girls belonging to the first families of the empire, dancing and singing, their heads crowned with garlands, branches in their hands, and little bells on their legs. Next came a group of high dignitaries, some of them picking up the stones and wisps of straw left on the roadway, others scattering flowers; and directly behind them came the Inca himself, seated upon a golden throne borne by eight *orejones*. The man-god was

sheltered under two feather parasols, forming a sort of canopy embellished with emeralds and little flakes of very fine gold. In his right hand he held a golden throwing stick and in his left hand a rod of the same metal, which he professed to have received from the Sun. On his forehead he wore the royal ribbon of red wool. Finally, members of the royal family and of the council and princesses covered with ornaments, all carried in litters, brought the procession to an end.⁵⁶

One sees how difficult it is to characterize social conditions in the empire of the Incas.⁵⁷ Exceedingly backward in some respects, very far advanced in others, the Peruvians elude every classification. Their technology was at once primitive and highly perfected; they treated men like cattle, but they knew how to reward merit; they made drums from the skins of those who had revolted against them, but they loaded the leaders of their conquered enemies with gifts and allowed them to retain their status; they were ignorant of the wheel, but they presented plays; they did not know how to write, but they kept faultless statistics. How can it be said that the human spirit everywhere follows the same course of development and must inevitably evolve in the same way? The empire of the Incas cannot be compared with any of the great civilizations of the ancient world.

A Menagerie of Happy Men

1. *The Effacement of the Individual*

And men delighted in being driven like a herd of animals . . .
—Dostoevski, *The Brothers Karamazov*

Was the Indian satisfied with his lot? Such is the grave question that we must answer if we wish to pass judgment on the social system of the Incas. We know that the monarch supplied his subjects with everything they needed; but happiness consists in a state of consciousness, not in an accumulation of products.

At the very outset of our investigation we immediately find ourselves confronted with an obstacle. The chroniclers speak of the “rich” and the “poor.”¹ What meaning are we to give to these words? We know that Peru is not to be considered as a communist state. Hence, the Indians who had received gifts or grants from the Inca could be regarded as rich, while those who had lost their crops because of a frost, a flood, or a drought, and who were being fed from the reserve stocks in the national granaries were really the poor. Others to be called poor were the aged, the disabled, or the ill, who were supported by their communities,² and the Indians who had no children to help them in their work.³ In brief, a subsistence minimum was assured to every individual, absolute destitution was unknown, and great inequalities of fortune were and remained exceptional.⁴ A man could not become completely impoverished, but it only rarely happened that anyone grew rich. The

words "wealth" and "poverty" thus had merely a relative significance. "Equality in poverty made all the Indians rich," says Morua.⁵

Evidently the Inca system, thus compounded of traditional survivals and rational ideas, presents a very complex picture. This may be troublesome for the sociologist, but the historically realized forms of social organization are rarely simple. Hence, attempts to compare the Peruvian to other economic systems are doomed to failure. Depending upon the angle from which one examines Peru, one will find in it analogies to this or that other state. This explains why we find modern authors, according to their individual bent, comparing Peru sometimes to England because of its aggressive qualities and its power of adaptation and assimilation;⁶ sometimes to pre-1914 Germany because of the character of the emperor;⁷ and sometimes to Turkey because of the preservation of agrarian communities and the concentration of political power.⁸ The only great empire that existed in pre-Columbian central America at the time of the arrival of the Spaniards, that of Mexico, differed profoundly from Peru. The Aztecs lived under a quasi-feudal regime. Their wars and their worship were bloody, their trade had spread far and wide, and their scientific knowledge was extensive.

Among no other peoples in the New World do we find, as we do in the realm of the Incas, a slow and gradual absorption of the individual by the state. The poison was not given to the Indians in massive doses that would have provoked a reaction, but was administered drop by drop, until it brought about the loss of personality. Man was made for the state, and not the state for man. This is indeed socialism in the full sense of the word, and it is a great mistake to refuse to consider the Peruvian empire as a socialist state on the ground that it was a state built on conquest—as if socialism and imperialism could not go hand in hand—or that its policy was inspired, not by motives of altruism, but by the rightly understood personal interests of the monarch—as if socialism and altruism were synonymous terms.

Did the poison carry its antidote with it? Was the system of quasi property created by gifts and grants capable of evolving and grow-

ing? Perhaps if the Spanish conquerors had not come when they did, we should have witnessed, side by side with the gradual socialization of the masses, a progressive individualization of the elite, with the gulf between the two classes becoming ever deeper. It must be recognized, however, that the regime did not collapse of itself. The civil war that was devastating the empire at the time of the discovery of Peru would probably not have brought about any change in the social order if it had gone on to its end without the intervention of the white man.

That the Peruvian system was often imposed by force is not to be denied. But, because of the support lent them by the religion and as a result of their own shrewd policy, the Incas achieved the miracle of transforming fear into love. Their divine character, as evidenced by the victories of their armies and the magnificence of their court; the gifts that they distributed so generously among the chiefs; the order and peace that they caused to prevail—all combined to win for them, little by little, the hearts of their subjects. The Indian had nothing to do but obey; and whoever has formed the habit of passive obedience ends by being no longer able to act for himself and comes to love the yoke that is laid upon him. Nothing is easier than to obey a master who is perhaps exacting, but who rules over all the details of life, assures one's daily bread, and makes it possible to banish all concern from the mind. "The Incas were extremely well loved," declares Cieza de León.⁹ "Without any doubt, the respect and affection that these people had for their Incas was great," says Acosta.¹⁰

The result of socialization is clearly apparent. The Peruvian government knew how to hold in check passions destructive of the social order and to prevent the revival of primitive anarchy. The Incas banished the two great causes of popular disaffection, *poverty* and *idleness*, and they left only a small place for ambition and greed. But, by the same token, they dried up the two springs of progress, *initiative* and a *provident concern for the future*.

What initiative, indeed, could the Indian have when the regimentation was so minutely detailed as to require that *chicha* should be made with newly harvested maize and that the still-green ears of this grain should not be eaten?¹¹ The Indian did not have

to do any thinking for himself. The government thought and acted for him, and if its action was suspended, social life would stop short. Under the rule of the Incas this inertia expressed itself in the stagnation of commerce that we have already noted, in the lack of vitality and the absence of originality in the arts, in dogmatism in science,¹² and in the rareness of even the simplest inventions.¹³ We now understand the reason for the murder of Atahualpa. Pizarro knew that the Inca, once free, had only to make a sign to raise an army of tens of thousands. By striking off the head, the conqueror would have the body at his mercy.¹⁴

This passivity has continued to exist since the fall of the empire. Even today the Indians take no interest in political or economic movements¹⁵ and, being incapable of defending themselves, frequently elect a Spanish cacique, who fills the role of the former "protector of the natives" of the colonial era,¹⁶ or else they take as their chief one of their own number who has been able to impose himself upon them by his strength and cunning.¹⁷ Ambition has been so thoroughly destroyed that, with certain exceptions, the red man in our time only rarely attempts to rise in the social scale and leaves it to the whites and the mestizos to perform public functions and share in the honors. "An almost complete absence of initiative and decision is the characteristic trait of the Indian," wrote Monnier.¹⁸ On the other hand, the Peruvians were great imitators and quickly learned to use the Spanish weapons and to make war in the European way.¹⁹

The sense of hierarchy has likewise continued. Not only do the Indians give themselves leaders, but in many regions a veritable *gobernación menor* has been set up, very powerful though not official, directed by the white *hacendado*, that is, the owner of an agricultural enterprise, who administers his estates with the aid of a series of native bailiffs, still known as *curacas*.²⁰

As for a provident concern for the future, how could that have been developed among a people whose public granaries were crammed with provisions and whose public officials were authorized to distribute them in case of need? There was never any need to think beyond the necessities of the moment. "The Indians today," remarks Ondegardo, "never think of getting a new garment

until the old one is in tatters.”²¹ “They take no thought for the morrow,” says Cabeza de Vaca.²² And within the past century E. Grandidier has made precisely the same observation.²³ On the rare occasions when the Indian does seek to build up a reserve for himself, he squanders it at once.²⁴

But what is even more serious is that the substitution of the state for the individual in the economic domain destroyed the *spirit of charity*. The native Peruvian, expecting the state to do everything, no longer had to concern himself with his fellow man and had to come to his aid only if required by law. The members of a community were compelled to work on the land for the benefit of those who were incapacitated; but when this task had been performed, they were free from all further obligation. They had to help their neighbors if ordered to do so by their chiefs, but they were obliged to do nothing on their own initiative. That is why, by the time of the Spanish conquest, the most elementary humanitarian feelings were in danger of disappearing entirely. Ondegardo writes:

Thus, children were not obliged to provide for their parents in their old age; no one had to succor the needy—which seems to me to be an invention of the Evil One to rob the Indians of charity . . . Today, even if some Indians should come upon one of their fellows with a broken leg, though there might be twenty of them and all might live in a village close by, they would do nothing more than notify the community, so that the unfortunate man could be sent for, this being the community’s concern.²⁵

This absence of charity accentuates the utilitarian character of Peruvian institutions. Today the family is still regarded as a business enterprise or rather as a labor force; children are treated as so much capital, and marriage is considered as a contract of mutual aid.²⁶

Thus, the inhabitant of the high Andean plateau became mild-natured and servile. Rude manners and customs continued to exist only in places where the sovereign had not yet been able to establish a prolonged domination. The Aymaras to the northeast of

Lake Titicaca, whose territory lay off the beaten track of migration and the natural routes of conquest, remained vindictive and cruel—very different from the Quechuas.²⁷ The Inca gave his people a slave mentality.

It is not surprising that this great empire, organized on the most rigid lines, should have been monotonous and melancholy. Cieza de León apologizes for endlessly repeating the same observations throughout his Peruvian journey. In most of the provinces, he says, the natives used to copy one another so effectively that they could be looked upon as "all identical."²⁸ The uniformity of the architecture surprised Humboldt, and the regularity of life astonished Lorente. "The Indians, like children, differed from one another more in external appearance than by virtue of distinctive personal qualities."²⁹ Everything was alike; men resembled each other as if they were all brothers, says Prescott.³⁰ In every isolated basin of the plateau the life led by the common people day after day was as monotonous as the climate and the landscape; and everything that deviated from the ordinary, everything strange or unforeseen, was regarded as supernatural. This is the final result toward which all the great socialist reformers have tended. In Utopia as in Icaria, and as in the colonies of converted Indians in Paraguay, a distressing uniformity holds sway. "Thus conceived, socialism appears as the most insufferable dream of mediocrity and ugliness that mankind has ever had."³¹

It must be admitted that from this point of view the Indian character appears in a scarcely favorable light, even if we make allowance for the exaggerations of many of the Spanish chroniclers. "Fear is the only moral principle [of the native]," says Del Hoyo.³² The natives of the province of Collao are "so accustomed to performing menial tasks that they do everything that is necessary without being told."³³ Gómara, by no means tender toward the vanquished, characterizes them as a deceitful, cruel, ungrateful people, without honor, without decency, without charity, without virtue;³⁴ and Morúa sets them down as dirty, lazy, mendacious, and unstable.³⁵ On the other hand, the author of an unsigned report is lavish in his praise of the Indians, whom he finds gentle, affectionate, peace-loving, compassionate, obedient, and loyal.³⁶

Ulloa and De Pauw insist upon regarding the Indian as a brute, while D'Orbigny, on the contrary, endeavors to restore his good name.³⁷ All through the eighteenth century great controversies raged between Jesuits and Franciscans, as they had in the seventeenth century between Franciscans and Dominicans, over the virtues of the American savages.³⁸ Even today Bandelier and Bingham paint the inhabitants of the shores of Lake Titicaca in completely different colors.³⁹ But, however bewildering these divergent evaluations may be, all the authors recognize the natives' servility. Now, if this is so, it is certainly the consequence of the Inca system, for Ondegardo observes that the only peoples capable of being governed were those who had been subjugated by the Incas, a succession of expeditions having had no effect upon the others.⁴⁰ García Calderón raises the question whether the creation of the empire was made possible by the weakness and ignorance of the Indians or by the success of the Incas in disciplining their subjects to the point of giving them an instinct for obedience and servitude.⁴¹ The desperate resistance of the Caras, whose environment was identical with that of their conquerors, establishes the second as the more likely possibility. Be that as it may, the character of the Indian has remained essentially the same to our own day: laziness—or, more exactly, indolence—timidity, drunkenness, uncleanness, on the one hand,⁴² and, on the other, a gentleness or sweetness of disposition that D'Orbigny calls "unfailing,"⁴³ submissiveness, servility, resistance to fatigue, and a certain utilitarian turn of mind. These are indeed the distinctive features of an enslaved and besotted race.

It was at the price of this degradation of the individual that a certain measure of well-being was achieved in the Inca empire. It is highly probable that this well-being was not regarded by the Inca as an end in itself, but simply as a means of raising the productivity of labor and assuring greater glory and profit for himself.⁴⁴ Nevertheless, it is a proof of intelligence on the ruler's part to have understood that it was to his interest to act for the good of the people as a whole.

Yet all the shortcomings we have noted are matters of slight importance beside the hidden flaw that lies within every socialist

system, the basic defect before which learned men, ready to make their way into the City of the Future, have been impelled, like Schaeffle,⁴⁵ to draw back. Socialism, in killing the spirit of individual initiative and providence, arrests the march of human progress. The life of the nation, hemmed in by a complicated network of narrow rules and regulations, tends toward an extreme rigidity, until it finally becomes, as it were, *crystallized*.⁴⁶

Were the Incas able to avoid this disadvantage by creating an elite? It would seem that they did, for the specialization of intelligence is as understandable as that of physical strength or of memory. Just as the *quipucamayus*, accustomed from father to son, throughout their lives, to the accurate collection of facts and figures, attained an extraordinary mastery of their art, so the *amautas* were bound to develop their intellectual faculties to the highest point.⁴⁷ Intelligence, it is said, is not the privilege of a particular class; yet both heredity and environment must favor its rise, and it was among the members of the upper class that it had the best chance of developing, and not among the ignorant and brutish masses. The Incas did not reign long enough, however, for us to be able to note any progress in these respects, and the inventive faculties of the *amautas* seem to have remained rather mediocre. The Peruvians appear to have had, above all, and almost exclusively, a *genius for organization*. Enlightened guidance and inflexible discipline, even if inventive faculties are lacking, better assure the well-being of a people than the noblest discoveries when these are applied by apostles of the class struggle.

As for these people themselves, they were and are creatures of routine. Their habits remain immutable, and if the Indian today is legally a free man, he remains a serf "by virtue of the continued existence of authoritarian ways of life."⁴⁸

2. *The Heresy of Happiness*

Does he, then, forget what he recognized only a little while ago, the unknown, the new, the dangerous, the heresy of happiness of which the others are only the disguises? Heresy of happiness! Heresy of heresies!

—Louis Artus, *La maison du fou*

We can now answer the question we have asked: Was the Indian happy? It must be supposed that he was, since he yearns for the past with so much ardor. He labored contentedly for a master whom he held to be divine. He had only to obey, without going to the trouble of thinking. If his horizon was limited, he was unaware of it, since he knew no other; and if he could not raise himself socially, he in no way suffered on that account, for he did not conceive that such a rise was possible. His life followed its peaceful course, its monotony broken by periodic holiday festivals and by such events as marriage, military service, and compulsory labor service, all in strict accordance with regulations.⁴⁹ The Indian had his joys and his sorrows at fixed dates. Only illness and death persisted in escaping government regulation.

Military discipline and economic organization were two manifestations of the same tendency. Both sought, by different means, but with equal rigor *to eliminate chance*.

It was a negative kind of happiness, with few great adversities and few great joys. The empire produced what D'Argenson called a "menagerie of happy men."

But let us not be too harsh in our judgment of this result. It is no small thing to have prevented the worst physical suffering, that of hunger and cold. Only rarely did Peru know actual want, whereas France in 1694 and again in 1709 underwent cruel famines.⁵⁰ Nor is it a small thing to have suppressed crime and to have established perfect order and absolute security. "These barbarian kings," says Acosta,

had made their subjects slaves and were enjoying the fruits of their labor. In this lay the monarchs' greatest wealth. But what demands admiration is that they made use of them with such method and organization that this servitude was transformed into a very happy existence.⁵¹

How could these people, whom we have seen singing as they worked, have been unhappy?

We may believe, then, that the natives were happy.⁵² It is of little consequence that their existence was poor and bare. Happiness is

subjective, and the only comparison the Peruvian could make—with his unsubdued neighbors, grappling with material difficulties, struggling against both man and Nature—was enough in itself to make that happiness real.

Even acquiescence in the established order, the correct performance of the imposed task, the feeling—kept alive by the poets—of being a cell in a marvelous organism, were sources of joy that kept the separation of the masses and the elite and the limitation of desires from occasioning any envy or discontent. "The man who envies another injures himself," said the Inca Pachacutec.⁵⁸ What the inhabitants of the plateau look back to wistfully today, limited as their desires may now be, is the time when those desires were even more limited. We have heard the same lament expressed in Ecuador and in Morocco: the foreigner has given the native new desires that have become his torment. In our civilized countries desires increase more rapidly than the means of satisfying them. That is why so many persons who enjoy ever-increasing well-being never stop complaining and become, in reality, constantly more unhappy, through nobody's fault but their own.

As for individual liberty, the only ones who could long for it were those who had known it in the countries lately subdued. It is restful to feel that the various activities of daily life are kept in a prescribed and orderly routine; and merely by not seeking to break the barriers, one comes, in time, to feel oneself free.

If, therefore, virtue and well-being, the sources of happiness, are the end and aim of life, the Inca may be said to have produced a masterpiece. The Indian's soul was lulled to sleep by the monotonous rhythm of a too well-regulated existence.

But if, on the contrary, it is the development of the personality that is regarded as the goal of all human existence, then the Peruvian system was the most disastrous of social experiments. The Inca plunged his subjects into a sleep that was akin to death. He robbed them of all human dignity. It is true that there are times in one's life when one is tired of struggling, when one does not want even to have to think any longer, and when one envies those who have only to obey an intelligence greater than their own; but the desire to destroy oneself in this way, by allowing oneself to be absorbed

in the mass, can be no more than the unwholesome fruit of hours of distress. The wish to surpass oneself continually, the constant effort toward improvement—this is what is important. The essential thing in life for the individual today is to have the sensation of climbing.

And, for the sovereign, wisdom does not consist in having found a perfect system, but in searching for it unremittingly. He who thinks he has attained his goal is by that very fact condemned to stagnation.

In South America a so-called happiness was obtained only through the annihilation of the human personality; and if each of us were asked in which country he would prefer to have lived, pre-Columbian Peru or sixteenth-century Spain, probably very few would choose the former.⁵⁴ In the Inca state only the members of the ruling class, and more especially the chief, could live a full life; outside of him and his family, men were no longer men, but cogs in the economic machine or figures in the official statistics.⁵⁵

13

The Spanish Antithesis

1. *The Invasion of the Barbarians*

Our world has just discovered another world . . . no less great, full, and well-limbed than itself, yet so new and so infantile that it is still being taught its A B C; not fifty years ago it knew neither letters, nor weights and measures, nor clothes, nor wheat, nor vines. It was still quite naked at the breast, and lived only on what its nursing mother provided. . . . I am much afraid that we shall have very greatly hastened the decline and ruin of this new world by our contagion, and that we will have sold it our opinions and our arts very dear. It was an infant world. . . .

—Montaigne, *Essays*, Bk. III, ch. vi

While the two sons of Huayna Capac, Huascar and Atahualpa, were fighting against each other, Pizarro landed near Tumbes and, at the head of a handful of men, began the assault on the plateau. It was the formidable clash of two different civilizations: the individualistic Europeans, brutal and greedy, but full of initiative and a marvelous daring; and the Indians, whose spirit had been broken by the socialist regime. Fortune smiled upon boldness, and the empire fell; but the impact was to be as fatal for the victors as for the vanquished, for the Spaniards were to take back with them, along with the gold of America, the seeds of decay. The historic events are well known, and it is not our part to recount them anew; but it seems that the Spanish conquerors have often been misjudged.

It would be foolish to try to compare states as dissimilar as Peru and Spain, one with its statisticians and bureaucrats, the other with its Inquisitors, its knights, and its beggars; the one all order and obedience, the other aflame with ardor and zeal. At the heart of the Peruvian empire was a small nucleus of clever men in whom all the vital existence of the country was concentrated. Spain, on the contrary, was swarming with individuals in ceaseless conflict with one another. Teeming with life, Spain gave birth to the human type that united in itself and carried to their extreme limits the good and evil qualities of the race: the conquistador. Impelled more by passion than by reflective will, more responsive to the spirit of camaraderie than to a sense of justice, mystical and sensual, ambitious and wily, valiant and resolute, the conquistador is the most perfect representative of that *casticismo* (i.e., pride of birth) in which is concentrated the valor and the virtue of all Castile.¹ He looks on life as a lottery, does not look before he leaps, and risks his very existence on the throw of the dice. Conquest fires his imagination by its quixotic element, nor is this, as might be imagined, the enthusiasm of youth: Francisco Pizarro was about fifty-eight years old at the time of the discovery of Peru, and his brother Fernando was nearly sixty. A nation already in step with the modern world, like France or England at the time of the Renaissance, would never have been able to produce such men, so immeasurably self-confident and sure of their destiny, so "in love with glory," as, for instance, the Castilian whose story Enrique Larreta has told in his celebrated novel, *La gloria de Don Ramiro*. Whoever knows the passes of the Cordillera can understand the state of mind of the little band of men, numbering less than two hundred, who dared to commit themselves to the perils of a country inimical and unknown.

It is a mistake to regard the conquerors simply as bandits in search of gold and amusement. No doubt there were in Pizarro's company many ruffians and criminals, as a single detail suffices to prove: after the capture of the Inca at Cajamarca, several soldiers suggested to their leader that the hands of the Indian prisoners be cut off. But alongside such brutes as these we find Francisco de Jerez, Miguel de Estete, Bartolomé Ruiz, Pedro Sancho, Cristóbal

de Molina, Juan de Betanzos, and many others, who knew how to observe and report and who were something other than "ignorant adventurers."²

It cannot be denied that the Spaniards were guilty of all kinds of cruelties. The testament of S. de Leguízamo and the *Noticias secretas* of Juan and Ulloa constitute overwhelming indictments.³ The crimes of the Spaniards were innumerable, from the murder of Atahualpa to the rape of the Virgins of the Sun, the demolition of the palaces, and the looting of the warehouses. Real wealth was stupidly destroyed, and no one was the richer for it. To get cinnamon, the whole tree was cut down, and the vicuña was killed to secure its wool.⁴ "The Spaniards did more harm in four years," says Ondegardo, "than the Incas had done in four hundred." "They sacked the country," adds Santillán.⁵

Of course, the conquerors had to surmount unprecedented obstacles, to struggle not only against Nature and the natives, but even against the intrigues and rivalries of their jealous compatriots. It was only at the third attempt, and after all sorts of tragic vicissitudes, that Pizarro reached Tumbez. Most of the conquerors had to endure great suffering: for example, Pascual de Andagoya on the coast of Colombia;⁶ Alvarado in traversing the equatorial forests from Bahía de Caraquez to Riobamba;⁷ Gonzalo Pizarro in the virgin forests of eastern Ecuador; and Almagro in the Atacama desert of Chile.⁸ Such men as these, as hard on themselves as they were on others, would flinch at nothing; and when they found themselves at last in the presence of the riches they had dreamed of, they were seized by a veritable intoxication and lost all restraint. Indeed, Juan Nuix thought it remarkable that, in view of the temptations that beset the conquerors, the irregularities were not worse than they were.⁹

The result, however, was disastrous. Knowing nothing of the Inca system, the Spaniards unwittingly perverted it.¹⁰ Civil wars,¹¹ epidemics, excessive forced labor, work in the mines, all brought about a rapid decline in the population. Nothing makes more depressing reading than the chapters in Cieza de León's *Crónica* in which he describes the abandonment of formerly rich and well-populated valleys.¹² Very grave consequences followed. The bur-

dens laid upon the Indians became all the heavier as the number of those on whom they fell decreased. "Ten Indians," wrote Santillán, "are sometimes taxed today as one hundred used to be."¹³ All the natives from sixteen to sixty were declared subject to taxation, although before the conquest only those between twenty-five and fifty years of age had been so classified.¹⁴ Yet the total amount of taxes due did not find its way into the coffers of the Crown because the tax gatherers did not take the trouble to collect inordinate commissions.¹⁵ Moreover, the native chiefs, no longer subject to the Inca's control, became too numerous,¹⁶ and, following the example of the Spaniards, acquired a taste for luxuries and the desire for pleasure and themselves began to tyrannize over the Indians. "Today, every cacique makes himself an Inca in his province," says Santillán.¹⁷ It needed official orders from the King to fix the total sum of the taxes due to the caciques from their subjects.¹⁸

The Spaniards are not alone in having made mistakes and committed crimes in their colonies. The English in North America were even more cruel, for they exterminated the Indians. It remains no less true, however, that the coming of the Spaniards may in some respects be compared to an invasion by barbarians. Yet in justice to them it should not be forgotten—as it often is—that this period of disturbance was of short duration and that it was followed by an era of peaceful organization.

2. Colonial Organization

It is better to bring an undertaking to a halt than to cause the slightest injury to the Indians.

—*Recopilación de leyes de los reinos de las Indias*,
Bk. IV, Title xxvi, Law 4

For a long time historians sought to do justice to the Spaniards and to protest against the exaggerations of three writers who, at the end of the eighteenth century, warped the judgment of their contemporaries: Abbé Raynal (1770); Adam Smith, the celebrated author of *The Wealth of Nations* (1776);¹⁹ and William Robertson

(1777). But nobody listened to these advocates of a more just approach; and it is only in recent times that Juan Nuix's *Reflexiones imparciales sobre la humanidad de los españoles en las Indias*, written originally in Italian and translated into Spanish, and the chapter from Colmeiro's book to which we have also referred²⁰ have become known. In our own day a few voices have finally succeeded in making themselves heard: Marius André in France,²¹ R. Altamira in Spain,²² C. Pereyra in Mexico,²³ and Lewis Hanke in the United States²⁴ have endeavored to correct the hasty verdicts that the most distinguished authors have believed themselves obliged to pronounce upon the Spanish achievement in America. A reaction is developing against the accumulated errors of the textbooks.

It is no longer permissible today to ignore what the conquerors gave to the conquered: European methods of agriculture,²⁵ useful animals,²⁶ and scientific knowledge. Above all, it is not possible to disregard the efforts made by the King, the higher officials, and the clergy to improve the lot of the Indians. It is seldom that the destinies of a people have been directed by greater administrators than the presiding judge De la Gasca or the viceroy Francisco de Toledo. And how can we not admire that poor and honest licentiate, Juan de Ovando, President of the Council of the Indies, who elaborated that "monument of justice, humanity, and wisdom" which is called "the Laws of the Indies"?²⁷ In every province there was an official of the Crown to perform the functions of "protector of the Indians"; and the slave trade was no other than a humanitarian measure intended to relieve the natives of the most laborious tasks.²⁸

What is especially remarkable in the Spanish colonial organization is that in many respects it was inspired by the old Peruvian system. All of Ondegardo's work is an eloquent plea in favor of a return to pre-Columbian institutions; and Matienzo, although constantly talking of the tyranny of the Incas, patterns the articles of the laws he proposes on the customs that were in existence before the conquest.²⁹ If the viceroy Francisco de Toledo deserved to be called a "second Pachacutec,"³⁰ it was because he did over again the work of that monarch. He reassembled the scattered tribes,

appointed officials, determined tax assessments, and regulated the postal service and the *tambos*.

Unfortunately, all this regimentation came too late. The white men could not conform to the ancient discipline. The rules were imperfectly enforced or even circumvented; and the system as a whole took on the aspect of a caricature, rather than a copy, of the ancient model. Pereyra, speaking of the laws of the Indies, declares that "this fund of benevolence lacked only the one law that would have enforced the others."³¹

The one element of the ancient organization that, above all else, survived the conquest was precisely what was not the work of the Incas, namely, the agrarian community. The conquest had destroyed the rational plan, the superstructure built up by the law-maker of Cuzco, and only the ancestral foundation remained.

The "Spanish peace" prevailed in America. The viceroy Francisco de Toledo refused to undertake new expeditions, urging that it was better to preserve his domains and make them prosperous than to conquer new territory that could not be exploited because of the shortage of men.³² Colonists were settled on the land; towns prospered; the Spaniards became farmers, cattle breeders, builders, scholars, and not merely those seekers after gold so often described in legend and poetry. Here again the state took protective action by prohibiting the emigration of undesirables—vagabonds, criminals, Jews, and Moors—to America.

As the colonial regime was not one of systematic oppression, the War of Independence was not a movement of popular revolt by the Indians. A tendency to adopt toward all revolutions an almost reverential and mystical attitude has had the effect of falsifying history. It was the large property owners, big business, and the clergy that led the struggle, all of them desiring autonomy above everything else; and it was a "great aristocrat," Bolivar, who triumphed.³³

3. *A Nation of Grown-up Children*³⁴

Christopher Columbus, unhappy admiral,
Pray to God for the world you discovered.
—Ruben Dario, *A Colón*

What has become today of the descendants of the worshippers of the Sun? Incomplete statistics do not permit an exact answer. We have seen that the population of the territory once subject to the Inca was probably about the same around 1914 as at the time of the coming of Pizarro. But of this population how many were Indians, how many mestizos, how many whites? Even when the census differentiates the races, the figures remain suspect, for often in South America any Indian who wears European dress and speaks Spanish is classified by the government as white.³⁵

It seems, on the whole, that the whites in the Andean states are in a minority, not only as compared with the red men, but also as compared with the people of mixed blood. According to the census of 1896, the pure-blooded Indians formed 57.5% of the population of Peru, and the census of 1914 in Bolivia put the proportion there at 50.9%. According to Wolf, only one pure-blooded white per hundred inhabitants is to be counted in the rural districts of Ecuador, and the pure-blooded Indians make up 50% of the population of that country.³⁶ García Calderón says that of the total population of Peru and Ecuador only 6% are white as against 70% of pure Indian stock.³⁷ Means gives the figures as: pure Indian, 50%; people of mixed blood, 30% to 35%; whites, 15% to 20%, of which number 5% are pure white.³⁸ In 1924, V. Sapper estimated that more than 6,000,000 pure-blooded Indians were living in the Andean countries.³⁹ All these figures are only approximations. In a general way, it may be said that the whites occupy most of the important positions in the South American republics, that the people of mixed blood constitute the majority of the middle class, and that the Indians make up the mass of the population.

Intelligent and imitative, the whites and the mestizos draw inspiration from democratic ideas that are incompatible with their

degree of civilization and often insist upon maintaining institutions of a European type that are not suited to them. Hence, revolutions repeatedly hamper economic development, and the people live through continual alternations of dictatorship and anarchy. Calm is restored only when power falls into the hands of one of those energetic leaders who are called *caudillos*, such as Porfirio Díaz, Guzmán Blanco, García Moreno, Dr. Francia, General Roca. Then the country can enter upon the path of progress; but soon the outraged liberals raise a clamor, the *caudillo* is swept out by an uprising, and disorder begins again. This, at least, has been the pattern for some time. In recent years conditions have improved greatly, and a state of equilibrium seems to have been attained in a number of countries.

As for the condition of the great mass of the people, it remains what it has always been. The last descendants of the Incas, of the ancient elite exterminated by Atahualpa and by the Spaniards, have passed into oblivion.⁴⁰ The Indians are more backward now than at the time of the Spanish conquest, according to Tschudi.⁴¹ They remain submissive, distrustful, and superstitious. *Intellectual torpor* constitutes their most marked characteristic and manifests itself in weakness of will, a taste for alcohol, unhygienic living, lack of proper nourishment as well as the most superficial knowledge of cooking, and an insufficiency of housing and clothing.⁴² Most of them continue to live in windowless huts of loose stones or mud, sleep with their clothes on, eat squatting on the ground, and have recourse to bowls, urns, cups, and spoons as household utensils. They are not attracted by large cities, and, except at Lima, they do not form an urban proletariat, as so many of the poor and miserable do in European countries.⁴³ They tend their flocks of llamas as their grandfathers did, piping on their flutes the songs of olden days. Their language is that of their ancient masters, the Quechuas; their ways are those of their ancestors; their common law continues to exist side by side with the written law; their very Christianity is only paganism disguised. Our civilization has passed over them as the wind passes over the Cordillera. This is what they are today; this is what they were when they ran in throngs along the roads to acclaim the Child of the Sun.

The Indian family has remained an economic institution, based upon utility and sensuality, not upon sentiment. Dismal and dirty, it presents little that is attractive. Marriage is simply a mating arranged by parents and priest to initiate a life in common. The wife is thus obliged to show herself capable of doing her part, that is, of preparing the food, spinning and weaving cloth for garments, helping in the work of the fields, and taking care of the animals; and this is why the custom of a trial period is current on the plateau today. Cohabitation makes it possible to ascertain and assure the future wife's ability to live up to the demands of her task. Virginity in a woman, far from being valued, is looked upon with disfavor.⁴⁴

As for the children, they must often do without the most elementary provisions of hygiene, and the infant mortality rate has become shockingly high.⁴⁵

The agrarian communities that we have studied here are a double-edged weapon. They protect the Indian, but by the same token they keep him in a position of inferiority in relation to the white man. He is a child, it is said; and the *patronato indigeno* has been established (Decree of May 29, 1922) on this account. The effect is to keep the Indian eternally in the status of a minor. He keeps his "collective consciousness," which in former days, to the great astonishment of the Spaniards, led him to engage in lawsuits between groups instead of between individuals.⁴⁶ He is not becoming accustomed to freedom. He remains *siervo*, *colono*, *peón*, *yanacona*.

The remedy is twofold. A long-range program is needed on the psychological level, to be carried out by means of appropriate education. The governments are working on this, and the Indians are by no means averse to it. But there are still too few teachers.⁴⁷ For the immediate present, and at the economic level, care must be taken that the community is not transformed into an autarky as a result of the modesty of its needs and the natural indolence of the people concerned. Certain specialists in this field recommend co-operative associations for production, for the native is a skillful

artisan and has raw materials—clay, wool, cabuya, totora, *paja toquilla* (a kind of straw), and hides—at his disposal.⁴⁸

We do not have to enter more deeply here into the present-day problem of the Indian, but it is evident that the future of the nations along the Pacific coast of South America depends in large measure upon the solution found for it. Europeans are prone to imagine that the Indians are no longer anything but a memory, that they exist only in the novels of James Fenimore Cooper, in the poetry of Longfellow, and on the reservations where the people of the United States have corralled them like animals in a menagerie. And yet it is these red men who hold in their hands the future of the Pacific states. To be sure, the number of pure-blooded Indians must have diminished by almost half since the Spanish conquest, if we are to believe von Sapper, but the flow of white immigration is meager in these countries, which remain separated from the rest of the world “by the same natural barriers as in the time of the Incas,”⁴⁹ and in the course of more recent years the native population seems to have increased rapidly.

In many regions the Indians and the descendants of the Spaniards have no contact at all with one another. They present the “unique spectacle of two races living side by side for three centuries without mingling.”⁵⁰ In the colonial period the laws of the Indies, to which we have referred, in seeking to protect the natives by special provisions, contributed to keeping them segregated from the invaders.⁵¹ This isolation has persisted. In our own day the red men resist the whites with an incredible force of inertia. Even where there has been some intermingling, it remains to be seen which of the two races will prevail. Are we to believe with Payne and with Mendieta y Nuñez that mixed elements gradually revert to the Indian type,⁵² or with von Sapper that the red race will, in two or three centuries, have entirely disappeared as a result of miscegenation, which, in spite of everything, cannot fail to take place in the long run?⁵³ However this may be, the status of the indigenous peoples of the Andean countries is the most serious problem that the various governments concerned have to meet at the present time, and from time to time native uprisings serve to

remind the descendants of the conquerors that not all the children of the vanquished have forgotten their ancient glories.⁵⁴

At the end of the War of Independence, at the Congress of Tucumán, a certain number of delegates demanded the restoration of the empire of the Incas, with Cuzco as its capital. It was a handsome tribute paid to the past; but, if the Indian seems to have changed very little, the white man and the mestizo have brought too many new elements into existing society to permit the ancient Peruvian organization to be revived in its pristine form. The astounding history of the Incas can have no sequel now.

14

The Influence of the Incas

The influence that the civilization of the Incas exerted upon foreign peoples after the conquest was very slight. None of the socialist colonies founded in America during the nineteenth century—of which there were more than fifty in the United States alone—drew its inspiration from the ancient Peruvians; and when European socialism made its way to the nations on the Pacific coast of South America toward the middle of that century, it developed especially in Chile and Colombia, countries which had not been conquered by the Incas, or which had been only partially subdued by them.¹ The only great attempt at organization which can be related to the one we have been studying is that of the reductions of Paraguay.²

1. *The Reductions of Paraguay*

It was the Jesuits who built this strange society. The motives that inspired them and the influences to which they were subjected have remained a matter of controversy to the present day. Opposing arguments, in each case purely a priori, are presented in two important works in the German language. E. Gothein contends that the authors of the plan put into effect in that country were two disciples of Campanella, a quixotic Calabrian monk who was thrown into prison as the result of a conspiracy and was the

author of a utopian work written between 1602 and 1630 entitled *Cittá del sole*. In this book, authoritarianism and rationalism are pushed to the farthest extreme, even to the point of absurdity. Communism is here complete, embracing women and children in its reach, and regimentation is extended to the most intimate acts of life.³ M. Fasbinder, on the other hand, advances the opinion that the Jesuits confined themselves to codifying ancient customs, thereby evidencing a wise opportunism and conforming to the sociological laws of the evolution of human societies.⁴

The present writer is inclined to accept neither of these solutions of the problem of the reductions, but rather to adopt a third, which was glimpsed in the eighteenth century by the distinguished Abbé Raynal and has been since suggested by the anonymous author of a paper presented to the Academy of Dijon in 1874 and recently by Prince Ruffo della Scaletta.⁵ According to these authors, the Jesuits were inspired by the example of the Incas. A highly significant fact that confirms this conclusion is that the great founder of the reductions, Father de Torres, a provincial of the Jesuits, lived in Peru before he went to Paraguay. Besides, the very organization of the reductions bears evidence of Peruvian influence.

The impression conveyed by the reports of those who visited the reductions is one of strict and definite order. The prevailing uniformity recalls that of the empire of the Incas. The villages were all laid out according to the same plan, around a central square adorned with a statue of the patron saint of the community and surrounded by the church, the rectory, the widows' home, and the public stores. Demand was slight and strictly limited, although the Guarani is less temperate than the Indian of the plateau. The authorities undertook the distribution of seeds, meat, and clothing, and forbade luxury. Supply was strictly regulated. Labor was compulsory. The fathers allotted jobs in the same way as they distributed everything else, assigning the Indians to their tasks in accordance with their aptitudes, whether for agricultural labor or the handicrafts. There were community lands and lands that belonged to God. The crops were garnered in storehouses. Private property was even more severely restricted than in Peru, since

neither land nor houses nor paddock nor cattle nor means of production could be individually owned. There was, of course, no system of inheritance. Only a few textiles and some ornaments were left to the women. It was an example of total communism.

Yet the fathers showed no hostility toward private property as such. On the contrary, they seemed anxious to introduce the Indians to this idea. But they considered that the natives themselves were lacking in a sense of individuality, and they were probably not far from the truth. They tried to school the natives in private ownership by way of lifetime grants of lands that formed a third category in addition to those of the community and those reserved to God, but these did not seem to have interested the Indians, who preferred to hold and work the land in common.

As for the labor of the artisans, this was done in workshops and organized in guilds.

On the whole, the regime of the reductions was that of a barracks: departure for work at a fixed hour, after Mass; curfew in the evening; and patrols to bring the laggards back to their houses!

The equilibrium between supply and demand was assured by means of reserve stocks exactly as in Peru, and the natives were forbidden to move from one region to another. Statistical tables indicated the needs of each reduction and the possibilities and the sum of its reserves.

As in Peru, too, trade was limited to the occasional exchange of superfluous goods. Money did not circulate, certain products serving as commodity-money. Certain echoes of the outside world did, nevertheless, succeed in penetrating these isolated villages. As a standard of reference—that is, as a measure of value—the Jesuits and the Indians made use of a nominal money, not coined, which was named for the Spanish currency *peso hueco*. The fathers drew up a list of fixed prices in *pesos huecos* in order to prevent haggling.

There was a whole category of operations in Paraguay that did not exist in Peru: those concerned with transactions with the Spanish world. The autarky could not, in fact, be absolute. The importation of necessities that the country could not produce—weapons, tools, objects of art for the churches—had to be per-

mitted, and these were paid for with maté, hides, and cotton. But this trade was wholly concentrated in the hands of the missionaries, and there is no need for us to examine it here.

One capital difference to be noted between the system of the reductions and that of the Inca empire is in the nature of the ruling class. In Paraguay the rulers did not constitute an elite—that is, an open group in the sense in which we have defined it. They formed a caste. There was no interpenetration between the fathers and those under their administration. The latter remained forever in a state of tutelage, and even the best of them could never aspire to rise to managerial rank. The very choice of the municipal authorities—elected, according to Spanish tradition, by the natives—was carried out, in practice, in agreement with the suggestions of the priest. Thus, the fathers continued to regard the Indians as children and to treat them as such, and they remained in a condition of infancy.

The result of all this was that the system was entirely artificial. The influence of the missionaries never went below the surface. This is why, in spite of a century and a half of order and progress, in spite of the establishment of absolute security and incontestable well-being, everything collapsed the moment the Jesuits left. Alcoholism became rampant, the family was broken up, the population suffered a fifty per cent decline in less than forty years, vices made their appearance again, and anarchy prevailed. The chief virtue that had been inculcated in the people was that of obedience.

In Paraguay, as in Peru, a relatively prosperous state had been founded upon the destruction of individual initiative and a provident concern for the future. The existence of an elite in the first instance and of a superior caste in the second prevented complete stagnation so long as the system continued to exist, but the masses remained amorphous, passive, unable to achieve individuality, and consequently proved incapable of self-direction once their masters were gone. The system is thus shown to be incapable of forming fully developed men. The socialized mass may be happy, but the depths of the soul receive no stimulation and remain sterile. There is no creative genius, no will to excel, no projection toward the future. In this respect, the system is a complete failure.⁶

2. Spanish Literature and the Utopians

The Spaniards, who naturally might have come under Peruvian influence more than any other Europeans, confined themselves to studying the agrarian system, and even then chiefly in the light of what they knew of Greek and Roman history. The Licentiate F. Murcia de la Llana in 1624, Floranes in 1797, and Florez Estrada in 1839 sought to justify their own views by reference to the Inca system.⁷

It is strange that Spanish literature itself should have drawn so little inspiration from pre-Columbian America. It is difficult to find in the "golden century" even a little writing that has anything to do with the Incas, such as the *Aurora en Copacavana* of Calderón de la Barca, a type of religious drama in which idolatry makes a flesh-and-blood appearance upon the scene. No poet of talent has celebrated the conquest of Peru. The *Conquista de la Nueva Castilla*, published in Paris in 1848, and the *Lima fundada* of P. de Peralta Barnuevo, which appeared in Lima in 1732, are works of little value. Among theatrical pieces we may mention the *Trilogía de las hazañas de los Pizarros en el Nuevo Mundo y sus aventuras amorosas en la metrópoli*, by Tirso de Molina, and the *Atahualpa* of Cortés (1784).

Even stranger is the fact that most of the utopians have neglected South America. Plato remains the source from which the founders of ideal future communities—foremost among them, Thomas More⁸—draw their inspiration. Campanella and Morelly seem to be exceptions to the general rule. The first perhaps borrowed elements of his system from the Peruvians, in addition to the very title of his book, which we have already mentioned, *Civitas solis* (1630).⁹ The second, who professes to have taken the Incas for his models in his *Basiliade*, speaks of common ownership and cultivation of the fields, public storehouses, and even highways "with a few rustic habitations set down at equal distances along their sides"; but the society he describes is communistic and is situated in a very fertile country, which differentiates it profoundly from the pre-Columbian societies of South America.¹⁰ Nevertheless, it

may be said that it was through the agency of Morelly's book that the empire of the Incas, however little known and badly understood, exerted a certain influence upon modern socialism.

Sir Francis Bacon, in his *New Atlantis* (1627), mentions Peru several times, but without drawing any inspiration from the Peruvian system of organizing society.¹¹

On the other hand, we find in the works of the utopians, as is natural, ideas that were put into practice in the time of the Incas. In the writings of Vairasse d'Alais, who was acquainted with Garcilaso's *Commentarios*, we visit a country where all the inhabitants are rich without possessing anything of their own, and where "no one wants for what is necessary and useful in life."¹² In Bulwer-Lytton's *The Coming Race* (1871), there is a relative inequality of fortune without real poverty. In the works of Rétif de la Bretonne¹³ we find agrarian communities. In Edward Bellamy's still-famous *Looking Backward* (1888), there is an all-encompassing bureaucracy and regulated production. But it is in the imaginary communities of More, Morelly (in the *Basiliade*),¹⁴ and Cabet,¹⁵ with their elaborately devised apparatus of regimentation, that we come closest to the empire of the Incas.

3. *Historians and Moralists*

Among historians and philosophers, a great many, especially in France, have concerned themselves with the Spanish empire in the New World, but chiefly from the moral point of view. Taking the murder of Atahualpa as an example, Bodin confined himself to demonstrating that in politics the strongest always find a pretext for doing what he wants. It is in vain that Atabalippa pays the ransom demanded of him and then embraces the Catholic faith: he is put to death just the same. "When there are no more excuses, the one whose material position is the stronger never allows anyone to get the better of him, and the weaker is in the wrong."¹⁶ Montaigne, who had read Gómara, Benzoni, and perhaps Las Casas, extols the virtues of the American natives, and, in criticizing the Spaniards, is directing his aim at the whole of the civilized world of his day.¹⁷ Even in Spain, Guevara, in *L'horloge des*

princes (1529), and Ercilla y Zúñiga, in the *Araucana* (1590), protested against the excesses committed by the conquerors.¹⁸

In the seventeenth century, as in the sixteenth, the Spanish conquerors continued to be severely criticized, with a purpose that was sometimes manifestly political. Benefiting from the horror inspired by their executioners, the Indians become models of virtue.¹⁹

4. *The Inca Vogue in the Eighteenth Century*

It was in the eighteenth century that the Incas were taken up with enthusiasm in France, but these Incas were the "good providers" pictured by the readers of Garcilaso and Las Casas. Although they were not quite so fashionable as the "noble savages" of Paraguay or Tahiti, they played a prominent role in comedies and ballets. Rameau's *Les Indes galantes* (1735) tells of the love between a daughter of the Incas and a Spanish officer. Voltaire, who quotes Garcilaso, Herrera, Zárate, and Las Casas, devotes a short and not very instructive chapter in his *Essai sur les mœurs* to the conquest of Peru.²⁰ On the other hand, he wrote *Alzire*, a drama which was presented for the first time on January 27, 1736, and which enjoyed an incredible success. From our point of view it is altogether without interest, for the author did not undertake to document what he wrote on the history and customs of the Indians.²¹

The American invasion became more pronounced in the second half of the eighteenth century. In succession came *La Péruvienne* (1748) by Boissi, another *La Péruvienne*, this one by Rochon de Chabannes (1754); *Manco Capac* by Leblanc (1763);²² and *Azor ou les Péruviens* by Du Rozoi (1770). Madame de Graffigny's *Lettres d'une Péruvienne* was published in Paris in two volumes in 1752 and enjoyed a real success. In it we find an Indian woman inditing, by means of quipus, lengthy missives in the flowery and bombastic style of the period.²³

In 1777, J. F. Marmontel published his celebrated novel, *Les Incas ou la destruction de l'empire du Pérou*—fanciful, tedious, and nauseatingly sentimental. He piles one improbability on top

of another and, to make matters worse, constantly refers to sources and insists upon the historical character of his work. He supposes that a Mexican comes to tell the Peruvians of the misfortunes of his country, and he shows us the Inca, at a moment when the empire is threatened on all sides, pardoning a Spaniard who had abducted a Virgin of the Sun—an exceptionally grave crime, as we know. Everything is so well ordered in the state which this writer depicts that one finds oneself admiring disorder, and the inhabitants are so exaggeratedly virtuous that we are almost tempted to regret the absence of vice.²⁴

Finally, in spite of their extreme brevity, the entries appearing in the *Grande Encyclopédie* under the words "Inca" and "Peru" also contain several major errors. We get the impression, as we read, that when they spoke of South America, the French of the eighteenth century felt that they could give free rein to their imagination with impunity: they would always find a public ready to believe them.

Certain more scientific works have also been devoted to Peru. We have already mentioned Abbé de Pauw. In spite of his partiality and his exaggerations, one is almost grateful to this paradoxical writer for having dared to breast the "inexhaustible torrent of glacial sensibility"²⁵ by which all his contemporaries were being carried away. As for Abbé Raynal, who, like Abbé de Pauw, is already known to readers of the present volume, he has given us, in his *Histoire philosophique et politique des établissements et du commerce des Européens dans les deux Indes*, a work very characteristic of the state of mind at the end of the century, when people were not yet willing to give up the ideal of the "noble savage," and yet, after the voyages of La Condamine and Bougainville, were no longer able to be under any illusions.²⁶ Abbé Raynal at once extols Peru and finds fault with it. His ideas are numerous but confused, and his conclusions are questionable.

In Book VII of the second volume of this two-volume work, the author paints an enchanting picture of the Inca empire. Then, noting that the system was one of collective ownership, he asks himself how the Peruvians, deprived of the stimulus of personal interest, escaped falling into extreme poverty. The answer he gives involves

a curious line of reasoning: The Peruvian monarchs, being unacquainted with money, obliged the Indians, by way of taxation, to cultivate the lands belonging to the Inca, and "their patrimony was so confusedly mingled with that of their subjects that it was impossible to make one fruitful without doing the same for the other." He believes that the Peruvians never succeeded in raising themselves above the level of the barest necessity. "One may be sure," he says, "that they would have acquired the means of varying and extending their enjoyments if a system of alienable and hereditary landed property had stimulated their talents." The celebrated philosopher also asserts that trade did not exist, that the specialized skills were not perfected, and that the Spaniards' accounts of cities, public buildings, highways, and quipus are legends; but this does not prevent him from censuring those who have treated the accounts of the Incas as fables. Finally, according to him, in the absence of writing, the laws were bound to degenerate imperceptibly, but by good fortune the absolute ignorance of gold and silver money prevented the monarch from hoarding treasure. Decidedly, Abbé Raynal does not unreservedly admire Peruvian institutions and conceals considerable uneasiness of mind under a factitious enthusiasm.²⁷

Adam Smith, though briefer than Abbé Raynal, was no better inspired. The English economist assures us that the Indians of Mexico and Peru could not have enjoyed a true civilization, and from this he concludes that the population of these two empires must have been sparse:

It seems impossible that either of these empires could have been so much improved or so well cultivated as at present, when they are plentifully furnished with all sorts of European cattle, and when the use of iron, of the plow, and of many of the arts of Europe, have been introduced among them.²⁸ But the populousness of every country must be in proportion to the degree of its improvement and cultivation. In spite of the cruel destruction of the natives which followed the conquest, these two great empires are, probably, more populous now than they ever were before: and the people are surely very different; for we must acknowledge, I apprehend, that the Spanish creoles are in many respects superior to the ancient Indians.²⁹

It is evident that the distinguished British economist was not exempt from prejudice.

As opposed to Abbé de Pauw, Count de Carli draws a cheerful picture of Peru, a gross distortion of reality for which Garcilaso remains responsible. The Peruvian system, he would have us believe, was an achievement of the Incas alone. It was founded on the distinction between "natural" and "legal" ownership, and it succeeded in realizing absolute happiness. Yet this author is not altogether without merit. He is wittily critical of De Pauw, who "considered everything savage that could not be found in Berlin or Breslau," and who, "by a strange metamorphosis, seems to have inherited the soul of the monk Vincent Valverde"—the monk who, at Cajamarca, presented the Inca with the Gospels and gave the signal for the slaughter. De Carli notes that Peru could not be described as a conventual state or a monastic community, for "this form of government can be effective only within a very narrow sphere." He points out, quite correctly, that the elimination of artificial needs, which resulted from the Incas' energetic policies, is the foundation of happiness in every human society.³⁰ He concludes in a burst of enthusiasm, excessive but sincere: "I am so full of the idea of the ancient government of Peru that I actually believe myself to be a Peruvian. It seems to me, at least, that I should like to see a similar system put into effect somewhere in this world. I shall manage to enjoy perfect happiness for the rest of my days."³¹

In 1789, on the eve of the French Revolution, the Academy of Lyon sponsored a discussion on the subject, "The Influence of the Discovery of America on the Happiness of Mankind." Among the works presented, that of Abbé Genty is the only one worthy of our attention.³²

This author, like Abbé Raynal, acknowledges both that property was collectively owned in the land of the Incas and that the people were very happy; but, as he considers all socialization to be an evil, he seeks, by subtle reasoning, to discover a way out of the impasse in which he finds himself. According to him, the absence of private ownership is the cause of the imperfections that one observes in Peruvian civilization: "The divers monuments and all the produc-

tions of the arts owed their existence only to prodigious efforts of patience and industry; the greater part of the national effort was wasted for lack of proper means of directing it and multiplying its effects." ³³ Finally, if the Peruvians were happy, it was only a temporary happiness; the Spaniards came at the very moment when misfortune was on the horizon. Abbé Genty's conclusion is discouraging. The whole world was bound to expect "inestimable benefits" from the discovery of America, but these "have been changed into deadly poisons by the fury of the conquerors and the ambition of the kings." ³⁴

In short, the authors seek in the Incas' system of organization—as reported to them by the small number of chroniclers whose works they know—the confirmation of their own political and economic theories.

In the absence of exact factual information, the controversies that were carried on from the sixteenth to the eighteenth century remained quite sterile. The champions of the American natives evoked the "noble savage" of literature, from Montaigne and Charon to Guendeville and Father Lafitau.³⁵ The polemical literature in opposition to this thesis likewise included great names: Buffon, Hegel, and De Maistre. Finally, there were the moderate and the hesitant, like Abbé Raynal, whom we have already cited. Some, like Abbé Pernety, sought to rehabilitate the Indians of Peru; others, like Clavigero, devoted their attention to the Mexicans, or, like Father Molina, to the people of Chile.

It is surprising to note the credulity and partiality of a number of celebrated writers. Rousseau believed that giants existed in America. Voltaire writes, quite seriously, that in the New World the lions are timid and that in Mexico the pigs have their navel on the back. De Pauw asserts that the heads of the Americans are square or cubical, that many animals lose their tails, and that the dogs do not bark.³⁶

In the nineteenth century the controversy subsided, and the scientific works described in our Appendix ("The Historical Sources") began to appear. The picture of pre-Columbian Peru became blurred, it lost its legendary quality, and public opinion

ceased to be interested in the Indians. It seemed as if in the twentieth century the Incas would scarcely be mentioned any longer, except in general histories and a few romantic works of pure imagination.³⁷ But today we see them once more emerging from the shadows.

The reason for this is to be found in the predominant interest presently taken in economic questions. The conflicts between the advocates of different systems are becoming very sharp. Specialists, statesmen, and demagogues are in search of arguments and examples. Now the doctrine opposed to the liberalism that ruled the world in the nineteenth century is socialism, and pre-Columbian Peru provides the only available example of the application of this doctrine to a great empire. The problems we have just been examining are those that we face today. We are witnessing in Europe the advance of etatism or of general syndicalism, the establishment of a controlled economy, and the destruction of individuality and hence of the elite.

The America of the pre-Columbian era provides us with valuable lessons in this respect. Let us hope that we can hold fast to them and put them to use. There is no such thing as historical inevitability. It is incumbent upon us to take action if we do not wish to become the subjects of a new Inca empire.

Conclusion

It is for the reader to fill out the picture of Peruvian society whose outlines we have been able here only to sketch. We shall be happy if we have succeeded in arousing in him even a small part of the pleasure that we ourselves have felt in perusing the pages of the old chroniclers, sharing in their astonishment, and experiencing, as they did, the sensation of discovering a new world.

Appendix

The Historical Sources*

Since the Indians had no writing, we do not possess any document written in the language that was spoken on the Andean plateau at the time of the Spanish conquest. The first chroniclers reproduced as best they could in their own language the sounds that they heard. As a result, we find the same word written in three or four different ways—which does not help to make our investigations any easier.¹ Modern authors have themselves adopted sometimes one spelling and sometimes another with the utmost capriciousness. There is, of course, an international phonetic system,² but it makes for difficult reading, and we have decided not to make use of it. We shall use instead the traditional and standard Spanish spelling.

In the absence of written documents, the Spaniards could be taught only by word of mouth. The Indians had, to be sure, a kind of *aide-mémoire*, the quipu,³ made of knotted cords, of which we have spoken in chapter 9, but it was only a very imperfect instrument. By the use of it, however, the official historians of the empire at the time of the Incas kept a record of past events and transmitted it to their successors. We know that, in addition, every province had its local historians, although we cannot say precisely whether these were special functionaries or merely tribal chiefs. Sarmiento de Gamboa tells how the Inca Pachacutec called all these historians together in the capital, questioned them at some length, and had the principal events of the reigns of his ancestors

* [This formed the first chapter of the French original.—EDITOR.]

painted on great gold-trimmed tablets, which he placed in a hall of the temple of the Sun, where only he himself and the learned men he designated might enter; then he made several Indians responsible for the care of this new kind of library.⁴

How inadequate this system of documentation was, is evident from the fact that at the time of the Spanish conquest the Indians themselves had completely forgotten the existence of the older civilizations that have since been brought to light by the excavations of archaeologists at Tiahuanaco in Bolivia, Huamachuco in Peru, and Chordeleg in Ecuador. Yet there is nothing astonishing in this. The collective memory of nations rarely goes back more than two or three hundred years,⁵ and the knotted cords are probably of fairly recent date, inasmuch as they are not found in tombs that antedate the last centuries.⁶ Even if, in agreement with Markham, we acknowledge that the Indians had an excellent memory,⁷ it is hardly to be supposed that they had any knowledge of events before the coming of the Incas.

Besides this historical record, the knowledge of which was reserved solely to the elite, and which was taught to them in the schools of Cuzco, as we have seen, there was another history, somewhat different, which was popularized by the official poets whose duty it was to compose lays and recite them on festival days. The chroniclers tell us that at the death of a sovereign a council of high officials and learned men would be held to examine the life of the late ruler. If it was considered to have been of benefit to the empire, the council would call upon the poets to give permanent form to the memory of the dead monarch's deeds so that they could be handed down to posterity. If the contrary judgment was reached, only the name of the sovereign would be cited, without comment. No official history was ever compiled with greater severity. Once the elite had pronounced their verdict, the memory of the Inca was either preserved or blotted out. Henceforth the people would remain in ignorance of those of their masters who had not known how to live up to the high demands of their position. Oblivion was the punishment imposed upon deeds that were deemed evil, though no Indian had the right to speak ill of the leader who had committed them, even when he was dead.

For example, the Inca Urco, found guilty of cowardice in having fled before the Chancas, was dethroned, and his reign was thenceforth treated with silence by the Indians.⁸ It was an ingenious method of offering posterity a list of sovereigns worthy of admiration. If we adopted a similar system in our day, contemporary history would be amazingly abridged.⁹

Thus, two separate historical records were juxtaposed in Peru: one documented, but kept secret; the other, expurgated for popular consumption.

But this is not all. The Indians were fully questioned by the European conquerors, but they did not always furnish satisfactory answers, for they often remained confused in their explanations, and they knew very well how to keep silent about anything that they wished to conceal.¹⁰ We know, for example, that the Spaniards, who wanted to get hold of mercury for the treatment of silver, discovered by chance—and not until 1563—the mines of Huancavelica, which were known to the natives.¹¹

Consequently, we must correct and complete the information given us by European writers by calling frequently upon both archaeology and ethnology.

Even though the sixteenth- and seventeenth-century chronicles continue to be the most valuable sources of pre-Columbian history in South America, it is nevertheless important to indicate at the outset the attitude with which the study of them should be approached.

No doubt the Spaniards found it very difficult to understand a people so different from themselves, and we have to take this fact into consideration. We shall thereby avoid both unjust criticism of the Peruvian institutions that the chroniclers were at a loss to explain and sweeping judgments unfair to the chroniclers themselves. We should recall, for example, that agrarian communities existed in Spain at the time of the conquest and that the conquerors, therefore, must have perfectly understood their significance in Peru. The Inca system of statistics and apportionment, on the contrary, was completely unknown to the Spaniards. In this respect it should be noted that there were essential differences among the historians according to the extent of their own knowl-

edge. The rough soldier or the credulous monk could not evaluate social institutions in the same way as the jurist who served as corregidor of Cuzco or Potosí. We must, then, assign to every writer a coefficient of education. But this education is itself not without its disadvantages. So consuming is the passion of certain authors for making comparisons with the Greeks and the Romans that it sometimes distorts their judgment. It is futile to attempt to measure the civilization of South America by the standards applied to the civilized peoples of the Mediterranean.¹²

To the handicaps born of lack of understanding must be added those which spring from the writer's personal feelings. Passionate religious, political, and social convictions have always been sources of error, in the past as well as today. We must classify both ancient and modern authors according to their bias and keep constantly in mind the position occupied by each. Some, like Sarmiento, Abbé de Pauw, and Ricardo Cappa, are favorably disposed toward the Spanish "agents of civilization" and hostile to the Incas, whom they regard as "Indian tyrants." Others, like Benzoni or Las Casas, are hostile to the Spanish "destroyers" and favorably inclined toward the "Indian martyrs." Still others, like Hanstein, given an anticlerical turn to their antagonism toward the Spaniards. A number of writers, moreover, characterizing the Inca empire as socialist, systematically extol or censure all Peruvian institutions according as they themselves may be advocates or adversaries of socialism. Finally, it must not be forgotten that among the first chroniclers some, like Garcilaso de la Vega, are supporters of the legitimate Inca, Huascar; and others, like Santa Cruz Pachacuti and Cavello Balboa, take the side of his opponent, Atahualpa.¹³ We shall thus have to assign to every historian a second coefficient: the coefficient of veracity.

In spite of their divergent views, most of the authors copied one another, and it would be possible to arrange them in a picturesque classification by attaching each work to the preceding work that served as almost its sole source. We should thus obtain chains in which the original work constituted the first link. For example, most of the eighteenth-century writers, among whom Marmontel is the most famous, find their inspiration almost exclusively in

Garcilaso, who himself made use of Blas Valera, whose manuscript has been lost. In the same fashion, several writers on Ecuador copy Velasco, who avers that he has borrowed largely from Marcos de Niza, whose work is also lost. This classification could be extended to include modern authors, but with the difference that the latter mention the ancient writers whom they take as their guides, whereas the Spanish chroniclers did not take the trouble to do this and made a principle of plagiarism. In the works of some of them one may find entire passages "lifted" from their predecessors without any credit given to the source. Herrera reproduces fragments from Ondegardo and Cieza de León without citing these writers; and the researcher, who thinks for a moment that he has found a new fountainhead of material, realizes with vexation that he is still drinking from the same stream. It is thus that one is sometimes surprised to discover in works of the twentieth century errors which go back to the sixteenth and which have been faithfully reproduced by a whole series of narrators.

Finally, this *vertical* classification could be completed by a *horizontal* classification, since each author is linked not only with his precursors, but also with his contemporaries and is borne with them on the same wave as it rises and falls. Everyone, as a matter of fact, comes under the influence of his time, and the cyclical movement manifested in all branches of human activity does not spare history. After an era of enthusiasm which, in the non-Spanish countries of Europe in the seventeenth and eighteenth centuries, exalted the Incas to the skies, came a period of criticism at the end of the nineteenth century and the beginning of the twentieth, during which they were judged very severely indeed. At the same time, certain of the earlier writers, hitherto considered excellent, were relegated to second rank, while others, who had been held suspect, enjoyed a new authority. Today Garcilaso is down and Montesinos is up.

There is in all these movements a great element of exaggeration. *We have followed the principle that no work, however suspect, should be rejected a priori.* Each one may contain some part of the truth. We must therefore take account of all that these works indi-

cate or suggest, while being careful to weigh them in conformity with the general ideas we have mentioned.¹⁴

Among the bibliographies relating to South America, we give first place to the *Bibliography of the Anthropology of Peru* by G. Dorsey (Chicago, 1898) and the *Biblioteca hispano-americana* of J. Toribio Medina (Santiago de Chile, 1898). The latter work restates and completes the information contained in the *Biblioteca americana* of León Pinelo (1807), the *Biblioteca americana vetustissima* of H. Harrisse (1866-72), and the *Biblioteca peruana* of René Moreno (1896). As bibliographies of secondary rank, we cite the *Catalogue des ouvrages relatifs à l'Amérique* of Ternaux-Compans (Paris, 1837), the *Bibliotheca americana* of J. Sabin (New York, 1868), the bulletin *Americana* (Paris, 1876-1901, but continued since 1888 by the *Bibliophile américain*), and the still unfinished *Bibliographie péruvienne* of C. A. Pret (Paris, 1903).¹⁵ There is also the very incomplete *Biblioteca americana* of Leclerc (Paris, 1878). More recent are the *Bibliography of Peru (1526-1907)* by Sir Clements Markham, which appears at the end of the English translation of Sarmiento de Gamboa's history (Hakluyt Collection, 1907) and the "Bibliographie américaniste" published in each number of the *Journal de la Société des Américanistes de Paris*. The best are the *Biblioteca andina* of Philip Ainsworth Means (New Haven, 1928), *The Economic Literature of Latin America* in two volumes (Cambridge: Harvard University Press, 1935-36), R. Vargas Ugarte's *Historia del Perú; Fuentes* (Lima, 1939), and R. Porras Barrenechea's *Fuentes históricas peruanas* (Lima, 1955).

The most important manuscripts that have come down to us have been published, some as separate works and others in collections. Among the latter we may call particular attention to the "Colección de documentos inéditos relativos al descubrimiento, conquista y organización de las antiguas posesiones españolas de América y Oceanía, sacados de los Archivos del Reino y muy especialmente del de Indias" in sixty-six volumes (Madrid, 1864-84),¹⁶ the "Colección de documentos inéditos para la historia de España" in one hundred nineteen volumes (Madrid, 1842), the "Colección de libros españoles raros ó curiosos" in twenty-four volumes, and the "Colección de libros y documentos referentes á la historia del Perú" in two series, consisting of twenty-two volumes. Several of the works of the first Spanish chroniclers have been collected in the four volumes of the "Historiadores

primitivos de Indias" that form part of the "Biblioteca de autores españoles," the publication of which was begun in Madrid in 1846.¹⁷

In grouping by categories the books and authors that have served as sources for the present work, we shall follow in the main a chronological order.

1. Eyewitnesses of the Inca Empire: the Period of the Conquest

It is only rarely that the first Spanish chroniclers provide us with information of an economic character, but what we do find must be regarded as very important. The conquistadors were primarily preoccupied with military affairs, and their writings consist for the most part of actual campaign diaries, filled with superficial descriptions of towns, reports of battles, and lists of spoils. But when they set down an observation that is interesting to us, we must hold it to be accurate precisely because they did not understand its significance and had nothing to gain by leading us into error. For example, we must accept it as a fact—since they state it on several occasions—that they came upon toll bridges, even though the toll system implies an economic organization that is hard to reconcile with socialist centralization and the absence of trade.

Some ruthless critics, nevertheless, in order to give their own opinions the appearance of stronger support, have contended that the conquerors allowed themselves to be carried away by excessive enthusiasm, that they indulged in gross exaggerations, and took huts for palaces, trails for highways, and mud villages for imperial cities. Archaeology has undertaken to prove that this was not the case and that even the description of the treasures glimpsed in the temples was not a dream. Besides, is it to be assumed that so many chroniclers could all have entered into collusion to repeat the same errors and that jurists of the time of the viceroys, charged with the task of investigating the Inca empire, could have gathered in the different provinces identical data that would all turn out to be false? Abbé Raynal, with—to use his own words—"a skepticism sometimes excessive," has treated the accounts dealing with the Incas as fables; but could the "Spanish brigands" have invented fables so well contrived?¹⁸

The first Europeans to behold the strange Empire of the Sun were Pizarro and his companions.

Francisco de Jerez, of Seville, Pizarro's secretary, set out from San Lucar in January, 1519, at the age of fifteen, entered Peru at the con-

quistador's side, fought bravely, and was present when Atahualpa was taken captive at Cajamarca. In 1534 he returned to Seville, where he wrote the account of his sojourn in the New World under the title *Verdadera relación de la conquista del Perú y provincia del Cuzco, llamada la Nueva Castilla, conquistada por Francisco Pizarro*. It was published in the same year and appears as Volume XXVI in the "Biblioteca de autores españoles" and as Volume II (Madrid, 1853) in the series entitled "Historiadores primitivos de Indias." This work is of the greatest interest from the point of view of historical fact, but for our purposes there is not much to be gleaned from it.¹⁹ It includes the account given by another soldier in the conquering army, Miguel de Estete, who, with a handful of men, and under the orders of his leader, was the first to make his way along the coast of Peru and enter the famous temple of Pachacamac. Estete has a special place in history, since it was he who seized the Inca at Cajamarca and wrested from him the insignia of empire. The complete text of his account is to be found in the *Boletín de la Sociedad ecuatoriana de estudios históricos americanos* for 1918.

The brief manuscript of Juan de Sámanos, which was discovered in the Imperial Library at Vienna, also deserves to be placed at the beginning of this list of primary sources, for it deals with the first Spanish expeditions on the Peruvian coast.²⁰

Very short also, but important, is a letter from Hernando Pizarro, dated November, 1533: "Carta á los magníficos señores, los señores oidores de la Audiencia real de S. M., que reside en la ciudad de Sto. Domingo." It has been translated into English as "Letter to the Royal Audience of Santo Domingo, November, 1533" and appears in *Reports on the Discovery of Peru* (London: Hakluyt Society Publication No. 47, 1872), pp. 11-127.²¹

Cristóbal de Molina, who first followed Pizarro to Peru and then Almagro to Chile, lived at Cuzco and Lima, left for Santiago de Chile in 1556, and died in 1578. Around 1552 he wrote a "Relación de la conquista y población del Perú," which has been published in our time in the series of books entitled "Colección de libros y documentos referentes á la historia del Perú," but it contains little information of interest to us.

Juan de Betanzos, on the contrary, who came to America with Francisco Pizarro, has been of great assistance to us. Married to a sister of Atahualpa, speaking the Quechua language, official interpreter for the government, he has left a *Suma y narración de los Incas que los indios*

llamaron Capaccuna, que fueron Señores de la Ciudad del Cuzco y de todo lo á ella sujeto, a very lively, but unfortunately incomplete, history of ancient Peru, dated 1551, and published in Madrid in 1880 as Volume V of the "Biblioteca hispano-ultramarina."

Pedro Sancho de la Hoz followed Jerez as Pizarro's secretary and official chronicler of the conquest. His account forms a sequel to that of his predecessor and was finished at Jauja on July 15, 1534.²² Published in Volume V of the "Colección de libros y documentos referentes á la historia del Perú" (Lima, 1917),* it contains a frequently quoted description of Cuzco, but it is of little interest to us.

The same may be said for the narrative of Pedro Pizarro, who is primarily concerned with events that occurred after the conquest.²³

Marcos de Niza, a Franciscan, born in Nice, is, to use the phrase of Philip Ainsworth Means, a semimythical personage, for his work on the pre-Columbian history of Quito, mentioned by Father Velasco, has been lost.

2. *Post-Conquest Arrivals: the Era of Transition*

These are the writers who came to Peru immediately after the conquest and thus did not behold the Inca empire in all its splendor, but who saw its remains. There are only five names on the list: four Spaniards and one Italian.

Agustín de Zárate, who was sent to Peru about 1543 as "Treasurer of the Crown," returned to Spain about 1549 and wrote his narrative in secret; he did not have it published until 1555 in Antwerp.²⁴ The author details the customs of the natives with kindness, but he did not know the Quechua language, and his work remains extremely superficial.

Pedro de Cieza de León is certainly one of the most illustrious among the chroniclers of Latin America. Although he visited the empire very shortly after the conquest, we cannot include him among those who actually saw it. What he describes are already the ruins left by the Spaniards, and he remarks that in the space of a few years the appearance of the country had changed. He is, in fact, the painter of that period which we call the transition, between the era of the great initial struggles against the Indians and against the Spaniards them-

* [It has been translated and edited by P. A. Means under the title *An Account of the Conquest of Peru* (New York: Cortés Society, 1917).—EDITOR.]

selves and that of the systematic organization of the colony under the viceroys.

A native of Seville who left Spain at the age of fifteen, Cieza traveled through the New World as a common soldier for seventeen years, and he has left us a work of amazing richness, the *Crónica del Perú* in three parts. The first part—finished about 1550, at the time of the author's return to Spain, and published in 1553 in Seville and 1554 in Antwerp—consists of an extremely detailed and exact description of the route taken by the writer from the north to the south of the empire.* All the villages, all the centers of supplies, all the roads are mentioned; even the distances from town to town are carefully noted. It is a veritable Baedeker of the Peru of that day. The second part, long unknown, and wrongly attributed by Prescott to Sarmiento, is a historical and social study of the Incas. It was published only in 1880 as Volume V of the "Biblioteca hispano-ultramarina" (Madrid) and has served as one of our principal sources.** The third part, which appeared in 1877, is taken up with events that took place during the colonial period. Cieza de León, who simply records what he saw and repeats what he heard, with complete disinterestedness, is one of the authors in whom we can place the greatest confidence.²⁵

Diego Fernández de Palencia, who served in Peru in the anti-Pizarro party, published his *Primera y segunda parte de la historia del Perú* in Seville in 1571. Ignorant of the Indians' language, he deals primarily with post-conquest history, making use of the reports of Pedro de la Gasca. His book is so biased that it was banned by the Council of the Indies.²⁶ At the end of the volume, however, Palencia sums up Inca history in a few pages, and one is surprised to discover in these brief notes original bits of information found nowhere else.²⁷

P. Gutiérrez de Santa Clara, also a soldier, was a mestizo who was born in the Indies at some time between 1518 and 1524. He served in turn under Francisco Pizarro, the viceroy Nuñez Vela, Gonzalo Pizarro, and the presiding judge La Gasca, changing his allegiance with astonishing ease, always ranging himself on the side of the victor. His book, published in Madrid in 1904 in four volumes under the title

* [This has been translated into English under the title *The Travels of Pedro de Cieza de León, A.D. 1532-1550* (London: Hakluyt Society Publication No. 33, 1864).—EDITOR.]

** [Translated into English under the title *The Second Part of the Chronicle of Peru* by Sir Clements R. Markham (London: Hakluyt Society Publication No. 68, 1883).—EDITOR.]

Historia de las guerras civiles del Perú y otros sucesos de las Indias, must have been written day by day. He left Peru for Mexico before 1590. It is indeed regrettable that he had so little curiosity about pre-Columbian history, for his narrative is full of animation, his characters are very much alive, and he has a real literary style. Unfortunately, he devotes only a few chapters to the Incas (Vol. III, ch. xlix *et seq.*), and these have been of little help to us.²⁸

Girolamo Benzoni, a native of Milan, landed at Guayaquil in 1547, but was obliged to leave Peru three years later, when the governor, Pedro de la Gasca, decided to expel all foreigners. After spending four years of illness in Nicaragua, he returned to his native land and at Venice in 1565 published *La historia del Mondo Nuovo*, which was reprinted in 1572. Hostile to the Spaniards, a man of little education, but with an inquiring mind, Benzoni speaks of Peru only in the third section of his work, and even there confines himself to recounting the history of the conquest—in which he had taken no part—and making a few brief comments on the provinces he had passed through, Quito in particular. His book is illustrated with naive pictures.²⁹

3. *Collectors of the First Reports, Not Themselves on the Scene*

There are a certain number of writers who did not themselves go to Peru, but who collected the records of the conquerors. Among the authors who deserve to be listed under this head the best known is Bartolomé de las Casas, Bishop of Chiapas, whose name was, for several centuries, more renowned in Europe than any of the rest. The champion of the Indians, he stood in the minds of many generations as the very symbol of compassion and charity.³⁰ Today, when we can judge him in all impartiality, we must note, side by side with very noble and generous sentiments, a regrettable tendency to exaggeration. He allowed himself to be carried away by emotion, and he is in great part responsible for the innumerable misconceptions in regard to the Spanish colonization in America that were and still are current in Europe.³¹ By dint of representing the Indians as martyrs, the eminent ecclesiastic has succeeded in making us consider the Spaniards solely as executioners. He is sectarian, violent, and narrow-minded, and his obvious bias does great injury to the cause he is pleading. Moreover—contrary to the belief long held by many³²—he never went to Peru. All his information is second-hand, and he shamelessly plagiarizes Cieza de León, Cristóbal de Molina, and Francisco de Jerez. Finally, he is

very hard to read. In addition to many repetitions and imperfections in arrangement, he insists upon interlarding his narrative with long dissertations on Greek and Roman antiquity and with irrelevant Latin quotations. If all the French and English philosophers and historians who have in the past extolled the merits of the Bishop of Chiapas read his works attentively and took an interest in them, we must conclude that our ancestors were people of strong character indeed.

Las Casas' best-known work is his *Brevísima relación de la destrucción de las Indias*, which was presented to the Emperor in 1542 and published in 1552. It is a pamphlet full of errors, incapable of being used for any scientific work whatever. On the other hand, we have made use of his *Apologética historia sumaria*,³³ which appears in the "Nueva biblioteca de autores españoles" and as Volume I of the "Historiadores de Indias" (Madrid, 1909), and from which Don Marcos Jiménez de la Espada has excerpted twenty-seven chapters to form Volume XXI of the "Colección de libros españoles raros ó curiosos" under the title *De las antiguas gentes del Perú*.³⁴

Francisco López de Gómara, who was born in Castile about 1510, was a churchman, a former student at the University of Alcalá, and chaplain to Hernando Cortés. A man of cultivated and finely critical mind, he wrote a bulky volume called *Primera y segunda parte de la historia general de las Indias*, which appeared in Saragossa in 1552; but he manifested such bias in favor of Cortés, upon whom he sought to heap all the glory of the conquest of Mexico, that his book was condemned by the Council of the Indies. He has an agreeable literary style, which is unusual among the chroniclers of that age, but serious mistakes have been discovered in his reports, some of which were already noted by Garcilaso de la Vega. His collected works appear as Volume XXII in the "Biblioteca de autores españoles" and as Volume I of "Historiadores primitivos de Indias" (Madrid, 1852) under the title *Hispania victrix* in two parts: *Historia general de las Indias* and *Conquista de Méjico*.³⁵

Gonzalo Fernández de Oviedo y Valdés was born in Madrid in 1478. He left Spain as Inspector for the Crown in 1514, spent some time on Santo Domingo, and died at Valladolid in 1557. He wrote a *Historia general y natural de las Indias, islas y tierra firme del mar océano*, which was published between 1526 and 1547. The work comprises four huge volumes, published at Madrid in 1851-55, in which the reader has considerable difficulty in orienting himself.³⁶ Oviedo is a capable writer, who received a good education in his youth, and conscientious;

but, not having been to Peru himself, he does not always draw the line carefully between the true and the false in the accounts that are given to him; he accumulates observations without sorting them out; and he misuses what he remembers of his Latin, dragging in Pliny and Vergil where they have no place at all.

Antonio de Herrera, chronicler to the King of Spain, is the typical compiler. Plagiarizing brazenly from his predecessors, he wrote, in 1554, the vast *Historia general de los hechos de los castellanos en las islas i tierra firme de el mar océano*, which, divided into eight sections of ten chapters each, was published in four volumes in Madrid between 1601 and 1615.³⁷

Finally, a little later, in 1575, a Spaniard who describes himself as chronicler of the Order of Saint Augustine, J. Román y Zamora, brought out a two-volume work at Medina del Campo, *Repúblicas de Indias; idolatrías y gobierno de México y Perú antes de la conquista*,³⁸ which forms an interesting general study.

4. *Collectors, in Peru, of Accounts by the Incas' Descendants: the Era of Colonization*

Here we enter upon the period of documentation and synthesis. The disturbances have come to an end, but already the world of the Incas belongs to times past. It was during the second half of the sixteenth century that Spaniards whose achievement is of greatest value carried on the first researches designed to throw light on the lost empire. In ordering official investigations, the viceroys themselves were the initiators of this great movement to enlarge the borders of knowledge.

Garcilaso de la Vega holds first place among the historians of this period. Of mixed blood, son of a Spaniard who had come to Peru with Pedro de Alvarado and of an Indian woman of the royal family, the niece of Huayna Capac, he was born at Cuzco itself in 1539. He called himself Inca without any right to that appellation inasmuch as he was descended from the Peruvian sovereign through the female line and only male descent could authorize the use of the title. He spent his youth among the last survivors of the Incas, speaking Quechua and storing in his memory the historical accounts and the legends he heard from his grandparents. At the age of twenty he left Peru and, after several years of the active and diversified existence of a captain in the Spanish armies, he retired, about 1590, to Cordova and there wrote the

history of his native land under the title³⁹ *Comentarios reales que tratan del origen de los Incas, reyes, que fueron del Perú, de su idolatría, leies, y gobierno, en paz y en guerra: de sus vidas y conquistas: y de todo lo que fué aquel imperio y su república, antes que los españoles pasaron á él.** This Peruvian must indeed have had a very trustworthy memory, for he cites the names of no less than three hundred twenty towns and is never mistaken about their location.⁴⁰ To be sure, he was assisted, to a certain extent, by letters from correspondents in America, for he always kept in touch with his old friends in Cuzco; and, in addition, he had access to a manuscript, now lost, written by a Jesuit mestizo named Blas Valera, which seems to have been of great importance.⁴¹ Garcilaso died in Spain in 1616.

Although he was long considered the greatest historian of Peru and is still in our time compared to Herodotus and Xenophon,⁴² his reputation has nevertheless suffered some decline on account of his too obvious bias. Yet we do not reproach him, as some have unthinkingly done, for having humbled himself before the conquerors and "licked the hands that slew his people."⁴³ To speak in this way is to show no understanding of the Indian point of view. Garcilaso was a supporter of Huascar, the legitimate son of the Inca, and looked upon the Spaniards who had dethroned the usurper Atahualpa as liberators.

This Peruvian writer remains, above all, the Incas' admirer. No one before him had spoken of them with so much enthusiasm and filial piety. He thus endeavored to throw a veil over his ancestors' deeds of cruelty, and some of what he recounts should be regarded as suspect. But his exaggerations and deliberate omissions are themselves instructive, for they show the state of mind of the Indians, living in perpetual nostalgia for the past. Garcilaso has the great virtue of presenting an admirable synthesis of his race, and his commentaries are indeed the "reflection of the soul of vanquished peoples."⁴⁴

His book is very long and overelaborated, but it is full of information of the greatest interest. It is easy reading, and its style is clear and simple. On the other hand, the general arrangement is very poor. Bits of information of an economic or social character are scattered here and there in capricious fashion. The description of the routes of communication, for instance, or of the fiscal system, is sandwiched in between the political and military accounts of two reigns.

Pedro Sarmiento de Gamboa stands in notable contrast to Garcilaso.

* [Translated into English and edited by Sir Clements R. Markham (London: Hakluyt Society Publications Nos. 41 and 45, 1869-1871).—EDITOR.]

A pure-blooded Spaniard, a man of learning, a good observer, and a highly meritorious official much esteemed by the viceroy—who on two occasions made it possible for him to escape the Inquisition—Sarmiento was also a great sea captain, who discovered the Solomon Islands in 1567 while under the orders of Alvaro Mendaña, invented some nautical instruments, and pursued the ships of Sir Francis Drake beyond the Strait of Magellan, which he explored.⁴⁵ A rough and forthright man, he had no pity for the Indians and showed no regret over the execution of the last Inca in 1571. His book, written around 1572, was discovered at Göttingen in 1893 by Professor W. Meyer and was published at Berlin in 1906 under the title *Geschichte des Inkareichs*.⁴⁶ Sarmiento's work* is of extremely great interest, but it is open to question on several points inasmuch as the author was very biased. This is not surprising, however, since the book was written on specific orders from the viceroy, who was anxious to efface the impression produced in Europe by the publication of Las Casas' work, so full of accounts of the atrocities committed by the Spaniards.⁴⁷ Accordingly, Sarmiento insists upon the cruelty of the Incas, whom on every occasion, and even without any occasion, he treats as barbaric tyrants. But Markham is mistaken in maintaining that the viceroy himself interpolated sentences in Sarmiento's manuscript that were intended to blacken the memory of the Peruvian sovereigns. R. Levillier has refuted these allegations.⁴⁸ On the whole, however, with the exception of these few passages and if the author's bias is taken into account, the work is constructed on scientific lines. It is the result of long journeys and patient research, and in Peru itself it was read to forty-two Indian notables, especially called together for the purpose, who declared that it was in agreement with the facts.

The ecclesiastical historians, however inclined they may be to emphasize the study of religious questions that are of only indirect interest to us here, do furnish us incidentally with valuable information concerning pre-Columbian society. Miguel Cavello Balboa, who reached America in 1566, lived first in Bogotá and then in Quito, where, between 1578 and 1586, he wrote his *Miscelánea austral*. He espoused the cause of the Quito faction and showed himself to be a resolute champion of Atahualpa. In 1594 he was sent on a mission among the Chuncos, northwest of Cuzco, and after that he lived in Lima. According to the information kindly supplied to us by Philip Ainsworth

* [It has been translated and edited by Sir Clements R. Markham under the title *History of the Incas* (Cambridge: Hakluyt Society, Series II, No. 22, 1907).—EDITOR.]

Means, the manuscript attributed to Balboa, which is now in the New York Public Library, is merely a copy, probably distorted, dating from the beginning of the eighteenth century, and the original may very well be in a Spanish monastery. The third part of the *Miscelánea* was translated into French by Ternaux-Compans under the title *Histoire du Pérou* (Paris, 1840), but the translation is very imperfect, with entire chapters omitted and others mutilated. A Spanish translation of the French translation appears in Volume II of the second series of the "Colección de libros y documentos referentes á la historia del Perú." It will be interesting to confront this text with the original when the latter is rediscovered.

Cristóbal de Molina, who had the same name as a writer we have mentioned above and was for a long time confused with him, was born in Cuzco and was a priest in that city. He was probably, like Garcilaso, of mixed blood. Between 1572 and 1591, he wrote a *Relación de las fábulas y ritos de los Incas*, which was published in 1916 in the "Colección de libros y documentos referentes á la historia del Perú." *

Much more interesting is Father J. de Acosta, a Jesuit and a professor of theology, who was in Peru from 1570 to 1586, chiefly in Lima, and has left us a *Historia natural y moral de las Indias*, which was published in two volumes in Seville in 1590 and thus antedates Garcilaso's *Comentarios*.** The instructive passages to be found in this work are unfortunately engulfed in a sea of naive narrative and futile controversies.⁴⁹

Finally, we come to the Spanish jurists and high officials who constitute our chief source of documentary material. The King of Spain, desirous of receiving accurate information, had tours of inspection made in New Granada, and he was so well pleased with the result of these inquiries that in a letter of November 7, 1537, he gave an identical order to the viceroy of Peru. Under the title *Relaciones geográficas de Indias*, Jiménez de la Espada published in Madrid, from 1881 to 1897, the replies made by the officials of the different provinces to a very detailed questionnaire sent out by the higher authorities. Certain questions that concern the condition of the territory before the con-

* [It was translated and edited by Sir Clements R. Markham under the title "The Fables and Rites of the Yncas," *Rites and Laws of the Yncas* (London: Hakluyt Society, 1873), pp. 1-64.—EDITOR.]

** [An English translation, edited by Sir Clements R. Markham, appeared under the title *The Natural and Moral History of the Indies* (London: Hakluyt Society Publications Nos. 60 and 61, 1880).—EDITOR.]

quest are of direct interest to our investigation. Several of these replies, however, bear a strange resemblance to one another. It would seem that the interrogated officials passed their documents around to one another in order to facilitate their task. A little later, Francisco de Toledo, who was viceroy from 1569 to 1581, assigned to Sarmiento the writing of the justificatory history mentioned above. He himself at that time collected items of information that have been brought together in Volume XVI of the "Colección de libros españoles raros ó curiosos" under the title *Informaciones acerca del señorío y gobierno de los Ingas, hechas por mandado de Don Francisco de Toledo, virrey del Perú, 1570-72* (Madrid, 1882). Finally, at the request of the King in the memorandum of Badajoz dated September 23, 1580, an inquiry was opened, which resulted in the publication of a series of reports.

Among the documents drawn up at these different dates, we have made particular use of the following, which contain information of an economic character:

"Relación general de la disposición y calidad de la provincia de Guamanga," by Damián de la Bandera (1557), who was corregidor of Potosí, and whose report is in Volume I of the *Relaciones geográficas*.

Relación y declaración del modo que este valle de Chíncha y sus comarcas se gobernaban antes que hubiese Ingas y después que los hobo hasta que los cristianos entraron en esta tierra, by Fray Cristóbal de Castro and Diego de Ortega Morejón. This report, which is extremely important from the point of view of the Incas' governmental administration, is lost in the midst of a mass of other documents in Volume L of the "Colección de documentos inéditos para la historia de España." It is dated 1558.

"Relación del origen, descendencia, política y gobierno de los Incas," by Fernando de Santillán, magistrate at Lima, and later president of the Audiencia of Quito, who died at Lima in 1576. This is a capital work from the standpoint of administration and full of a generous feeling of compassion for the Indians. Written about 1572, it was published by Marcos Jiménez de la Espada in *Tres relaciones de antigüedades peruanas* (Madrid, 1879), pp. 1-133.

"Descripción de la ciudad de Quito y vecindad de ella," by the Licentiate Pedro Rodríguez de Aguayo, which was written in 1576 and published in Volume III of *Relaciones geográficas*.

The principal documents which have come down to us are those we owe to the pen of Juan Polo de Ondegardo, corregidor of La Plata, in the province of Charcas, and later of Cuzco. He was a good administra-

tor and wise jurist, who went to Peru some time before 1545 and remained there until his death in 1575. He had a great admiration for the administrative system of pre-Columbian Peru and tried to prevent the execution of the Inca Tupac Amaru by the viceroy.⁵⁰ His first report, of which the manuscript is in the National Library of Madrid, is dated 1560. The title is *Relación del linaje de los Incas y como extendieron ellos sus conquistas* (Volume IV of the "Colección de libros y documentos referentes á la historia del Perú"). It was translated by Markham in his *Rites and Laws of the Yncas* (London, 1873), pp. 151-171.⁵¹

Volume XVII of the "Colección de documentos inéditos del Archivo de Indias" contains a second report of prime importance, the *Relación de los fundamentos acerca del notable daño que resulta de no guardar á los indios sus fueros*, dated June 26, 1571; and this is followed by an anonymous piece of writing entitled *De la orden que los yndios tenyan en dividir los tributos é distribuyrlos entre sí*, which is likewise attributed to Ondegardo. To these essential works must be added a *Relación de los adoratorios de los indios en los cuatro caminos (zeques) que salían del Cuzco*, which is reprinted in Volume IV of the "Colección de libros y documentos referentes á la historia del Perú," pp. 3-44, and which Cobo appropriated in his *Historia del Nuevo Mundo* without citing the name of the author; and a treatise entitled *Los errores y supersticiones de los indios*, published in Volume III of the same collection, pp. 1-43. Two further texts must be attributed, according to Carlos Romero, to the same author: the first, under the title *Copia de carta que según una nota se hallaba en el Archivo general de Indias, y que hemos rectificado . . .*, appears in Volume XIII of the "Colección de documentos inéditos para la historia de España" (Madrid, 1848), p. 425, and in Volume IV of the "Colección de los libros y documentos referentes á la historia del Perú"; the second, entitled *Copia de unos capítulos de una carta del licenciado Polo para el Dr. Francisco Hernández de Liébana*, was published in Volume VI of the "Nueva colección de documentos inéditos para la historia de España" (Madrid, 1896), p. 274, and reprinted in Volume IV of the "Colección de libros y documentos referentes á la historia del Perú." The first of these letters is a defense of the legitimacy of the Spanish sovereignty in the Indies. The second treats of administrative measures that have already been made the subject of other reports.⁵²

The reading of Polo de Ondegardo's works is most instructive, but it is also most difficult because of the absence of paragraphing and,

indeed, of any breaks whatever in the text. In the first of these documents we found a sentence that covered no less than four and a half pages, and it is not the only one of its kind.

Alongside this writer we may set two specialists in juridical and social questions: Francisco Falcón, who, in his *Representación hecha en concilio provincial sobre los daños y molestias que se hacen á los indios*, written in 1582 and reprinted in Volume XI of the "Colección de libros y documentos referentes á la historia del Perú," vigorously pleads the cause of the Indians; and Juan de Matienzo, a member of the Audiencia of Las Charcas in La Plata in 1561, who enjoyed great renown as a jurist. Matienzo, like Sarmiento, took a stand opposed to that of Las Casas. He represented the Incas as despotic usurpers and characterized the Indians as lying, lazy, cruel, and pusillanimous. His work, entitled *Gobierno del Perú*, is to be found in the "Publicaciones de la sección de historia de la facultad de filosofía y letras de Buenos Aires" for 1910.⁵³

5. *The Spanish Historians of the Seventeenth Century*

We have come a long way from the heroic era of the conquest. It is more and more difficult to gather information. And yet even after the year 1600 we find writers of the first rank. They are all ecclesiastics except for Juan de Santa Cruz Pachacuti Yanqui Salcamayhua, an Indian, as his name indicates, whose book, *Relación de antigüedades deste reyno del Perú*, dated 1620, has little of interest to offer us, in spite of the author's knowledge of the Quechua language.⁵⁴

Around the year 1605, Fray Reginaldo de Lizárraga, a Dominican, wrote a book called *Descripción breve de toda la tierra de Perú, Tucumán, Rio de la Plata y Chile*, which appears among the "Historiadores primitivos de Indias" (Volume XIV in the "Nueva biblioteca de autores españoles"), but this provides us with hardly any information. More helpful is Father Martín de Morua, of whose life little is known, but whose work is very important. Morua, who belonged to the Order of Mercy, lived for a long time in Cuzco and at Capachica, on the shore of Lake Titicaca. In 1590 he completed his *Historia del origen y genealogía real de los reyes Incas del Perú, de sus hechos, costumbres, trajes y manera de gobierno*, a comprehensive chronicle in which the reader finds the history of the queens and of the eminent military commanders. It was printed in the "Colección de libros y documentos referentes á la historia del Perú" (Volume IV of the second series).

Morua speaks of the social and economic system of the Incas, but he sometimes becomes repetitious or contradicts himself, and several of his statements are certainly erroneous.

Of less importance for us is Fray Antonio de la Calancha, an Augustinian, born at Chuquisaca in Bolivia. He was a good observer who knew the language of the country, but biased and excessively credulous. He has left us a *Corónica moralizada del orden de San Agustín en el Perú, con sucesos egemplares vistos en esta monarquía*, published at Barcelona in 1638. De la Riva-Agüero calls it "a monstrous mass of pious dissertation, carping criticism, intellectual affectation, geography, history, and monastic doings."⁵⁵ Certainly there are few books so tiresome as this even in Spanish-Peruvian literature. Its naive observations and interminable sermons weary the most courageous reader.⁵⁶

Father Pablo José de Arriaga, who came to Peru in 1585, wrote a book which rivaled Calancha's in length. This work, the *Extirpación de la idolatría del Perú*, published at Lima in 1621, is concerned with little except religious subjects.⁵⁷

Shorter and more fully documented is the work of Father Anello Oliva, a Jesuit from Naples who lived for a long time in Peru and who asserts that he received his information from an Indian named Catari who was guardian of the quipus at the court of the last Incas.⁵⁸ His manuscript, dated 1631, is entitled *Vida de varones ilustres de la Compañía de Jesús de la provincia del Perú*. The first section, which treats of the history of Peru, is the only part that interests us. It was published in a French translation by Ternaux-Compans at Paris in 1857, and in Spanish at Lima in 1895.

It was another Jesuit who, between 1615 and 1621, wrote the "Relación de las costumbres antiguas de los naturales del Pirú," an anonymous work of which the text forms part of J. de la Espada's *Tres relaciones de antigüedades peruanas*, reprinted in the *Revista del Archivo histórico del Cuzco*, No. 4, 1953.⁵⁹

Finally, Father Alonso Ramos Gavilan, in the first part of his *Historia de Nuestra Señora de Copacabana*, published at Lima in 1621, deals with ancient customs and almost exclusively with different forms of idolatry.⁶⁰

The writings of all these monks must be subjected to a particularly critical scrutiny, for they are extremely naive and are ready to believe anything and to proclaim a miracle on every occasion.⁶¹

Two writers of great merit make their appearance toward the middle of the seventeenth century: Montesinos and Cobo.

The Jesuit father, Fernando Montesinos, is beyond question the most discussed of all these authors on Peru. His extravagant chronologies and his bold assertions were for a long time an object of derision; but today we find him slowly rising in prestige, and, by a natural reaction, he is coming to be accepted as "one of the most honest and learned of the historians of Peru."⁶²

Montesinos was one of the first authors to assert that the Peruvians at one time knew the art of writing and that great civilizations had existed before that of the Incas.⁶³ Although it has not been possible to verify the first assertion, the second has been amply confirmed by archaeological discoveries. Certain recent excavations have even proved the accuracy of several details. Thus, the discovery in Ecuador of articles of Chilean origin establishes the truth of Montesinos' statement that for the conquest of the provinces to the north the Incas used troops recruited from the southern regions of the empire. De la Riva-Agüero maintains that Montesinos has been "too much rehabilitated";⁶⁴ and we are inclined to agree, for a number of "absurd legends" are to be found in his work.⁶⁵ We must neither follow him with closed eyes nor refuse to consult him. Unfortunately, he is more concerned with the history of events than of institutions.

Although he came late to the scene, Montesinos must certainly have been in possession of precious information, for he bought manuscripts prepared under the direction of Fray Luis López, Bishop of Quito, and, as we have said, he was probably acquainted with part of the work, now lost, of Blas Valera. For more than fifteen years he traveled about in Peru, where he was parish priest at Potosí and was twice sent on missions of inspection. He boasts of having crossed the Andes sixty times. At once churchman, adventurer, and speculator, harsh toward the Indians, whom he catechized by force, he is one of the most characteristic figures of the colonial period.

Montesinos' *Memorias antiguas historiales y políticas del Perú*, written in 1652, was published at Madrid in 1882 in Volume XVI of the "Colección de libros españoles raros ó curiosos," pp. 1-76.* It was translated into French around 1840 by Ternaux-Compans.⁶⁶

Very different is Father Bernabé Cobo, also a Jesuit, who is lacking in originality and conscientiously pilfers from his predecessors, but who brings us a large number of facts on economic and social conditions in ancient Peru. He lived for sixty-one years, from 1596 to 1657,

* [It has been translated into English and edited by P. A. Means (London: Hakluyt Society Publications, Series II, No. 48, 1920).—EDITOR.]

in the Spanish Indies, most of the time in Mexico or in Lima, and he provides abundant information about these countries, with which he was admirably acquainted. His greatest fault is in having arrived so late, almost a century after the conquest. His *Historia del Nuevo Mundo*, in four bulky volumes, was published at Seville between 1890 and 1895.

6. *The Period of Transition: the Eighteenth Century*

Very few of those who lived in Peru or traveled through it in the eighteenth century took the trouble to study the Indians and their history. It was a period of intellectual quiescence: the time of the conquest was over; the day of modern criticism had not yet dawned. Even the religious chroniclers were few in number. We can cite hardly any except Juan José del Hoyo, parish priest of Tarma in 1772, who described the customs of the Indians of his time in his *Estado del catolicismo, política y economías de los naturales del Perú que se dicen indios y medios simplisimos de corregir*, which was published in Volume IV of the "Colección de libros y documentos referentes á la historia del Perú."⁶⁷

The most important writings of this period are those of European travelers, but they are primarily descriptive, and we have had recourse to them only to discover what still survived into their own time. A. Frézier, author of a *Relation du voyage de la mer du Sud aux côtes du Chily et du Pérou* (Paris, 1716) and S. Durret, who wrote an entertaining narrative of a *Voyage de Marseille à Lima* (Paris, 1720), scarcely penetrated at all into the interior of the country.⁶⁸ Jorge Juan and Antonio de Ulloa, who went to Peru with the first French geodetic mission, produced, in 1748, a *Relación histórica del viaje á la América meridional hecho de orden de S. M. para medir algunos grados de meridiano terrestre*, which was published at Madrid in five volumes. This was followed by a history of Peru, taken from Garcilaso, none of it of much value.⁶⁹ One might have hoped for something better from scholars, but these authors too often give free rein to their imagination and manifest a hostility toward the Indians that is little short of ferocious. Yet one must recognize the undeniable interest of their *Noticias secretas de América* (London, 1826), which they prepared for the King of Spain, and which throws a singular light on the Spanish colonization. P. Bouguer, who took part in the same mission, does not speak of the Incas in his account, entitled *La figure de la terre* (Paris, 1749).

W. Bayer, in *Reize naar Peru* (Amsterdam, 1773), offers some items of information about Cuzco and Lake Titicaca (ch. xi-xv).

As for the works on Peru written in France and England before the nineteenth century by authors who had not crossed the ocean, they enlighten us less about the history of the ancient Indians than about the state of mind of the Europeans of that day. We have given them some study in the last chapter of this book, and here we merely note the names of five outstanding figures among them.

Abbé de Pauw, a philosopher-priest who was admired by Voltaire, found pleasure in taking a point of view diametrically opposed to that of Rousseau by systematically disparaging the indigenous inhabitants of America in the three volumes of his *Recherches philosophiques* (Berlin, 1768-69). He was sharply criticized by Count J. R. de Carli, who, in a not unnatural gesture of reaction, wrote what amounted to a veritable defense of the Incas: *Delle lettere americane*, in two volumes (Florence, 1780, translated into German in 1785, and into French in 1788).⁷⁰

Abbé Raynal's *Histoire philosophique et politique des établissements et du commerce des Européens dans les deux Indes* (Paris, 1770), in spite of its exasperating sentimentality, its digressions, and its contradictions, offers a great many interesting observations that do not justify the discredit into which it has fallen. The same may be said of the work of Abbé Genty, *L'influence de la découverte de l'Amérique sur le bonheur du genre humain* (Paris, 1787).⁷¹ On the other hand, William Robertson's biased and superficial two-volume work entitled *The History of America* (1777) is far from deserving the success it attained.⁷²

7. Modern Authors: The Nineteenth Century

The nineteenth century provides us with a great variety of texts of all kinds and all qualities. Archaeology and ethnology contribute the fruits of their valuable co-operation, but these sciences are so intimately involved with political and economic history that it is often difficult to know whether to characterize certain authors as archaeologists, ethnologists, historians, or sociologists.

J. Skinner's *The Present State of Peru* (London, 1805), put together from articles in the *Mercurio peruano*, is of only moderate interest for us, but in its French translation it is accompanied by an important description of the provinces of the Andean plateau written by mis-

sionaries at the end of the eighteenth century and entitled *Voyages au Pérou faits dans les années 1791 à 1794 par les Pères Manuel Sobreviela et Narcisso y Barcelo* (Paris, 1809, 2 vols.).⁷³

The famous German naturalist and traveler Alexander von Humboldt and the botanist Aimé Bonpland recounted their *Voyage aux régions équinoxiales du nouveau continent* (Paris, 1814-25, 3 folio vols.; and Paris, 1816-31, 13 vols.), to which they appended two atlases, one geographic, the other pictorial. The latter was reprinted in two volumes (Paris, 1816-24) under the title *Vues des Cordillères et monuments des peuples indigènes de l'Amérique*.

At Paris Alphonse de Beauchamp published, in 1808, his *Histoire de la conquête et des révolutions du Pérou*, a two-volume work of which the first contained a very superficial history of the Incas; and the Chevalier de Propiac, in 1824, issued his *Beautés de l'histoire du Pérou*, a naive treatise illustrated with drawings that do honor to the imagination of their author. In 1827, John Ranking wrote, in London, his *Historical Researches on the Conquest of Peru, Mexico, Bogotá, Natchez and Talomeco in the Thirteenth Century by the Mongols*, with a supplement in 1831, a work of amusing fantasy. Alcide d'Orbigny, in his study of *L'homme américain* (Paris, 1839), devotes only a few pages to the Incas and precisely follows Garcilaso and Acosta. The work of J. M. de Córdoba y Urrutia in *Las tres épocas del Perú* (Lima, 1844) is very cursory.

The most important source book of this period is William H. Prescott's *The History of the Conquest of Peru*, first published in New York in March, 1847, and immediately brought out in London and speedily translated into French, German, Spanish, and Dutch. Conscientious and clear, the work draws its inspiration chiefly from Garcilaso's *Comentarios* and the second part of Cieza de León's *Crónica*; but today it is already outdated, and it is not without gaps. A good French translation, in three volumes, was published at Paris in 1861.

It was in Prescott and Garcilaso that Herbert Spencer found the facts of which he made use, but the English philosopher had no desire whatever to study ancient Peru. He was simply seeking, in the history of that state, for confirmation of his doctrines. In his famous *Principles of Sociology* (1879), he took the Inca empire as the typical representative of a military society, and he made a number of erroneous statements which we have had occasion to take up in the text.

In South America itself, Sebastian Lorente, a Spaniard by birth, a teacher in Peru from 1842 to 1884, gives us in his *Historia antigua del*

Perú (Lima, 1860) a cursory glimpse of the ancient civilization of that country. His book has no documentary references and draws its inspiration almost solely from Garcilaso, but it is written in such elegant language that the reader remains wholly charmed. It is a typical work of popularization.

In the second half of the nineteenth century, a large number of writers embarked upon Peruvian journeys that were often actual explorations and began to investigate the coast and the plateau. The influence of Garcilaso, which we have noted hitherto, went into a progressive decline.

M. E. de Rivero and J. D. von Tschudi, in their *Antigüedades peruanas* (Vienna, 1851),⁷⁴ published in translation at London in 1853 and at Paris in 1859, supply us with a great deal of information, of which some is erroneous. Von Tschudi felt obliged to declare that he took no responsibility for hypotheses "devoid of any scientific foundation" that appeared in this book, the text of which was the exclusive work of de Rivero.⁷⁵ A more instructive work of the same von Tschudi is *Kulturhistorische und sprachliche Beiträge zur Kenntnis des alten Peru*, which was published in Volume XXXIX of the "Denkschriften der Kaiserl. Akademie der Wissenschaften" at Vienna in 1891, and in a Spanish translation in the "Colección de libros y documentos referentes á la historia del Perú" under the title *Contribuciones á la historia, civilización y lingüística del Perú antiguo*, in which a certain number of Quechua words are explained at length.

Fidel López, who carried on a controversy with the two authors named above, could undoubtedly be described as a writer who indulged his fancy. In his book, *Les races aryennes du Pérou* (Paris, 1871), he attempts, by noting analogies, to prove the European origin of the South American peoples. He considers Garcilaso biased and accords high praise to Montesinos.

Among the French who engaged in the scientific exploration of Peru at this time, we find no scholar of the first rank. De Castelnau wrote a report of his *Expédition dans les parties centrales de l'Amérique du Sud*, of which the third part, *Antiquités des Incas et autres peuples anciens*, contains a series of lithographic plates devoted to Inca antiquities; and P. Angrand deserves a special place, less because of his own publications (although his "Lettre sur les antiquités de Tiaguanaco" in the *Revue générale de l'architecture et des travaux publics* in 1867 is very interesting) than because of his remarkable collection of writings on America, which is today in the Bibliothèque nationale in Paris and

is our most precious source of information. A little later, C. Wiener undertook the ambitious explorations which he recounted in his voluminous work entitled *Pérou et Bolivie*, published in 1880. Unhappily, he remains suspect on more than one count. Not only is he content to lean upon Montesinos without checking the latter's accuracy and makes a great many mistakes, but, what is still worse, he fabricates. According to Bandelier, he even went so far as to describe expeditions that he never made.⁷⁶ We ourselves can state that he gives evidence of very little critical sense and a great deal of fantasy in another work, which is particularly pertinent to the present study: *Essai sur les institutions politiques, religieuses, économiques et sociales de l'empire des Incas* (Paris, 1874). Yet Wiener does not deserve to be passed over in silence; he knew how to observe intelligently, and he has given us some lively sketches.

On the other hand, the brochure by J. de Neltray, *Fouilles et voyages au pays des Incas* (Sens, 1886), is completely devoid of interest.

The French writers of the second half of the nineteenth century who did not leave Europe confined themselves for the most part to recapitulations of Garcilaso. As a matter of record, we may mention E. Desjardins, *Le Pérou avant la conquête espagnole* (Paris, 1858); A. Castaing, *Le communisme au Pérou* ("Archives de la Société américaine de France," New Series, Vol. III, Pt. I, Paris, 1884); C. A. Pret, "Les institutions sociales et la législation du Pérou avant la conquête," *Bulletin de la Société d'ethnographie*, April, 1901; and H. Castonnet des Fosses, "La civilisation de l'ancien Pérou," *Revue des religions* (Angers, 1896). On the other hand, we find analyses by E. Reclus that are penetrating, though biased and incomplete, in Volume XVIII of the *Géographie universelle* (Paris, 1893) and Volume IV of *L'homme et la terre* (Paris, 1905). Finally, among French archaeologists we may cite the Marquis de Nadaillac and his study of *L'Amérique préhistorique* (Paris, 1883).

In the same period as Wiener's *Essai*, two books in Spanish were published at Lima: the *Diccionario histórico-biográfico* of M. de Mendiburu, which treats of the Inca empire in an appendix that is a mere resumé of Garcilaso's *Comentarios*;⁷⁷ and A. Raimondi's *El Perú*, in three volumes (1874-79), which is one of the most complete works on modern Peru in existence, but with little documentation on ancient Peru. Later, M. Lafuente, in Volume VIII of his *Historia general de España* (Barcelona, 1888), contented himself with a rough summary, and Ricardo Cappa manifested an excessive bias in his *Historia del*

Perú (Lima, 1885) and his *Estudios criticos acerca de la dominación española en América* (Madrid, 1889-91).

In the English language, at London W. Bollaert published in 1854 his *Observations on the History of the Incas of Peru, on the Indians of South Peru, and on Some Indian Remains in the Province of Tarapaca*, in 1860 his *Antiquarian, Ethnological, and Other Researches in New Granada, Ecuador, Peru, and Chile*, and in 1865 his *Introduction to the Palaeography of America*; A. Helps, in 1865-61, *The Spanish Conquest in America and Its Relation to the History of Slavery and to the Government of Colonies*; ⁷⁸ and D. Adams, in 1885, *The Land of the Incas and the City of the Sun, or the Story of Francisco Pizarro and the Conquest of Peru*; none of which works is particularly instructive for our purposes. In New York, E. G. Squier published, in 1877, his important *Peru, Incidents of Travel and Exploration in the Land of the Incas*, a product of conscientious research that has been utilized by a large number of writers who have come after him. E. J. Payne's two-volume *History of the New World* was published in 1892 at Oxford and is, in our opinion, a work that is too little known, for it is full of discerning comment—for instance, in regard to the influence of the environment upon the South American native.

In Germany, the students of the Americas can be divided into several distinct groups. There are first the compilers. A. Bastian, *Die Kulturländer des alten Amerika*, in three volumes (Berlin, 1878-89); ⁷⁹ R. Brehm, *Das Inka-Reich, Beiträge zu Staats- und Sittengeschichte des Kaiserthums Tahuantinsuyu* (Jena, 1885); G. Brühl, *Die Kulturvölker alt-Americas* (New York, 1877); R. Cronau, *Amerika*, in two volumes (Leipzig, 1892); and F. Ratzel, *Völkerkunde*, in three volumes (Leipzig, 1885-88). Then there are the travelers who are chiefly concerned with archaeology: E. W. Middendorf, *Peru, Beobachtungen und Studien über das Land und seine Bewohner während eines 25 jährigen Aufenthalts* (Berlin, 1893); W. Reiss and A. Stübel, *Das Totenfeld von Ancon in Peru. Ein Beitrag zur Kenntniss der Kultur und Industrie des Inkareiches nach den Ergebnissen eigener Ausgrabungen* (Berlin, 1880-87); W. Reiss, A. Stübel, B. Koppel, and M. Uhle, *Kultur und Industrie südamerikanischer Völker. Nach den im Besitze des Museums für Völkerkunde zu Leipzig befindlichen Sammlungen von A. Stübel, W. Reiss und B. Koppel* (Berlin, 1889); and E. Seler, *Peruanische Alterthümer* (Berlin, 1893). And finally, there are the sociologists: Dr. O. Martens, *Ein sozialistischer Grosstaat vor 400 Jahren, die geschichtliche, soziale und politische Grundlage des Inkareiches Ta-*

huantinsuyu das Staatswesen der Incas auf dem südamerikanischen Hochlande (Berlin, 1895), a superficial resumé, which appeared in a French translation under the title *Un grand état socialiste au XVIème siècle* (Paris, 1910); H. Cunow, *Die soziale Verfassung des Inkareichs, eine Untersuchung des altperuanischen Agrarkommunismus* (Stuttgart, 1896), a veritable masterpiece of scholarship. Cunow's thesis is briefly as follows: The Peruvian monarchs never created more than an artificial tie among the various tribes; they added nothing to the pre-existing institutions and did no more than appropriate them; the empire did not constitute a true state, but was an agglomeration of peoples assembled by force under the same sceptre; and the only basic institution that formed a social unit was the clan. In the course of the present book we have tried to show that this theory, which is presented with great vigor and which contains a part of the truth, is inadequate.

8. Modern Authors: The Twentieth Century to About 1926

Since the beginning of the twentieth century, a great number of writers have concerned themselves with South America, although no one of them has thrown a full light upon the social organization of the Incas. Most of them deal with this question only incidentally, and the best of them, venturing timidly upon such difficult terrain, maintain a prudent silence upon a great many points.⁸⁰

Of the sociologists writing in French who touch upon Peruvian institutions, it is scarcely necessary to make more than a passing mention. C. Letourneau, in several of his works, notably in *L'évolution du commerce* (Paris, 1897) and *La condition de la femme dans les diverses races et civilisations* (Paris, 1903), continues to draw his inspiration almost solely from Garcilaso, D'Orbigny, and Prescott. De Greef, in Volume II of his *Sociologie, structure générale des sociétés* (Brussels, 1908), tries to reconcile the theories of Spencer and Cunow. He grants that Peru was an association of tribes with egalitarian and pacifistic ideas, but at the same time, by a strange contradiction, he explains that this federation was necessarily obliged to make war. In his *Évolution des croyances et des doctrines politiques* (Brussels, 1895), he approached the study of Peru without knowing any of the sixteenth-century Spanish writers except Garcilaso. Vilfredo Pareto himself, who is beyond question one of the foremost economists of this period, speaks of the Incas, in *Les systèmes socialistes* (Paris, 1902), in terms that attest his ignorance and his bias. At Paris, in 1914, Capitan and Lorin brought

out a little book on a specialized subject, *Le travail en Amérique avant et après Colomb*; and in 1924 G. Rouma published at Brussels *La civilisation des Incas et leur communisme autocratique*, a popularized account that is excellent, but unfortunately too cursory.

Two archaeologists who wrote in French deserve to be mentioned: Eric Boman, *Antiquités de la région andine de la République Argentine et du désert d'Atacama*, in two volumes (Paris, 1908); and especially H. Beauchat, who, in his *Manuel d'archéologie américaine* (Paris, 1912), presents in condensed form all the information that had been obtained up to that time. This is a notable book, which marks the extent of our knowledge in the year of its publication, but which, of necessity, remains very incomplete because of the very vastness of the ground that it covers.

In Spanish, we have only monographs to list: *El Perú antiguo y los modernos sociólogos*, by V. A. Belaúnde (Lima, 1908); *El ayllu*, by Bautista Saavedra (Paris, 1913); *Las civilizaciones primitivas del Perú*, by C. Wiesse (Lima, 1913); *El comercio precolombiano*, by Ricardo Latcham (Santiago de Chile, 1909), a book that gives prominence to the commercial relations that existed among the different peoples before the time of the Incas; *La existencia de la propiedad en el antiguo imperio de los Incas*, by the same author (Santiago de Chile, 1923), a conscientious study, but lacking in references;* J. Mendoza del Solar, *La evolución social y política del antiguo Perú* (Arequipa, 1920); Pedro Irigoyen's "Inducciones acerca de la civilización incáica," *Revista universitaria de Lima* (November, 1909-January, 1910), with a thesis inspired by Spencer; another article from the same review (1919), "Las comunidades de indígenas en el Perú," by Bustamente Cisneros; "Observaciones sobre la organización social del Perú antiguo," by E. Zurkowsky in the *Mercurio peruano* for May, 1919; and "Régimen de la propiedad durante los Incas," by C. Valdez de la Torre in the same magazine, November, 1920.

In the Portuguese language, we know of only one book from this period that treats of the ancient civilization of Peru—*O imperio dos Incas no Peru e no Mexico*, by Domingos Jaguaribe (São Paulo, 1913), and it is of little value.

Among writers in English, on the other hand, there are many who deserve to be cited. Sir Clements Markham wrote his very lively book,

* [The same author has written in English "The Totemism of the Ancient Andean Peoples," *Journal of the Royal Anthropological Institute*, LVII (1927), 55-87.—EDITOR.]

The Incas of Peru (London, 1910) and a series of introductions to translations of the Spanish chroniclers brought out in the Hakluyt Collection.⁸¹ He is incontestably one of the best students of the Americas in our time. T. Joyce gives an excellent general survey of pre-Columbian South America in his *South American Archaeology* (London, 1912). The American explorer, Hiram Bingham, is less interesting in his *Inca Land* (New York, 1922), but he has a place of special distinction because he unearthed the ancient citadel of Machu Picchu, the refuge of the Peruvian chiefs during the Spanish conquest and perhaps also during those turbulent and little-known times that preceded the establishment of the Inca empire.⁸² His compatriot, C. Mead, published in 1924, at New York, a very brief popularized account entitled *Old Civilizations of Inca Land*, which is more entertaining in its pictures than instructive in its text.

In Germany, O. von Hanstein follows Brehm.⁸³ His book, *Die Welt des Inka* (Dresden, 1923), is obviously intended for a mass public. It is poorly documented, has no references, and is biased in its systematic hostility to the Spaniards and especially to the Catholic Church. It also contains certain errors that we have had occasion to deal with in the text. It has been translated into English.* Herman Trimborn, on the other hand, published two remarkable articles in the magazine *Anthropos* (July-December, 1923-24) on "Der Kollektivismus der Inkas in Peru." He takes his inspiration from Cunow, but he very felicitously rounds out the earlier author's work. In Trimborn's view, the entire Inca organization derived from the local clan, and the very title of his work must be taken ironically.⁸⁴

Ethnology has made an important contribution to the study of ancient Peru. The observer discovers survivals not only in the regions difficult of access, but also in the closed circles of family or tribe throughout the territory of the Andes. It is not that the Indian resists the white man. He accepts laws and decrees, but he gradually distorts them by adapting them to his own ancestral conditions of life. The civilization of ancient Peru is still living; in the struggle with European civilization it remains to the present moment victorious, at least on the high plateau.⁸⁵

If the customs of earlier days persist as they do, it is undoubtedly because the Incas knew how to impose their rule with uncommon energy. So efficiently was the machine set in motion that even after the

* [*The World of the Incas*, translated by Anna Barwell (London and New York, 1925).—EDITOR.]

death of the operator it continued to run by itself. Ondegardo observed that after the Spanish conquest the Indians insisted on cultivating the lands of the Incas and storing the crops in the imperial granaries.⁸⁶ There are still natives today who marry among themselves, live a communal life, and invoke their ancient idols.⁸⁷ The methods of agriculture described by the first chroniclers are still to be found in certain areas of the interior.⁸⁸ The shepherds count their flocks with the aid of the ancient quipus.⁸⁹ Laborers still break stones in the way described by Cieza de León, by dousing them in cold water after they have been well heated.⁹⁰ And there are many drinkers who would not dare raise a glass of the national beverage, *chicha*, to their lips without first pouring a few drops on the ground as an offering to the great god Pachacamac. Even now secret societies exist in many regions.⁹¹ In the domain of art in particular, the survivals constitute a veritable folklore;⁹² and in the field of jurisprudence they constitute a common law of which we have had to take account.⁹³

Among the most interesting studies from this point of view, we may mention *The Islands of Titicaca and Coati* by A. Bandelier (New York, 1910); *Agrarian Indian Communities of Highland Bolivia*, by George McBride (New York, 1921); H. Castro Pozo, *Nuestra comunidad indígena* (Lima, 1924); and an article entitled "Wallalo" by J. C. Tello and P. Miranda in the magazine *Inca* for April, 1913; as well as the numerous booklets of Otto Nordenskiöld.

9. *The Historians of the Kingdom of Quito*

Thus far we have omitted—in order to group them together under their own heading—any mention of the authors who dealt with the Kingdom of Quito, which was annexed to the Inca empire only at a late date and which perhaps knew a native civilization prior to this annexation. Such, at least, was the view maintained by Velasco in the eighteenth century.

Father Juan de Velasco, a Jesuit, was born at Riobamba in Ecuador in 1727, was expelled by order of the Madrid government in 1767, and took up his residence in Italy. During this exile he compiled his *Historia del reino de Quito*, to the glory of his lost fatherland. This work, which has become a rarity,⁹⁴ is the first that tells the story of the Caras, a people who lived in Ecuador before the Inca conquest and had attained a certain degree of civilization. If Velasco's statements are to be

believed, he became acquainted with a manuscript, now lost, by that Marcos de Niza of whom we have spoken above. He undoubtedly also collected information on the spot before leaving Ecuador, but the virtually complete absence of any trace now remaining of a Cara empire renders this author suspect in the eyes of most of our contemporaries. Some of them, like Jijón y Caamaño, condemn him definitively.⁹⁵ It is certain that the *Relaciones* drawn up in 1576 by order of the King of Spain on the Audiencia of Quito do not mention the existence of a Cara civilization.⁹⁶ Yet we do not feel that we could reject everything in the story Velasco tells us. Like many another conscientious but naive writer, he has reported what people told him, without seeking to distinguish between the true and the false, and his exalted patriotism perhaps stood in the way of his reducing the facts to their just proportions. We have had to be circumspect, therefore, when referring to him.

P. Fermín Cevallos, whose *Resumen de la historia del Ecuador desde su origen hasta 1845* was published in six volumes at Quito between 1886 and 1889, confined himself to the popularization of Velasco. On the other hand, the assertions of the Jesuit father from Ecuador are disputed by González Suárez, Bishop of Quito, a graceful writer and informed critic, whose *Historia general del Ecuador*, in two parts, appeared at Quito between 1890 and 1892.

We shall find little information about our subject in the books of F. Hassaurek, *Four Years Among Spanish Americans* (New York, 1867, and published in a German translation at Dresden twenty years later) and of T. Wolf, *Geografía y geología del Ecuador* (Leipzig, 1892). We learn more from the second part of the brief work of Jijón y Caamaño and Carlos Larrea, *Un cementerio incáico en Quito*. But the most valuable information is contained in Volume VI of the report published by the French expedition sent out by the Service géographique de l'Armée for the measurement of an equatorial meridian arc in South America. The first part, written by R. Verneau and P. Rivet, is entitled *Ethnographie ancienne de l'Équateur*. The second part (Paris, 1912-22) contains an excellent bibliography. This is indisputably the most scientific and the most important work to which we can refer in regard to the Kingdom of Quito.

The coast of Ecuador, whose history appears to be somewhat different from that of the plateau, has been studied by an American archaeologist, Marshall Saville, in *The Antiquities of Manabi, Ecuador* (New York, 1910).

10. *Present-Day Writers Since 1926*

Considerable progress in the field which concerns us here has been made in our own day.

First, the bibliography has been enriched by a number of first-rate works by Philip Ainsworth Means, the Bureau for Economic Research in Latin America, and Father R. Vargas Ugarte, already mentioned at the beginning of this chapter.

Among the new manuscripts, the most important is undoubtedly that of Felipe Guamán Poma de Ayala, a native author, as is indicated by his name. *Guamán* means "falcon," and *poma* is the word for "puma." This manuscript, entitled *Nueva corónica y buen gobierno*, was discovered in the Royal Library of Copenhagen by Richard Pietschmann in 1908 and was published in 1936 in the "Collection de travaux et mémoires" (Vol. XXIII) of the Institut d'Ethnologie of Paris. More than one-fourth of it deals with Peru in the pre-Columbian era. Indeed, one may say that the author goes back to the beginning of history, for he starts with the creation of the world. A man of little education, he writes in an impossible Hispano-Quechua dialect, makes undeniable mistakes, illustrates every page with naive and badly executed pen-and-ink drawings that nevertheless have some instructive value for us, and adopts a peculiar arrangement that leads him to parade in review successively the Inca emperors, the empresses (*Coyas*), the captains (viceroys of the four *Suyus*) and their wives, the sovereigns' orderlies, the social classes listed in the statistical tables, the various occupations, the festivals, the religious and mortuary practices, the penal laws, the palaces, the public stores, the high officials, the messengers, and the accountants. A curious interpretation of the prehistoric part of this work, including several modernized drawings, has been offered by J. C. Tello under the title *Las primeras edades del Perú por Guamán Poma, ensayo de interpretación* (Lima, 1939).

More recently, in a booklet entitled *El cronista indio Felipe Huamán Poma de Ayala* (Lima, 1948), Raul Porras Barranechea has reconstructed the miserable vagabond life of this superficial and vainglorious chronicler, who hates the Incas as much as he does the Spaniards and exalts the memory of the ancient local chiefs (*caciques*), whose despotism he admires. Poma de Ayala does not hesitate to disclose his own ideal as he constructs a city of the future, built upon a rigid caste system and governed by implacable tyrants. There is something pic-

turesque in this sort of caricature of the Inca system, which involves regimentation down to the last detail. The statistician is king, and the rulers go so far as to fix the number of hens and cabbages that each Indian may keep for himself and consume.

It was this same Porras Barranechea who, in 1936, discovered and made public the will of Francisco Pizarro, brought out a series of documents in 1937 entitled *Las relaciones primitivas de la conquista del Perú*, and, above all, brought to light the chronicle of Diego de Trujillo, *Una relación inédita de la conquista del Perú* (Madrid, 1940). This last is particularly valuable, for its author took part in the discovery of Peru, the capture of the Inca at Cajamarca, and the march on Cuzco. His account is vivid and clear. Rafael Loredo also has unearthed a curious *Crónica de la conquista del Perú* (Seville, 1948) by Alonso Borregan.

An increasingly close and careful study has been made in recent years of the chronicles already known. In the *Revue d'histoire moderne* of June, 1932, R. Levillier presents a very just criticism of the writings of Las Casas, and in a two-volume work published in Madrid in 1935 entitled *Don Francisco de Toledo, supremo organizador del Perú: su vida, su obra (1515-1582)*, he pays tribute to the strong personal character of the viceroy Francisco de Toledo. On the occasion of the four-hundredth anniversary of the birth of Garcilaso de la Vega, a great number of books and articles appeared.⁹⁷

The institutions of ancient Peru, taken as a whole, have been made the subject of several important studies in recent years. In Peru itself there have been Emilio Romero, *Historia económica y financiera del Perú, antiguo Perú y virreynato* (Lima, 1939); Jorge Basadre, *Historia del derecho peruano*, Vol. I (Lima, 1937); R. Mariátegui Oliva, *Historia del Perú*, in two volumes (Lima, 1939), a rather cursory work for school use; and Luís E. Valcárcel, *Historia de la cultura antigua del Perú* (Lima, 1943-49). In the United States we have Philip Ainsworth Means, *Ancient Civilizations of the Andes* (New York, 1931) and *The Fall of the Inca Empire and the Spanish Rule in Peru, 1530-1780* (New York, 1932) and J. H. Rowe, "Inca Culture at the Time of the Spanish Conquest," *Handbook of South American Indians* (Washington, 1946).⁹⁸ To this list we add the good but very short popularized work of R. d'Harcourt, *L'Amérique avant Colomb* (Paris, 1925), and a book that is conscientious but summary in its treatment of the problems in which we are interested, *Il Perú* (Rome, 1926), by Count G. M. Perone.⁹⁹

On the pre-Inca epoch, we list Max Uhle, *Estado actual de la prehistoria ecuatoriana* (Quito, 1929); J. Mejía Valera, *Organización de la sociedad en el Perú precolombino* (Lima, 1946) and R. Larco Hoyle, *Los Mochicas* (Lima, 1938-39).

On the Inca period, we may mention the following books: J. Imbelloni, *La esfinge indiana* (Buenos Aires, 1926) and *Pachacuti IX, el Inkario crítico* (Buenos Aires, 1946); R. Latcham, "Los Incas, sus orígenes y sus ayllus," *Revista de la Universidad de Chile*, V and VI (Santiago de Chile, 1927-28); H. Urteaga, *El Perú* (Lima, 1928) and *El imperio incáico, en el que se incluye la historia del ayllu y familia de los Incas* (Lima, 1931); J. de la Riva-Agüero, *Civilización peruana* (Lima, 1937); Lope de Atienza, "Compendio historial del estado de los indios del Perú" (Appendix to *La religión del imperio de los Incas* by J. Jijón y Caamaño [Quito, 1931]); J. Tello, *Origen y desarrollo de las civilizaciones prehistóricas andinas* (Lima, 1942); H. Bingham, *Lost City of the Incas* (New York, 1948); H. Horkheimer, *El Perú prehispánico* (Lima, 1950); J. A. Fonvielhe, *L'évolution juridique et sociale de l'indien du Pérou* (Bordeaux: thesis, 1952); M. R. T. de Diez Conesco, *Pachacutec Inca Yupanqui* (Lima, 1953). A number of excellent works have recently been published by H. Osborne and V. von Hagen.

Among monographs, the following may be cited: E. Romero, *El departamento de Puno* (Lima, 1928), *Tres ciudades del Perú* (Lima, 1929), and *Balseros del Titicaca* (Lima, 1934); Wendell C. Bennett, *Chimú Archaeology* (reprinted from *The Scientific Monthly*, July, 1937); J. Vellard, "Un village de structure précolombienne en Bolivie," *Annales de géographie*, July, 1943; P. Fejos, *Archaeological Explorations in the Cordillera Vilcabamba, Southeastern Peru* (New York, 1944); A. L. Kroeber, *Peruvian Archaeology in 1942* (New York, 1944); A. Posnansky, *Tihuanacu, the Cradle of American Man* (New York, 1946) and *Antropología y sociología de las razas interandinas y de las regiones adyacentes* (La Paz, 1938); M. Kuczynski-Godard, *El pensamiento arcáico mítico del campesino peruano* (Lima, 1948); R. Carrión Cachot, *Paracas, Cultural Elements* (Lima, 1949); G. A. Otero, *La piedra mágica* (Mexico, 1951); Louis Baudin, "L'indien dans l'économie des états andins," *Zeitschrift für die gesamte Staatswissenschaft*, II (1949), "Le problème de l'indien," *Les études américaines* (1952), "L'Inca Pachacutec, réformateur du monde," *Annales de l'Université de Paris*, April, 1953.

There is, finally, the "Biblioteca de cultura peruana" (Paris, 1938). Three volumes are of interest for us: No. 1, *Literatura Inca*; No. 2,

Crónicas de la conquista; and No. 3, *Páginas escogidas de Garcilaso de la Vega*.

Meanwhile, exploration and excavation continue to be carried on with marked success, bringing to light the civilization of Chavín, the twin cities of Machu Picchu, the sources of the Amazon,¹⁰⁰ the tombs of Paracas, etc. The airplane now makes it possible to recognize the remains of cities and fortresses.¹⁰¹

To complete this list, it only remains to enumerate the most noteworthy magazine articles. But as these have already been mentioned in the course of the present study, we shall cite here merely the reviews that have yielded the richest harvest. In France, there is the *Journal de la Société des Américanistes de Paris*, to which we add the reports made to the various sessions of the International Congress of Americanists; in South America, the *Boletín de la Sociedad ecuatoriana de estudios históricos americanos* of Quito, the work of which has been carried on by the *Boletín de la Academia nacional de historia*, the *Revista histórica* of Lima, *Inca*, the *Revista universitaria* of Lima, the *Revista del Museo nacional* of Lima, the *Mercurio peruano*, the *Revista universitaria* of Cuzco, the *Revista del Archivo histórico del Cuzco*, *Tradición*, the *Revista del Museo de la Plata*, and the "Tra-vaux de l'Institut français d'études andines" (after 1949 at Lima).

In these periodicals we find articles signed by such eminent Americanists as Verneau, Rivet, Créqui-Montfort, Berthon, Nordenskiöld, Hrdlička, Max Uhle, Otto von Buchwald, Ainsworth Means, Jijón y Caamaño, De la Riva-Agüero, González de la Rosa, H. Urteaga, Debenedetti, C. Ugarte, J. Vellard, H. Reichlen, Marie Helmer, etc.

And now that we have listed the authors who have spoken of the Incas, it is fitting that we should name those who ought to have done so and have not. Durkheim, Giddings, Ward, Bouctot, Sudre, Sagot, Altamira, Adler, Conrad, Pohlman—these hardly mention the Peruvians. Among the economists, Vilfredo Pareto and Joaquin Costa have vouchsafed a few pages to them; Nicholson, a few lines.

This silence becomes understandable if one considers the difficulties presented by the study of Peruvian social institutions before the discovery of America. The enormous mass of documents of far from equal value, which we have briefly glimpsed here, disheartens the investigator. Many of these ancient writers are dispiritingly long-winded and distressingly naive. Many of the modern writers avoid entering into the investigation of economic questions or simply defend preconceived

theses. Yet in all of them we can find something that we can glean; their very contradictions and uncertainties put us on the trail of the truth.

Is it not paradoxical that in our day we still persist in borrowing our examples of state socialism or agrarian collectivism from the Sparta of Lycurgus or the Germany of remote antiquity when the empire of the Incas is as close to us as the fifteenth century and that we continue to quote Tacitus without any desire to mention the Spanish chroniclers? ¹⁰²

Notes

NOTES TO INTRODUCTION

1. We refer the reader to works in which this problem is thoroughly studied and resolved, in particular the *Traité d'économie politique* published in 1960 by the Librairie Dalloz at Paris. We have given our own solution in Vol. I, ch. viii.
2. One of the strangest attempts at socialization seems to have been made in China in the eleventh century, but it was of brief duration, and we cannot, in the absence of documents, judge its scope. As in the Egypt of the Lagides, this experiment appears to have been predominantly fiscal in character. Cf. Soulié de Morant, *L'histoire de la Chine*; an article by the same author in the *Mercure de France* (May 15, 1938); the celebrated work of Father Huc, *L'empire chinois*, Vol. II (English translation, under the title *The Chinese Empire*, published in 1859); and finally, a paper by León Caubert submitted to the Académie des Sciences morales et politiques in 1895, entitled "Un essai de socialisme en Chine au XI^{ème} siècle."
3. For example, the contradiction noted by Ugarte between the exceedingly centralized, semidivine government of the Incas and the regionalism of the agrarian system. Cf. "Los antecedentes históricos del régimen agrario peruano" (Lima, 1918), p. 60. [For further information concerning all authors and works cited, the reader is referred to the bibliography at the end of this volume.]
4. B. J. Menéndez, *Manual de geografía y estadística del Perú* (Paris, 1861).
5. The present English-language edition is based in great measure on the author's work on the same subject, entitled *L'empire socialiste des Inka* (Paris: Université de Paris, Institut d'Ethnologie, Travaux et mémoires, Vol. V, 1928), completed and revised in the light of the many works published between that date and the present.

NOTES TO CHAPTER I

1. ". . . nearly all early civilizations have been in warm climates where the necessities of life are small and where nature makes bountiful returns even to the rudest cultivation. . . . They often developed on the banks of a great river." Marshall, *Principles of Economics* (8th ed.; London,

- 1925), p. 724. Most authors reason from the examples furnished by antiquity. Cf. Brunhes, *La géographie humaine* (2nd ed.; Paris, 1912), p. 73, and Metchnikoff, *La civilisation et les grands fleuves historiques* (Paris, 1889).
2. This explains why it is that some authors, like Squier (*Peru*, p. 6), emphasize the first characteristic, while others, like Bandelier (*The Islands of Titicaca, etc.*, p. 7), insist on the second, leaving the reader greatly perplexed.
 3. The temperature of the Humboldt Current varies from 14° to 18° C. (R. Murphy, "The Oceanography of the Peruvian Littoral with Reference to the Abundance of Marine Life," *Geographical Review*, January, 1923, p. 67.) Cf. E. Romero, *Geografía económica del Perú* (Lima, 1930), p. 26, and *El Perú en marcha* (Lima: Banco de crédito del Perú, 1943), p. 16.
 4. The most important of these are those of Porco between Chile and Bolivia; Pasco in the middle of Peru, from which flow the two largest tributaries of the Amazon—the Marañón and the Huallaga; Vilcañota between the Bolivian Andes and central Peru; and then in Ecuador the knots of Loja, Tinajillas, of the province of Azuay, Tiocajas, Sanancajas, Tiupullo, and Mojanda.
 5. Gutiérrez de Santa Clara, *Historia de las guerras civiles del Perú*, Vol. III, ch. lviii.
 6. Martinet, *L'agriculture au Pérou* (Paris, 1878), p. 8.
 7. Geographically, Ecuador is only an extension of Peru. There too there is a dearth of arable land. More than half the soil cannot be cultivated. (T. Wolf, *Ecuador*, p. 447.) The *puna* is called *páramo* in Ecuador.
 8. It crosses the divide at 15,665 feet.
 9. P. de Villagomes, *Exortaciones é instrucción acerca de las idolatrias de los indios del arzobispado de Lima* (Lima: Colección de libros y documentos referentes á la historia del Perú, Vol. XII, 1919).
 10. *Crónica*, Pt. II, ch. xiii.

NOTES TO CHAPTER II

1. *L'homme américain*, I, 108.
2. *Voyages aux régions équinoxiales*, III, 364.
3. *La figure de la terre*, p. 101.
4. D'Orbigny, *op. cit.*, I, 117 *et seq.* Ferris gives the measurements of the Indians in his *The Indians of Cuzco and the Apurimac* (1916).
5. *Comentarios*, Vol. I, ch. ix.
6. Santillán, *Relación*, § 4. Cieza de León, *Crónica*, Pt. I, ch. lxxix.
7. Cieza de León, *Crónica*, Pt. II, ch. iv. J. de la Espada, *Relaciones geográficas*, I, 84.
8. Sarmiento, *Geschichte*, ch. viii. Morua, *Historia*, Vol. I, ch. i. Cieza de León also qualifies as *behetrías* some of the tribes on the coast of Ecuador at the time of his voyage. (*Crónica*, Pt. I, ch. i.)
9. Markham (*The Incas of Peru*, ch. xi) protests against the use of the word *behetría* as if it were necessarily derogatory. To be sure, it was often so

- used by the chroniclers. Nevertheless, a great many Spanish writers looked upon the *behetrías* with admiration. It was only with their decline that liberty degenerated into anarchy and the disturbances broke out that completely discredited this institution. Cf. Cárdenas, *Ensayo sobre la historia de la propiedad en España* (Madrid, 1873), I, 227, and López de Ayala Alvarez, *Memoria* (Madrid, 1896), p. 243, n. 1.
10. *Relaciones geográficas*, I, 149-188; III, 96. Herrera explains that the kings had themselves served like gods and treated their subjects like animals, and this was the reason why many of the tribes no longer wanted to have a sovereign and preferred to live in *behetrías*. (*Historia general*, Dec. V, Bk. III, ch. vi.)
 11. *Loc. cit.*
 12. *Historia de los Incas*, p. 212.
 13. Nordenskiöld, "Une contribution à la connaissance de l'anthropogéographie de l'Amérique," *Journal de la Société des Américanistes de Paris*, 1911. H. Vignaud, "Le problème du peuplement initial de l'Amérique," *Journal de la Société des Américanistes de Paris*, 1922.
 14. For example: *apay*, to carry; *auki*, father, old man; *cura* (which became *curaca*), chief; *ipu*, cloud; *kiri* (which became *kara*), skin; *pucara*, fortress. In Maori, the word *inga* means "man-at-arms." Cf. the addendum to J. Imbelloni, *La esfinge indiana* and G. Friederici, "Zu den vorkolumbischen Verbindungen der Südsee-Völker mit Amerika," *Anthropos*, May, 1929, p. 441. Entirely without reason, H. Cunow pours scorn upon the belief in the Indian's Asiatic origin (*El sistema de parentesco peruano, etc.*, p. 58).
 15. T. Joyce, *South American Archaeology*, p. 189. The Kon-Tiki, a raft built along the same lines as those once used by the natives, left Peru and was allowed to drift. The current carried all those on board toward Polynesia. Cf. Heyerdahl, *Kon-Tiki* (London, 1950).
 16. P. Rivet, "Les Malayo-Polynésiens en Amérique," *Journal de la Société des Américanistes de Paris*, XVIII (1926), 141-278, and the same author's paper submitted to the 22nd International Congress of Americanists, Rome, September 27, 1926.
 17. For the "Atlantis" solution, see Cúneo Vidal, *Historia de la civilización peruana*, p. 84. For the refutation of this hypothesis, see L. Germain, "L'hypothèse des Atlantes et les arts primitifs des deux Amériques et de l'Égypte," *Les études atlantéennes*, February, 1928. For the "country of Mu" solution, see A. Posnansky, *Tihuanacu*, p. 20, and the works of J. Churchward.
 18. H. Urteaga, "El antiguo Perú á la luz de la arqueología y de la crítica," *Revista histórica de Lima*, 1909, ch. i.
 19. De Créqui-Montfort and Rivet, "L'origine des aborigènes du Pérou et de la Bolivie," paper submitted to the Académie des Inscriptions et Belles Lettres, session of March 27, 1914, and "La langue Uru ou Pukina," *Journal de la Société des Américanistes de Paris*, 1925, p. 211. A whole literature exists on the curious Uru people, who are on the way to total extinction as a result of the disappearance of the totora reeds, which they used in making boats. The Urus differ from the Aymaras and profess

- to antedate other men. Cf. A. Posnansky, *Antropología y sociología de las razas interandinas*, p. 57; E. Romero, *El departamento de Puno*, p. 163; and E. Palavecino, "Los indios Urus de Iruito," *La Prensa*, Buenos Aires, November 18, 1934; J. Vellard, *Contribution à l'étude des Indiens Uru* (Lima: Institut français d'études andines, 1949), *Dieux et parias des Andes* (Paris, 1954).
20. Otto von Buchwald, "Migraciones sud-americanas," *Boletín de la Sociedad ecuatoriana de estudios históricos americanos*, 1918, p. 236.
 21. J. Tello, "Origen y desarrollo de las civilizaciones prehistóricas," *Proceedings*, 27th International Congress of Americanists (Lima, 1942), I, 589; E. L. Hewett, *Ancient Andean Life*, p. 210; A. L. Kroeber, *Peruvian Archaeology in 1942*; J. Muelle and C. Blas, "Muestrario de arte peruano precolombino," *Revista del Museo nacional de Lima*, Vol. VII, No. 2 (1938).
 22. M. Saville, *The Antiquities of Manabi: a Final Report*.
 23. Jijón y Caamaño, "Una gran marca cultural en el Nord-Oeste de Sud América," *Journal de la Société des Américanistes de Paris*, 1930, p. 107.
 24. Max Uhle, *Estado actual de la prehistoria ecuatoriana*. For earlier opinions, cf. Velasco, *Historia*, p. 156; González de la Rosa, "Les Caras de l'Équateur," *Journal de la Société des Américanistes de Paris*, and Philip Ainsworth Means, *Ancient Civilizations, etc.*, p. 166.
 25. A. Raimondi, *El Perú*, I, 153. In the art of Chavín, the eye is oval- or almond-shaped, with the pupil against the upper edge; in the art of Tiahuanaco, it is square, octagonal, or round. The former is expressive; the latter is not. The art of Tiahuanaco appears to have come later than that of Chavín and to be more assured, simpler, and more austere. Markham was mistaken in thinking Chavín a corruption of Tiahuanaco.
 26. Chimú is often called Mochica or Yunga, but the latter is used as the generic name for all the warm regions, whether along the littoral or on the eastern slopes of the Andes.
 27. Calancha, *Corónica moralizada*, Vol. III, ch. i; Montesinos, *Memorias, etc.*, ch. ix; Francisco de Ávila, "A Narrative of the Errors, etc."
 28. This was brought to light by aerial exploration. Cf. Shippee-Johnson, *Peru From the Air* (New York, 1930).
 29. P. Kimmich maintains that it resembles Chinese towns in its outer wall of defense and its sloping roofs. (*Enciclopedia universal ilustrada europeo-americana*, article on "Perú.") Cf. Otto Holstein, "Chan-Chan: Capital of the Great Chimú," *Geographical Review*, XXVII (January, 1927), 50.
 30. R. Larco Hoyle, *Los Mochicas*, II, 54; Squier, *Peru*, p. 169. F. de la Carrera published at Lima in 1644 a grammar and in 1680 a dictionary of the Chimú language entitled *Arte de la lengua yunga de los valles del obispado de Truxillo del Perú* and *Arte y vocabulario de la lengua de los Chimú*. Cf. Paz Soldan, *Arte de la lengua yunga* (Lima, 1880) and E. W. Middendorf, *Die einheimischen Sprachen Perus* (Leipzig, 1892), Vol. VI.
 31. Reproductions of these designs are to be found in all the illustrated books on ancient Peru, especially the two handsome volumes of R. Larco Hoyle, *Los Mochicas*, and H. Urteaga, *El Perú*, pp. 47 ff.

32. R. Carrión Cachot, "La indumentaria de la antigua cultura de Paracas," *Wira Kocha*, Vol. I, No. 1 (1931).
33. For example, the different months of the year. We do not know for what city Paracas served as the necropolis. No trace of it exists in the environs.
34. H. Urteaga, *op. cit.*, p. 7. The reader will find beautiful reproductions in this work.
35. The size of Lake Guanacache has diminished considerably; the sandy stretch of land between the provinces of Rioja and Catamarca was covered with thickets of mesquite in the seventeenth century; miners sometimes unearth the roots of trees in the Atacama desert; and the provinces of León and Tunguragua in Ecuador were once much more fertile than they are today. (Moreno, "Notes on the Anthropogeography of Argentina," *Geographical Journal*, 1901, p. 574; R. Latham, *El comercio precolombiano*, p. 10.)
36. E. Reclus, *Géographie universelle*, XVIII, 641; A. Posnansky, *El clima del altiplano y la extensión del lago Titicaca*; P. Angrand, *Lettre sur les antiquités de Tiaguanaco*, p. 7.
37. J. Imbelloni, *op. cit.*, p. 58; I. Bowman, *Desert Tracts of Atacama*, American Geographical Society, Special Publications, No. 3.
38. H. Urteaga, *El imperio incaico*, p. 13.
39. A. Posnansky, *Antropología y sociología de las razas interandinas y de las regiones adyacentes*, ch. i and ii, and *Tihuanacu*.
40. H. Cunow, *op. cit.*, p. 73.
41. Cúneo Vidal, *Historia de la civilización peruana*, p. 115.
42. P. A. Means, *op. cit.*, p. 117; E. Vásquez, "Sillustani," *Revista del Museo nacional de Lima*, Vol. VI, No. 2 (1937). We shall return to Machu Picchu when we speak of the cities of the Incas.
43. Stübel, *Die Ruinenstätte von Tiahuanaco* (Leipzig, 1892); Bandelier, "The Ruins at Tiahuanaco," *Proceedings of the American Antiquarian Society*, XXI (1911), 218; and Posnansky, *Tihuanacu* (New York, 1932).
44. Posnansky, "Die altertümer von Tihuanacu," *Zeitschrift für Ethnologie*, XLV (1913), 176, and *Tihuanacu*.
45. Julius Nestler, *Beiträge zur Kenntnis der Ruinenstätte von Tiahuanaco* (Vienna, 1913); Posnansky, "Nuevas investigaciones en Carangas," *Proceedings*, 21st International Congress of Americanists (Göteborg, 1924).
46. M. Uhle, "Las relaciones prehistóricas entre el Perú y la Argentina," *Proceedings*, 17th International Congress of Americanists (Buenos Aires, 1910); Debenedetti, "Influencias de la cultura de Tiahuanaco en la región del noroeste argentino," *Revista de la Universidad de Buenos Aires*, XVII (1912), 326; R. Levillier, *El Perú y el Tucumán en los tiempos prehispánicos* (Lima, 1926), p. 61; B. Brandt, *Südamerika* (Breslau, 1923), p. 57.
47. Joyce, *op. cit.*, p. 184.
48. The word *aymara*, borrowed by the Jesuits from a section of the Quechua tribe, is altogether inappropriate, but it has come to be generally accepted.
49. M. Uhle, "Los orígenes de los Incas," *op. cit.*; D'Orbigny, *op. cit.*, p. 223; B. Saavedra, *El ayllu*, p. 130. At the beginning of the seventeenth cen-

- tury, an Italian Jesuit, L. Bertonio, who lived in the Juli mission in Peru from 1581 to 1625, wrote three books on the Aymara language: *Arte breve de la lengua Aymara para introducción del arte grande de la misma lengua* (Rome, 1603), *Arte y gramática muy copiosa de la lengua Aymara* (Rome, 1603), and *Vocabulario de la lengua Aymara* (Juli, 1612). A little later, D. de Torres Rubio brought out a book called *Arte de la lengua Aymara* (Lima, 1616). There is another early seventeenth-century work of the same title by Diego Gualdo. Cf. also J. M. Camacho, "La lengua Aymara," *Boletín de la Sociedad de geografía de la Paz*, December, 1945.
50. Posnansky, González de la Rosa, and Means contend that there were two successive Aymara empires.
 51. Rivero and Tschudi (*Antiquités péruviennes*, F. tr., p. 42) and H. Vignaud (*op. cit.*, p. 53) maintain that the Incas come from the Aymaras. In this book we shall call the emperor or king the Inca and give the generic name of Incas to the Indians of royal blood, who belonged to the upper class.
 52. De Créqui-Montfort, "Exploration en Bolivie," *Bulletin de la Société de géographie*, 1902; A. Chervin, "Aymaras and Quichuas," *Proceedings*, 18th International Congress of Americanists (London, 1912), I, 63; G. Rouma, *Les Indiens quitchouas et aymaras, etc.* (Brussels, 1913).
 53. Nordenskiöld, "Exploration scientifique au Pérou et en Bolivie," *Bulletin de la Société de géographie*, 1905, p. 289. Squier writes that the Aymaras are as different from the Quechuas as the French are from the Germans (*Peru*, p. 570).
 54. Angrand, *op. cit.*, p. 9.
 55. G. Suárez, *Historia general*, I, 34. The Esmeraldas did not submit to the Inca influence. They spoke a language belonging to the Chibcha family.
 56. M. Uhle, "La arqueología de Arica y Tacna," *Boletín de la Sociedad ecuatoriana de estudios históricos americanos*, 1919.
 57. For example, there may have been such centers in the recently explored parts of the great eastern forest. There are traces of dwellings in north-eastern Bolivia that indicate the existence of a once numerous population different from that of the plateau. (Nordenskiöld, *loc. cit.*)
 58. Rivet, "Les origines de l'homme américain," *op. cit.*
 59. Researchers who are impatient to discover the truth are much in danger of attributing to migrations and outside influences what is merely the result of parallel development. Many objects of the pre-Columbian era in South America are identical with those brought to light by excavations in the Old World. The vases found by Schliemann on the site of Troy are like those of Peru. (G. Suárez, *op. cit.*, Pt. II, p. 121.) The Incas and the Pharaohs resembled each other in more than one respect, and certain authors have busied themselves in drawing up lists of analogies from which they draw the conclusion that the Indians are of Aryan origin. (Fidel López, *Les races aryennes du Pérou.*) But the pace of progress is unequal. Some peoples are advanced, and some are retarded; and the forms of this progress are far from being identical. It is true that writing was invented twice, once in Egypt and again in Central America (Amelja

- Hertz, "L'Égypte sous les quatre premières dynasties et l'Amérique centrale," *Revue de synthèse historique*, June, 1923); but it did not exist in Peru, although the development of the latter country was comparable to that of Mexico. Although the idea of monarchy was the same among the Incas and the Pharaohs, the social structure of their peoples was nevertheless absolutely different. Let us, therefore, be on our guard against both extremes: it is just as much an exaggeration to conclude from an identity of ideas or of products that there must have been some reciprocal influence as it is to disregard the identity on the assumption that all progress is the result of independent lines of parallel development.
60. M. Uhle, "Fundamentos étnicos de la región de Arica y Tacna," *Boletín de la Sociedad ecuatoriana de estudios históricos americanos*, 1919.
 61. Boman, "Migration précolombienne dans le nord-ouest de l'Argentine," *Journal de la Société des Américanistes de Paris*, 1905. Nordenskiöld has studied a Guarani migration that came from the banks of the Parana and Paraguay at the beginning of the sixteenth century and was forced back by the Incas. ("The Guarani Invasion of the Inca Empire in the Sixteenth Century," *Geographical Review*, IV (August, 1917), 103-121.)
 62. Verneau and Rivet, *Ethnographie ancienne de l'Équateur*, p. 240.
 63. Boman, *loc. cit.*
 64. Uhle, "Ancient South American Civilization," *Harper's Magazine*, October, 1923.
 65. Garcilaso, *op. cit.*, Vol. I, ch. xxii; Sahuaraura Inca, *Recuerdos de la monarquía peruana* (Paris, 1850); Montesinos, *op. cit.*, ch. xiv.
 66. Ondegardo, *Copia de carta, etc.*, p. 449.
 67. Jijón y Caamaño and Carlos Larrea, *Un cementerio indico en Quito*, p. 65; G. de la Rosa, "Ensayos de cronología incana," *Revista histórica de Lima*, 1909, p. 43; J. de la Riva-Agüero, "Examen, etc." *op. cit.*, p. 559. Wiener, drawing his inspiration from Montesinos, acknowledges the existence of kings who performed the function of high priests (*pirhuas*) and later of high priests with the attributes of sovereignty (*amautas*) before the Inca invasion (*Essai sur les institutions, etc.*). Fidel López writes that, in linking Sinchi Roca with Manco Capac, "Garcilaso crossed out, at a single stroke, four thousand years of Peruvian history" (*op. cit.*, p. 279). It is possible, as Castonnet des Fosses believes, that the first four Incas belong to the realm of mythology (*La civilisation de l'ancien Pérou*, p. 12).
 68. Castaing observes that the habit that the monarchs acquired of associating their eldest son with them in the exercise of power may account for the discrepancies one finds among the historians in regard to the duration of the reigns of the last of the Incas (*Le communisme au Pérou*, p. 17).
 69. According to G. de la Rosa and A. Means, Fernández Nodal worked out a genealogical tree, entertaining but without scientific value, which is to be found in the Bibliothèque nationale in Paris under the title *Los Yncas del imperio Tahuantinsuyo*. Mitchell Humphreys calls our attention to the discrepancies existing among the various authors who have treated this subject, but does not give the probable list of sovereigns (*Dauer und Chronologie der Inkaherrschaft* [Rostock, 1903]). In fact,

however, the chronologies of the Inca sovereigns given by the chroniclers are not very different from one another: Vaca de Castro in 1542, Gutiérrez de Santa Clara in 1544, Betanzos in 1551, Cieza de León in 1553, Sarmiento in 1572, Acosta in 1589, Morua in 1590, Garcilaso in 1609, Poma de Ayala in 1613, Cobo in 1683, Herrera in 1728. An ingenious theory recently advanced by J. Imbelloni, in his *Pachacuti IX (El Inkario crítico)*, puts everything in question. This eminent Americanist maintains that the list of emperors compiled in Peru by the chroniclers had been fabricated by the Indians in such a way as to give their history a well-balanced and harmonious appearance. It would thus be a "subjective chronology." It is not impossible, in fact, that the Indians should have given a cosmic significance to the reigns of their emperors and that their official history should have been arranged to fit in with their cyclical conceptions of time. The end of a cycle, the crisis, as Imbelloni says, would have come around 1435, in the reign of Pachacutec, whose very name signifies "critical period." But this is still only an hypothesis, and it would be more prudent to accept the data provided by the chroniclers. Cf. L. Baudin, "L'Inca Pachacutec, réformateur du monde," *Annales de l'Université de Paris* (April, 1953).

70. Pacheco Zegarra gives the total area of the empire as 3,750,000 square miles (*Ollantay* [Paris, 1878], Introduction, p. xiii), but he included about 1,250,000 square miles of Argentine territory, which seems a great exaggeration.
71. Ondegardo (*op. cit.*, p. 456) asserts that the Incas had reigned for but a short period before the Spanish occupation. He concludes from this that their power, born of conquest, had not yet been legitimized by prescription and that the King of Spain was consequently justified in dethroning them. This curious reasoning is characteristic of the legal mentality of that time.

NOTES TO CHAPTER III

1. Ondegardo, "De l'état du Pérou avant la conquête" (F. tr., ch. xii, p. 349); Sarmiento, *op. cit.*, ch. xxxii; Means, "A Study, etc.," p. 425; Cunow, *Die soziale Verfassung, etc.*, p. 27. Elsewhere in the same book (ch. xxvi) Sarmiento speaks of the enormous increase in the population of the Chancas. Hernando Pizarro noted that the valleys of the coast were very thickly populated ("Letter to the Royal Audience of Santo Domingo, November, 1533," *Reports on the Discovery of Peru*, Hakluyt Society Publications, No. 47, p. 122). Cf. also C. de Castro, *Relación*, p. 217.
2. Bollaert, *Antiquarian, Ethnological, etc.*, p. 133; Rivero and Tschudi, *op. cit.*, p. 205. We may note that the population of the whole of Egypt under the Theban empire did not exceed eight million (Moret, *Le Nil et la civilisation égyptienne* [Paris, 1926], p. 547, n. 3). The general histories avoid this difficult subject of the Peruvian population. Von Sapper, basing his conclusions on the possibilities of feeding the ancient Indians, estimates the Andean population at from twelve to fifteen million

at the end of the fifteenth century ("Die Zahl und die Volkesdichte der indianischen Bevölkerung in Amerika," *Proceedings*, the 21st International Congress of Americanists [The Hague, 1924], p. 95). The Spanish demographic statistics of the sixteenth century are fiscal, representing only the taxable inhabitants (from eighteen to fifty years of age), and it is therefore necessary, in order to calculate the whole population, to multiply these figures by an arbitrary coefficient—four, four and a half, or five. This is the procedure followed by López de Velasco in his *Geografía y descripción universal de las Indias (1571-74)*.

3. Cf. *infra*, ch. xiv. Epidemics seem to have decimated the population on a number of occasions before the Spanish conquest. Cf. Cieza de León, *Crónica*, Pt. II, ch. lxxviii; Montesinos, *op. cit.*, ch. xii and xv; Sarmiento, *op. cit.*, ch. lii.
4. Juan de Ulloa Mogollón, ("Relación de la provincia de los Collaguas para la descripción de las Yndias que S. M. manda hacer," *Relaciones geográficas*, II, 42) maintains that the Indians were less numerous in earlier times than in his day because of the many casualties sustained by the armies of the Inca. This is not correct. The only provinces that suffered a loss of numbers during the reign of the Incas were those that served as battlefields, like Cañar. There can be no doubt about the total decrease in population, and the majority of the Spaniards acknowledged it. Cieza de León, in the first part of his chronicle, mentions a large number of valleys that had been depopulated since the conquest. Marcos de Niza speaks of territories in which the population had dropped from eighty thousand to four thousand (*Relation*, F. tr., p. 275). These figures are fantastic, but the fact of depopulation is certain. A. Rosenblatt gives the population figures by countries for the period around 1570 in "El desarrollo de la población indígena de América," *Tierra firme*, No. 1 (1935).
5. The Indian population continued to decrease for a long time. According to M. Sobreviela and Narcisso y Barcelo, it must have fallen to four million by the end of the eighteenth century (*Voyages au Pérou*, II, 181).
6. According to the figures cited by the periodical *Ibérica* ([1924], 163), the area of Bolivia, Peru, Ecuador, and Chile is at present 1,290,000 square miles, and their population numbers 16,000,000 inhabitants, which appears to be a maximum figure, since the population at the beginning of this century did not surpass 12,000,000. But the Inca empire did not include all this territory, for the eastern part of the first three and the southern part of the last were outside its territories; on the other hand, it included the Andean region northwest of Argentina.
7. Cristóbal de Castro, *op. cit.*, p. 212. The Inca used to give his provincial governors the right to assign wives to their principal officials.
8. Cristóbal de Castro, *op. cit.*, p. 212; F. de Santillán, *op. cit.*, § 17. Among the Chibchas marriage took place by purchase. Cf. Restrepo, *Los Chibchas*, p. 111.
9. Garcilaso, *op. cit.*, Vol. IV, ch. viii; Betanzos, *Suma y narración, etc.*, ch. xiii; Las Casas, *Apologética, etc.*, ch. xcvi; Montesinos, *op. cit.*, ch. vi.
10. Morua, *op. cit.*, pp. 196-197.

11. Garcilaso, *op. cit.*, Vol. VI, ch. xxxvi. A description of the Indian family of the present day will be found in the last chapter of this book.
12. Morua, *op. cit.*, p. 193; C. de Castro, *op. cit.*, p. 212.
13. Garcilaso is very clear on this point: "No era lícito casarse . . . sino todos en sus pueblos y dentro en su parentela" ("marriage outside one's town and lineage was prohibited to all"). Cf. *op. cit.*, Vol. IV, ch. viii. Montesinos says the same (*op. cit.*, ch. xix). According to Durkheim and Giddings, exogamy is the rule among primitive peoples (Santillán, *op. cit.*, § 82). The change to endogamy is probably due to the desire to avoid the breaking up of community property and to hold together the working forces of the group (J. Basadre, *Historia*, p. 159). According to the latest sociological research, which we shall not discuss here, the original family system among the Peruvians was matriarchal (Cunow, Uhle, Latcham, Bandelier). This is logical as long as a state of sexual anarchy prevails, since the maternal line of descent is the only one possible. When kinship groups were established, sexual taboos (the abhorrence of incest) limited the possibilities of union and led the men to obtain outside their clan the women they needed, first by abduction or war, and later by gift or purchase (C. de Castro and O. Morejón, *op. cit.*, p. 232; Vaca de Castro, *Discurso*, p. 24; J. Mejía Valera, *Organización de la sociedad en el Perú*, ch. iv; L. Valcárcel, *Del ayllu al imperio*). As a result, woman lost her position of eminence and became a thing, a chattel for man, and the matriarchal system was superseded by a patriarchy. Henceforth, woman remained inferior to man, she formed part of the patrimony of the master, she could be given as a gift, and she could be handed down by inheritance (B. Cobo, *Historia del Nuevo Mundo*, Vol. III, Bk. XIV, ch. vii). Today the Indian rarely marries outside his clan (Guevara, "Derecho consuetudinario de los indios del Perú."), and there is a tendency toward equality of the sexes, for women play an eminent role in production: they weave, spin, model and decorate pottery, engage in barter, take care of the animals, help in the fields, cultivate the kitchen garden, and prepare the food (L. E. Valcárcel, *Historia*, p. 156).
14. Garcilaso, *op. cit.*, Bk. VI, ch. xxxvi; J. de Mercado de Peñalosa, "Relación de la provincia de Pacajes," *Relaciones geográficas*, II, 60; the anonymous author of the "Relación de las costumbres antiguas de los naturales del Perú," in J. de la Espada, *Tres relaciones de antigüedades peruanas*, p. 200; Acosta, *Historia natural, etc.*, Vol. III, Bk. VI, ch. xviii; Levinus Apollonius, *De Peruviae regionis, etc.*, p. 27.
15. Ondegardo, *Relación*, p. 60; D. de la Bandera, "Relación," *Relaciones geográficas*, I, 100. As primitive peoples are often monogamous, the existence of polygamy is no index of the degree of civilization attained.
16. This rule is clearly indicated for Santo Domingo: *Relación anónima de las costumbres é usos de los yndios de Santo Domingo*, Colección de documentos del Archivo de Indias, XXXV, 566.
17. Suárez, *op. cit.*, I, 91.
18. *Ibid.*, I, 105; Jijón y Caamaño, "Puruha," *Boletín de la Academia nacional de historia*, 1923.

19. Suárez, *op. cit.*, I, 126.
20. Restrepo, *op. cit.*, p. 110. Among the Chibchas the chiefs could have several hundred wives, and commoners could possess two or three each, according to their wealth.
21. Wolf, *Ecuador*, p. 534.
22. J. de Matienzo, *Gobierno del Perú*, ch. vii. On the other hand, it was necessary to prevent the upper class from becoming too large in proportion to the mass of the population. Perrone maintains that this must have been the reason why the Incas condemned the Virgins of the Sun to celibacy. In this way the social classes were kept in balance by the double action of polygamy and the conventual life. "Occoreva limitare il numero dei membri della casta incasica eliminando alcune delle sue donne in una sacra castità" ("it was necessary to limit the number of members of the Inca caste by eliminating certain women and consecrating them to lives of holy chastity")—Perrone, *Il Perú*, p. 35.
23. *Relaciones geográficas*, I, 82.
24. "Descripción de la tierra del repartimiento de los Rucanas Antamarcas," *Relaciones geográficas*, I, 207; Herrera, *op. cit.*, Dec. V, Bk. IV, ch. iii.
25. Colección de documentos del Archivo de Indias, XVIII, 17. Wives who had remained in Spain were obliged to join their husbands, or else the latter had to go back to Spain. Benzoni refers to these measures at the end of his *Historia*, Bk. III.
26. Cf. the letter of Colbert to Talon, February 20, 1668, and Sumner Maine, *Ancient Law: Its Connection With the Early History of Society and its Relation to Modern Ideas* (New York, 1906).
27. In Thomas More's *Utopia* and Morelly's *Code de la nature*, marriage is obligatory.
28. This is proved by the fact that widows were not obliged to remarry nor barren wives to leave their husbands so that the latter might contract other unions.
29. After the time of the Incas, the practice of compulsory marriage rapidly disappeared, but control over conjugal unions continued to be exercised by the chief of the clan until the seventeenth century in the regions around Lake Titicaca (Bandelier, *The Islands of Titicaca and Coati*, p. 86).
30. Cf. Guevara, *op. cit.*; Brehm, *Das Inka-Reich, etc.*, p. 230. We have no way of knowing what the mortality rate was in Peru. The climate of the plateau is salubrious, but it is less so in certain regions along the coast and on the eastern slopes of the Cordillera. Wiener calls attention to the great number of infants' bodies that he found in the tombs at Parnunca (*Pérou et Bolivie*, p. 75). Hrdlička, on the other hand, comments on the fact that the bones of infants are rarely to be found at Chimú (*Some Results of Recent Anthropological Exploration in Peru*).
31. H. Castro Pozo, *Nuestra comunidad indígena*, p. 10.
32. Squier, *Peru*, p. 14; Cunow, *Die soziale Verfassung, etc.*, p. 24. Squier remarks that in order to replace old buildings by new ones better suited to their needs without losing an inch of territory, the Indians had the

- former demolished and set up the latter on the same sites, and he mentions this practice as one of the reasons for the disappearance of the monuments of very early days in Peru (*op. cit.*, p. 575).
33. Means, "A Study, etc.," *op. cit.*, p. 437.
 34. G. Collins, "The Origin and Early Distribution of Maize," *American Anthropologist*, New Series, XXIII (1921), 503; Payne, *History of the New World*, I, 321. Like many things on the American continent, maize has its element of mystery. Its wild prototype is unknown. It is the only cereal whose origin is lost to us. It was domesticated in the New World, probably in Mexico. It will be recalled that in Longfellow's beautiful poem, *The Song of Hiawatha* (Part V), Hiawatha, the Indian, encounters the "friend of man," slays him, and buries him; then, on his grave, carefully cleared of weeds by the conqueror, warmed by the sun and watered by the rain, there springs up a divine plant—maize. It is strange that in the Old World we should not have discovered for a very long time new plants to domesticate.
 35. Gómara, *Historia*, ch. cxcv; Ondegardo, *Relación*, pp. 25 and 34. According to Tschudi, the people of the plateau could count on one good year in three. (*Contribuciones, etc.*, p. 221.)
 36. Europe is indebted to Peru for the potato, the coca plant, and cinchona bark, from which quinine is derived.
 37. Garcilaso, *op. cit.*, Bk. VII, ch. xv.
 38. The banana, which is at present the pre-eminent nutriment of the Indians of the Ecuador coast, is a native of southeast Asia and was not brought to America until after the time of Columbus, in spite of what Humboldt says to the contrary.
 39. Cieza de León, *Crónica*, Pt. I, ch. xciii; Cobo, *op. cit.*, Bk. I, ch. iv. The natives of the coast of Ecuador had processes for purifying salt from the sea. Cf. G. Suárez, *op. cit.*, I, 166.
 40. Cieza de León, *ibid.*, Pt. I, ch. xcix; Herrera, *op. cit.*, Dec. VIII, Bk. II, ch. xvi.
 41. Garcilaso, *op. cit.*, Bk. VII, ch. xix. On the other hand, cf. Wolf, *op. cit.*, p. 467.
 42. Tschudi, *ibid.*, p. 55.
 43. G. Taton, "Food Animals of the Peruvian Highlands," *Proceedings*, 21st International Congress of Americanists (Göteborg, 1924).
 44. Before the Inca conquest no species of *Auchenia* existed in what is now the Republic of Ecuador. Suárez, *op. cit.*, p. 194.
 45. Colpaert, *Des bêtes à laine des Andes et de leur acclimatation en Europe* (Paris, 1864). Raynal has given a picturesque description of the paco: "The paco is to the llama what the ass is to the horse, a small and subsidiary species, with shorter legs and a more stocky muzzle, but with the same nature, the same manners, the same temperament as the llama" (*Histoire philosophique*, II, 217).
 46. Payne, *op. cit.*, II, 548; Tschudi, *ibid.*, p. 217.
 47. A. de Ulloa, *Mémoires philosophiques, etc.* (F. tr., Paris, 1787), I, 159.
 48. Acosta, *op. cit.*, Bk. I, ch. xl.
 49. A. de Ulloa, *ibid.*

50. Cieza de León, *Crónica*, Pt. I, ch. cxi.
51. The Pacific Ocean along the shores of Peru abounds in fish, thanks to the Humboldt Current, which has a low saline content and a uniform temperature. Because of this abundance of fish, birds are also very numerous in these parts, and their excrement forms veritable mounds of guano, a source of wealth for Peru. It has been reckoned that the Chincha Islands are inhabited by about five and a half million birds, which eat more than a thousand tons of fish a day (R. Murphy, *op. cit.*, p. 79). Lake Titicaca contains six species of fish belonging to two families (Bandelier, *op. cit.*, ch. i, n. 4). In Ecuador, only one fish, the *preñadilla*, lives in the lakes at an altitude of between six and ten thousand feet, and above ten thousand feet there are no fish at all (Wolf, *op. cit.*, p. 462).
52. "Comían poca carne" ("they ate little meat"), according to Morua (*op. cit.*, p. 54), and Ondegardo (*Copia de carta, etc.*, p. 166) says, "Rara vez comen carne" ("they rarely eat meat"). The inhabitants of the Basiliade, the floating islands of Morelly's utopia, are vegetarians ([Messina, 1753], I, 9).
53. *Estado del catolicismo, etc.*, p. 166.
54. Rivet, "Étude sur les Indiens de la région de Riobamba," *Journal de la Société des Américanistes de Paris*, New Series, I (1903).
55. Pereyra, *L'oeuvre de l'Espagne en Amérique* (F. tr.), p. 95.
56. *Comentarios*, Bk. IX, ch. xvi.
57. Even today specialists deplore the lack of cultivated land in Peru (Rómulo A. Ferrero, *Tierra y población en el Perú*). There is an abundant literature on the animals and plants used by the Indians in former times: H. Trimborn, "Die kulturhistorische Stellung der Lamazucht in der Wirtschaft der peruanischen Erntevölker," *Anthropos*, XXIII (1928), 656; O. F. Cook, *El Perú como centro de domesticación de plantas y animales*: E. Yacovleff and F. L. Herrera, "El mundo vegetal de los antiguos peruanos," *Revista del Museo nacional de Lima*, III (1934), 241; F. L. Herrera, "Precursores de los estudios botánicos en el departamento del Cuzco," *Revista del Museo nacional de Lima*, Vol. VII, No. 1 (1938); Redcliffe N. Salaman, "The Potato in Its Early Home and Its Introduction into Europe," *Journal of the Royal Horticultural Society* (1937); A. Weberbauer, *El mundo vegetal de los Andes peruanos* (Lima, 1945).

NOTES TO CHAPTER IV

1. This ruling class should be called an elite and not a caste, for it was open, under certain conditions, to new members drawn from the mass of the people, whereas a caste is a closed group.
2. Cobo, *op. cit.*, Bk. XII, ch. xxii.
3. Herrera, *op. cit.*, Dec. IV, Bk. IX, ch. iii.
4. Velasco, *op. cit.*, II, 43.
5. P. Angrand, *op. cit.*, p. 12.
6. As Letourneau writes in his *Évolution de la morale*. Cf. Belaúnde, *El Perú antiguo, etc.*, ch. viii, p. 73.
7. Prescott, *The History of the Conquest of Peru* (New York: Modern Library, n.d.), p. 816.

8. Algarotti, *Saggio sopra l'imperio degl' Incas*, F. tr. in *Mercure de France* (1760), II, 92. To correct to some extent the absurdity of this statement, the translator of the edition of 1769 wrote: "They preached with sword in hand and fought with the crosier" (*Lettres sur la Russie*, p. 304).
9. An example of this confusion may be found in Payne's *History of the New World*, II, 548. Wiener (*op. cit.*, p. 714) is one of those who have seen this point most clearly, as have also Markham (*The Incas of Peru*, p. 98) and A. Réville (*Histoire des religions* Paris, 1885, II, 369).
10. Morua, *op. cit.* p. 20.
11. Morua, *ibid.*
12. Garcilaso, *op. cit.*, Bk. II, ch. ii.
13. Garcilaso, *loc. cit.* A more extended discussion may be found in the chapter devoted to religion in the time of the Incas in Bloud and Gay's collective work on the history of religion (Paris, 1958), V, 73.
14. "Among the Greeks and the Romans, as among the Hindus, the law was at first a part of the religion." F. de Coulanges, *La cité antique* (4th ed.; Paris, 1872), p. 221.
15. The law against drunkenness, for example, was interpreted by the *amautas* to mean that punishment should be inflicted only upon those who were so drunk as to have lost their reason. Anon., "Relación de las costumbres antiguas de los naturales del Pirú," *Tres relaciones*, p. 200.
16. Brehm, *op. cit.*, p. 201; Hanstein, *Die Welt des Inka*, p. 30. Brehm bases his assertions on the anonymous account cited above in the *Tres relaciones* of J. de la Espada, p. 200.
17. *Carta para el Dr. de Liébana*, p. 153. The Spanish writers who were acquainted with the laws of the Incas, such as Garcilaso, asserted that they were general in character. Those, on the other hand, who were primarily familiar with local customs were struck by their diversity and went so far as to deny the existence of imperial laws. Thus, Santillán writes: "It does not seem to me that the Incas had definite laws on every subject" (*Relación*, § 12).
18. Ondegardo, *Relación*, p. 64.
19. *Principles of Sociology* (New York, 1910), Vol. II, p. 521.
20. Hamy, "Notes sur six anciens portraits d'Incas du Pérou conservés au Musée d'ethnographie du Trocadéro." *Compte rendu à l'Académie des inscriptions et belles-lettres* (1897).
21. R. Falb seeks to prove that the *borla* was the symbol of the snake (*Das Land der Inca, in seiner Bedeutung für die Urgeschichte des Sprache und Schrift* [Leipzig, 1883], p. 195).
22. Garcilaso declares that this bird is very rare, and Prescott repeats this assertion. The present writer can assure his readers that this is not the case, for he has killed such a bird himself on the slopes of Mount Coto-paxi.
23. De Rivero and Tschudi estimate that as many as eight thousand people attended the court of the Inca, but we do not know on what documents they base this fantastic figure, which Cevallos copies without comment. Cf. Rivero and Tschudi, *op. cit.*, p. 207; Cevallos, *Resumen de la historia del Ecuador, etc.*, p. 126. We find mention of a wardrobe master in

- Información hecha en el Cuzco el 13 de mayo de 1571* (Colección de libros españoles raros ó curiosos, XVI, 211). Cf. also Garcilaso, *op. cit.*, Pt. I, Bk. VI, ch. iii; Vol. II, pp. 207-208 of Markham's English translation (1869-71).
24. F. de Jerez, *Verdadera relación*, p. 335; Zárate, *Historia*, ch. xi; Las Casas, *Apologética*, ch. cclv. The same ceremonial was customary among the Chibchas of Colombia. Joyce, *op. cit.*, p. 18; Oviedo y Valdés, *Historia general*, Pt. II, Bk. XXVI, ch. xxiii.
 25. F. de Jerez, *loc. cit.*; Pedro Pizarro, *Relación*, p. 247; Gómara, *op. cit.*, ch. cxx; Oviedo y Valdés, *op. cit.*, Pt. II, Bk. IV, ch. ix; Morua, *op. cit.*, p. 84.
 26. Garcilaso, *op. cit.*, Bk. VII, ch. x.
 27. Prescott, *op. cit.*, 816.
 28. Prescott, *op. cit.*, 817.
 29. "Varias noticias curiosas sobre la provincia de Popayan," *Colección de documentos del Archivo de Indias*, V, 487.
 30. *Comentarios*, Bk. IX, ch. xi.
 31. Zárate, *op. cit.*, Bk. I, ch. vi; Gómara, *op. cit.*, Pt. I, p. 227; Herrera, *op. cit.*, Dec. IV, Bk. VII, ch. xi.
 32. Restrepo, *op. cit.*, pp. 92, 113, 210.
 33. Human sacrifices probably had not disappeared entirely, since all the authors, with the exception of Garcilaso—who is highly suspect on this point—speak of them. Near the temple of Pachacamac mummies have been found of young women who had met with violent deaths and been buried with their personal belongings about them, which implies that these were not cases of virgins condemned to death for having committed a crime (M. Uhle, *Pachacamac* [Philadelphia, 1903], p. 86). It is quite possible, as is maintained by the anonymous author of the narrative in *Tres relaciones* (p. 144), that in Peru animals had come gradually to replace men on the sacrificial altar. Even so harsh a critic as the monk Vicente de Valverde acknowledges that the Peruvians did not sacrifice human beings except in a few provinces ("Lettre à Charles-Quint," Cuzco, April 2, 1939, ms. in Helps, *The Spanish Conquest, etc.*, III, 343). Opinions differ on the meaning of these sacrifices. Cf. R. Karsten, *The Civilization of the South American Indians* (London, 1926), pp. 404 *et seq.*
 34. Cf. *infra*, ch. ix.
 35. Calancha, *op. cit.*, Bk. I, ch. xv, p. 98. Cf. *Revista del Archivo histórico del Cuzco*, No. 4 (1953), p. 91, and Montaigne, *Essays*, III, vi: "But as for piety, observance of the laws, goodness, liberality, loyalty, and frankness, it served us well not to have as much as they [the Peruvians]: by their advantage in this they lost, sold, and betrayed themselves."
 36. Brehm, *op. cit.*, p. 39; Lorente, *Historia antigua, etc.*, p. 21; Buschan, *Illustrierte Völkerkunde* (Stuttgart, 1922), I, 384; Trimborn, "Der Kollektivismus der Inkas in Peru," *Anthropos*, 1923-24, p. 996. Copying the epithets used by Tschudi, J. Friederici describes the Incas as "Autokraten wie die Geschichte keine absoluteren kennt, Tyrannen im wahrsten Sinne des Wortes" ("the most absolute autocrats known to history, tyrants

- in the truest sense of the word") in his *Der Charakter der Entdeckung und Eroberung Amerikas durch die Europäer* (Stuttgart, 1925), I, 242. Martens at least acknowledges that the *orejones* enjoyed a certain measure of independence (*Un état socialiste*, p. 59).
37. *Relación*, p. 210.
 38. *Crónica*, Pt. II, ch. xxxix. Urco had probably not yet become the Inca, but he had already been named by his father as heir to the throne. Markham, *The Incas of Peru*, p. 82; Sarmiento, *op. cit.*, ch. xxix.
 39. *Histoire du Pérou* (F. tr.), p. 57.
 40. Morua, *op. cit.*, pp. 98, 99, 117, 121, 131; Cobo, *op. cit.*, Bk. XII, ch. xxv. Montesinos, in speaking of the retinue of the Inca, also mentions the councillors (*op. cit.*, ch. xxii).
 41. *Op. cit.*, p. 307.
 42. Herrera, *op. cit.*, Dec. V, Bk. I, ch. xii.
 43. Morua asserts that the Incas used to drink from vessels made of a certain precious wood that had the property of serving as an antidote to poison (*op. cit.*, p. 115), but no other author confirms this.
 44. Garcilaso is mistaken when he writes: "The Incas themselves do not commit any offense because they have no occasion to do so" (*op. cit.*, Bk. II, ch. xv). Perrone makes the same error (*op. cit.*, p. 345).
 45. This custom, according to Cobo, dates only from the time of Tupac Yupanqui (*op. cit.*, Vol. III, Bk. XII, ch. xiv).
 46. Fernández de Palencia gives information on this subject that is not corroborated by any other author. According to him, the Incas never married a sister who was born of the same mother, but another sister, who had to be their first wife and who became the *Koya*. *Historia*, Pt. II, Bk. III, ch. v.
 47. Morua, *op. cit.*, p. 129; Santillán, *Relación*, § 18; Castro, *op. cit.*, p. 216.
 48. Here again the account given by Fernández de Palencia deviates from that of other authors. According to him, when the *Koya* had no son, the leading men of the realm would choose an heir from among the children of the Inca's other wives, and the *Koya* would adopt him as her own (*loc. cit.*).
 49. Las Casas, *De las antiguas gentes del Perú* (Colección de libros españoles raros ó curiosos, XXI, 215); Garcilaso, *op. cit.*, Bk. IV, ch. xx. In the ancient Peruvian drama *Ollantay* we find the following significant bit of dialogue:

Lightfoot (a commoner): Who, then, is to take the place left vacant by Pachacutec? If Tupac Yupanqui succeeds him, many others will be ousted. This Inca is a minor, and there are others who are of age.

The astrologer: All Cuzco has elected him, and the king has left him his crown and sceptre. How can another be elected?

The term "elected" must be understood here in the sense of "chosen" or "designated," and by "all Cuzco" the astrologer means the whole

group of the *orejones*, most of them of royal stock, who formed the major part of the population of the capital. This passage clearly shows the great influence exercised by the elite. Cf. also Poma de Ayala, *Nueva corónica*, p. 109; B. Cobo, *op. cit.*, Vol. IV, Bk. XIII, ch. xiii and xiv; De Diez Canseco, *Pachacutec Ina Yupanqui*, p. 237.

50. Marcos de Niza, *op. cit.*, p. 303.
51. Five of these mummies, in a state of perfect preservation, were discovered by Ondegardo when he was corregidor of Cuzco. The impression made in Peru by the death of Atahualpa, even though he was a usurper, was enormous. A large number of Indians committed suicide in order to follow the monarch into the other world. Herrera, *op. cit.*, Dec. V, Bk. III, ch. v.
52. Cf. Baudin, *Le problème des élites* (Paris, 1943); *Manuel d'économie politique* (6th ed., 1950), I, 93; *L'aube d'un nouveau libéralisme* (Paris, 1953), ch. viii; and, on the same subject, by the same author, in Spanish, *Revista de derecho* (Santiago de Chile, July, 1947), p. 65. The Russian soviet system has nothing in common with that of the Incas; its criterion is adherence to the party (C. Gide, *La Russie soviétique*, p. 9).
53. Garcilaso, *op. cit.*, Bk. IV, ch. xix.
54. Montesinos, *op. cit.*, ch. xiv and xv; Bingham, *Inca Land*, p. 310.
55. Tschudi, "Contribuciones, etc.," *op. cit.* De Beauchamp writes that the *amautas* were essentially poets.
56. Morua, *op. cit.*, p. 123.
57. The endurance races required of young Indians from fourteen to sixteen years of age in certain communities is a survival of this test (J. Delgado, *Organización de la propiedad rural en la sierra*).
58. Garcilaso, *op. cit.*, Bk. VI, ch. xxv; L. Baudin, "La formation de l'élite et l'enseignement de l'histoire dans l'empire des Inka," *Revue des études historiques*, April, 1927.
59. Rouma notes that the Japanese gods of happiness are distinguished by the exaggerated development of their ear-lobes—a remark that the probable Asiatic origin of the Indians makes particularly interesting (*La civilisation des Incas*, p. 25, n. 2). Proof that this custom in South America antedated the Incas is the fact that the right to wear earrings was granted among certain tribes as a reward for service, for example in the Yucay valley (Joyce, *op. cit.*, p. 129) and among the Chibchas of Columbia (Piedrahita, *Historia general*, etc. [Antwerp, 1688], Pt. I, Bk. II, ch. iv). In Mexico likewise, the chiefs used to give earrings to the warriors who had distinguished themselves in combat (S. Blondel, *Recherches sur les bijoux des peuples primitifs* [Paris, 1876], p. 38).
60. This remarkable system of educating the elite was not peculiar to the Incas. A curious kind of initiation existed among the Chibchas. The young men who were destined to become caciques were condemned to live in seclusion from five to seven years. They were forbidden all intercourse with women and had to submit to certain tests before being recognized as chiefs (Piedrahita, *op. cit.*, Pt. I, Bk. I, ch. v; Restrepo, *op. cit.*, p. 98).
61. We do not know on what grounds C. Mead writes that the physical type

- of the Incas was different from that of the other Indians; he cites no authority for this statement (*Old Civilizations of Inca Land*, p. 19).
62. *Comentarios*, Bk. VII, ch. i. Prescott doubts their existence, but De la Riva-Agüero confirms it (*op. cit.*, p. 554). Cf. Cobo, *op. cit.*, Bk. XII, ch. xxvii.
 63. *Historia*, Pt. II, Bk. III, ch. v. Lorente assumes that the Incas by privilege were descendants of the original companions of the Inca conquerors (*op. cit.*, p. 236).
 64. Betanzos, *op. cit.*, ch. xvi. According to Marcos de Niza (*op. cit.*, p. 286), there were once two kinds of *orejones*, one that shaved their heads and another that let their hair grow, and the former triumphed over the latter after a civil war. No other author confirms these very vague indications.
 65. Estete, in Jerez, *op. cit.*, p. 341.
 66. Garcilaso, *op. cit.*, Bk. II, ch. ix; Bk. V, ch. viii; Markham, *The Incas of Peru*, ch. viii; Arriaga, *Extirpación de la idolatría*, etc., *passim*. Certain priests were responsible for the upkeep of the temple; others took charge of the sacrifices. There may also have been religious communities and hermits ("Relación anónima de las costumbres antiguas de los naturales del Pirú," *Tres relaciones*, etc., p. 172). There was a special method for recruiting members of the clergy. All individuals who had anything about them that was out of the ordinary would go into the service of the temples, whether their singularity was something physical, like epilepsy, or due to some particular circumstances of their birth or their life (children who had been born feet first or during a storm, twins, people crippled from birth, Indians who had been struck by lightning but not killed). Here again we find the same idea that is at the root of the cult of the *huacas* of which we have spoken: the divinization of anomalies.
 67. Morua, *op. cit.*, Bk. I, pp. 39, 45; Markham, *op. cit.*, ch. viii.
 68. Morua, *op. cit.*, pp. 199 *et seq.*
 69. L. E. Valcárcel, *Historia de la cultura antigua del Perú*, p. 154.
 70. Garcilaso, *op. cit.*, Bk. IV, ch. i and ii; "Relación de la religión y ritos del Perú" (Colección de libros y documentos referentes á la historia del Perú, XI, 39). Cf. Pareto, *Traité de sociologie générale* (Paris, 1917), I, 416.
 71. For example, Hanstein, *op. cit.*, p. 59. Cf. R. Karsten, *op. cit.*, p. 396. The houses of the Virgins of the Sun were built with a series of cells opening on a central court. Traces of them have been found at Pachacamac and on the island of Coati (G. Buschan, *op. cit.*, p. 406). For an example of this confusion in the chronicles themselves, see R. Porras Barrenechea, *Una relación inédita de la conquista del Perú* (episode of the arrival of the Spanish advance guard at Caxas, where, according to the narrator, there were three houses of "Virgins of the Sun"). This confusion, according to E. de Gandia, is the origin of the myth of the Amazons (*Historia crítica de los mitos de la conquista americana*, p. 88).
 72. Hernando Pizarro, *op. cit.*, p. 121.
 73. *The Islands of Titicaca*, etc., Pt. IV, n. 67.

74. Garcilaso, *op. cit.*, Bk. IV, ch. iii and vii.
75. Falcón, *Representación*, etc., p. 153. Castaing remarks humorously: "The right-thinking *curacas* received investiture" (*op. cit.*, p. 19).
76. De la Riva-Agüero, "Examen, etc.," *op. cit.*
77. *Relación*, §19.
78. This prepossession is expressed in the "Informaciones" (Colección de libros españoles raros ó curiosos, XVI, 189). Sarmiento, with the same end in view, maintains that the *curacas* were removed by the Incas and replaced by appointed officials (*op. cit.*, ch. 1).
79. These youths served at the same time as hostages. It was with the same purpose that the Pharaoh also would often take away the son of some noble and bring him up with his own children (Maspero, *Histoire ancienne des peuples de l'Orient classique* [Paris, 1895], I, 300).
80. Cobo, *op. cit.*, Bk. XII, ch. xxv; Herrera, *op. cit.*, Dec. V, Bk. IV, ch. i and iii; D. Cabeza de Vaca, "Descripción y relación de la ciudad de la Paz," *Relaciones geográficas*, II, 72.
81. Garcilaso, *op. cit.*, Bk. IX, ch. x.
82. "Aprobó las erencias de los estados y señoríos, conforme a la antigua costumbre de cada provincia ó reyno" ("the inheritance of rank and authority was determined in accordance with local custom").—Garcilaso, *op. cit.*, Bk. VI, ch. xxvi. Cf. Bello Gayoso, "Relación que envió á mandar S. M. se hiziese desta ciudad de Cuenca y de toda su provincia," *Relaciones geográficas*, III, 217.
83. Damián de la Bandera, *op. cit.*, p. 101.
84. Betanzos, *op. cit.*, p. 77.
85. Sarmiento, *op. cit.*, ch. 1 and lii.
86. H. Trimborn, "Familien und Erbrecht im präkolumbischen Peru," *Zeitschrift für vergleichende Rechtswissenschaft*, 1937, p. 352.
87. *Historia*, Vol. II, Bk. II, §8.
88. Balboa, *Histoire du Pérou* (F. tr.), ch. ix. Sarmiento tells a similar story, but with less detail (*op. cit.*, ch. li).
89. *Crónica*, Pt. II, ch. xviii. In the Quechua language, *yana* means "servant," and *cuna* is the sign of the plural. Gómara, in his *Historia general*, confuses the *yanacuna* with the *mitimaes*, and Beuchat does the same (*Manuel*, p. 601).
90. Ondegardo, *Relación*, p. 96; C. de Castro, *op. cit.*, p. 218; Balboa, *loc. cit.* Pareto is wrong in describing the *yanacuna* as serfs and in believing that there were a great number of them (*Systèmes socialistes* [Paris, 1902], I, 189 *et seq.*; *Cours d'économie politique* [Lausanne, 1897], II, 361).
91. Santillán, *op. cit.*, §11.
92. Like the father of Alonso Cuxi Illa, whose interrogation by the Spanish investigators in 1571 is reported in "Información hecha en el valle de Yucay" (Colección de libros españoles raros ó curiosos, XVI, 216).
93. Cieza de León, *Crónica*, Pt. II, pp. 61 and 63.
94. It was thus that one of Tupac Yupanqui's servants became an official at Huallpa, near Cuzco ("Información hecha en el valle de Yucay," *op. cit.*, p. 215); Santillán, *op. cit.*, §§34 and 36; Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 999.

95. Colección de documentos del Archivo de Indias, XXV, 241.
96. *Histoire du Pérou*, loc. cit.
97. Colección de documentos del Archivo de Indias, VI, 221.
98. *Gobierno del Perú*, ch. viii.
99. Lugones, *El imperio jesuítico* (2nd ed.; Buenos Aires, 1908), p. 135; Pablo Hernández, *Organización social de las doctrinas guaraníes de la Compañía de Jesús* (Barcelona, 1913), II, 93. We make no mention of such obvious errors as that of the editor who, in a note on an article by A. Ugarte, explains that the *yanacona* was a piece of land allotted to a *yana* (*Inter-America*, October, 1923, p. 36, n. 5).
100. "Lettre de l'évêque de Cuzco" (Colección de documentos del Archivo de Indias, III, 92). Officially, the enslavement of the Indians was abolished in 1542 and again in 1553, and a special administration was made responsible for the enforcement of this law.
101. Santillán, *op. cit.*, §83; Herrera, *op. cit.*, Dec. V, Bk. X, ch. viii.
102. Matienzo, *op. cit.*, p. 74. The *ordenanzas de tambos* of 1543 make reference to the deprivations committed by the *yanacuna* in the *tambos* along the highways (*Revista histórica de Lima*, 1908, p. 496).
103. Velasco, *op. cit.*, II, 45.
104. Velasco, loc. cit. Cobo exaggerates when he says, in speaking of the army, "Era el único título para adelantarse en puestos honorosos, y apenas había otro camino que este por donde viniesen á subir y valer" ("it was the only avenue by which one could advance to positions of honor, and there was hardly any other way than this by which they rose in influence and importance").—*Historia*, Bk. XIV, ch. ix.
105. Joyce, *op. cit.*, p. 129.
106. Garcilaso, *op. cit.*, Bk. I, ch. xxii.
107. Garcilaso cites eleven words from the special language used by the Incas, but declares that he does not know the meaning of ten of them. Markham doubts the existence of this language and assumes that Garcilaso's error comes from the Incas' use of certain words in a sense different from that given to them in ordinary usage ("On the Geographical Positions of the Tribes Which Formed the Empire of the Yncas," *Journal of the Royal Geographical Society* XLI [1871], 292). Tschudi and Brinton likewise deny the existence of this language (*Organismus der Khetsua-Sprache* [Leipzig, 1884], p. 65; *The American Race* [New York, 1891], p. 204). However, the Chanes, who settled on the east of the Bolivian Andes and were conquered by the Guaranis, have preserved a secret language, Arawak, which was their own tongue in earlier days (Rivet, "Les langues américaines," in Meillet and Cohen, *Les langues du monde* [Paris, 1924], p. 692).
108. Garcilaso, *op. cit.*, Bk. VI, ch. xxxv.
109. What was the numerical proportion of the elite to the rest of the population? We do not know. The families of the high officials, and especially of the Incas, being polygamous, were no doubt appreciably larger than those of the *hatunruna*. Means estimates the ruling class as comprising about one hundred thousand persons, but this figure is hypothetical (Means, "A Study, etc.," *op. cit.*, p. 457).

NOTES TO CHAPTER V

1. Cunow, *Die soziale Verfassung, etc.*; Felix Cosio, "La propiedad colectiva del ayllu," *Revista universitaria del Cuzco*, September, 1916, p. 21; J. Friederici, *op. cit.*, Bk. I, p. 250.
2. Garcilaso, *op. cit.*, Bk. I, ch. xv.
3. Joyce, "The Clan-Ancestor in Animal Form as Depicted on the Ancient Pottery of the Peruvian Coast," *Man*, XIII (1913), 113.
4. "Cada ayllu tiene su principio" ("every ayllu has its totem").—Arriaga, *op. cit.*, ch. vii, p. 40.
5. Cúneo Vidal, "El concepto del ayllu," *Boletín de la Sociedad geográfica de Lima*, XXX (1914), 4-9. Beuchat (*op. cit.*, Pt. IV, ch. vii) translates *ayllu* as "clan," and Trimborn as *Sippe* ("kin") in "Der Kollektivismus, etc.," *op. cit.*
6. Tello and Miranda, "Wallalo," ch. iii.
7. Tello and Miranda, *ibid.*, ch. v.
8. Monnier, *Des Andes au Para* (Paris, 1890), p. 267; P. Walle, *Le Pérou économique* (Paris, 1908), p. 74. Herbert Spencer exaggerates when he says that the ancient Peruvians submitted to a rigid social system based on an ancestor cult so complicated that the living were virtually the slaves of the dead (*Principles of Sociology*, I, 291).
9. In *El ayllu* (Paris, 1913).
10. "Viewed from the historical point of view, the clans begin by being combinations of kinsmen, and end by being territorial communities" (Vinogradoff, *Outlines of Historical Jurisprudence* [London, 1920], I, 324). The clans of Peru are similar to the nomes of ancient Egypt.
11. Sarmiento, *op. cit.*, ch. xix; Cobo, *op. cit.*, Vol. III, Bk. XII, ch. iv. The list of the descendants of the Inca *ayllus*, taken from the documents in the Archives of the Indies, appears at the end of the first volume of the "Colección de libros y documentos referentes á la historia del Perú." According to Sarmiento, there were ten *ayllus* of the original companions of the first Inca conquerors and eleven others derived from royal stock that made their appearance later. Cunow has criticized Sarmiento on this point. But Uhle refutes these criticisms ("Los orígenes de los Incas," *op. cit.*, p. 302). According to Fernández de Palencia, four *ayllus* were regarded as purely Inca: "Aña Cuzco, Hullin Cuzco, Tambo, Maxca" (*Historia*, Pt. II, Bk. III, ch. v). But these are territorial, not kinship groups, as Inca *ayllus* would have to be. Sarmiento reports also that every Inca chose a particular *idol*—a falcon, a fish, a golden image, the lighting (*op. cit.*, ch. xxv, xxxi, xlvi, liv, lxii).
12. "Los antecedentes históricos del régimen agrario peruano," *Revista universitaria de Lima*, 1923, p. 336. The chroniclers sometimes translate *ayllu* as "settlement" (*pueblo*). However vague the meaning of the latter word, it always denotes a territorial group or unit, and not a people. The clan was localized.
13. *Op. cit.*, II, 44; Saavedra, *op. cit.*
14. *Op. cit.*, p. 350.
15. *The Incas of Peru*, ch. ii.

16. "Das Fundament der alten Organisation war die Ayllu oder Pachaca. Sie bildete meist zugleich eine Dorfschaft, die einen Theil des Stammesgebietes als ihr Eigen in Besitz hatte. Ein solcher Hundertschafts-Bezirk wurde 'Marca' genannt" ("the basis of the old organization was the *ayllu* or *pachaca*, generally consisting of a village community which possessed a part of the tribal territory. The area occupied by such a community unit of one hundred was called the *marca*").—Cunow, *Die soziale Verfassung, etc.*, p. 39.
17. McBride uses the word *marca* to denote the territory occupied by a community formed of several *ayllus* (*The Agrarian Communities of Highland Bolivia*, p. 5). Town or village names ending in *marka* or *marca* are found very frequently on the inter-Andean plateau.
18. Cunow, *op. cit.*, p. 45.
19. Bingham, "In the Wonderland of Peru," *National Geographic Magazine*, Vol. XXIV, No. 4 (1913), p. 468.
20. The head of a group of *ayllus* became the *sinchi* (Means, "La civilización precolombina de los Andes," *op. cit.*, p. 229).
21. *Historia general*, I, 233. However, in order to fit into the Incas' decimal system of administration, alien elements were sometimes added to the community, or some of its own members were subtracted from it, to round out the statistics (see below, ch. vi).
22. Herrera, *op. cit.*, Dec. V, Bk. IV, ch. iii.
23. Damián de la Bandera, *op. cit.*, p. 100.
24. Bandelier, *The Islands of Titicaca, etc.*, p. 82.
25. Cieza de León, *Crónica*, Pt. II, ch. xix; Las Casas, *Apologética*, clxxxi.
26. The Peruvians divided the year into lunar months. The first Council of Lima, which fixed the order of the months, retained the Quechua names. Thus, *hatun pocoy* (the period from February 22 to March 22) signifies "great ripening," because the maize ripens very much at this time; and *ayrihua* (the period from April 22 to May 22) means "harvest." Cf. Poma de Ayala, *op. cit.*, pp. 1131-1157.
27. "Memoria dado al Rey" (Colección de documentos del Archivo de Indias, VI, 533).
28. *Historia*, Bk. XIV, ch. viii. The land was invested with a divine character under the name of Mama Pacha, "Mother Earth," as among the Aztecs (cf. D. G. Brinton, *Religions of Primitive People* [New York, 1897], p. 145). The cult of the Sun is itself a cult of agricultural workers, since it is the light of day that regulates the order of the labors of the field.
29. The *comunidad indígena* (native community) of Peru is sometimes compared to the Soviet *kolkhoz* (collective farm). However, these are two very different types of agricultural systems. In the first place, the Peruvian community was of spontaneous origin, regulated by custom, autonomous, and localized; whereas the Russian collective farm was created by legislative fiat and remains under the supervision of the agents of the Communist Party. Moreover, the Indians were creatures of routine, distrustful of innovations; whereas the Russian rulers have taken over vast domains in order to use modern techniques of cultivation, especially machines. Finally, the Peruvian communities were separate and self-

sustaining units, as opposed to the *kolkhozes*, which form part of an integrated whole and whose products enter into the framework of a general plan. Cf. L. Baudin, "Indiens et moujiks," *France-Amérique latine*, March, 1931, p. 77; *Les Incas du Pérou* (new ed.; Paris, 1944), p. 161; and *L'utopie soviétique* (Paris, 1937), p. 23. Pittard is mistaken in speaking of the "communism" of the Incas and comparing it to that of present-day Russia (*Les races et l'histoire* [Paris, 1924], pp. 551-556). Montesinos tells us briefly that the Inca Roca decreed the common distribution of the fruits of the soil, but that this rule was later violated. Is it possible that at one time an attempt was made to establish a true system of communism? We have no evidence on this point (Montesinos, *op. cit.*, ch. xix).

30. Bandelier does not believe that the Indians planted trees (*The Islands of Titicaca, etc.*, Pt. IV, n. 58). The multiplicity and variety of local customs makes it impossible to make any unconditional generalizations. The information in the text is accurate in the main. Thus, even today, in a part of the Atacama district, the land belongs to the community, and the houses to individuals; but it is quite possible that in certain regions the dwellings built by the community remain collective property. The account given by Castro, on which Trimborn bases his assertion that houses were privately owned, deals only with conditions in the valley of Chinchá (Castro, *op. cit.*, p. 216; Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 587). It is likewise possible that in some districts the land was privately owned, as we shall see later on. Evidently, too, the laws relating to the bequest and inheritance of private property, whatever form it might take, also varied with the region. In this same valley of Chinchá, it was the custom for property to be left to whichever son seemed the most capable, on the understanding that this would redound to the benefit of the rest of the family, and a woman could never be a legatee (Castro, *loc. cit.*). In the province of Huamanca, the *curaca* selected his heir from among his sons and bequeathed most of his property to him, leaving the rest to be divided equally among the other sons. (De la Bandera, *op. cit.*, p. 101.)
31. C. de Stefani, "Di alcune proprietà collettive nell'Appennino et degli ordinamenti relativi," *Archivio per l'antropologia e la etnologia*, Vol. XVIII, No. 1 (Florence, 1888).
32. Onegardo, *op. cit.*, p. 16; Cieza de León, *Crónica*, Pt. II, ch. xxiv; Balboa, *op. cit.*, ch. ix; Cobo, *op. cit.*, Bk. XII, ch. xxiv.
33. J. de la Espada, *Relaciones geográficas*, Vol. I, Appendix; Introduction, No. 3. Cf. the order for resettlement in the "Colección de documentos del Archivo de Indias," Vol. XVIII, p. 514.
34. Garcilaso, *op. cit.*, Bk. V, ch. xiv; Damián de la Bandera, *op. cit.*, p. 98.
35. Excellent photographs of these terraces may be found in Bingham, "In the Wonderland of Peru," *op. cit.*, p. 515. Cf. also Schmidt, *Die materielle Wirtschaft bei den Naturvölkern* (Leipzig, 1913), p. 49.
36. Bandelier, *The Islands of Titicaca, etc.*, Pt. III, n. 64.
37. Near Salamanca, for example. Isiah Bowman, *The Andes of Southern Peru* (London, 1920), p. 59.

38. *Historia de Copacabana*, p. 8.
39. Joyce, *op. cit.*, ch. x.
40. Joyce, *loc. cit.*; Wiener, *Pérou et Bolivie*, p. 543.
41. Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 112; Bastian, *Die Kulturländer des alten Amerika*, II, 69; Hutchinson, *Two Years in Peru*, I, 125. Wiener tells of a traveler who, having discovered traces of former cultivation in a desert area some leagues from Trujillo, looked for the irrigation canal, discovered its remains, had it rebuilt, and became a multimillionaire (*Pérou et Bolivie*, p. 107). Good irrigation has had surprising results in the warm regions of the coast. The Nazca valley was transformed into a veritable paradise in ancient times (Markham, *The Incas of Peru*, ch. xii), and even today one finds in this valley a maze of subterranean channels whose design still has not been traced out (E. Villar y Córdova, "La educación incáica," *Revista universitaria de Lima*, 1926, p. 498).
42. Garcilaso, *op. cit.*, Bk. V, ch. iv.
43. *Historia natural*, Vol. I, Bk. III, ch. xviii. It also recalls the rule adopted by the Mormons on the shores of the Great Salt Lake, but among them every member of the community was authorized to draw water in an amount proportional to the work he had performed in the construction of the canal. This simple detail suffices to measure the difference between the authoritarian regime of the Peruvians and the system of co-operation that existed among the Americans (Hamilton Gardner, "Co-operation Among Mormons," *Quarterly Journal of Economics*, 1917).
44. Garcilaso, *op. cit.*, Bk. V, ch. xiv; Cieza de León, *Crónica*, Pt. II, ch. xxiv; Betanzos, *op. cit.*, ch. xii; Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 173.
45. *Fuero general de Navarra*, Bk. III, Sec. IV, ch. vi.
46. J. Costa, *Colectivismo agrario en España* (Madrid, 1898), p. 556.
47. Reclus, *op. cit.*, XVIII, 539; *L'homme et la terre*, IV, 431; Wiener, *Essai*, etc., ch. iv; Lorente, *op. cit.*, p. 241; Pret, *Les institutions*, etc.
48. Algarotti, *op. cit.*, p. 307; Marmontel, *Les Incas* (Paris, 1777), p. 30; Spencer, *Principles of Sociology*, II, 8; Markham, *The Incas of Peru*, ch. xi, and Introduction to Sarmiento, *History of the Incas* (E. tr., Cambridge, 1907), p. xv; Lindner, *Weltgeschichte seit der Völkerwanderung* (Stuttgart, 1901-05), IV, 423. Hanstein declares that fields and crops were divided into three equal parts (*op. cit.*, p. 34).
49. *Un état socialiste au XVIème siècle*, p. 62.
50. *Géographie universelle*, XVIII, 540. It is curious to note that this great geographer is one of the authors with the least understanding of the spirit of Peruvian institutions. Wiener was completely mistaken in his description of the agrarian system, and it is unfortunate that Reclus and several other contemporary writers have uncritically accepted his assertions.
51. *Relación*, pp. 18 and 32. Cf. also "Carta al Dr. de Liébana" (Colección de libros y documentos referentes á la historia del Perú, IV, 154).
52. *Historia*, Bk. XII, ch. xxviii.

53. *Historia natural*, Vol. II, Bk. VI, ch. xv, cited by Garcilaso, *op. cit.*, Bk. V, ch. v.
54. In ancient Japan the Emperor used to divide the land among his subjects. Every man had the right to one lot of a given area and every woman to two-thirds of this allotment. The family (*ko*) worked in common all the lots accruing to its members (Tokuzo Fukuda, *Die gesellschaftliche und wirtschaftliche Entwicklung in Japan* [Stuttgart, 1900]).
55. Prescott, *op. cit.*, p. 756, n. 14.
56. *Manuel*, p. 605, n. 1.
57. J. de la Espada, *Biblioteca hispano-ultramarina*, V, 53; Markham, E. tr. of Pt. II of Cieza de León, *Crónica* (London, 1883), p. 43, n. 1.
58. Castonnet des Fosses, *op. cit.*, p. 26; Perrone, *op. cit.*, p. 352.
59. The *fanega*, which is of Arabic origin, never had, even in Spain, the same value in every region, whether it was considered as a unit of capacity or of area. If the different values are carefully examined, the variations among those of the *fanega* taken as a unit of capacity are seen to be much less than the variations among those of the *fanega* considered as a unit of area. With some three exceptions, in the provinces where the word is used in both senses the value of the *fanega* as a measure of capacity varies from 49 to 52 quarts (U. S. dry measure), while that of the *fanega* as a unit of area varies (the same three provinces being excepted) from 2,300 to 7,000 square yards. It follows that the *fanega* is in fact a measure of capacity and that it has had an accessory use as a measure of land areas. It is equivalent to about 50 quarts (U. S. dry measure), and, by extension, it was used to denote the area necessary to produce 50 quarts (i.e., $6\frac{1}{4}$ pecks) of grain, an area that would inevitably vary according to the region. Let us note further that the word *tupu* in Peru referred to an area, not to a capacity. The pre-Columbian measure of capacity among the Indians was the *pocha*.
60. "De la orden que los indios tenyan, etc.," p. 102.
61. Tello and Miranda, *op. cit.*, p. 533. McBride estimates that the parcel allotted to the head of a family in the periodic land apportionment that takes place in Bolivian communities at the present time is about twenty-four acres (*op. cit.*, p. 6). During the attempt at socialism carried out in China in the eleventh century there was an annual distribution of land, each group of ten families receiving one parcel (Caubert, "Un essai de socialisme en Chine au XI^{ème} siècle," *Séances et travaux de l'Académie des sciences morales et politiques*, 1895, p. 763).
62. The officials of the Protectorate calculate in each province the area of land necessary for the support of one tent. On an average this amounts to about twenty-five acres of arable land and an equal area of pasturage. This is the equivalent of the *tupu*, and, let us note, it is a unit that varies with the fertility of the soil. The land area that each tribe is obliged to maintain is obtained by multiplying this unit by the number of tents in the tribe. Only the surplus can be disposed of. It may be bought by the Protectorate (L. Baudin, "Le régime des terres au Maroc et la colonisation française," *Revue des sciences politiques*, April, 1926, p. 203).

63. *Op. cit.*, Bk. V, ch. i.
64. McBride, *op. cit.*, p. 6. The same is true in the Casta region, where each family has two or more parcels, so that it can harvest the products of both cold and temperate zones of cultivation (Tello and Miranda, *op. cit.*, p. 506).
65. *History of the Conquest of Peru* (1829), I, 29 (Modern Library ed., Random House, n. d., p. 757). The same point of view is taken by Helps, *op. cit.*, III, 352; C. Ugarte, "Los antecedentes históricos, etc.," *op. cit.*, p. 354; Latcham, *La existencia, etc.*, p. 43; B. Cisneros, "Las comunidades de indígenas en el Perú," *Revista universitaria de Lima*, 1919, p. 451; F. García Calderón, *Le Pérou contemporain* (Paris, 1907), p. 18, n. 1. Wiener declares that the individual tenants had the usufruct for life of the lands granted to them (*op. cit.*, ch. iv). F. Cosío assumes that the partition applied only to parcels of land assigned each year to newly married couples (*op. cit.*).
66. *Historia natural*, Vol. II, Bk. VI, ch. xv.
67. *Relación*, p. 32; "Copia de carta, etc.," *op. cit.*, p. 458.
68. Herrera, *op. cit.*, Dec. V, Bk. IV, ch. ii; Garcilaso, *op. cit.*, Bk. V, ch. v.
69. Cobo, *op. cit.*, Bk. XII, ch. xxviii.
70. Caesar *De bello gallico* vi. 22 and iv. 1; Tacitus *De moribus Germanorum* 26.
71. J. Costa, *op. cit.*, p. 340.
72. Garcilaso, *op. cit.*, Bk. V, ch. i. This is also the opinion of De Carli, *Delle lettere americane* (F. tr.), I, 230; of Propiac, *Beautés de l'histoire du Pérou*, p. 43; and of Beuchat, *op. cit.*, p. 605. Cf. Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 586.
73. Santillán maintains that the local governor was in charge of it, but this is unlikely; such a high official had more important duties to perform that would not permit him to waste his time in this kind of work (Cunow, *Die soziale Verfassung, etc.*, ch. v; Trimborn, *ibid.*, p. 585).
74. Bastian, *op. cit.*, II, 565.
75. Ondegardo, *Relación*, p. 23; Acosta, *op. cit.*, Vol. II, Bk. VI, ch. xv; Cobo, *op. cit.*, Bk. XII, ch. xxix.
76. Latcham, *La existencia, etc.*, p. 61. Prescott exaggerates when he says that the flocks of llamas were appropriated exclusively to the Sun and to the Inca. Cf. *supra*, ch. iii.
77. Cunow, *Die soziale Verfassung, etc.*, p. 86.
78. Ondegardo, *Relación*, p. 29.
79. Falcón, *op. cit.*, p. 152; Bandelier, *The Islands of Titicaca, etc.*, p. 87.
80. F. Cosío, *op. cit.*, ch. v; De Rivero and Tschudi, *op. cit.*, p. 212; Falcón, *op. cit.*, p. 152.
81. Ondegardo, "De l'état du Pérou avant la conquête" (F. tr.), ch. xii. Cobo explains that the Indians would divide the work into units corresponding to strips of land and that once this division had been made, every man would have his wife and children come to help him (*op. cit.*, Bk. XII, ch. xxviii).
82. *Historia*, Bk. XIV, ch. viii.

83. F. Xavier Peñaranda describes the labor performed on the communally owned lands in Spain as having a likewise festive character, and J. Costa points out that this famous author speaks of that labor in precisely the same terms as Father Cobo speaks of the labor of the Peruvians in the fields of the Inca (Peñaranda, *Resolución universal sobre el sistema económico y político más conveniente á España* [Madrid, 1789]; J. Costa, *op. cit.*, p. 189). It is only by a great effort of imagination that Cabet, in his *Voyage en Icarie* (1840), is able to picture labor in the workshop as having its attractions. But the day will never come when tools are so perfected or the surroundings made so pleasant that the worker will take joy in his labor. The only solution is that of the Inca, and it is psychological. The Indian was happy to take the pains to cultivate the fields of the monarch whom he adored. R. d'Harcourt suggests the ingenious hypothesis that the lands of the Inca were cultivated to the accompaniment of singing and dancing because this work ended the year's round of such labors (*L'Amérique avant Colomb*, p. 41), but the chroniclers do not share this opinion, and we are not even certain, as we shall see further on, that the Inca's lands were actually the last to be worked.
84. *Comentarios*, Bk. V, ch. ii.
85. Beuchat (*op. cit.*, Pt. IV, ch. vii) writes that the fields situated within a certain radius of the holy city of Cuzco were regarded as belonging to the Sun, but this is unlikely. Betanzos, on the other hand, tells us that the territory surrounding Cuzco had been distributed among the *orejones* of the capital, which seems to be the truth (*op. cit.*, ch. xii). It was only the terrace of Colcampata, near Cuzco, that was dedicated to the Sun and cultivated by the Incas, but it is possible that in certain villages everything belonged to the Sun, as at Arapa, to the north of Lake Titicaca (Ondegardo, "Report," p. 156), or to the Inca (J. de la Espada, *Relaciones geográficas*, II, 18).
86. A. de Vega, "Descripción que se hizo en la provincia de Xauxa," *Relaciones geográficas*, I, 84.
87. Ondegardo, "De l'état du Pérou" (F. tr.), p. 301; Cobo, *op. cit.*, Bk. XII, ch. xxviii; Suárez, *op. cit.*, I, 218. Suárez does not say from what source he drew his information. Garcilaso tells of an official who was put to death because he had had the fields of a *curaca* cultivated before those of a widow (*op. cit.*, Bk. V, ch. ii and viii). Several authors—Helps, for example (*op. cit.*, III, 352); G. Buschan ("Die Inka und ihre Kultur im alten Peru," *La cultura latino-americana*, 1915-18, p. 424); and Beuchat (*op. cit.*, p. 659)—are content to copy faithfully the statements of Garcilaso.
88. Bandelier, *The Islands of Titicaca, etc.*, p. 80.
89. McBride, *op. cit.*, p. 7. The result was that a large land area was needed to afford subsistence to a limited number of people; and from the many traces of cultivation that have been found it should not be concluded, as has been done by some observers, that the area was very densely populated (Latham, *La existencia, etc.*, p. 37).
90. *Op. cit.*, p. 659. Durret speaks of "certain sharp-edged shovels" (*Voyage*

- de Marseille à Lima, etc.*, p. 207). Poma de Ayala pictures Adam as cultivating the soil with an implement of this kind (*Nueva corónica*, p. 22).
91. J. de la Espada in Cobo, *op. cit.* (ed. of 1890), Vol. III, p. 190, n. 1.
 92. Cobo, *op. cit.*, Bk. XIV, ch. viii. G. Friederici rightly protests against the practice of several chroniclers of calling this agricultural implement of the Peruvians a plough, which has misled a number of historians (*op. cit.*, p. 285).
 93. P. Rodríguez de Aguayo, *Descripción, etc.*, p. 95. The Caras of Ecuador had a spade made of tough wood with a notch in the middle to serve as a handle (Verneau and Rivet, *op. cit.*, p. 16).
 94. Bingham, *Inca Land*, p. 122. The Indians of the Chilean coast turn over the earth with a long, heavy, sharp-pointed stake. In central and southern Chile the women break up the sods with a primitive hammer made of a perforated stone fastened to a stick. We make no mention of the methods of harvesting used in Peru because there is nothing especially noteworthy about them: potatoes were dug out of the ground with a stick shaped at one end like a chisel, maize was gleaned by hand, and the quinoa stalks were cut with flint knives (R. Latham, "La organización agraria de los antiguos indígenas de Chile," *La Información*, December, 1926, p. 359).
 95. Cobo, *op. cit.*, Bk. XIV, ch. viii. On the coast there was another important crop, cotton, but its cultivation was also very simple: holes were dug in the ground, the seeds inserted, and the land irrigated (Payne, *op. cit.*, I, 370).
 96. Garcilaso, *op. cit.*, Bk. VII, ch. v. Santillán (*op. cit.*, §11) declares that children harvested the coca, but this is not very probable, since this crop was gathered only in unhealthy regions (Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 594). For the first two months after the seeds had been planted, caretakers stayed in the fields to watch over the growing maize (Buschan, "Die Inka und ihre Kultur, etc.," *op. cit.*, p. 438).
 97. Garcilaso, *op. cit.*, Pt. I, Bk. V, ch. iii; Acosta, *op. cit.*, Bk. IV, ch. xxxvi. Later fallen into oblivion, guano came into use again during the nineteenth century. It began to be exported to Europe in 1935 on the initiative of a Frenchman (Middendorf, *Peru*, II, 178). After a long period of ruinous exploitation, the Peruvian government, at the beginning of the twentieth century, took appropriate action. Since 1908, it has had the islands evacuated for periods of at least thirty months in order to allow the cormorants and pelicans to return and add to the deposits (R. Murphy, "The Sea Coast and Islands of Peru," *Brooklyn Museum Quarterly*, 1920); and *Bird Islands of Peru* (New York, 1925).
 98. Garcilaso, *op. cit.*, Bk. V, ch. iii; Cieza de León, *Crónica*, Pt. I, ch. lxxiii. "To understand this custom, it must be remembered that several times a year the sea casts upon the beach thousands of fish, of the average size of a sardine, that are sick or dead as the result of underwater earthquakes followed by the release of noxious gases" (D'Harcourt, *op. cit.*, p. 139).
 99. Schmidt calls this "cultivation in depth" (*Tiefkultur*).—*Op. cit.*, p. 37.
 100. M. de Tezanos Pinto, *El impuesto único y la extensión de impuesto a las*

- mejoras* (Buenos Aires, 1923), p. 44. "The system just described was certainly better than any that were ever conceived of in our hemisphere, for not only were the citizens bound to be happy under this system, but they could not help being so in spite of themselves" (De Carli, *op. cit.*, I, 233). This system is characterized as communistic by Morua (*op. cit.*, p. 114); Prescott ("they had nothing that deserved to be called property," *op. cit.*, p. 817); Cronau (*Amerika*, II, 101); Suárez (*op. cit.*, I, 218); Brehm (*op. cit.*, p. 40); Moireau (*Histoire générale*, IV, 961); Castañing (*op. cit.*); Réville (*op. cit.*, II, 285); Villar y Córdova (*op. cit.*, p. 520); J. Prado y Ugarteche (*Estado social del Perú durante la dominación española* [Lima, 1894], p. 150); Friederici (*op. cit.*, p. 250). "The *ayllu* was not a phalanstery where products were held in common so that all might enjoy them equally" (F. Cosio, *op. cit.*).
101. Economists have drawn from this the general conclusion that landed property first appeared in this form (Colson, *Cours d'économie politique* Paris, 1918, III, 34); Leroy-Beaulieu, *Le collectivisme* [Paris, 1893], p. 114).
 102. *Historia antigua*, p. 247.
 103. Ondegardo, *Relación*, p. 37; P. Pizarro, *Relación*, p. 271. According to Morua, it was the Inca Pachacutec who adopted this system of gifts (*op. cit.*, p. 137).
 104. Often among primitive tribes the acceptance of a gift by a person who does not make one in return betokens the subordination of the recipient to the donor.
 105. "De l'état du Pérou avant la conquête," p. 37. Elsewhere Ondegardo says that this heir represented the *ayllu* (*Report*, p. 162), but the word *ayllu* is used here in a special sense to denote all the descendants of the beneficiary, who was considered as the chief of the line. As we have seen, the Inca formed an *ayllu* under these conditions, and it is perhaps by analogy that the chroniclers have used the same word to designate the line of descent issuing from the beneficiary and the collective owner of the property he had received. This *ayllu* is *sui generis*, and has nothing at all to do with the real *ayllu* of which the beneficiary, like all his family and descendants, was a part. To avoid confusion it is better to use the word only in the latter sense.
 106. The same rules applied to gifts of land and of animals. Animals given as gifts by the Inca could not be alienated, but remained the common property of the heirs of the recipient (Cobo, *op. cit.*, Bk. XII, ch. xxix). According to Matienzo, the Incas gave lands in perpetuity to the Indians responsible for the cultivation of coca (Latham, *La existencia de la propiedad, etc.*, p. 51).
 107. Ondegardo, *Report*, p. 162, copied by Cobo, *op. cit.*, Bk. XII, ch. xxviii. De Carli refers to the rule mentioned in the text, and the author of the French translation of his book writes in a note: "We have always ignored this principle in the exaction of the *corvée*" (Vol. I, p. 242, n. 1).
 108. Esmein, *Cours élémentaire d'histoire du droit public français* (Paris, 1921), p. 42.
 109. Latham, *La existencia de la propiedad, etc.*, p. 39, n. 1.

110. It was thus that private property gave way to collective ownership in seventeenth-century Japan.
111. De la Torre, "Régimen de la propiedad durante los Incas," p. 405.
112. According to De la Torre, the Incas came under the influence of conquered peoples who owned private property (*op. cit.*, p. 400). We do not agree. Only in spheres in which they were inferior to those whom they conquered did the conquerors fall under foreign influence, not in administrative and juridical matters.
113. *Historia*, II, 7 and 53.
114. *Resumen de la historia*, I, 28.
115. Suárez, *op. cit.*, I, 91.
116. Restrepo, *op. cit.*, ch. xi.
117. Piedrahita, *op. cit.*, Pt. I, Bk. II, ch. iv.
118. *Op. cit.*, p. 553.
119. R. Latcham, "El estado económico y comercial de Chile prehispánico," *La Información*, October, 1925, p. 252, and "El régimen de la propiedad entre los indios de Chile," *La Información*, February, 1927, p. 101.
120. "Informaciones que mandó levantar el Virrey Toledo sobre los Incas," *op. cit.*, XVI, 202.
121. Beuchat, *op. cit.*, Pt. IV, ch. vii; A. Oliva, *op. cit.*, p. 40. According to this author, Manco Capac promulgated a law decreeing that everything—lands, animals, plants—was his personal property, but no other writer repeats this strange statement. Brehm says: "Every piece of land, every possession, every product, every means of production belonged to the Inca; he was the beginning and the end of everything" (*op. cit.*, p. 220). Cf. Hanstein, *op. cit.*, p. 33; C. Mead, *Old Civilizations of Inca Land*, p. 59. According to Perrone, all land was regarded as the property of the Sun (*op. cit.*, p. 348).
122. Cunow, *Die soziale Verfassung, etc.*, p. 96. Trimborn remarks humorously that Cunow relies on a passage of Santillán that tends to prove the exact opposite ("Der Kollektivismus, etc.," *op. cit.*, p. 583).
123. Cobo, *op. cit.*, Bk. XII, ch. xxviii.
124. Falcón, *op. cit.*, pp. 148-149.
125. "Relación, etc.," *op. cit.*, p. 33.
126. "Those parcels of land which were sown on behalf of the Inca are the ones that the Indians and the Spaniards were wont to call the Inca's, but in reality they were not the Inca's at all; they belonged to the village communities themselves, which had considered and kept them as their own property from the time they were first set aside" (*op. cit.*, p. 102). Acosta expresses the same view (*op. cit.*, Vol. II, Bk. VI, ch. xv).
127. "Descripción, etc.," *op. cit.*, p. 96.
128. "Report," *op. cit.*, p. 157.
129. According to Latcham, the sovereign must have regarded himself as only the "nominal owner" of the land (*La existencia de la propiedad, etc.*, p. 34). Means and De la Torre both state that at some time preceding the period of the Incas the chiefs gradually usurped "the right of eminent domain" and the inhabitants became mere usufructuaries (Means, "A

- Study of Ancient Andean Social Institutions," *op. cit.*, p. 438; De la Torre, *op. cit.*, p. 403).
130. Ugarte, "Los antecedentes, etc.," *op. cit.*, p. 356; Zurkalowski, "Observaciones sobre la organización social del Perú antiguo," *Mercurio peruano*, II (1919), 490.
 131. Trimborn asks where the Inca obtained the lands that he gave away, and he answers, quite logically: from his own share ("Der Kollektivismus, etc.," *op. cit.*, p. 588). This portion, as we have seen, was prescinded as far as possible from the acreage that had been made available for cultivation by the work done under the sovereign's orders, but it must sometimes have taken in some part of the soil already being tilled by the community, and it also included the properties of the *curacas* dispossessed by the Incas or of those of the inhabitants who had been forcibly transferred elsewhere without their places having been filled. This explains the conflicts that broke out, at the time of the Spanish conquest, between the Indians who recalled that they had possessed a piece of land before the coming of the Incas and demanded the restoration of their prior rights, and those who said that they were the legitimate owners of the same piece of land because they had received it from the Peruvian monarch (Herrera, *op. cit.*, Dec. V, Bk. IV, ch. ii).
 132. Cárdenas, *op. cit.*, II, 201. For the controversy between Las Casas and Sepúlveda, cf. Toribio Medina, *Biblioteca hispano-americana*, I, 245.
 133. Quiroga, *La evolución jurídica de la propiedad rural en Puno* (Arequipa, 1915).
 134. *Recopilación de leyes de las Indias*, Bk. IV, Title xii. Royal Ordinance of 1541 (Colección de documentos del Archivo de Indias, XVIII, 5). The system of collective cultivation of the fields allotted to those incapable of attending to their own concerns inspired one of the most important institutions of Latin America, that of the *cajas de comunidad*. These community chests, of which the funds must be used for the maintenance of hospitals, missions, and poor relief, received lands that had been granted as *encomiendas* and restored on the death of the recipient and which were cultivated collectively. During the colonial period a great deal of wealth was poured into their coffers (Viñas y Mey, "El régimen de la tierra en la colonización española," *Humanidades*, X [La Plata, 1925], 85 *et seq.*
 135. Instructions given to the Licentiate De la Gasca, February 10, 1546 (Colección de documentos del Archivo de Indias, XXIII, 510); Helps, *op. cit.*, IV, 102, 236, 239; Herrera, *op. cit.*, Dec. VIII, Bk. X, ch. xviii and xix, cii, ccxxxvi, and ccxxxix. It should not be forgotten that the conquistadors ran great risks, not only with their own lives, but with the capital that they had invested in their enterprises. The *encomienda* was their reward. Here is how Solórzano defines the *encomienda*: "Un derecho concedido por merced real á los beneméritos de las Indias para percibir y cobrar para sí los tributos, de los indios que se les encomendaron por su vida y la de un heredero, conforme á la ley de la sucesión, con cargo de cuidar del bien de los indios en lo spiritual y temporal y de habitar y defender

- las provincias donde fueren encomendados y hacer de cumplir todo este omenaje ó juramento particular" ("a right, granted by royal favor to the well-deserving in the Indies, to collect and appropriate taxes from the Indians, who are entrusted to their care for their own lifetime and that of their lawful heir, with the obligation of promoting both the temporal and the spiritual welfare of the native inhabitants and of inhabiting and defending the provinces allotted to them and of seeing that all due homage and fealty is rendered therein").—*Política indiana* (Madrid, 1648), Bk. III, ch. i. The history of the encomienda is the history of the struggle between the colonists and the royal power. The encomiendas were at first entrusted to the grantees solely for their own lifetime. Then, in 1536, the law of succession was passed, extending it for "two lifetimes." Their abrogation in 1542, at the instance of Las Casas, provoked the revolt of Pizarro, and they were re-established in 1545. The colonists gained the concession of a "third lifetime" in 1629, and the system did not disappear until the eighteenth century.
136. Colección de documentos del Archivo de Indias, XVI, 390-400; XVIII, 201; XIX, 97.
 137. *Ibid.*, XVI, 389.
 138. Cf. the royal ordinances forbidding the sale of Indians, either alone or with fields of mines (*ibid.*, XVIII, 231 and 301; XIX, 158; Cosío, "La propiedad colectiva, etc.," *op. cit.*, ch. iv).
 139. "Tierras usufructuadas mancomunadamente" ("lands whose usufruct was conjointly enjoyed"), says J. Frisancho ("La propiedad agraria y el caciquismo," *Inca*, April, 1923).
 140. This *repartimiento* is not to be confused with a procedure called by the same name, but essentially different, which consisted in the distribution of merchandise to the Indians by the principal alcaldes. The Indians were compelled to accept goods at a high price and to pay for them by the delivery of produce that was priced very low. Charles III abolished these *repartimientos* (Colmeiro, *Historia de la economía en España* [Madrid, 1863], ch. lxxviii). Sobreviela and Narcisso y Barcelo use the word *repartimiento* in the latter sense in their *Voyages au Pérou*, II, 180.
 141. Juan and Ulloa, *Noticias secretas de América, etc.*, p. 267; "Relación del Marqués de Montesclaros" (Colección de documentos del Archivo de Indias, VI, 209); Herrera, *op. cit.*, Dec. V, Bk. VI, ch. x.
 142. The Spanish sovereigns were not unaware of these evils, which were called to their attention on many occasions, but the measures that they took to remedy the situation were of no avail. Cf. the letters of the King to L. de Velasco of July 12, 1600, and of November 24, 1601 (Colección de documentos del Archivo de Indias, XIX, 121 and 151). At first, the *mita* was part of the tax of the encomienda, but was separated from it at the time that personal service was abolished (cf. *infra*, p. 325, n. 111). Juan and Ulloa in their famous *Noticias secretas de América, etc.*, draw a moving picture of the wretchedness of the *mitayo*. In Paraguay the term *mitayos* was applied to the Indians who voluntarily engaged to work for the Spaniards two months each year without remuneration in payment of taxes (Lugones, *op. cit.*, p. 135). An unpublished manuscript in the

Archives of the Indies in Seville, entitled "Descripción geográfica, histórica, física y política de la Villa Imperial y Cerro Rico de Potosí y de los partidos de Porco, Choyanta, Chichas ó Tarija, Lipez y Atacama," and dated 1789, gives the figure of 418 *mitayos*, working by turns in groups of one-seventh of their number in the Porco mines (ch. ix) and 14,248 *mitayos*, taking turns in groups of one-third of the total, in the mines of Potosí (ch. vi), under Francisco de Toledo in the year 1578. For information on the Indians' flight from the *mita* and the decline of that institution, cf. *Memorias de los virreyes que han gobernado en el Perú durante el tiempo del coloniaje español* (Lima, 1859), pp. 240-245.

143. *Recopilación de leyes de las Indias*, Bk. IV, Title xii, Law 18; Saavedra, *op. cit.*, p. 161; O. von Buchwald, "Propiedad rústica," *Sociedad jurídica-literaria* (Quito), January, 1920.
144. L. Baudin, "Le régime des terres au Maroc et la colonisation française," *op. cit.*, p. 196.
145. In Morocco, the allotted parcels of land could not be sold or mortgaged for ten years.
146. Art. 58: "La Nación reconoce la existencia legal de las comunidades de indígenas y la ley declarará los derechos que les corresponden" ("the State recognizes the legal existence of the native communities, and their rights are to be defined by statute law"). Art. 41: "Los bienes . . . de comunidades de indígenas son imprescriptibles y solo podrán trasferirse mediante título público, en los casos y en la forma que establezca la ley" ("the property . . . of native communities is imprescriptible and can be alienated only through the agency of the public authorities in cases and in a manner to be prescribed by law").
147. Of course, these laws must not be allowed to remain a dead letter. Ugarte maintains that the agrarian system of Peru is a catalogue of un-enforced laws ("The Agrarian Policy of Peru," *Inter-America*, October, 1923).
148. F. Ponce de León, "Representación en juicio de las comunidades indígenas," *Revista universitaria del Cuzco*, 1926, No. 49, p. 52; Cisneros, *op. cit.*, p. 484.
149. A. Sivirichi, *Derecho indígena peruano*, ch. iv.
150. Tello and Miranda, *op. cit.*, ch. iii.
151. Poblete Troncoso puts it at from 2,000 to 3,000; H. Castro Pozo, at more than 3,000; Valdez de la Torre, at 4,500. The largest Peruvian communities do not have more than 2,000 members (Huánuco), and most of them are of more modest size: an average of about 50 in the neighborhood of Cuzco, 100 to 120 in the districts of Apurímac and Puno, 650 to 750 around Lima, Ayacucho, Huancavelica, and Ancachs, and 1,400 in the region of Junin.
152. McBride, *op. cit.*, p. 22.
153. Saavedra, *op. cit.*, p. 148.
154. Boman, *Antiquités de la région andine, etc.*, II, 434 and 468.
155. *The Islands of Titicaca, etc.*, p. 80.
156. *Op. cit.*, pp. 13-14. This is the village studied by J. Vellard, "Un village de structure precolombienne," *Annales de géographie* (1943).

157. *Op. cit.*, ch. iii and iv.
158. Engélica Alvarez, "Ankoccahua," *Revista universitaria del Cuzco*, 1925, No. 47.
159. The Jesuits in Paraguay preserved the native communities, but considered them merely provisional, for they endeavored to accustom the Indians to private ownership (Gothein, *Der christlich-soziale Staat des Jesuiten in Paraguay* [Leipzig, 1883], p. 34).
160. Cesareo Vidalón, "El problema indígena," *Revista universitaria de Lima*, 1922, p. 207.
161. Cisneros, *op. cit.*, p. 37.
162. The tragic theme of the dissolution of the communities has been used by several novelists—for instance, by Alcides Argüedas in *La raza de bronce* (Valencia, Spain, 1924).
163. "Indian Legislation in Peru," *Hispanic Historical Review*, November, 1920, p. 524.
164. García Calderón, *op. cit.*, p. 329.
165. Sumner Maine, *Ancient Law: Its Connection With the Early History of Society and Its Relation to Modern Ideas* (New York, 1906), p. 253.
166. Among recent studies devoted to the agrarian communities we call particular attention to the following:
1. A report made by Dr. José Angel Escalante to the Upper Council on Native Affairs, at Lima, on March 10, 1936. This author distinguishes among four kinds of communal ownership: absolute collectivism (pastures); a "less perfect" form of collective ownership (lands of meager fertility, left to lie fallow for long periods); communal ownership with private usufructuary rights to allotted parcels of land held and transmitted by inheritance within the family, but with no right to sell; and communities of absolute private ownership.
 2. Two booklets, one by J. Cornejo Bouroncle, *Las comunidades indígenas, la explotación del trabajo de los indios* (Cuzco, 1939), a propaganda pamphlet, and the other by Julio Delgado, *Organización de la propiedad rural en la sierra* (Lima, 1930), well documented in regard to such Indian customs as cohabitation before marriage, indigenous forms of mutual aid, and the races run by young Indians as tests of their endurance.
 3. The important book of Poblete Troncoso, *Condiciones de vida y de trabajo de la población indígena del Perú* (Geneva, 1938).
 4. The basic work by H. Castro Pozo, *Nuestra comunidad indígena* (Lima, 1924), a detailed account of the life of the Indians of the Andean plateau. The author is a convinced champion of the agrarian communities. On the other hand, J. Imlaf Navarro, in his *Rol económico, social y político del indígena en Chile* (Santiago de Chile, 1945), has declared his opposition to the preservation of these communities in his country on the ground that the Indian is exploited by his chief (the cacique), and productivity suffers. As for creating new communities where they do not exist, this is a bold undertaking that requires further study. (For Venezuela, cf. R. Fernández y Fernández, *Las comunidades agrarias*

[Caracas, 1947]). We shall return to this question toward the end of the present volume. For the present writer's views, cf. "L'Indien dans l'économie des états andins," *Zeitschrift für die gesamte Staatswissenschaft*, Vol. CV, No. 2 (Tübingen, 1949), p. 339, and "Quelques aspects des politiques économiques des états andins," *Revue d'économie politique*, May, 1949.

NOTES TO CHAPTER VI

1. Gide and Rist, *A History of Economic Doctrines* (London, 1915), p. 440.
2. Tarde cites the Incas specifically in connection with his observation that the practice of counting by families, which is customary in countries of collective ownership at the time of the periodical redistributions of the land, is proof that originally the individual counted for nothing (*Les transformations du droit* [8th ed.; Paris, 1922], p. 74).
3. Gide and Rist, *loc. cit.*
4. Garcilaso, *op. cit.*, Bk. VI, ch. xxvi; Cieza de León, *Crónica*, Pt. II, ch. ix; Betanzos, *op. cit.*, ch. ix *et seq.*; Balboa, *op. cit.*, ch. viii; Cobo, *op. cit.*, Bk. XII, ch. xii; Román y Zamora, *Repúblicas de Indias, etc.*, II, 24. The importance of the reign of Pachacutec is apparent from the very exaggerations and inaccuracies of various writers. Santillán refers to Pachacutec as the first Inca to reign in Peru, as if his great figure was enough to put all his ancestors in the shade (*op. cit.*, §3), and Sarmiento attributes to him the invention of the agricultural terraces, which is certainly a mistake (*op. cit.*, ch. xxx). Cf. M. R. de Diez Cansaco, *Pachacutec Inca Yupanqui*; L. Baudin, "L'Inca Pachacutec, réformateur du monde," *Annales de l'Université de Paris*, April, 1953.
5. Garcilaso, *op. cit.*, Bk. VI, ch. xxxvi.
6. Garcilaso, *loc. cit.*; Betanzos, *op. cit.*, ch. xi and xvi.
7. Betanzos, *op. cit.*, ch. xvi.
8. J. de la Riva-Agüero, *Civilización peruana, época prehispánica* (Lima, 1937), p. 115.
9. *Del ayllu al cooperativismo socialista*, p. 144, cited by J. Basadre, *Historia*, p. 96. Incidentally, Pozo's title is incorrect. The theory of co-operatives is one doctrine; socialism is another. A desire to appear socialist is apparently what prompts their juxtaposition.
10. H. Trimborn, "Das recht der Chibcha in Columbien," *Ethnologica*, IV (1930), 36.
11. G. Muñoz Puglisevich, "La familia, la propiedad y el estado en el antiguo Perú," *Revista de economía y finanzas*, February, 1939, p. 156. This author classifies the present writer as a member of the "positivistic evolutionist" school.
12. E. Romero, *Historia económica y financiera del Perú, antiguo Peru y virreynato*, p. 84.
13. Luis E. Valcárcel acknowledges that the Inca empire was a socialist regime (*Historia*, p. 201).
14. J. C. Mariátegui, *Siete ensayos de interpretación de la realidad peruana* (Lima, 1928), p. 57, note.

15. Cf. ch. ix of Pt. I of the *Traité d'économie politique* published by a group of professors at the Faculty of Law (Paris: Dalloz, 1960).
16. H. Urteaga, *op. cit.*, p. 222. Cf. Moret, *op. cit.*, p. 309.
17. "Hay tanta multitud de lenguas entre ellos, que casi á cada legua y en cada parte hay nuevas lenguas" ("there is such a multiplicity of dialects among them that at almost every league and in every region a new tongue is spoken"), writes Cieza de León (*Crónica*, Pt. I, ch. cxv). In the district of Lima, there was a village numbering seven *ayllus*, each one of which had its own language (Cobo, *op. cit.*, Bk. XI, ch. ix). Sometimes three or four languages would be spoken in a single village, so that the inhabitants did not understand one another (Anello Oliva, *op. cit.*, p. 19). Cf. also Benzoni, *Historia*, Bk. III (p. 247 in the E. tr.).
18. As a matter of fact, the name "Quechua" is inappropriate. It was that of a group of *ayllus* in the neighborhood of Cuzco and was employed for the first time in the lexicon of D. de Santo Tomás published at Valladolid in 1560.
19. Some sounds familiar to us are unknown to this language, but it contains others that we do not have. It has five genders. Its verbs are conjugated, but its adjectives are invariable. It has no article, but it has a plural and a dual number, and the plural of its verbs has two first persons, exclusive and inclusive of the person speaking. It contains some delightful onomatopoeic words: in the word *huahua*, which means "baby," one can almost hear the puling infant, and in *alau* the sharp pain that makes us scream. On the other hand, it is of a nature to disconcert Europeans, for it is agglutinative, and a single word sometimes fills half a line. Here are some samples of its affixes: *kunka* means a place (*una*, water; *unakunka*, pool); *siki* denotes habit (*hillu*, food; *hillusiki*, glutton); *kay* signifies an abstract idea (*runa*, a man; *runakay*, humanity); *chaku* denotes attention (*chauha*, to look; *chahuachaku*, to examine).

Among the works that deal with the Quechua language, we may mention: D. de Santo Tomás, *Gramática ó arte de la lengua general de los reynos del Perú* (Valladolid, 1560); *Lexicón ó vocabulario de la lengua general del Perú*; Anon., *Arte y vocabulario en la lengua general del Perú llamada quichua y en la lengua española* (Lima, 1586); D. de Torres Rubio, *Gramática y vocabulario en la lengua general del Perú, llamada quichua y en la lengua española* (Seville, 1603), reprinted many times; *Arte de la lengua quichua* (Lima, 1700); J. Martínez, *Vocabulario en la lengua general del Perú, llamada quichua, y en la lengua española* (Lima, 1604); D. González Holguin, *Vocabulario de la lengua general de todo el Perú llamada lengua quichua* (Lima, 1586); *Gramática y arte nueva de la lengua general de todo el Perú, llamada lengua quichua ó lengua del Inca* (Lima, 1607), reprinted many times; Anon., *Arte y vocabulario en la lengua general del Perú llamada quichua y en la lengua española* (Lima, 1614); A. de Huerta, *Arte de la lengua quechua general de los yndios de este reyno del Perú* (Lima, 1616); D. de Olmos, *Gramática de la lengua general del Cuzco* (Lima, 1633); J. Roxo Mexía y Acón, *Arte de la lengua general de los yndios del Perú* (Lima, 1648); E. Sánchez de Melgar, *Arte de la lengua general llamada quichua* (Lima,

1691); V. Tschudi, *Die Kechua-Sprache* (Vienna, 1853); H. Mossi de Cambiano, *Gramática de la lengua general del Perú llamada comunemente quichua* (Sucre, 1857); *Diccionario quichua-castellano* (Sucre, 1860); Fernández Nodal, *Elementos de gramática quichua ó idioma de los Yncas* (Cuzco, 1872); J. D. Anchorena, *Gramática quichua* (Lima, 1874); R. Falb, *Das Land der Inca* (Leipzig, 1883); Onffroy de Thoron, *Grammaire et dictionnaire français-kichua* (Paris, 1886); J. de Arona, *Diccionario de peruanismos* (Lima, 1887-88); A. Carli, *Compendio de gramática quichua* (Santiago de Chile, 1889); M. Mossi, *Manual del idioma general del Perú* (Córdoba, 1889); Middendorf, *Wörterbuch des Runa Simi oder Keshua Sprache* (Leipzig, 1890); Luis Cordero, *Breves nociones gramaticales concernientes al idioma quichua* (Quito, 1894); R. P. Raurich, *Elementos de gramática quechua* (Sucre, 1901); M. Navarro, *Vocabulario castellano-quechua-pano* (Lima, 1903); Algunos religiosos Franciscanos ("some Franciscan monks"), *Vocabulario poliglota incáico* (Lima, 1905); P. E. Hengwart, *Gramática de la lengua quichua* (Lima, 1907); C. Markham, *Contribution Towards a Grammar and Dictionary of Quichua* (London, 1864); *Vocabularies of the General Language of the Incas of Peru* (London, 1908); Mariano Rodríguez, *Gramática de la lengua quechua* (Cuzco, 1921); Octavio Cordero, *El quechua y el cañari* (Cuenca, 1924); R. P. Julio Paris, *Gramática de la lengua quichua* (Cuenca, 1924); J. de Vega, *Arte ó rudimentos de gramática en la lengua indígena del Perú* (Lima, n. d.); Rivet and Créqui-Montfort, *Bibliographie des langues aymara et kiçua* (Paris, 1951).

20. Suárez, *op. cit.*, I, 193.
21. According to the royal decrees of 1554 and 1596 (Colección de documentos del Archivo de Indias, XVIII, 472 and 475), the *encomenderos* were obliged to teach the natives Spanish, but Quechua continued to be spoken. In 1576 a chair of Quechua was established in San Marcos University at Lima, knowledge of Quechua was required at the examinations for both the baccalaureate and the master's degrees, and in 1680 it was forbidden to ordain any priest who was ignorant of this language. The third Council of Lima decided that the Indians should be taught in their native tongue. Solórzano and Matienzo protested against this measure. They would have wished the natives to be obliged to speak Spanish, just as they had once been obliged by the Incas to speak Quechua.
22. *Corónica moralizada*, III, ch. ii. "The women of Cañas consider it shameful to express themselves in any language but their own" (M. Sobreviela and Narcisso y Barcelo, *op. cit.*, II, 157).
23. According to the Peruvian census of 1940, more than 50% of the school children now speak Quechua or Aymara and more than 35% are entirely ignorant of Spanish. We are told by Buschan that at present the Quechua language is in constant use on the plateau from 3° North Latitude to 22° South, and, east of the Andes, along the upper reaches of the Madeira and of the Marañón (G. Buschan, *Illustrierte Völkerkunde*, I, 325).
24. P. M. Benvenuto Murrieta, *El lenguaje peruano*, I (Lima, 1936).
25. *Op. cit.*, p. 165. We shall return to this question in the next chapter.

NOTES TO CHAPTER VII

1. Today's socialists make no attempt to limit demand. They acknowledge that the desires and needs of the consumers must be the principal factor in determining production. But this liberty for the consumer gives their system a utopian character. Cf. Webb, *Industrial Democracy* (London, 1897), II, 818.
2. Garcilaso, *op. cit.*, Bk. VIII, ch. ix.
3. "With a handful of this meal and a little charqui dissolved in boiling water, one has an excellent broth."—Monnier, *Des Andes au Para*, p. 277, n. 1. The dehydrated potato contains from 74% to 76.5% carbohydrates, from 7.4% to 8.5% protein, and from 0.5% to 2.3% fat. Generally speaking, the Indian diet is deficient in protein. Proteins are found in quinoa, *cañihua*, and mani. Cf. M. Kuczynski-Godard and C. E. Paz Soldan, *Diseccción del indigenismo peruano* (Lima, 1948), p. 105; L. E. Valcárcel, *Historia de la cultura antigua del Perú*, II, 75; J. Kuon Cabello, "Alimentación del indio peruano," *Revista universitaria del Cuzco*, III (1948), 130; M. T. Mejía Xesspe, "Kausay, alimentación de los indios," *Wira Kocha* (1931).
4. Cobo, *op. cit.*, Bk. I, ch. iv.
5. Tschudi, "Contribuciones á la historia, etc.," *op. cit.*, p. 64; Buschan, "Die Inca und ihre Kultur, etc.," *op. cit.*, p. 434. Without the potatoes it must have made a very indifferent sort of broth.
6. Garcilaso, *op. cit.*, Bk. VI, ch. vi.
7. Garcilaso, *ibid.*, Bk. IV, ch. xiv.
8. Ondegardo, "Copia de carta, etc.," *op. cit.*, p. 165. And yet the mass of the population in Spain at this time was also satisfied with very little. Some fruit and a piece of bread was enough for the peasant of the *huerta* of Valencia.
9. Zárate, *op. cit.*, ch. viii. Durret reports that at the beginning of the eighteenth century men and women used to hire themselves out to chew the kernels of maize. He adds: "The [drink] that is made with standing water is deemed stronger and better than if it is made with running water. The same is true in Flanders, where beer is made with stagnant and stinking water, which is greatly favored for this purpose." (*Op. cit.*, p. 192.)
10. Cobo, *op. cit.*, Bk. XIV, ch. iv.
11. Gómara, *op. cit.*, ch. cxcv; "Relación anónima," *Tres relaciones, etc.*, p. 190.
12. Garcilaso, *op. cit.*, Bk. VIII, ch. xii and xiii.
13. Garcilaso, *ibid.*, Bk. VIII, ch. ix; "Relación anónima," *op. cit.*, Law 10. The Inca Roca ordered the Indians to do their drinking in public places, for he was afraid of the excesses that resulted from these orgies and was better able in this way to prevent them (Morua, *op. cit.*, p. 16).
14. "The essential qualities of coca are brought out when it is mixed with carbonate of soda. This is what the Quechuas did in mixing it with *llypta*" (second letter of F. López to Dr. von Tschudi in *Deux lettres à propos d'archéologie péruvienne* [Buenos Aires, 1878]). Even today dis-

tances are still sometimes measured in *cocadas*, the time it takes to chew a pellet of coca.

15. Squier, *op. cit.*, p. 74. It should not be forgotten that the houses of European workers and peasants of the same period were also extremely small.
16. D'Orbigny, *op. cit.*, I, 131. In the dry coastal regions the houses were frequently built of reeds and branches (F. Pizarro, *op. cit.*, p. 122). Sometimes they were no more than simple shelters consisting of a pitched roof supported on posts and backed up against a wall or a rock. This is how they are represented on some of the pottery.
17. Del Hoyo, *op. cit.*, ch. ii, §59; Lorente, *op. cit.*, p. 332.
18. Where did Brehm get the idea that the common people had tables and wooden chairs and lived in houses with doors that could be locked with keys? (*Op. cit.*, p. 85.) Hanstein repeats what Brehm says (*op. cit.*, p. 55).
19. Cobo, *op. cit.*, Bk. XIV, ch. iv.
20. They could remain for a whole day in this position without getting up (Cobo, *ibid.*, Bk. XIV, ch. v).
21. Only the royal family used silver mirrors (Garcilaso, *op. cit.*, Bk. II, ch. xxviii). The mirrors were generally convex because they could thus, in spite of their small size, reflect the entire face. Ladies today also use convex pocket mirrors so that they may take up the least possible space in their handbags (Nordenskiöld, "Miroirs convexes et concaves en Amérique," *Journal de la Société des Américanistes de Paris*, 1926, p. 107). "La Condamine asserts that the workmanship on these mirrors was as good as if these people had had the most highly perfected instruments and had known the most precise laws of optics" (De Carli, *op. cit.*, I, 353).
22. Verneau and Rivet, *op. cit.*, p. 187.
23. Betanzos, *op. cit.*, ch. xiii. The remarkable cloaks of feathers which are to be seen in museums were worn only by dignitaries of high degree. As for the garments of bats' hair mentioned by Garcilaso, no trace of them has ever been found anywhere.
24. "De la orden, etc.," *op. cit.*, p. 104.
25. Several writers mistakenly refer to ponchos as being worn in the time of the Incas. Cf. C. Mead, *Old Civilizations, etc.*, pp. 19 and 33; and G. Buschan, *Illustrierte Völkerkunde*, I, 393.
26. Mme. A. Barnett, "À propos des cusma péruviennes," *Journal des Américanistes de Paris*, 1914.
27. "Como capa" ("as a cape"), says Las Casas (*Apologética*, ch. cclviii).
28. Zárate, *op. cit.*, Bk. I, ch. viii.
29. Cobo, *op. cit.*, Bk. XIV, ch. iv. We know that the headdress differed in each province.
30. Lope de Atienza, *Compendio historial*, ch. ix.
31. *Historia*, p. 114; P. de Ribera and A. de Chaves, "Relación de la ciudad de Guamanga," *Relaciones geográficas*, I, 113; D. Cabeza de Vaca, *op. cit.*, p. 72.
32. De Carli has seen this point quite clearly. "The Incas," he says, "succeeded . . . above all in eliminating those artificial needs that become the agents of destruction in all civil societies" (*Op. cit.*, p. 258). We see

how rash Nicholson is in speaking of "the high degree of material comfort" of the ancient Peruvians (*The Revival of Marxism* [London, 1921], p. 67). The reader will find detailed information on the food of the Indians in M. T. Mejía Xesspe, "Kausay, etc.," *Wira Kocho*, Vol. I, No. 1 (1931); on coca, in L. N. Saenz, *La coca* (Lima, 1938); and on clothing, in Lope de Atienzo, *Compendio historial*, ch. v, reprinted in J. Jijón y Caamaño, *La religión del imperio de los Incas* (Quito, 1931).

NOTES TO CHAPTER VIII

1. Blum, "L'idéal socialiste," *Revue de Paris*, May 1, 1924.
2. Garcilaso, *op. cit.*, Bk. IV, ch. xiii. This custom still persists among the old women of Peru and Ecuador, who keep spinning as they walk, often while carrying a baby on their back. (Bingham, "In the Wonderland of Peru," *op. cit.*, p. 401; Rivet, "Étude sur les Indiens de la région de Riobamba," *op. cit.*, p. 72).
3. Louis Baudin, "La loi économique," *Revue d'économie politique*, July 1924, p. 641.
4. Pedro Pizarro, *Relación*, p. 276.
5. *Op. cit.*, Vol. II, Bk. VI, ch. xii.
6. "Lo que se prueba acerca de las costumbres de las Indias" (Colección de libros españoles raros ó curiosos, XVI, 196). Prescott recalls that, according to certain authors, the great square of Cuzco was filled with mold brought from the distant shores of the Pacific Ocean (*op. cit.*, p. 818). Betanzos asserts that Pachacutec had Cuzco rebuilt just in order to give the Indians something to do and that he recommended military exercises to keep them from idleness (*op. cit.*, ch. xii and xvi). A great deal of time was already taken up with religious ceremonies on account of the large number of divinities (Ondegardo, "Report," *op. cit.*, p. 155).
7. *Op. cit.*, ch. xvii.
8. Del Hoyo, *op. cit.*, p. 165; Santillán, *op. cit.*, §59; Herrera, *op. cit.*, Dec. V, Bk. IV, ch. ii. "Indolence is their habitual state," says Raynal (*op. cit.*, Vol. II, Bk. VII, p. 208). Cf. Robertson, *Histoire de l'Amérique*, I, 270. "They spend whole days in the same place, sitting on their heels without moving and without saying anything," observes P. Bouguer (*op. cit.*, p. 102). The same is true of the Guarani (M. Fasbinder, *Der Jesuitenstaat in Paraguay* [Halle, 1926], p. 90).
9. Suárez, *op. cit.*, I, 239. Beginning with the reign of Pachacutec there was a holiday every nine days (Garcilaso, *op. cit.*, Bk. VI, ch. xxxv).
10. "Contribuciones, etc.," *op. cit.*, p. 34.
11. Garcilaso, *op. cit.*, Bk. VIII, ch. xxv. During the period of Spanish domination, steps were taken to keep the Indians from being employed for too long a time in the mercury mines, which would have ruined their health (Royal Ordinance of November 24, 1601 [Colección de documentos del Archivo de Indias, XIX, 174]).
12. The King of Spain also forbade pearl-fishing, or at least specified that no Indian could be employed in this occupation against his will and that no such fishing should be undertaken so long as it involved the risk of

death ("Código de leyes y ordenanzas para la gobernación de las Indias" [Colección de documentos del Archivo de Indias, XVI, 387]). Later, only Negroes were authorized to engage in this work (Colección de documentos del Archivo de Indias, XIX, 163).

13. The Spaniards did not enforce these salutary regulations in regard to the coca plantations, and whole tribes perished in consequence (Santillán, *op. cit.*, §115). Yet the King of Spain had followed the Inca's example by decreeing that Indians should not be employed in regions where the climate was different from what they had been accustomed to from birth and set up detailed regulations regarding work on the coca plantations with the object of protecting the health of the natives (*Recopilación de leyes de las Indias*, Bk. VI, Title ii, Law 20). A witty anonymous writer observes that the fact that coca grows only in insalubrious regions is evident proof that it is an invention of the Devil ("Provehimientos generales y particulares del Pirú" [Colección de documentos del Archivo de Indias, XI, 51]). Cf. W. G. Mortimer, *Coca, the Divine Plant of the Incas* (New York, 1901) and L. N. Saenz, *La Coca* (Lima, 1938).
14. Garcilaso, *op. cit.*, Bk. V, ch. x.
15. Poma de Ayala, *Nueva corónica*, p. 195; Santillán, *op. cit.*, §11; Cabeza de Vaca, *Relaciones geográficas*, II, 71.
16. Hanstein, *op. cit.*, p. 35.
17. *Op. cit.*, Bk. V, ch. xi.
18. Ordinance of November 24, 1601 (Colección de documentos del Archivo de Indias, XIX, 163).
19. Garcilaso, *op. cit.*, Bk. VI, ch. xxv.
20. *Ibid.*, Bk. IV, ch. xiii.
21. Acosta, *op. cit.*, Vol. II, Bk. VI, ch. xvi.
22. The bronze smelters were an exception to this rule (Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 602).
23. "Este Rey estableció muchas leyes, entre las cuales dice . . . que convenía que los hijos de la gente común . . . les enseñasen los oficios de sus padres, que les bastavan" ("This King promulgated many laws, among them one that required children of the common people to be taught the occupation of their parents, which was education enough for them"), says Garcilaso (*op. cit.*, Bk. IV, ch. xix). Cf. Prescott, *op. cit.*, p. 809; De Carli, *op. cit.*, I, 240; De Greef, *Sociologie, etc.*, II, 40; Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 602. "Skilled occupations, like every other calling and office in Peru, always descended from father to son. The division of castes, in this particular, was as precise as that which existed in Egypt or Hindoostan."—Spencer, *op. cit.*, I, 478-479, quoting Prescott, *op. cit.*, p. 809. Hereditary occupations are characteristic of most primitive peoples (Durkheim, *La division du travail social* [Paris, 1893], p. 341). In More's Utopia members of the same family worked at the same occupation.
24. Román y Zamora, *op. cit.*, II, 30.
25. A prudent concern for the future is not necessarily, as Bücher supposes, a mark of civilization, nor is the lack of such prevision characteristic of

- primitive tribes (*Die Entstehung der Volkswirtschaft* [Tübingen, 1922], p. 18). Never has there been such great waste as in our so-called civilized societies.
26. One evidence of this that we have already mentioned is the precautions that were taken to control the exploitation of guano. It is also possible that aversion to waste may have motivated the religious policy of the Incas. It was probably in order to reduce the number of sacrifices that they discouraged the cult of the *huacas* (Santa Cruz Pachacuti, "Relación, etc.," *Tres relaciones, etc.*, p. 244; Payne, *op. cit.*, I, 543). "The *huacas* were so numerous that the sacrifices would have kept the Indians fully occupied even if they had had nothing else to do," says Ondegardo ("Report," *op. cit.*, p. 155).
 27. Cobo, *op. cit.*, Bk. XII, ch. xxix; Ondegardo, *Relación*, p. 56.
 28. Ondegardo, *ibid.*, pp. 26 and 54.
 29. The great royal hunts of the Incas were not repeated in the same quarter of the country more often than once in four years (Prescott, *op. cit.*, p. 807) in order to allow time for the fleece of the vicuña to attain its full beauty (Hanstein, *op. cit.*, p. 45); but Herrera declares that the forest of Huamachuco was the most frequent scene of these hunts (*op. cit.*, Dec. V, Bk. IV, ch. x). At Jauja the Inca Manco organized a great hunt in honor of Pizarro (Prescott, *op. cit.*, p. 990). Authors are not in agreement on the extent to which members of the community enjoyed the right to hunt on their own territory. Cunow remarks that Garcilaso contradicts himself (*op. cit.*, ch. v). Trimborn reasons by analogy, distinguishing regions that abounded in game from those that did not, as wooded areas were distinguished from those that were not wooded, wild animals being the property of the community in the first and belonging to the sovereign in the second ("Der Kollektivismus, etc.," *op. cit.*, p. 592). Middendorf (*Peru, etc.*, p. 47) and Beuchat (*op. cit.*, p. 657) assume that hunting was absolutely forbidden everywhere. Latham judges that, in addition to the great hunts organized by the Incas, the Indians themselves hunted once a year on the territory of their *ayllu*, using the methods of encirclement described in the text, but he does not say on what documents he bases this assertion (*La existencia, etc.*, p. 62). The same author, following Matienzo, also speaks of professional hunters in certain provinces (*op. cit.*, p. 64). It is strange that the other chroniclers make no mention of them. Hunting seems to have been held in high esteem among the Atacamas, for quantities of bows and arrows have been found in their tombs (Buschan, *Illustrierte Völkerkunde*, I, 413).
 30. Opinions differ concerning the number of Indians thus employed. Zárate says 4,000 to 5,000; Garcilaso, 20,000 to 30,000; Cieza de León, 50,000 to 100,000 (Zárate, *op. cit.*, Bk. I, ch. viii; Garcilaso, *op. cit.*, Bk. VI, ch. vi; Cieza de León, *Crónica*, Pt. II, ch. xvi).
 31. "Los errores y supersticiones de los indios," *op. cit.*, III, 37. Durret, in 1720, gives a similar description: "Women and children take part in this hunt, and their cries and shrieks play no small part in its success" (*op. cit.*, p. 207).
 32. Colpaert, *op. cit.*, p. 34. Tschudi maintains that the name Chaco comes

- from the Quechua word *chaku* used to denote the hunters' encirclement of the animals (*Die Kechua-Sprache*). And in fact the Spaniards did tighten the circle of their conquests in South America by driving back the Indians toward the territory since known as the Gran Chaco.
33. Garcilaso, *op. cit.*, Bk. VIII, ch. xvii; S. de Villasante, "Relación general de las poblaciones españolas del Perú," *Relaciones geográficas*, I, 21.
 34. The abundance of fish along the Peruvian coast rendered all measures of conservation superfluous. Fishing was done with hook and line as well as with nets, and torchlight fishing was also known. The Indians would go out at night on rafts with torches and would shoot darts at the fish that were attracted by the light. According to G. de Santa Clara, the system employed in capturing animals was also used in taking fish. The Indians would line up in the water and swim toward the land, making a great noise, and the panic-stricken fish would fling themselves into the nets set out along the shore. But this procedure, which was called "royal fishing," was not without its element of danger on account of the considerable number of sharks that infested these waters (*op. cit.*, Vol. III, ch. lxi).
 35. Certain stones known as *hihuana* were much sought after as hammers because they were very hard (Garcilaso, *op. cit.*, Bk. II, ch. xxviii).
 36. Bandelier, *The Islands of Titicaca, etc.*, Pt. III, n. 54; Rouma, *La civilisation des Incas, etc.*, p. 54, n. 1.
 37. Rivet, "Les Indiens Colorados," *Journal de la Société des Américanistes de Paris*, N.S., II (1905).
 38. Verneau and Rivet, *op. cit.*, p. 240.
 39. *Op. cit.*, Vol. II, Bk. VII, p. 150. Abbé Genty writes to the same effect: "Their monuments and all the products of their arts were due only to prodigious efforts of patience and industry" (*L'influence de la découverte de l'Amérique, etc.* p. 29). "Patience triumphed over the intractability of the material, and Nature yielded to the force of numbers," writes E. Grandidier (*Voyage dans l'Amérique du Sud, etc.* [Paris, 1861], p. 84).
 40. *Op. cit.*, Vol. I, Bk. IV, ch. xxiii.
 41. *Apologética*, ch. lix.
 42. Dated August 1, 1533 (Colección de documentos del Archivo de Indias, XLII, 85).
 43. *Op. cit.*, I, 307.
 44. The Spaniards were not unacquainted with platinum, but believed it could not be utilized and attempted no exploitation of it before the nineteenth century (Wolf, *op. cit.*, p. 641, n. 33). They called it "white gold." A platinum plate was found by the conquerors in the Temple of the Moon at Cuzco (R. Loredo, "El reparto de los tesoros del Cuzco," *Revista del Archivo histórico del Cuzco*, 1950, p. 259).
 45. Boman, *Antiquités, etc.*, p. 861; Verneau and Rivet, *op. cit.*, pp. 133 and 341.
 46. Nordenskiöld, *The Copper and Bronze Ages in South America, Comparative Ethnographical Studies* (Göteborg, 1921), Vol. IV.
 47. Jijón y Caamaño, "Los tincullpas y notas acerca de la metalurgia de los aborígenes del Ecuador," *Boletín de la Academia nacional de historia*,

- 1920, pp. 40 *et seq.* Bingham has found objects of almost pure tin ("The Inca Peoples and Their Culture," *Proceedings*, 19th International Congress of Americanists, [1917], 256). Carabuco, in Bolivia, was one of the principal centers of its production.
48. Rivet, "Les éléments constitutifs des civilisations du nord-ouest et de l'ouest sud-américain," *Proceedings*, 21st International Congress of Americanists (Göteborg, 1924), p. 13, n. 1.
49. Santillán, *op. cit.*, §114.
50. The metal is extracted by washing the gold-bearing gravel. Cf. Carranza, "Sinopsis histórico-científico de la historia minera en el Perú á través de los períodos incaico y colonial," *Revista universitaria de Lima*, II (1923), 205; Herrera, *op. cit.*, Dec. V, Bk. III, ch. xv. Frézier describes the placer mining of gold in Chile (*Relation, etc.*, p. 100).
51. Quesada, *Crónicas potosinas* (Paris, 1890), Vol. I.
52. Verneau and Rivet, *op. cit.*, pp. 341 *et seq.*; Verneau, "Les collections anthropologiques équatoriennes du Dr. Rivet," *Journal de la Société des Américanistes de Paris*, N.S. (1907); H. Saville, *The Antiquities of Manabi, Ecuador, Final Report*.
53. Wolf, *op. cit.*, p. 639.
54. Rouma, *La civilisation des Incas, etc.*, p. 52; Beuchat, *op. cit.*, p. 685.
55. It is obvious that to obtain copper by this means, only easily fusible ores could be used—oxychloride (atacamite) and silicate.
56. Garcilaso, *op. cit.*, Bk. VIII, ch. xxv; Acosta, *op. cit.*, Vol. I, Bk. IV, ch. x.
57. Garcilaso, *loc. cit.*; F. de Palencia, *op. cit.*, Pt. I, Bk. II, ch. xi. "Así como el viento es provechoso para navegar por el mar, lo es en este lugar para sacar la plata" ("the wind here is as suitable for navigation as it is for the mining of silver"), says Cieza de León (*Crónica*, Pt. I, ch. cix).
58. Beuchat, *op. cit.*, pp. 686 *et seq.* This was the first method used by the Spaniards in treating the silver-bearing ores of Potosí. (Cf. *Relaciones geográficas*, Vol. II, App. 4). The amalgamation process was employed for the first time in America by B. de Medina in 1554, introduced into Peru by F. de Velasco about 1567, and perfected by C. Corso de Leca in 1582 (Anon., "Descripción geográfica, histórica, física y política, etc.," unpublished manuscript previously cited, ch. iii).
59. Santillán, *op. cit.*, §42; Cieza de León, *Crónica*, Pt. II, ch. xviii.
60. "Memorial y relación de las minas de azogues del Pirú [*sic*]" (Colección de documentos del Archivo de Indias, VIII, 422).
61. Garcilaso, *op. cit.*, Bk. VIII, ch. xxv.
62. *Relaciones geográficas*, I, 110, n. d.
63. Azogues, Ecuador, owes its name to its mercury mines, today exhausted. The output of Huancavelica was not sufficient to treat the silver of Potosí (cf. the letter of the Marquis de Montesclaros [Colección de documentos del Archivo de Indias, VI, 319]), and mercury was brought from Almadén, Spain, and transported on the backs of mules from Arica to Potosí (cf. unpublished manuscript cited in Note 58 above, ch. ii).
64. Fidel López takes exception to the statements of Rivero and Tschudi to the effect that the Indians did little work in wood (Fidel López, *op.*

- cit., p. 303; Rivero and Tschudi, *op. cit.*, p. 120). A great many articles made of wood have been found in the territory of the Atacamas.
65. "The judicious choice of material showed in itself the mastery to which the craftsmen in stone had attained" (Capitan and Lorin, *Le travail en Amérique avant et après Colomb*, p. 130).
66. Wiener, *Pérou et Bolivie, etc.*, p. 570.
67. Cieza de León, *Crónica*, Pt. II, ch. xv; Rouma, *La civilisation des Incas, etc.*, p. 54; P. Walle, *op. cit.*, p. 163. The Peruvians also knew how to cut precious stones, notably emeralds.
68. Wiener, *Pérou et Bolivie, etc.*, p. 469.
69. *Apologética*, ch. lvi. Las Casas speaks of black stones used in building the royal dwellings and the temple of the Sun at Tomebamba. Garcilaso also mentions these black stones in describing the temple of Cacha, south of Cuzco (*op. cit.*, Bk. V, ch. xxii).
70. *Op. cit.*, p. 210.
71. Bingham, "In the Wonderland of Peru," *op. cit.*, p. 448. A slab of porphyry at Ollantaytambo measures approximately seven by ten feet (Grandidier, *op. cit.*, p. 93). "They did not build with any stones less than ten feet square" (Montaigne, *Essays*, Book III, ch. vi). It is difficult to distinguish the monuments belonging to the Inca period from those that were erected earlier. The cyclopean walls are undoubtedly often very ancient, and Humboldt is mistaken in considering the ruins of Tiahuanaco as typical of Inca architecture (*Vues des Cordillères, etc.*, I, 309); but this is not always the case, for the Incas were imitators, and, according to Pablo Chalón, the fortress of Cuzco is a relatively recent copy of Tiahuanaco (*Los edificios del antiguo Perú* [Lima, 1884], p. 93). Some of the blocks of stone in this fortress reached a height of over fifteen feet.
72. Squier, "Quelques remarques sur la géographie et les monuments du Pérou," *Bulletin de la Société de géographie*, January, 1868.
73. James Ferguson, *A History of Architecture in All Countries from the Earliest Times to the Present Day* (London, 1887), II, 587-588; F. López, *op. cit.*, p. 316. Excellent photographs of walls may be found in several books, particularly those of Bingham ("In the Wonderland of Peru," *op. cit.*, p. 416) and Middendorf (*Peru, etc.*, III, 477).
74. Wiener declares that at Ollantaytambo some of them were from twenty-five to thirty feet high and that they attained a height of forty feet at Viracochabamba and sixty at Huamachuco (*Pérou et Bolivie, etc.*, pp. 480 et seq.). Cf. Velarde, *Arquitectura peruana*, Pt. I.
75. J. Déchelette, *Manuel d'archéologie préhistorique* (Paris, 1908), p. 387.
76. H. Rowe, *Inca Culture at the Time of the Spanish Conquest*, p. 226, n. 10.
77. *Historia*, III, 551. The same question has been raised in regard to the erection of the colossal statues on Easter Island. Mrs. Routledge has studied it very carefully in her recent book (*The Mystery of Easter Island* [London, n.d.], p. 197). She acknowledges that these massive blocks of stones could have been extracted from quarries and set up on embankments, but she does not explain how they could have been

- moved for considerable distances, even if we assume that rollers and rigging were used. The mystery remains.
78. Garcilaso, *op. cit.*, Bk. VII, ch. xxvii; Morua, *op. cit.*, p. 65.
 79. *Op. cit.*, p. 138.
 80. Betanzos, *op. cit.*, ch. xiii; Rouma, *La civilisation des Incas, etc.*, p. 45, n. 1.
 81. Betanzos, *op. cit.*, p. 109; Suárez, *op. cit.*, Pt. II, pp. 168 *et seq.*
 82. Wiener, *Pérou et Bolivie, etc.*, pp. 150 *et seq.*; Bingham, "In the Wonderland of Peru," *op. cit.*, p. 486.
 83. Prescott, *op. cit.*, p. 813.
 84. *Op. cit.*, Bk. II, ch. xiv; Morua, *op. cit.*, p. 161. Squier does call attention to an arch at Pachacamac (*Peru, etc.*, p. 70), but Uhle asserts that it is of Spanish construction (Jijón y Caamaño, "Nueva contribución al conocimiento de los aborígenes de la provincia de Imbabura de la República del Ecuador," *op. cit.*, p. 115). On the other hand, false vaults are often encountered, consisting of a shouldered arch, i.e., a lintel carried on corbels projecting from the supporting stones, which are arranged in steps, without any need for a keystone. Velasco contends that the Caras made use of the arch (*op. cit.*, II, §9).
 85. Suárez, *op. cit.*, I, 155.
 86. Wiener, *Pérou et Bolivie, etc.*, pp. 486 *et seq.* and 503 *et seq.*
 87. According to Bingham ("In the Wonderland of Peru," *op. cit.*, and *Inca Land*, p. 331), Machu Picchu was the place of refuge of the *amautas* during the intermediate period, and the cradle of the Inca dynasty was Tampu Toko—*toko* meaning "window." Las Casas speaks of windows which served to light the *tambos* built along the highways by order of the sovereigns for persons traveling on official business; but this is certainly an error, as J. de la Espada observes ("De las antiguas gentes, etc.," *op. cit.*, p. 191, n. 1). Even where openings were made in the walls, they were kept to an indispensable minimum, for, as the Peruvians knew nothing of glass, these apertures admitted the cold air along with the light.
 88. Bingham, "In the Wonderland of Peru," *op. cit.*, p. 467. On page 485 of this book there is a photograph of a very beautiful door with a monolithic lintel. Middendorf (*Peru, etc.*, III, 118) also includes a picture of a beautiful monolithic door in Huánuco Viejo. From observations made at Incapirca in the province of Cañar, where two holes were drilled at the base of each jamb in corresponding positions in the stone, it would appear that the doors were raised and lowered like drawbridges and were attached by ropes. "The latter, passing through the grooves cut in the stone, could hold the base of the door and have the effect of a hinge" (Verneau and Rivet, *op. cit.*, pp. 83 *et seq.*).
 89. Cobo, *op. cit.*, Bk. XIV, ch. iv. It is not known whether the locks found in Bolivia and which are exhibited in the ethnographic museums of Neuchâtel and Berlin date from before the conquest (Van Gennep, "Études d'ethnographie sud-américaine," *Journal de la Société des Américanistes de Paris*, N.S., 1914, Vol. II). When the Indian left his home, he often was content merely to place a little stick across the en-

- trance as a sign that the master was out and that no one was to enter (Calancha, *Corónica moralizada*, Vol. I, Bk. I, ch. xv).
90. With the exception, perhaps, of the roof of short grass and reeds on the turret of Azángaro (Reclus, *Géographie universelle*, XVIII, 607).
 91. Jerez, *op. cit.*, p. 330.
 92. Some of the more important buildings may have had a covered inner gallery, forming a kind of atrium (Wiener, *Pérou et Bolivie, etc.*, p. 505). Herrera declares that the straw of which the roofs were made was so tightly compacted that it would last for several years if not destroyed by fire (*op. cit.*, Dec. V, Bk. V, ch. i).
 93. Prescott, *op. cit.*, p. 780.
 94. Garcilaso, *op. cit.*, Bk. III, ch. xx and xxi; Cieza de León, *Crónica*, Pt. II, ch. xxvii; Betanzos, *op. cit.*, ch. xi; R. Lehmann-Nitsche, "Coricancha," *Revista del Museo de la Plata*, XXXI (1928), 1.
 95. Garcilaso, *op. cit.*, Bk. III, ch. xxiv. Among other interesting descriptions of temples, we may mention that given by Cieza de León (*Crónica*, Pt. I, ch. lxxxix) of the temple of Vilcas, which was reached by two stone stairways, each guarded by forty doorkeepers, that given by Garcilaso (*op. cit.*, Bk. V, ch. xxii) of the temple of Viracocha, sixteen leagues from Cuzco, and those of the very famous sanctuaries of Pachacamac on the coast and of Copacabana on the shore of Lake Titicaca (Estete, *Relación*; Ramos Gavilan, *Historia del célebre santuario de Nuestra Señora de Copacabana y sus milagros é invención de la cruz de Carabuco*).
 96. Suárez says that the palaces of the Incas must have been gloomy, dark, and even ugly (*op. cit.*, Pt. II, p. 181), and Pablo Chalón declares that those of the Chimús were superior to them (*op. cit.*, p. 93).
 97. Garcilaso, *op. cit.*, Bk. VI, ch. i.
 98. Niches were set in the retaining walls or outer enclosures at Pucara and Kona on the island of Titicaca. Did they serve as shelter for the Indians and the crops at times of sudden torrential rains, or did they house the idols whose task it was to preside over the work of the fields? We do not know (Bandelier, *The Islands of Titicaca, etc.*, Pt. IV, p. 235).
 99. F. de Jerez, *op. cit.*, p. 334.
 100. Balboa, *op. cit.*, ch. xi. Among other descriptions of places we may mention those of Callo, near Latacunga, and of Hatun-Cañar (A. de Ulloa, *Voyage de l'Amérique méridionale, etc.* [F. tr.], pp. 387-389). Morua describes a palace in which the wife of the Inca Roca lived and which had more than one hundred rooms, twenty gates, and four great courts (*op. cit.*, p. 47), but his report is based only on hearsay.
 101. Perhaps this custom has a religious basis. The Indians believed that the souls of the dead would one day return to take possession of their bodies and that they would be happy to find their old homes waiting for them.
 102. Middendorf, *Peru, etc.*, III, 519. Buschan sees in these precolumbian habitations the prototype of today's Bolivian *corral* (*Illustrierte Völkerkunde*, I, 399).
 103. The wall of the temple of Viracocha at Racche is made of brick (Bingham, *Inca Land*, p. 129).
 104. Cobo, *op. cit.*, Bk. XIV, ch. iii; Garcilaso, *op. cit.*, Bk. I, ch. xii.

105. Jerez, *op. cit.*, p. 333. The conquerors became so quickly familiar with the town plans that they no longer thought of describing them. As Helps remarks, it is Jerez, the companion and secretary of Francisco Pizarro, who supplies us with the best description of the Peruvian town (*op. cit.*, Vol. III, p. 358, n. 1).
106. Twenty thousand, according to P. de Carabajal, "Descripción fecha en la provincia de Vilcas-Guaman," *Relaciones geográficas*, I, 166.
107. Wiener, *Pérou et Bolivie, etc.*, p. 211. E. Harth-Terré ("Fundación de la ciudad incáica," *Revista histórica de Lima*, Vol. XVI, 1943) explains the establishment of this town first as a measure of defense and then as an application of an astronomical and ritual idea.
108. Wiener, *Pérou et Bolivie, etc.*, p. 132.
109. Betanzos, *op. cit.*, ch. xvi. On Cuzco, cf. L. E. Valcárcel, "Sobre el origen del Cuzco," *Revista del Museo nacional de Lima*, VIII, No. 2 (1939), 190, with maps indicating the routes presumably followed by the immigrants, and R. Larco Herrera, "El Cuzco precolombino," *Revista universitaria del Cuzco*, II (1929), 224.
110. L. Valcárcel, "El Cuzco precolombiano," *Revista universitaria del Cuzco*, No. 44 (1924). The city was traversed by another, smaller stream, the Tullumayu.
111. R. de Lizárraga, *Descripción breve, etc.*, ch. lxxx. Cf. De Contreras y Valverde, "Relación de la ciudad del Cuzco," *Relaciones geográficas*, II, 180.
112. Pedro Sancho de la Hoz, *Relación*, p. 192; Garcilaso, *op. cit.*, Bk. VII, ch. viii.
113. "An extraordinary, a unique city, in which thoughtful planning not only achieved an admirable fusion between the geometrical possibilities of symmetry and uniformity, on the one hand, and the uneven character of its topography, on the other, but attained a sort of synthetic expression of the political geography of the entire empire" (H. Velarde, *op. cit.*, p. 37).
114. Nothing is more difficult than to estimate the population of a community at a glance. Let us recall that Paris under Philippe le Bel did not number 250,000 inhabitants (Levasseur, *La population française* [Paris, 1889], I, 154 and 170).
115. This cotton is very pure, almost always free from grit and dust, but inferior in quality to the Asiatic variety. Cf. C. Larrabure y Correa, *Bref aperçu sur l'état financier et économique du Pérou* (Brussels, 1914), p. 9.
116. The spindle weight or whorl is a cylindrical ring from one to two inches in diameter, which keeps the thread from slipping on the spindle. It is sometimes shaped like a truncated cone. According to D'Harcourt, the South Americans were so far from any understanding of the wheel that the Peruvians did not make use of the principle of the steelyard and its rotating movement (*op. cit.*, p. 124, and *Les tissus indiens du vieux Pérou* [Paris, 1924], p. 9).
117. D'Harcourt, *Les tissus indiens du vieux Pérou*, p. 9; Beuchat, *op. cit.*, Pt. IV, ch. x; Garcilaso, *op. cit.*, Bk. IV, ch. xiii.
118. "It is the most extraordinary textile development of a prehistoric people"

- (Mead, *Old Civilizations of Inca Land*, p. 37, quoted from Murphy, *Textile Industries*). Holmes calls attention to the similarity between the textiles of the Peruvians and those of the Egyptians in the first centuries of the Christian era (*Textile Fabrics in Ancient Peru*, Bureau of American Ethnology, Bulletin 7 [Washington, 1889], p. 7). Cf. Crawford, "Peruvian Textiles," and "Peruvian Fabrics," *Anthropological Papers of the American Museum of Natural History*, XII, Pt. 3 and Pt. 4 (1916); and "The Loom in the New World," *The American Museum Journal*, XVI, No. 6 (October, 1916).
119. *Crónica*, Pt. I, ch. lxxvii-xciv.
 120. Mme. Barnett, "Étude technologique d'un tissu péruvien antique," *Journal de la Société des Américanistes de Paris*, 1909.
 121. D'Harcourt, *Les tissus indiens du vieux Pérou*, p. 14.
 122. *Le travail en Amérique*, pp. 149 and 152. Cf. also *La renaissance de l'art français*, special number (August, 1926), p. 442.
 123. "The Peruvians had discovered and applied the principle of brocade, which consists, as is known, in superimposing a second, more variable weft on the first, regular one and having it appear and disappear as it passes from front to back according to the exigencies of the design" (D'Harcourt, *L'Amérique avant Colomb*, p. 127). According to Sarmiento, Peruvian art owed this discovery to the Inca Viracocha (*op. cit.*, ch. xxv). What is also very remarkable is that the backs of Peruvian tapestries were not left unfinished and that both sides are often equally perfect (D'Harcourt, *Les tissus indiens du vieux Pérou*, p. 15).
 124. Hamy, *Galerie américaine du musée d'ethnographie* (Paris, 1897), pl. LI. Among recent writings on textiles we may mention: L. M. O'Neale and L. A. Kroeber, *Textile Periods in Ancient Peru* (University of California Press, 1930); R. Carrión Cachot, "La indumentaria en la antigua cultura de Paracas," *Wira Kocha*, No. 1 (1931); B. K. de la Torre, "Clasificación técnica de los tejidos antiguos del Perú," *Revista del Museo nacional de Lima*, VII, No. 1 (1938), 137.
 125. Valette, "Note sur la teinture de tissus précolombiens du Bas-Pérou," *Journal de la Société des Américanistes de Paris*, X (1913), pp. 43-46.
 126. Rouma, *La civilisation des Incas, etc.*, p. 55; Rivero and Tschudi, *op. cit.*, p. 128.
 127. For example, in the region of Ecuador that stretches to the east of Riobamba. Each maguey plant can yield an average of about fifteen and a half pounds of fiber (P. Walle, *op. cit.*, p. 201). On the uniformity of the ancient methods of weaving among the Andean peoples, even those that were widely separated from one another, and the survival of these methods among their descendants, cf. R. D'Harcourt, "Le tressage des frondes au Pérou et en Bolivie," *Journal de la Société des Américanistes de Paris*, 1940, p. 103. We shall speak of the making of weapons when we discuss the army.
 128. Hébert, "Quelques mots sur les techniques des céramistes péruviens," *Journal de la Société des Américanistes de Paris*, IV (1903). Even today many of the potters of the plateau are ignorant of the wheel.
 129. Wiener, *Pérou et Bolivie, etc.*, p. 625.

NOTES TO CHAPTER IX

1. Garcilaso, *op. cit.*, Bk. VI, ch. xxxvi.
2. Las Casas, *Apologética*, ch. cclvii.
3. Montesinos, *op. cit.*, ch. iv.
4. *Ibid.*, ch. xii and xv.
5. R. Porras Barrenechea, "Quipus y quilca," *Mercurio peruano*, January, 1947, p. 3. Among the writers who accept the statement of Montesinos are: Wiener, *Essai, etc.*; Brehm, *op. cit.*, p. 413; Lorente, *op. cit.*, p. 290; Irigoyen, "Inducciones, etc.," *op. cit.*, p. 38. A Posnansky has collected ideographic documents prepared by the missionaries shortly after the conquest in order to transcribe certain parts of the catechism for the natives. He maintains that this writing is of pre-Columbian origin (*Guía general, etc.*, p. 78). It is certain that the ancient Peruvians drew some signs, but were these true hieroglyphics or mere figurations? We do not know. (Cf. Bollaert, *On Ancient Peruvian Graphic Records*, s. l. et a.). If the Indians had wanted to make use of writing, the materials for it would not have been lacking, for the Agave is common on the plateau. Morúa tells how the Spaniards, finding themselves without paper and ink, often wrote on bark with the juice of certain fruits (*op. cit.*, p. 179). According to Humboldt, a Franciscan missionary found on the banks of the Ucayali books of paintings made of leaves of cotton cloth held together with an Agave thread and sent one of them to Lima, where it was mislaid (*Vues des Cordillères, etc.*, I, 203). On the other hand, certain authors believe that drawings appearing on articles made by the Chimús can be identified as characters (Larco Hoyle, *op. cit.*, II, 85) and that these people must therefore have been acquainted with ideographic writing, but forbidden by the conquering Incas to make use of it (Velez López, "¿Existió la escritura entre los Yungas?" *Proceedings*, 21st International Congress of Americanists, 1924, p. 87). Cúneo Vidal believes that he has found evidence of ideographic writing in the bas-reliefs of Tiahuanaco (*Historia de la civilización peruana*, p. 115). As for the writing of the Mayas, it could not have been taken to South America by the Mayan immigrants themselves, because in that remote period the hieroglyphic signs of the Mayas were used only as ornaments (Spinden, "Notes on the Archaeology of Salvador," *American Anthropologist*, 1915). The Chibchas, though closer to Central America than the Quechuas were, were ignorant of the art of writing (Restrepo, *op. cit.*, ch. xv).
6. *Op. cit.*, ch. xiv. Perhaps there is some connection between this rod and those sheathed in gold and silver and marked with lines and shapes that have been found at Chordeleg, although this city had completely disappeared at the time of the Incas (Suárez, *op. cit.*, I, 174). Suárez conjectures that the Cañaris wrote on rods. In that case, Huayna Capac, who was born at Tomebamba, might well have been acquainted with this method of writing. Las Casas reports that the imperial couriers carried rods with certain marks on them that assured the authenticity of their messages (*Apologética*, ccliii).
7. Bollaert, *Antiquarian, Ethnological, etc.*, p. 5, n. 3. For the Chinese, cf.

- Bastian, *Die Kulturländer des alten Amerika*, II, 75. Anello Oliva maintains that the quipu was invented by a favorite of Mayta Capac (*Histoire du Pérou* [F. tr.], p. 44). This information is suspect, and we prefer to believe, with Calancha, that the quipu dates from time immemorial (*Corónica moralizada, etc.*, ch. xiv).
8. Velasco, *op. cit.*, II, 7; Cevallos, *op. cit.*, I, 28.
 9. Verneau and Rivet, *op. cit.*, p. 244.
 10. Drawings of these computers may be found in Cronau, *op. cit.*, II, III; Suárez, *op. cit.*, Pt. II ("Atlas geográfico"), pl. III; Verneau and Rivet, *op. cit.*, p. 246; and Wiener, *Pérou et Bolivie, etc.*, p. 776.
 11. Wiener, *ibid.* Acosta refers to the custom certain Indians had of using stones to express ideas. "It is really marvelous to see old men learning the paternoster with one circle of little stones, and with another the Ave Maria, and with still another the Credo, and knowing what every stone means: who was conceived of the Holy Spirit, who suffered under Pontius Pilate. . . . For my own part, a single one of these circles of stone would be enough to make me forget everything I knew by heart" (Acosta, *op. cit.*, Vol. II, Bk. VI, ch. viii). The same author recalls that the Indians also made use of rude paintings and calculated by means of kernels of maize.
 12. *Op. cit.*, I, 99.
 13. In Leland Locke's "*The Ancient Quipu, a Peruvian Knot-Record* (New York: American Museum of Natural History, 1923) there are some excerpts from early writers on the subject of quipus, but his bibliography is incomplete (a part of this book reproduces an article by the same author under the same title which appeared in the *American Anthropologist*, XIV [1912], 325-332). M. T. de Guimaraes is of the opinion that the quipu must have expressed words and ideas. According to M. Uhle, on the contrary, the quipu was merely a technical aid to memory, complemented by means of special marks on the knots, stories in prose, or short poems ("Algo sobre el quipu. With a Note by Max Uhle," *Revista histórica de Lima*, II [1907], 55-65). According to M. L. Cipriani, ideas must have been expressed by the quipu discovered at Ancon and now in the National Museum of Anthropology and Ethnology at Florence, which differs from all other quipus so far collected (the cords between the knots are divided in half, there are loops at the ends, etc.). Cf. Cipriani, "Su due 'quipus' del Museo nazionale di Antropologia e Etnologia di Firenze," *Proceedings*, 22nd International Congress of Americanists, Pt. I (Rome, 1926), 471-480.
 14. According to Nordenskiöld, the simple knots were used to denote tens and multiples of ten, and the complicated knots were reserved for units. In fact, the latter are usually found in the lower sections of the quipus. They must not be confused with the very small knots tied at the ends of the cords to keep them from raveling ("Le calcul des années et des mois dans les quipus péruviens," *Journal de la Société des Américanistes de Paris*, 1926, p. 53).
 15. Mead, *Old Civilizations, etc.*, p. 99. According to Rivero and Tschudi (*op. cit.*, p. 231), one must also take account of the way in which the

- knots are tied and the strings twisted and the distance from the strings to the principal knot. Morua also maintains that the thickness of the knots has some significance (*op. cit.*, p. 178).
16. *Corónica moralizada*, Bk. I, ch. xiv (p. 90 in the edition of 1638).
 17. The anonymous translator of Toulouse, whose style is very piquant (cf. Appendix, "The Historical Sources," *infra*), in summarizing this passage of Calancha, makes a number of mistakes, of which a particularly bad example is to be found in his translation of the sentence concerning the knots that enumerate the casualties of the enemy. He concludes the passage in the following terms: "Now anyone seeing the lower half of this cord, with such a large number of threads in so many colors and with so many little knots, and the upper half with a few threads looking like straws and a thousand colorless knots, would say: These people before Manco Capac had no king, since there is no scarlet thread; they had no law and order, since there are no gray threads; they were not drawn up [*sic: rédigés*] in provinces, since there are no cords of different colors; they had no wars [*sic*], for there is no red thread; they were given neither gold nor silver, since there is no white or yellow thread. In short, they lived without religion, since there is no white, yellow, and blue cord. Thus, those who looked at the quipu would see from the lack of colors, knots, or threads, by elimination, what had not been done, and would understand what had been done" (p. 24).
 18. Cieza de León, who was by no means credulous, on seeing an Indian of Jauja, with the aid of a quipu, give a complete account of everything he had given to the Spaniards, exclaimed, "En verdad yo quedé espantado dello" ("I found it absolutely astonishing").—*Crónica*, Pt. II, ch. xii. Observations to the same effect may be found in Gómara, *op. cit.*, ch. cxv; Las Casas, *Apologética*, ch. cclvii; G. de Santa Clara, *op. cit.*, III, 549; and Sarmiento, *op. cit.*, ch. ix. "Everything that books can contain in the way of histories, laws, accounts of festivals, stories is supplied by the quipus. . . . Just as we can construct an infinite number of sentences by combining the letters of our alphabet in different ways, so the Indians with their knots and colors express innumerable kinds of meaning" (Acosta, *op. cit.*, Vol. II, Bk. VI, ch. viii). Morua likewise expresses his stupefaction on seeing an old Indian using his quipu "as if it were paper and ink" (*op. cit.*, p. 178).
 19. Squier, *Peru, etc.*, p. 571. De Pauw does not even believe in the existence of the quipus! (De Carli, *op. cit.*, Letter XXII.)
 20. There is one in the Musée de l'Homme in Paris. The opinion, which was widespread among the Spanish missionaries, that the quipus were formularies of magic seems to lend some support to the theory advanced by Nordenskiöld. Having observed that the number seven plays an important role in the quipus and that some of the numbers appear to have astronomical significance, this scholar concludes that many of these cords were calendrical in nature and were used in divination (*The Secret of the Peruvian Quipus*, Comparative Ethnographical Studies, Göteborg Museum [Göteborg, 1925], Vol. VI, Pt. I. Cf. Louis Baudin, "La statis-

- tique au temps des Inka," *Revue politique et parlementaire*, September 10, 1927, p. 463.
21. Rivero and Tschudi, *op. cit.*, p. 232.
 22. Tello and Miranda, *op. cit.*, ch. v. It is possible that the ancient quipus likewise served to measure quality as well as quantity, a purpose that could very well be achieved simply by assigning to each individual a coefficient in keeping with his intelligence, capacity, or good will.
 23. Cieza de León, *Crónica*, Pt. II, ch. xix. The division given by C. de Castro is incomprehensible (*op. cit.*, p. 208).
 24. Garcilaso, *op. cit.*, Bk. II, ch. xiv. Means says that these reports were due each month (*A Study, etc.*, p. 455). Cf. Wiener, *Pérou et Bolivie, etc.*, p. 776.
 25. Ondegardo, "Report," *op. cit.*, p. 155.
 26. *Corónica moralizada*, ch. xiv; Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 213.
 27. This did not prevent certain *curacas* from attempting to conceal Indians in underground hiding places in an effort to reduce their own tax payments, as C. de Castro reports (*op. cit.*, p. 213). It is really hopeless ever to obtain exact statistics.
 28. C. de Castro, *loc. cit.*
 29. Thomas More, *Of the Best State of the Public Weal and of the New Isle Called Utopia*, Bk. II, ch. vi.
 30. Ondegardo, *Relación*, p. 50; Santillán, *op. cit.*, §82.
 31. The Jesuits in Paraguay also forbade the Indians to move away from their villages (Lugones, *op. cit.*, p. 221).
 32. Cobo, *op. cit.*, Bk. XII, ch. xxiv; Rouma, *La civilisation des Incas, etc.*, p. 8.
 33. Morua, *op. cit.*, p. 182; Estete, in Jerez, *op. cit.*, p. 341.
 34. Las Casas, *Apologética*, ch. cclviii.
 35. Garcilaso, *op. cit.*, Bk. VII, ch. i. Markham writes *mitimac* (*Contributions Towards a Grammar and Dictionary of Quichua, the Language of the Yncas of Peru*); González Holguin, *mitmac* (*Vocabulario, etc.*); R. P. Raurich, *mitimai* (*op. cit.*); Middendorf, *mitma* (*Wörterbuch, etc.*).
 36. Cieza de León, *Crónica*, Pt. II, ch. xxii. G. Rouma tells of having visited the ruins of one of these frontier garrison posts at Samaipata in Bolivia (*La civilisation des Incas, etc.*, p. 12).
 37. For example, the Collas were *mitimae*s in the region of Tacna (Cúneo Vidal, "El cacicazgo de Tacna," *Revista histórica de Lima*, 1919, p. 321, and "El Collasuyo de los Incas," *Revista chilena de historia y geografía*, 1914, p. 170).
 38. Latcham, *La existencia de la propiedad, etc.*, p. 23, n. 2.
 39. Cieza de León, *Crónica*, Pt. II, ch. xvii. M. Helmer, *La vie économique au XVIème siècle sur le plateau andin*, Travaux de l'Institut français d'études andines, 1951.
 40. Ondegardo, *Relación*, p. 43.
 41. Cobo, *op. cit.*, Bk. XII, ch. xxiii.
 42. Ondegardo, *Relación*, p. 46; M. Helmer, *loc. cit.*

43. Ondegardo, "Report," *op. cit.*, p. 163.
44. Román y Zamora, *op. cit.*, II, 31.
45. According to Wiener (*Pérou et Bolivie, etc.*, p. 742), Chimús were settled on the plateau to teach their art to the Quechuas.
46. "Relación de la religión y ritos del Perú" (Colección de documentos del Archivo de Indias, III, 31). This account deals with the province of Huamachuco, where *mitimaes* from Cuzco had been settled.
47. The inhabitants of the provinces of Chillhue and Chillcaras refused to leave their native lands to colonize other territories (Anello Oliva, *Histoire du Pérou* [F. tr.], p. 52). The native population naturally regarded the *mitimaes* with defiance and contempt (Cunow, *Die soziale Verfassung, etc.*, p. 69; Suárez, *op. cit.*, I, 66).
48. The initiation of this tyrannical practice is attributed by Sarmiento to Pachacutec (*op. cit.*, ch. xxxix).
49. *Op. cit.*, Bk. XII, ch. xxiii. Cieza de León describes several *mitimaes* in the first part of his chronicle (for example, at Latacunga, ch. xiv; in the province of the Chinchas, ch. lxxiv; at Cajamarca, ch. lxxvii). Anello Oliva declares that Yahuar Huacoc, in order to put an end to rebellion, resolved to mingle together all the peoples that made up the empire and ordered that two-thirds of the population of every village should leave for other provinces, the inhabitants of which should take their places (*op. cit.*, p. 51), but no other author mentions such a measure, and it seems altogether improbable.
50. O. von Buchwald, "Die Kara," *Globus*, 1908, 123.
51. "De la orden que los yndios, etc.," (Colección de documentos del Archivo de Indias, XVII, 113).
52. According to Alonso Ramos, one of the Incas, after expelling the inhabitants of Copacabana on the shores of Lake Titicaca, peopled this peninsula with families chosen from the different tribes of the empire (*Historia de Copacabana*, p. 11). This measure seems to have had a religious motivation, since the southern part of the lake, both the shore and the islands, was particularly venerated by the Indians.
53. Temporary migrations could also take place because of an exceptional drought or an occasional dearth of manual labor in a sparsely populated area. In such cases, of course, the emigrants would remain under the rule of their original chiefs (Ondegardo, *Relación*, p. 137; Bastian, *Die Kulturländer, etc.*, II, 546; Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 600).
54. Ondegardo, "Report," *op. cit.*, p. 155.
55. Bourguin, *Les systèmes socialistes et l'évolution économique*, p. 20.
56. We shall use the word "province" in the Spaniards' sense of "large administrative district," when the documents do not admit of further specification. At the present time a province in Peru is a subdivision of a department.
57. Tello and Miranda and Castaing assume an average of ten persons to a family unit, while Means speaks of between five and seven (Tello and Miranda, *op. cit.*, p. 508; Castaing, *op. cit.*, p. 20; Means, "A Study of Ancient Andean, etc.," *op. cit.*, p. 456). All these figures are arbitrary.

58. A different terminology is adopted by De Carli, who calls the chief of ten families a decarch (*dizainier*) and reserves the word "decurion" for the chief of five denaries (*dizaines*). Cf. *op. cit.*, Letter XIV.
59. Garcilaso, *op. cit.*, Bk. II, ch. xi.
60. Sarmiento speaks of two governors general (*suyoyoc apo*), one of whom lived in Jauja and the other in Tiahuanaco (*op. cit.*, ch. lii). These could not have been the viceroys, because the latter had their residence in Cuzco.
61. "Informaciones acerca del señorío y gobierno, etc." (Colección de libros españoles raros ó curiosos, XVI, 218).
62. This continues to be the case in certain regions. It is called the *mayoral* in the province of Riobamba (Rivet, "Étude sur les Indiens de la région de Riobamba," *op. cit.*, p. 64).
63. Means, "A Study, etc.," *op. cit.*, p. 454.
64. *Op. cit.*, p. 344.
65. Montesinos, *op. cit.*, ch. vi.
66. Garcilaso, *op. cit.*, Bk. V, ch. xi.
67. Santillán, *op. cit.*, §10; Cieza de León, *Crónica*, Pt. II, ch. xviii and xx; Cobo, *op. cit.*, Bk. XII, ch. xxv.
68. Damián de la Bandera, *op. cit.*, p. 100.
69. It is these, no doubt, whom the Licentiate Falcón had in mind in speaking of judges "tucuiricos que eran de fuera de la provincia" ("representing the *tucricuc* and coming from outside the province").—*Op. cit.*, p. 147. Cf. Santillán, *op. cit.*, §14; Garcilaso, *op. cit.*, Bk. II, ch. xiv; Cieza de León, *Crónica*, Pt. II, ch. xviii.
70. Sarmiento, *op. cit.*, ch. lii, p. 99.
71. C. de Castro, *op. cit.*, p. 212.
72. Garcilaso, *op. cit.*, Bk. VII, ch. xiii, and Bk. IX, ch. iv.
73. Cunow, *Die soziale Verfassung, etc.*, p. 107; Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 993.
74. Santillán, *op. cit.*, §§11 and 15.
75. C. de Castro, *op. cit.*, p. 213. "De manera que como iba multiplicando la gente iban haciendo señores" ("as the population increased, new overlords were created").
76. O. von Buchwald, "La lengua de la antigua provincia de Imbabura," *Boletín de la Academia nacional de historia*, 1920, p. 180.
77. Cf. de la Torre, "El régimen, etc.," *op. cit.*, p. 411; Zurkalowski, *op. cit.*, pp. 482 and 492.
78. Zurkalowski, *op. cit.*, p. 495.
79. Thomas More, *op. cit.*, pp. 69-70.
80. Tello and Miranda, *op. cit.*, p. 508.
81. *L'Amérique avant Colomb*, p. 39. Hanstein writes that each official was in charge of "exactly the same number of persons," which is certainly inaccurate (*op. cit.*, p. 28).
82. C. de Castro, *op. cit.*, p. 208; Las Casas, "De las antiguas gentes, etc.," *op. cit.*, ch. xvii; Montesinos, *op. cit.*, ch. vi.
83. Sarmiento, *op. cit.*, ch. xviii and xix.
84. Las Casas, *loc. cit.*; Montesinos, *loc. cit.*

85. Cobo, *op. cit.*, Bk. XII, ch. xxiv.
86. Durkheim, *Les formes élémentaires de la vie religieuse* (Paris, 1912), p. 158; Bastian, *Die Kulturländer, etc.*, II, 62.
87. Uhle, "Los orígenes de los Incas," *op. cit.*, p. 302. G. Buschan believes that the *hanan* and the *hurin* classes were at one time exogamous groups within the ancient tribes (*Illustrierte Völkerkunde*, I, 385). Cf. Uhle, "El ayllu peruano," *Boletín de la Sociedad geográfica de Lima*, 1911. Zurkowsky thinks that this division, very ancient on the plateau, was imposed upon the seaboard peoples by the Inca. This would explain the difference of opinion among the chroniclers, some of whom drew their information from the coast and others from the sierra (*op. cit.*, p. 493). Means sees the *hanan* as the conquerors, who kept the lion's share for themselves, and the *hurin* as the vanquished, who were allowed to live on the less desirable lands ("A Study, etc.," *op. cit.*, p. 43). G. de Santa Clara maintains that in besieging Cuzco, Tupac Yupanqui constructed at the gates of the coveted city another city which was meant to serve as a base of attack (*op. cit.*, III, 433), very much as Abou Yakoub at the beginning of the fourteenth century had a town built on the site of his camp at Mansoura near Tlemcen, which he wished to invest. The two cities at Cuzco must then have later formed the two quarters (*partialités*).
88. "El cacicazgo de Tacna," *op. cit.*, p. 311.
89. Urteaga, *El imperio incdico*, p. 54.
90. Ondegardo, "De la orden, etc.," *op. cit.*, p. 102; Falcón, *op. cit.*, p. 156. This principle antedated the Incas. The Indians of the province of Vilcas had to "build the house, make the clothes, supply the seeds, and tend the flocks" of the local ruler (P. de Carabajal, *op. cit.*, p. 149).
91. "La voluntad del Ynga era la tasa" ("the tax depended entirely on the will of the Inca"), says Ondegardo (*Relación*, p. 69).
92. Cieza de León, *Crónica*, Pt. II, ch. xviii.
93. Cobo, *op. cit.*, Bk. XII, ch. xxxiii.
94. Ondegardo, "De la orden, etc.," *op. cit.*, p. 103. The stocks of clothing quickly became so considerable that the Incas limited themselves to demanding one garment from each taxable married man. Cf. Santillán, *op. cit.*, §73; Castro, *op. cit.*, p. 218.
95. Cobo, *loc. cit.*
96. Rodríguez de Aguayo, *op. cit.*, p. 96.
97. Ondegardo, *Relación*, p. 63.
98. This was the case among the *hunu* of Tacna (Cúneo Vidal, "El cacicazgo de Tacna," *op. cit.*, p. 311).
99. Santillán, *op. cit.*, §48; Falcón, *op. cit.*, p. 153.
100. C. de Castro, *Relación*, p. 218.
101. Latcham, *La existencia, etc.*, p. 64.
102. Suárez, *op. cit.*, I, 48.
103. Anello Oliva, *Histoire du Pérou* (F. tr.), p. 42.
104. Herrera (*op. cit.*, Dec. V. Bk. IV, ch. ii) explains that the Indians were in the habit of crushing the lice with their teeth, not to eat them, but

because their hands were occupied with their hair, which was long and hard to separate. This custom, like others, has continued to exist in the sierra to the present day.

105. Santillán, *op. cit.*, §50; C. de Castro, *op. cit.*, p. 217.
106. Falcón, *op. cit.*, p. 158. Cf. *infra*, p. 150.
107. Damián de la Bandera, *op. cit.*, p. 100; Santillán, *op. cit.*, §15.
108. Santillán, *op. cit.*, §62.
109. The same is true in Paraguay. P. Hernández, *op. cit.*, II, 92.
110. The royal ordinance of November 24, 1601 (Colección de documentos del Archivo de Indias, XIX, 151). In the grants of two encomiendas issued by the Licentiate De la Gasca in 1550, the following are listed as taxes due: gold pesos, wheat, maize, potatoes, sheep [i.e., llamas], pigs, birds, partridges, eggs, salt, wood, sandals, clothing, Indians to tend the flocks, Indians for domestic service, and Indians to cultivate the fields ("Proveymiento de una encomienda por el licenciado Gasca" [Colección de documentos del Archivo de Indias, XXV, pp. 1 and 17]). Even in Spain the practice existed of paying taxes in the form of personal service. On certain days of the year the peasants of Navarre had to work on the lands of the king and the lords (F. Costa, *op. cit.*, p. 68, n. 1). Theoretically, personal service was abolished in Peru in 1542 and again in 1549, but in practice it continued until 1601. A supplementary ordinance of 1609 forbade an Indian's being condemned to serve a white man, even as punishment for crime. The ordinance of 1549 provoked the uprising of F. Hernández de Girón, after which its enforcement was temporarily suspended. Personal service sometimes reappeared under another guise. The cacique sent Indians to hire themselves out to the Spaniards, and the wages they received served to pay the tax due in cash to the *encomendero*.
111. Santillán declares that the exactions imposed in his day were heavier than at the time of the Incas (*op. cit.*, §66). The anonymous author of "Provehimientos generales y particulares del Pirú [*sic*]" (Colección de documentos del Archivo de Indias, XI, 32) is of the opposite opinion.
112. Schaeffle, *La quintessence du socialisme*, p. 10.
113. Cobo, *op. cit.*, Bk. XII, ch. xxx.
114. Garcilaso, *op. cit.*, Bk. V, ch. v.
115. The sites of some of the storehouses on the sierra north of Cuzco included Quito, Latacunga, Tomebamba, Cajamarca, Jauja, and Vilcas, and, to the south, Hatun-Colla and Paria (Payne, *op. cit.*, II, 541). We do not know why this author maintains that such warehouses existed only on the sierra, for Ondegardo explicitly states the opposite (*Relación*, p. 19).
116. Ondegardo, *loc. cit.* Thomas More (*op. cit.*, ch. vii) makes provision for only two years.
117. Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 48.
118. *Op. cit.*, p. 334.
119. *Loc. cit.*; Oviedo y Valdés, *op. cit.*, Vol. IV, Bk. XLVI, ch. viii.
120. Cobo, *op. cit.*, Bk. XII, ch. xxx; Pedro Pizarro, *op. cit.*, p. 272.

121. A similar system was established by the missionaries in Paraguay (Charlevoix, *Histoire du Paraguay* [Paris, 1757], II, 53-54; Fasbinder, *op. cit.*, p. 86). Cf. *infra*, p. 220.
122. Santillán, *op. cit.*, §41; Cobo, *op. cit.*, Bk. XII, ch. xxx. Pedro Pizarro tells of having seen an Indian who from his youth had been carrying loads of maize from Cajamarca to Cuzco. He was fed from the warehouses, and his loads had to arrive intact on pain of death (*op. cit.*, p. 271).
123. C. de Castro, *op. cit.*, p. 219. The Spanish chroniclers often mistook these movements of merchandise, effected by the authority of the government, for genuine commerce.
124. Cobo, *op. cit.*, Bk. XII, ch. xxix; Ondegardo, *Relación*, p. 27.
125. For a plan for stabilizing production by the accumulation of reserves in times of abundance and their distribution in periods of scarcity, cf. Bacon, "Stabilizing Production by Means of Reserves," *American Economic Review*, March, 1924.
126. "This work [the construction of the roads] was certainly the greatest the world had ever seen, for it surpassed, without any doubt, all the works of the Romans," wrote Gutiérrez de Santa Clara (*op. cit.*, III, 539).
127. *Essai sur les mœurs*, Vol. II, ch. cxlviii.
128. "The roads climb the steepest gradients and are often practicable only for pedestrians," says Desjardins (*Le Pérou avant la conquête espagnole, etc.*, p. 165), and with good reason! Ricardo Cappa goes even farther in his *Estudios críticos acerca de la dominación española en América*. He regards the Spanish chroniclers' admiration for the Peruvian roads as excessive, on the ground that the flights of stairs on the mountainsides impeded the progress of the horses! (De la Riva-Agüero, "Examen de la primera parte, etc.," *op. cit.*)
129. We have already mentioned the components that went into the making of *pirca*. Velasco, speaking of the ruins of a road that he saw in Ecuador, gives his opinion of this material: "What I marveled at most of all was that where the torrents of water that rushed down from the mountaintops during the rainy season had washed away parts of the soil beneath the road, the causeway remained suspended in the air like a very solid bridge made of a single stone, so great was the strength of this mixture" (*op. cit.*, II, 59). These fine roads had their detractors: "The great highways of Peru," says Abbé Raynal, "were nothing more than two rows of posts set in straight lines and intended solely as a guide to travelers; the only great road was the one that bore the name of the Incas and traversed the entire empire" (*op. cit.*, II, 147).
130. *Op. cit.*, p. 326; Wiener, *Pérou et Bolivie, etc.*, p. 556; Beuchat, *op. cit.*, p. 649. The lateral walls had been especially constructed "two leagues before the entrance to each valley and two leagues after the exit from it" in order to keep the troops in line (C. de Molina, *Relación*, p. 128).
131. Cobo, *op. cit.*, Bk. XII, ch. xxxi.
132. Garcilaso, *op. cit.*, Bk. IX, ch. xiii.
133. Notably at Collao. Cieza de León, *Crónica*, Pt. II, ch. xv.
134. Cieza de León, *Crónica*, Pt. I, ch. lx; Garcilaso, *op. cit.*, Bk. IX, ch. xiii.

135. Morua, *op. cit.*, p. 187. The Roman roads did not reach such perfection and were often very narrow, as we may see from what remains of the Via Latina near Rome.
136. At the beginning of the first volume of G. de Santa Clara's *Historia de las guerras del Perú*, there are two curious diagrams which can hardly be called maps. In the second, two double lines are drawn, exactly parallel, which show the two great highways, and which are framed by the Cordillera on one side and by the southern sea at the other. In reality, however, this parallelism was certainly far from being exact. Thus, the route of the *llanos*, after leaving Tumbes, approached the western Cordillera, and that of the sierra approached the ocean in the same region, to the northwest of Huancabamba (Cieza de León, *Crónica*, Pt. I., ch. lvii). Vilcas was considered as the geographical center of the empire (Cieza de León, *Crónica*, Pt. I, ch. lxxxix). Many are the errors and even absurdities of which authors both ancient and modern have been guilty in describing these routes. G. de Santa Clara maintains that the roads were composed of three juxtaposed roadways: the Inca and his escort would take the middle one, while the troops and retainers would take those at the sides (*op. cit.*, III, 540). In the "Demarcación y división de las Indias," mention is made of two roads, one coming from the plateau of Ecuador, and the other from the coast of Peru, joining in Chile (Colección de documentos del Archivo de Indias, XV, 489). Anello Oliva repeats this inaccuracy and has the highway over the plain starting from Piura, south of Tumbes (*op. cit.*, ch. i). According to Las Casas (*Apologética*, ch. ccliii), the road from Chile ended at the Strait of Magellan! In our day, C. Cantu has imagined that the two great arteries connected Cuzco and Quito (*Histoire universelle* [F. tr.; Paris, 1867], XIII, 201). Buschan has the coast road starting from Loja and that of the sierra going down from Cuzco to Chile by way of Lake Titicaca ("Die Inka and ihre Kultur, etc.," *op. cit.*, p. 425). Finally, A. Deberle, exceeding all bounds, writes: "The roads went from one mountain to another, passing above the valleys, which had to be filled in, and did not turn aside even to cross the lakes"! (*Histoire de l'Amérique du Sud* [Paris, 1876], p. 29.)
137. Cieza de León, *Crónica*, Pt. 11, ch. xv.
138. Las Casas, *Apologética*, ch. ccliii.
139. Wiener, *Pérou et Bolivie, etc.*, p. 139.
140. Wolf, *op. cit.*, p. 38.
141. Means, "A Study, etc.," *op. cit.*, p. 462.
142. Langlois, "De çí, de là, à travers le Pérou précolombien," *La géographie*, 1936, p. 29.
143. The chroniclers say that these were four, five, or six leagues apart, but the length of the league itself varied. It was, successively, 3,654 yards, then 4,567 yards, and finally, in the nineteenth century, 6,096 yards, at which time it was called the Castilian league (Paz Soldan, *Diccionario geográfico-estadístico del Perú*, p. xxv). The chroniclers sometimes used the Indian league, which was equivalent to two Spanish leagues, as the basis of their calculations (Montesinos, *op. cit.*, ch. vii). A great

- number of the villages on the plateau are still called Tambo or Tampu.
144. Cobo, *op. cit.*, Bk. XII, ch. xxxii.
 145. Squier, *Peru, etc.*, p. 400.
 146. Verneau and Rivet, *op. cit.*, pp. 77 and 79. Velasco maintains that a distinction must be made between the hostelry properly so called and the storehouse of which we have spoken above, in which a part of the tribute owed to the Sun and to the Inca was laid away (*op. cit.*, II, 57). Gómara, on the contrary, confuses the two (*op. cit.*, ch. cxciv), as does G. de Santa Clara (*op. cit.*, III, 546). It is probable that these two kinds of edifices, though occupying different buildings, were placed under the care of a single group of Indians when they were of slight importance. At the center of the empire some important ruins of *tambos* have been pointed out three leagues from Tampu, on the Vilcamayo (L. Valcárcel, "Estudios arqueológicos," *Revista universitaria del Cuzco*, No. 51 [1926], p. 23).
 147. For example, there were two *tambos* on the Azuay paramo, one on each side of the knot (Suárez, *op. cit.*, Pt. II, p. 168).
 148. *Essais*, Bk. III, ch. vi. According to Las Casas, large and small *tambos* alternated (*Apologética*, ch. ccli). The translators of Algarotti use such absurd terms as "hospitals [*hópitaux*]" for travelers" in referring to the first, and "kinds of caravansaries" in connection with the second ("Saggio sopra l'imperio degl'Incas" [F. tr.], *Mercure de France*, p. 98, n. 2; *Lettres sur la Russie*, p. 307). The latter term is also used by Brandt (*op. cit.*, p. 106) and by Prescott (*op. cit.*, p. 765).
 149. Santillán, *op. cit.*, §97 *et seq.*
 150. C. de Molina, "Relación de la conquista, etc.," *op. cit.*, p. 115.
 151. "Ordenanzas de tambos," *Revista histórica de Lima*, 1908. Cf. the letter written by the Marquis de Cañete, viceroy of Peru, to the Emperor, dated September 15, 1556 (Colección de documentos del Archivo de Indias, IV, 109).
 152. Humboldt, *Vues des Cordillères, etc.*, I, 290; Reiss, *Carta á S. E. el Presidente de la República sobre sus viajes á las montañas del sud de la capital* (Quito, 1873), p. 19.
 153. Estete, in Jerez, *op. cit.*, p. 342.
 154. Wiener, *Pérou et Bolivie, etc.*, p. 561. According to Rivero and Tschudi (*op. cit.*, p. 140), Inca bridges still exist at the lagoon of Lauricocha in the Department of Junin and at Compuerta in the Department of Puno. Reclus (*L'homme et la terre*, iv, 409) reproduces a curious sixteenth-century picture showing different means of crossing the rivers of Peru.
 155. Garcilaso, *op. cit.*, Bk. III, ch. xv and xvi; Acosta, *op. cit.*, Vol. I, Bk. III, ch. xviii; Zárate, *op. cit.*, ch. xi; Cobo, *op. cit.*, Bk. XIV, ch. xiii; Velasco, *op. cit.*, II, 61.
 156. Wiener believes that there was an aerial ferry of this kind on the *Quebradonda* (*quebrada honda*—i.e., deep ravine) between Cajabamba and Huamachuco, and he calculates the saving of time that this mode of passage made possible. To go down into the ravine and climb up again on the other side takes two and a half hours; by way of the *oroya* the crossing took ten or fifteen minutes (*Pérou et Bolivie, etc.*, p. 139).

157. Cobo, *op. cit.*, Bk. XIV, ch. xiii.
158. Garcilaso, *op. cit.*, Bk. III, ch. vii; Cieza de León, *Crónica*, Pt. I, ch. lxxxix; Cobo, *op. cit.*, Bk. XIV, ch. xiii; Calancha, *op. cit.*, II, 186; Humboldt, *Vues des Cordillères, etc.*, II, 187. These bridges are mentioned by a great number of authors: Estete, Gómara, Lizárraga, Pedro Pizarro, Las Casas, etc.
159. Rouma, *La civilisation des Incas, etc.*, p. 48.
160. Gómara, *op. cit.*, ch. cxiv.
161. In Jerez, *op. cit.*, p. 342.
162. Garcilaso, *op. cit.*, Bk. III, ch. viii. Many suspension bridges were burned by the Indians to hold up the advance of the Spaniards.
163. "Relación de D. L. de Velasco, Virrey del Perú, dado á su sucesor el Conde de Monterey, 28 Nov., 1604" (Colección de documentos del Archivo de Indias, IV, 429); *Lettres édifiantes et curieuses* (ed. of 1839), V, 228.
164. Raimondi, *op. cit.*, I, 208; Garcilaso, *op. cit.*, Bk. III, ch. xv.
165. Acosta, *op. cit.*, Vol. I, Bk. III, ch. xviii.
166. Estete, in Jerez, *op. cit.*, p. 338; F. Pizarro, "Letter to the Royal Audience, etc.," *op. cit.*, p. 121; Pedro Sancho, *Relación*, p. 148; Gómara, *op. cit.*, ch. cxiv; Morua, *op. cit.*, p. 182; Román y Zamora surmises that there were separate bridges for men and women (*op. cit.*, II, 39).
167. According to Leadbeater, some of the royal couriers were actual postmen, whose task it was "to transport without charge the letters of every person who claimed their services"! ("Le Pérou antique," *Le lotus bleu*, 1901-02, p. 373.)
168. Morua, *op. cit.*, p. 175.
169. The chroniclers differ widely in their estimates of the distances between these *chozas*. The anonymous author of the undated manuscript in the collection of unpublished documents from the Archives of the Indies (XV, 489), A. Oliva (*op. cit.*, ch. i), and Cieza de León (*Crónica*, Pt. II, ch. xxi) speak of half a league. Garcilaso (*op. cit.*, Bk. VI, ch. vii) and Santillán (*op. cit.*, §38) put it at a quarter of a league. Montesinos (*op. cit.*, ch. vii) states it as an Indian league. G. de Santa Clara (*op. cit.*, III, 545), Acosta (*op. cit.*, Vol. II, Bk. VI, ch. xvii), and Herrera (*op. cit.*, Dec. V, Bk. IV, ch. i) refer to the distance as a league and a half. Velasco (*op. cit.*, II, 60) calls it two miles. According to Las Casas (*Apologética*, ch. ccliii) and Román y Zamora (*op. cit.*, II, 38), for every league there were three shelters situated a thousand paces apart, with two Indians in each. As the couriers had to have a clear view of the road for a considerable distance and send smoke signals back and forth to one another, the interpretation given in the text seems the most logical. The *chozas* were situated on the hilltops near the fortress of Cañete (E. Harth-Terré, "Incahausi," *Revista del Museo nacional de Lima*, 1933, p. 101).
170. This would explain why Garcilaso speaks of four or six Indians, and Las Casas and Román y Zamora of three shelters (*loc. cit.*).
171. This system is analogous—with all due allowance—to that of the runners employed during the First World War to enable the commander of a unit to transmit his orders to the front line and to receive information

- even when the telephone lines had been cut by bombardment. There were two of these couriers for each trench.
172. Morua, *op. cit.*, p. 26; Ondegardo, *Relación*, pp. 72 and 74.
173. A number of other estimates are manifestly exaggerated—e.g., those of Santa Clara and Las Casas, who maintain that messages were transmitted from Quito to Cuzco in three or four days (G. de Santa Clara, *op. cit.*, III, 545; Las Casas, *Apologética*, ch. ccli). Las Casas speaks of 1,500 couriers stationed at intervals along the road between Cuzco and Quito. Velasco estimates that for a single great artery the number of couriers would be more than 4,000 (*op. cit.*, II, 60). However, all these figures are highly dubious. Wiener estimates that a hardy Indian could run a kilometer—about $\frac{5}{8}$ of a mile—in four minutes (*Pérou et Bolivie, etc.*, p. 559).
174. Zárate, *op. cit.*, Bk. I, ch. ix; Las Casas, *Apologética*, ch. ccli.
175. Cieza de León, *Crónica*, Pt. II, ch. xxi.
176. Acosta, *op. cit.*, Vol. II, Bk. VI, ch. xvii; Morua, *op. cit.*, pp. 26 and 118. Spanish couriers on horseback took from twelve to thirteen days to go from Lima to Cuzco (Cobo, *op. cit.*, Bk. XII, ch. xxxii). Wiener calculates that fish caught in the early morning in the Pacific Ocean could reach Cajamarca in time for the Inca's supper that evening. He adds that five days would be necessary to cover the same stretch with good mounts (*Pérou et Bolivie, etc.*, p. 559, n. 1).
177. Poma de Ayala, *Nueva Corónica*, p. 352. Cf. Means, "Some Comments, etc.," *op. cit.*, p. 350. In addition to the regular couriers, the Inca sometimes made use of special messengers chosen from among the men of his guard. These were fed and taken care of along the route by the men in charge of the *tambos* (J. de la Espada, *Relaciones geográficas*, Vol. II, App. I, p. x, n. b).
178. Cobo, *op. cit.*, Bk. XII, ch. xxxvi. This is the reason why, according to Cieza de León, the *tambos* were placed such short distances apart (*Crónica*, Pt. I, ch. lxxxii).
179. The chroniclers are not in agreement on the number of litter-bearers. Montesinos speaks of eight, which seems to be a minimum figure. Their number must, in fact, have been considerable in order to keep any false step from being perceptible. Jerez and Hernando Pizarro both report that Indians came to Cajamarca to sweep the road the Inca was to follow. Indeed, even the important dignitaries who preceded the royal litter in the mountain passes did not disdain to perform this office (Jerez, *op. cit.*, p. 332; Montesinos, *op. cit.*, ch. xxii; H. Pizarro, *op. cit.*, p. 118).
180. Morua, *op. cit.*, p. 160; Herrera, *op. cit.*, Dec. V, Bk. III, ch. xiv.
181. "Ordenanzas de tambos," *op. cit.*, p. 468.
182. Gómara, *op. cit.*, ch. cxiv.
183. "Provehimientos generales y particulares del Pirú" (Colección de documentos del Archivo de Indias, XI, 29).
184. Stiglich, *Geografía comentada del Perú* (Lima, 1913), p. 85.
185. Squier, *Peru, etc.*, p. 400. Present-day governments are making great efforts in this field. In 1920 the legislature thought of reviving an ancient custom which would compel the Indian communities to co-operate with-

out charge in the execution of public works, but it forgot that in past ages the laborers had been supported at the Inca's expense. The communities themselves protested against this measure (First Native Congress of Lima, July, 1921), the law was repealed in 1930, and a three-year plan was put into effect in 1936 (cf. *El Perú en marcha*, p. 390).

186. *Op. cit.*, p. 121.
187. Cieza de León, *Crónica*, Pt. II, ch. xv. "Incredibili miraculo per quingenta pasuum millia perpetuam viam montani tractus aequarunt" ("by an incredible miracle, they laid a continuous level road through twenty miles of mountainous terrain"), writes Levinus Apollonius, *op. cit.*, p. 37).
188. "In 1706, the Queen took eighteen days to go from Madrid to Burgos. . . . As late as 1740, D. Bernardo de Ulloa reported that the lack of bridges obliged travelers to make long detours and often forced them to wait for the waters to subside sufficiently for the streams to be forded" (Desdévise du Désert, *L'Espagne de l'ancien régime. La richesse et la civilisation* [Paris, 1904], p. 128). *Tambos* were as rare in Spain as bridges, and on the route from Saragossa to Barcelona villages of five hundred inhabitants had no inn. Even in France in the eighteenth century the great highways were broken by swamps, bridges were infrequent, and the crossroads were impracticable (Henri Sée, *La France économique et sociale au XVIIIème siècle* [Paris, 1925], pp. 113 *et seq.*).
189. Zárate, *op. cit.*, Bk. I, ch. vi; Humboldt, *Vues des Cordillères, etc.*, II, 334. The Inca Huayna Capac had rafts transported for his entertainment from Tumbes to Lake Bombón (Estete, in Jerez, *op. cit.*, p. 341). This lake is situated on the plateau between Lake Lauricocha and the village of Tarma.
190. Urteaga, "El arte de navegar entre los antiguos peruanos," *Revista histórica de Lima*, Vol. V (1913-17). There is a drawing of a raft with a sail in the third book of Benzoni's *Historia*.
191. Sarmiento, *op. cit.*, p. 91; Pietschmann, "Introduction" to the *Geschichte* of Sarmiento, pp. xxx and cx; Balboa, *op. cit.*, ch. vii. Several modern historians think that they were the Galapagos Islands, but this opinion, which was that of Sarmiento himself, is not well founded, for the Peruvian conquerors brought back spoils that certainly did not originate in those islands: black men, gold, a copper throne, a hide and a bone of a horse. These trophies were preserved in the fortress of Cuzco until the Spanish conquest. The length of the voyage, which lasted between nine and twelve months, leads one to believe that the Inca may have reached one of the islands of Polynesia. But Sarmiento contends that the Peruvians must have been acquainted with these distant lands from the tales of merchants who came from there. Could there, then, have been a sea-borne trade between Oceania and South America?
192. Urteaga, *loc. cit.*
193. Frézier, *op. cit.*, p. 109; William B. Stevenson, *A Historical and Descriptive Narrative of Twenty Years' Residence in South America, etc.* (London, 1829), II, 223. However backward the Peruvians may have been in the art of navigation, it clearly cannot be said, as Algarotti does (*op. cit.*, p. 117), that they were entirely ignorant of it. "For fishing they make

use of a contrivance known among them as *barce*. It consists of two seal-skins sewn together, from nine to ten feet long, and inflated to the size of a drum. They do the same with two other skins, and then join the two pairs, leaving a space of about two feet between them over which they place a plank covered with sealskin on which they sit, and they row with a two-bladed oar" (Durret, *op. cit.*, p. 190). "Two separate sections placed one beside the other and fastened together make up the whole body of this boat. Each of these sections is composed of several sealskins sewn together. . . . These two inflated skins are connected by pieces of wood laid crosswise and attached by stout thongs. This craft, when empty, hardly displaces any water, merely skimming the surface; and even when loaded it sinks at most to a depth of four to six inches" (P. Lesson, *Voyage autour du monde entrepris par ordre du gouvernement sur la corvette La Coquille* [Paris, 1838], Vol. I, p. 508).

194. Morua, *op. cit.*, p. 166.

195. This, at least, is how we account for the discrepancies on this point to be found among the chroniclers. Garcilaso, who always had in mind the law of the Inca and had no thought of anything beyond the decrees of the sovereign, could not see the subject in the same light as Santillán and C. de Castro, who were familiar with local customs and tended—especially the latter—to exaggerate their importance (Garcilaso, *op. cit.*, Bk. II, ch. xiii; Santillán, *op. cit.*, §13; C. de Castro, *op. cit.*, p. 215).

196. Cf. *infra*, p. 193.

197. Prescott, however, asserts the contrary (*op. cit.*, p. 755). Cf. Cunow, *Die soziale Verfassung, etc.*, p. 116.

198. *Op. cit.*, Bk. XII, ch. xxvi. Cf. Leadbeater, *op. cit.*, p. 51; H. Trimborn, "Straftat und Sühne in Alt-Peru," *Zeitschrift für Ethnologie*, 1925, p. 194, and "Der Rechtsbruch in den Hochkulturen Amerikas," *Zeitschrift für vergleichende Rechtswissenschaft*, LI (1936), 7; H. Urteaga, *La organización judicial en el imperio de los Incas, contribución al estudio del derecho peruano* (Lima, 1928). The Peruvian system is more or less analogous to that of "parallel punishments" advocated by E. Garçon. Theoretically, the two systems are not identical. Garçon deems it logical and just that persons guilty of committing crimes and misdemeanors under the impulse of motives that are not dishonorable and by methods not condemned by the conscience should suffer different punishments from those prescribed in our penal code. He would thereby take account of the motives that determined the act and the means employed to attain the end chosen ("Les peines parallèles," *Revue pénitentiaire et de droit pénal*, 1914, pp. 863 *et seq.*). Practically, such a system would be equivalent to imposing, as in Peru, different punishments on the elite and the masses, for such motives and means as he describes are characteristic of the behavior of the elite. But in Peru the division of society into separate classes made the solution of the problem much easier than in modern nations.

199. Among the Chibchas too the punishments were terrible. (Piedrahita, *op. cit.*, Bk. II, ch. iv.) However, in Peru they were not as bad as the Encyclopedists imagined: "If anyone committed the least offense against the

- king, the village from which he came was razed"!—*Grande encyclopédie*, 1765, under the word, *Inca*). Buschan writes that the Incas, to punish their subjects, cut off hands, nose, and ears or put out their eyes, but later on he acknowledges that the mutilations depicted on the vases could well be the results of disease ("Die Inka und ihre Kultur, etc.," *op. cit.*, pp. 422 and 447).
200. Balboa, *op. cit.*, ch. x; Morua, *op. cit.*, p. 172; Poma de Ayala, *op. cit.*, p. 302.
201. Cobo, *op. cit.*, Bk. XII, ch. xxvi; Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 234; Garcilaso, *op. cit.*, Bk. V, ch. iv; "Relación anónima, etc.," *Tres relaciones de antigüedades peruanas*, p. 203. In the *Nueva corónica y buen gobierno* of Poma de Ayala (p. 302) there is a series of naive, but striking, drawings representing a stoning, a hanging, a flogging, etc.
202. Cieza de León does, to be sure, speak of four virgins of the "temple of the Sun" who would appear to have had intercourse with men and to have been punished, but his account lacks precision (*Crónica*, Pt. II, ch. xl).
203. Garcilaso, *op. cit.*, Bk. II, ch. xiii; Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 181. However, this rule was not followed when the class of the *yanacuna* was established (cf. *supra*, p. 51).
204. Cobo, *op. cit.*, III, 241.
205. Rouma, *La civilisation des Incas, etc.*, p. 15.
206. A. Villar y Córdova, "La educación incáica," *op. cit.*, p. 533.
207. "Relación anónima," *op. cit.*, p. 200, Law 23. According to Morua, capital punishment for a minor theft was imposed only for a third offense (*op. cit.*, p. 164).
208. It is absurd to say, "No money, no crime," as Edward Bellamy does (*Looking Backward* [Boston, 1888]). Crimes of passion would not disappear if money were eliminated. The guilt of the accused was often determined by ordeals or "judgments of God," according to Father P. J. de Arriaga (*op. cit.*, ch. v). H. Urteaga gives a list of misdemeanors and punishable crimes: offenses against life, against property, against authority; lack of zeal in work; cases of abuse of power, negligence in service, breach of regulations (*La organización judicial, etc.*).
209. Morua, *op. cit.*, p. 165.
210. Ondegardo, *Relación*, p. 56.
211. "The commodity form of goods is only an historical category," says A. Schaeffle (*La quintessence du socialisme* [F. tr.], p. 65).
212. J. S. Nicholson, *The Revival of Marxism*, p. 67. A. Villar y Córdova writes that there was no free trade in Peru (*op. cit.*, p. 520), and De Carli maintains that commerce was prohibited (*op. cit.*, I, 357).
213. Cobo, *op. cit.*, Bk. XI, ch. vii.
214. Latcham, *El comercio precolombiano*, pp. 21 and 26.
215. Jijón y Caamaño, "Los tincullpas y notas acerca de la metalurgia, etc.," *op. cit.*, pp. 37 and 38.
216. Nordenskiöld, *An Ethnogeographical Analysis of the Material Culture of Two Indian Tribes in the Gran Chaco* (Göteborg, 1919), p. 247.

217. M. Uhle, "La esfera de influencia del país de los Incas," *Revista histórica de Lima*, 1909, p. 9.
218. M. Uhle, "Ancient South American Civilization," *op. cit.*
219. Latcham, *El comercio precolombiano*, p. 30.
220. Rivet, "Les elements constitutifs, etc.," *op. cit.*, p. 13.
221. M. Uhle, "La esfera de influencia, etc.," *op. cit.*, p. 11.
222. Means goes so far as to say that the Aymara builders were indebted to the peoples of the coast, with whom they traded, for the elements of their culture ("Las relaciones entre Centro-América y Sud-América en la época prehistórica," *Boletín de la Sociedad geográfica de Lima*, 1917).
223. "No trataban muy lejos de sus pueblos" ("they did not trade very far from their own villages").—Román y Zamora, *op. cit.*, I, 326.
224. "In the mountains he rarely is acquainted with more than two villages."—Means, "A Study, etc.," *op. cit.*, p. 442.
225. M. Uhle, "Los indios Atacameños," *Revista chilena de historia y geografía*, V (1913), pp. 105 *et seq.*
226. Latcham, *El comercio precolombiano*, pp. 28 and 34.
227. Joyce, *op. cit.*, p. 23. According to Friederici, traders from the plateau reached the banks of the Rio de la Plata and descended into the valley of the Amazon as far as its confluence with the Yapurá (*op. cit.*, p. 241).
228. Maize and coca thus exemplified the economic law "that if a commodity is in general use, under such conditions that its (marginal) utility to anyone who takes or gives it in exchange is not much affected by small transactions in it, then that commodity is so far well suited to act as a medium of exchange, and discharge the simpler functions of money for the small business of a primitive community" (Marshall, *Money, Credit, and Commerce* [London, 1923], p. 272).
229. Joyce, *op. cit.*, p. 23; Restrepo, *op. cit.*, p. 126.
230. Verneau and Rivet, *op. cit.*, p. 273; Toribio Medina, "Monedas usadas por los indios de América al tiempo del descubrimiento," *Proceedings, 17th International Congress of Americanists* (Buenos Aires, 1910); Dorsey, *Archaeological Investigations on the Island of La Plata* (Chicago, 1901), p. 259.
231. Ondegardo reports that the Indians of his day were still offering shells as sacrifices ("Los errores y supersticiones, etc.," *op. cit.*, p. 39). Shells played the same double role in Malaya and Polynesia (Rivet, "Les origines de l'homme américain," *op. cit.*). Reproductions of pink and white shells may be found in M. Uhle, *Kultur und Industrie sudamerikanischer Völker* (Berlin, 1889), pl. XX, No. 57, 58, and 59.
232. *Op. cit.*, I, 160.
233. Malachites from the region of Copiapo also served as money. These stones were pierced and threaded like shells (Latcham, "El estado económico y comercial, etc.," *op. cit.*, p. 254).
234. Gómara, p. 226. Pascual de Andagoya was acquainted with Birú when he visited the province of Cochama ("Noticia biográfica del adelantado Pascual de Andagoya" [Colección de documentos del Archivo de Indias, XXXIX, 522]).
235. Prescott, *op. cit.*, p. 899.

236. Nordenskiöld, "The Guarani Invasion of the Inca Empire in the Sixteenth Century," *Geographical Review*, IV (1917), p. 103; Sarmiento, *op. cit.*, ch. lxi.
237. Garcilaso, *op. cit.*, Bk. IX, ch. xv. Other prophecies, however, we must regard as inexplicable if we accept them as exact—notably the one that Garcilaso attributes to the Inca Viracocha, who lived well before the discovery of America (*op. cit.*, Bk. V, ch. xxii, and Bk. IX, ch. xv).
238. Helps, *op. cit.*, III, 320.
239. In Jerez, *op. cit.*, p. 341.
240. *Op. cit.*, p. 99; Balboa, *op. cit.*, ch. ix; Herrera, *op. cit.*, Dec. VIII, Bk. II, ch. xvi; Garcilaso, *op. cit.*, Bk. VI, ch. xxxv. These fairs continue to be held in the towns of the plateau. Their origin seems often to have been religious. The people, meeting together in some sacred place, would bring their merchandise with them for barter. Today, on the high plateau, great fairs are held at Huari on Lake Poopo in Bolivia and at Huancayo between Lima and Cuzco (Wrigley, "Fairs of the Central Andes," *Geographical Review*, VII [1919], 65).
241. The father of a family would be in a better economic position if his children were males, since he received a whole *tupu* for a son and only half a *tupu* for a daughter, and it has not been proved that a boy eats twice as much as a girl.
242. Cobo, *op. cit.*, Vol. III, Bk. XI, ch. vii; Santillán, *op. cit.*, §64.
243. Garcilaso makes a distinction between fairs and markets and maintains that Pachacutec went so far as to make the latter daily occurrences (*op. cit.*, Bk. VI, ch. xxxv). Letourneau wrongly imagines that in America the liking for commerce was developed only at the instance of the Europeans. On the other hand, he is quite right in saying that domestic trade at the time of the Incas was limited to "small barter transactions between private individuals" (*L'évolution du commerce* [Paris, 1897], p. 201). Castonnet des Fosses writes to the same effect: "Trade was insignificant. . . . The fairs were chiefly holiday festivals. . . ." (*op. cit.*, p. 29). The village of Baños on the upper reaches of the Pastaza River in Ecuador, because of its ideal location at the end of the plateau and on the edge of the eastern forest, and thanks to its warm springs and its miraculous Virgin, is the type of place that is at once a market, a spa, and a center of pilgrimage. The Indian at Baños can purify his body, sanctify his soul, and get rid of his produce at advantageous prices.
244. Even raw materials might become objects of barter, as we shall see later on.
245. Hanstein, in speaking of the arrival of the Spaniards at Tumbez, where there was a great deal of commercial activity, limits himself to remarking, without comment, that this was a phenomenon contrary to Inca traditions (*op. cit.*, p. 117). Sámanos' *Relación* is mentioned in the Appendix ("The Historical Sources") of the present work.
246. Dorsey, *Archaeological Investigations, etc.*, p. 253; M. Uhle, "La esfera de influencia, etc.," *op. cit.*, p. 22. Urteaga calls the marine commerce of the Peruvians "regular," but there is no basis for such an assertion ("El arte de navegar entre los antiguos peruanos," *op. cit.*). We have already

- seen, in fact, what difficulties the navigators encountered (cf. *supra*, ch. ii). The Incas also maintained trade relations with the tribes of the Chaco, as is evidenced by the identity of terms employed at great distances from the sierra. Perhaps, through the importation of European fish-hooks, the Peruvians were acquainted with iron before the arrival of the Spaniards (Nordenskiöld, *Deductions Suggested by the Geographical Distribution of Some Post-Columbian Words Used by the Indians of South America* [Göteborg, 1922], p. 87). Juan de Salinas, in 1557, found Indians on the Ucayali who had once been to Cuzco (Nordenskiöld, *ibid.*, p. 24). According to Montesinos, some Indians from the eastern forests of Ecuador led stray soldiers of the army of Viracocha back in the direction of Cuzco, which they knew perfectly (*op. cit.*, ch. xxv).
247. Balboa refers to these merchants who traveled through the various parts of the empire (*op. cit.*, ch. ix). The Spaniards at Panama learned of the existence of the empire through the tales of traveling merchants who frequented that country (Prescott, *op. cit.*, p. 831).
248. "Relación y descripción de los pueblos del partido de Otávalo," *Relaciones geográficas*, III, 111.
249. *Crónica*, Pt. II, ch. lx.
250. *Op. cit.*, I, 123.
251. Prescott, *op. cit.*, p. 805; Payne, *op. cit.*, II, 503.
252. *Histoire de la conquête, etc.*, I, 37. Suárez says that there was no commerce (*op. cit.*, I, 216), but elsewhere he seems to acknowledge the existence of local trade (*ibid.*, I, 68).
253. "In former times the tribes from the plains used to go up into the mountains to barter foodstuffs for precious metals, but this trade took place before they were subjugated by the Inca, and it ceased almost entirely after that" (Ondegardo, "De l'état du Pérou, etc." [F. tr.], ch. ii).
254. M. Uhle, in Latham, *El comercio precolombiano*, p. 43. Robertson criticized the Peruvians for not having any commerce, but Velasco replies that the absence of trade was, on the contrary, a benefit (*op. cit.*, I, 221). As the empire was organized like one big family, commercial transactions would have disturbed the harmony. In Paraguay, as in Peru, under the rule of the Jesuits trade was not prohibited, but it continued to be very limited (M. Fasbinder, *op. cit.*, p. 108).
255. Balboa, *op. cit.*, ch. ix.
256. Prescott, *op. cit.*, pp. 736 and 815; Friederici, *op. cit.*, p. 242.
257. The Peruvian economy was completely different from that of Mexico. In Mexico there were great fairs and an actual class of traveling merchants who went about in armed groups with their retainers. Zinc, silver, gold, and cacao seeds were used as money (Herrera, *op. cit.*, Dec. II, Bk. VII, ch. xv). The reading of the Nahuatl codices is difficult because of the pictorial and phonetic elements they contain (Rivet, *Les langues du monde*, p. 711).
258. Jerez, *op. cit.*, p. 326. This passage has been copied word for word by Oviedo y Valdés, *op. cit.*, Vol. IV, Bk. XLVI, ch. iii.
259. "Tiene su portero que pide portazgo" ("it has its toll collector").—Estete, in Jerez, *op. cit.*, p. 338. Raimondi cites this passage without noticing

- how interesting it is (*El Perú*, II, 35). Hernando Pizarro also refers to toll bridges (*op. cit.*, p. 121).
260. Estete, *op. cit.*, p. 342; Gómara, *op. cit.*, ch. cxciv; Morua, *op. cit.*, p. 161. "Pagaban pontazgo" ("they paid a bridge toll"), writes Morua. By employing the word *pontazgo* instead of *portazgo*, the writer indicates that he believed these tolls were collected only at bridges. However, such taxes were levied at other places as well—for example, at the place near Urcos, not far from Cuzco, where the road from the south passed through a defense wall (Cieza de León, *Crónica*, Pt. I, ch. xcvi).
261. Oviedo y Valdés, *op. cit.*, Bk. VI, ch. xx, p. 206; Herrera, *op. cit.*, Dec. V, Bk. III, ch. xv; Acosta, *op. cit.*, Vol. I, ch. xix; R. de Aguayo, *op. cit.*, p. 98. Subercaseaux, *El sistema monetario y la organización bancaria de Chile* (Santiago, 1921), devotes only a few brief pages, of little interest, to pre-Columbian money (L. Baudin, "Notes sur l'Amérique du Sud," *Revue d'économie politique*, January, 1925, p. 132). The French writers of the eighteenth century—Abbé Raynal, for example (*op. cit.*, II, 144)—persuaded that the Peruvians had no knowledge of money, offered them as an example to all peoples, which would have greatly surprised the Incas, who certainly were not acting from a love of virtue. In the opinion of these writers, as well as of many modern socialists, money is the cause of all the vices. "They [the Peruvians] had no coined money, nor any established instrument of commerce" (Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, II, 314).
262. *Op. cit.*, Bk. XI, ch. vii.
263. Cf. Guevara, "Derecho consuetudinario, etc.," *loc. cit.*; Wrigley, "Fairs of the Central Andes," *op. cit.*, p. 65. In Paraguay, at the time of the missions, maté, tobacco, honey, and maize served as money. It will be recalled that the monetary dislocations following the First World War compelled great modern nations to revert to barter, for the reparations treaties provided for nothing else.
264. Garcilaso, *op. cit.*, Bk. V., ch. vii. How different was this point of view from that of the Spaniards! When the latter arrived in Peru, the natives, seeing their horses champing at the bit, imagined that these strange animals lived on metal and offered them gold and silver, which their riders forbore to refuse.
265. Montaigne, *op. cit.*, Bk. III, ch. vi, p. 697.
266. Sarmiento, *op. cit.*, p. 99.
267. Herrera, *op. cit.*, Dec. V, Bk. III, ch. xiii.
268. Nordenskiöld, "The Ancient Peruvian System of Weights," *Man*, 1930, p. 155, and "Emploi de la balance romaine en Amérique du Sud avant la conquête," *Journal de la Société des Américanistes de Paris*, 1921; Rivet, "La balance romaine au Pérou," *L'Anthropologie*, March, 1924. In the colonial period the Indians were still using their ancient methods of weighing (Herrera, *op. cit.*, Dec. V, Bk. III, ch. xvi; Salinas Loyola, "Relación y descripción de la ciudad de Loxa," *Relaciones geográficas*, III, 218).
269. Wiener, *Essai, etc.*, ch. iv.
270. Zárate, *op. cit.*, p. 470.

271. Morua, *op. cit.*, p. 163.
272. De Créqui-Montfort, "Fouilles de la mission scientifique française à Tiahuanaco," *Proceedings*, 14th International Congress of Americanists (Stuttgart, 1904), p. 564.
273. De la Riva-Agüero, "Examen, etc.," *op. cit.*, p. 158.

NOTES TO CHAPTER X

1. Spencer, *Principles of Sociology*, I, 560; Belaúnde, *op. cit.*, ch. vii; Trimborn, "Der Kollektivismus," *op. cit.*, p. 984.
2. This was already the opinion of Ondegardo ("Report," *op. cit.*, p. 153). Cunow took it over and exaggerated it (*Die soziale Verfassung, etc.*, p. 50).
3. Santillán, *op. cit.*, § 49; Hanstein, *op. cit.*, p. 88.
4. Las Casas, "De las antiguas gentes, etc.," *op. cit.*, p. 35.
5. Garcilaso, *op. cit.*, Bk. V, ch. xi.
6. Velasco maintains that there were always ten general commanders (*op. cit.*, II, 50).
7. M. Uhle, "Los orígenes de los Incas," *op. cit.*, p. 308. It is not quite clear how this system was reconciled with the numerical division of the population. As in the civil organization, the figures for the size of military units were probably only approximations.
8. Oviedo y Valdés, *op. cit.*, Vol. IV, ch. xvii; Herrera, *op. cit.*, Dec. V, Bk. III, ch. xvi; Cobo, *op. cit.*, Bk. XIV, ch. vii.
9. When Las Casas reported that thousands of soldiers passed along the roads without taking a bit of fruit from the trees he felt it necessary to add: "Esto no es fábula sino verdad" ("this is not fiction, but fact").—*Apologética*, ch. cclvi.
10. Morua, *op. cit.*, p. 157; Letter of the viceroy Francisco de Toledo, September 24, 1572 (J. de la Espada, *Relaciones geográficas*, Vol. II, App. I, p. x). This guard had been created only on the eve of the Spanish conquest, for the province of Cañar had been brought into the empire late, under Tupac Yupanqui. It was to punish the Cañaris for their loyalty to the legitimate sovereign, Huascar, that Atahualpa destroyed their capital, Tomebamba.
11. Jijón y Caamaño and Carlos Larrea, *Un cementerio incdico, etc.*, p. 84; Santa Cruz Pachacuti, *op. cit.*, p. 102; Herrera, *op. cit.*, Dec. V, Bk. III, ch. xiv. Herrera speaks of 300,000 men assembled under Tupac Yupanqui to fight the Chancas, and then of 200,000 under the orders of Huayna Capac at the time of the war with Quito. Brehm and Hanstein accept this figure of 300,000, which seems very large, and one is tempted at first sight to regard it with some suspicion, the more so as historians have always been prone to exaggerate in such matters. We know what to think of the historians' accounts of the Persian and the Roman armies and of those of Charlemagne. Yet in this case, given the population of the Inca empire and especially the system of recruiting and the arrangements made for provisioning, it is quite possible that the number of Peruvian troops may really have been very considerable. The population

being estimated at 12,000,000, the number of Indians between the ages of twenty-five and fifty may be assumed to be one-third of that figure, or 4,000,000, and the number of males able to bear arms can be estimated at half that, or 2,000,000. This, interestingly enough, is precisely the figure indicated by Anello Oliva: "Sinchi Roca had a census taken of all men capable of bearing arms and found that they numbered 2,000,000" (*op. cit.*, p. 41). But it is impossible that it could have reached this figure under Sinchi Roca, at the beginning of the Inca dynasty, when the empire comprised only a small number of tribes. Anello is certainly mistaken about the time when the census was taken. The Indians served by rotation, one-tenth of the available manpower being called up for each turn. The total number recruited at any one time would thus indeed come to the 200,000 estimated by the historians, but this is a maximum figure and includes the baggage carriers and the garrisons. The Aztecs were individually more formidable soldiers than the Quechuas. They had better weapons and a more highly developed feeling of patriotism. The Peruvians, on the other hand, were superior in numbers and discipline (Friederici, *op. cit.*, p. 243).

12. Cieza de León, *Crónica*, Pt. II, ch. xxxi. The Indians today are still very adept in the use of the slingshot. During the "Queta" war in the province of Jujuy in Argentina, a detachment of one hundred and fifty soldiers of the regular army was annihilated by Indians with slings (Boman, *Antiquités de la région andine, etc.*, II, 453). Velasco lists the arms of the Caras as the pike, the lance, the battle-ax, and the club; he does not mention either the throwing stick or the sling (*op. cit.*, II, 7). Bello Gayoso, speaking of the Cañaris, cites slings, lances, clubs, and throwing sticks (*op. cit.*, III, 159). Cf. Urteaga, "El ejército incáico," *Boletín de la Sociedad geográfica de Lima*, 1920, and *El Perú*, p. 111.
13. Uhle, "La estólica en el Perú," *Revista histórica de Lima*, 1907, p. 289. The men of the Magdalenian era were acquainted with the throwing stick (J. de Morgan, *L'humanité préhistorique* [Paris, 1921], p. 67).
14. Bandelier, *The Islands of Titicaca, etc.*, Pt. IV, n. 11; A. de Vega, *op. cit.*, p. 85; J. de Ulloa Mogollón, *op. cit.*, p. 45.
15. F. de Jerez, *op. cit.*, p. 334.
16. Molina, "Relación de la conquista, etc.," *op. cit.*, p. 143; Marcos de Niza, *op. cit.*, p. 290.
17. Sometimes these would have a layer of copper as well (Montesinos, *op. cit.*, ch. x).
18. *Op. cit.*, I, 37.
19. Markham, *The Incas of Peru*, ch. ix; Poma de Ayala, *op. cit.*, p. 108.
20. This is what Garcilaso calls, with some exaggeration, "winning vassals by love and not by force" (*op. cit.*, Bk. III, ch. xv).
21. The clemency of the Inca Tupac Yupanqui after the battle of Poma-tamba filled the vanquished with wonder (Herrera, *op. cit.*, Dec. V, Bk. III, ch. ix).
22. Cieza de León, *Crónica*, Pt. II, ch. xviii; Santillán, *op. cit.*, §8; C. de Castro, *op. cit.*, p. 207; Garcilaso, *op. cit.*, Bk. V, ch. xii. Garcilaso reports that a tribe, after receiving the Inca's messengers, agreed to welcome the

- monarch provisionally, on the understanding that he would withdraw if his laws did not suit the people. The Inca accepted these conditions, but later the tribe, recognizing the excellence of the Peruvian system, submitted definitively (*op. cit.*, Bk. III, ch. xv). This highly dubious story is repeated by Marmontel (*op. cit.*, p. 245).
23. Espionage played an important part in preparations for war. In the time of the Spaniards, the *yanacuna* were past masters in the art (Herrera, *op. cit.*, Dec. V, Bk. VI, ch. v; Bk. X, ch. i; Anello Oliva, *op. cit.*, p. 114).
 24. Among many ancient peoples the acceptance of a gift from a monarch was a recognition of his authority and bound the two parties like a contract (cf. Moret and Davy, *Des clans aux empires* [Paris, 1923], p. 108).
 25. The emperor's constant insistence on avoiding needless bloodshed is indicated at several points in the ancient drama *Ollantay* (Scenes iii and xiv). But some enemy chiefs actually preferred suicide to surrender, like the cacique Pintac in the Antisana region of northern Ecuador (Suárez, *op. cit.*, I, 193). Sometimes the Inca would choose as the new head of the conquered territory the Indian chieftain who had come to offer the submission of his tribe (Ondegardo, "Copia de carta, etc.," *op. cit.*, p. 446).
 26. Las Casas, *Apologética*, ch. cclvi. In the great battle against the Chancas, the son of the Inca himself marched at the head of his troops and engaged the enemy (Garcilaso, *op. cit.*, Bk. V, ch. xviii; Montesinos, *op. cit.*, ch. xxi).
 27. Lorente, *op. cit.*, p. 268; Markham, *The Incas of Peru*, ch. xii; Montesinos, *loc. cit.* The Indians used to interrupt their military operations on the day of the new moon in order to celebrate their religious rites. The Spaniards took advantage of this custom on a number of occasions to rest and reorganize their forces (Helps, *op. cit.*, IV, 33). In many regions of the Andean plateau today, work in the fields is still suspended during the first three days of the new moon.
 28. The inhabitants of a coastal area in Ecuador were condemned to have their teeth broken (Zárate, *op. cit.*, ch. vi). Two rebellious chieftains were killed, and their skin was used to make drums (Balboa, *op. cit.*, ch. viii).
 29. C. de Castro, *op. cit.*, p. 207.
 30. The story of this war between the Incas and the Caras has been recounted by Garcilaso (*op. cit.*, Bk. VIII, ch. vii). Cf. Balboa, *op. cit.*, ch. xi.
 31. Cieza de León, *Crónica*, Pt. II, ch. xxxi.
 32. Sarmiento, *op. cit.*, p. 72. The peoples of the sierra seem always to have been more difficult to subdue than those of the coast. According to Hernando Pizarro, the former are more intelligent than the latter (*op. cit.*); according to Las Casas, they were also more valiant (*Apologética*, ch. cclvii).
 33. Sarmiento, *op. cit.*, p. 61; Herrera, *op. cit.*, Dec. V, Bk. III, ch. x.
 34. *Die soziale Verfassung*, etc., p. 50.
 35. Hanstein quite rightly remarks that if the Spaniards had arrived a few years earlier, in the reign of Huayna Capac, they would have found the

- conquest of Peru less easy (*op. cit.*, p. 134). We may add that without the help of the Indians of Cuzco, the Spaniards would never have been able, with the limited forces at their disposal, to subdue the kingdom of Quito.
36. Oviedo y Valdés, *op. cit.*, Vol. IV, Bk. XLVI, ch. iv.
 37. Among the Chibchas, for example (Restrepo, *op. cit.*, ch. xix). It was, in fact, something akin to mystic awe. The white men were looked upon as divinities, but this lasted only a very short time. We have only to recall the story of the attack made upon a company of horsemen by some Indians on the Colombian coast. At a moment when the Spaniards were in great danger, one of them was unseated and thrown from his horse. He sprang up, intending to go on fighting on foot. But the Indians, who had taken the conquerors and their mounts for centaurs, were so overcome with fear when they saw the two parts of a single being continue to live even when separated that they ran away. The Spaniards, says Balboa, appeared to the Peruvians as riding on great llamas and armed with blowpipes that shot out fire with the noise of thunder (*op. cit.*, ch. xxii). "Those who accuse the Indians of a puerile timidity would have done well to take note that the Romans trembled at the sight of elephants" (Marmontel, *op. cit.*, p. 18). Pizarro's companions were sometimes very much afraid too—for example, at Cajamarca, when they caught sight of the Inca's army. F. de Jerez and Pedro Pizarro bear eloquent witness to this.
 38. Herrera, *op. cit.*, Dec. V, Bk. IV, ch. xii; Gómara, *op. cit.*, ch. cxxviii; Markham, *The Incas of Peru*, ch. xii; Velasco, *op. cit.*, I, 222.
 39. "Relación del sitio del Cuzco (1535-1539)" (Colección de libros españoles raros ó curiosos, XIII, 1 *et seq.*).
 40. Even today, the revolutions are, unhappily, far from always being the operetta-type of affairs that Europeans like to imagine them. During the civil war in Ecuador in 1911-12, in the single engagement of Yaguachi, fifteen hundred men were left on the battlefield (L. Baudin, "La révolution de 1911-12 en Équateur," *Revue des études historiques*, January, 1925, p. 11).
 41. *Op. cit.*, ch. ii, 58.
 42. *Op. cit.*, Vol. II, ch. cxlviii.
 43. *Op. cit.*, p. 773.
 44. Velasco states correctly that the Incas sometimes made war for reasons of ambition (*op. cit.*, II, 47). Lorente remarks that some conquests took place "to satisfy a bellicose nobility" (*op. cit.*, p. 264).
 45. *Loc. cit.*
 46. We may also mention the hardly tenable opinion expressed by Robertson to the effect that the Incas made war to spread their civilization and acquaint barbarian peoples with their arts (*op. cit.*, p. 308).
 47. Huayna Capac had a line of defensive fortifications set up in this way following an attack by the Guaranis (Nordenskiöld, "The Guaraní Invasion, etc.," *op. cit.*, p. 103).
 48. *History of America Before Columbus* (Philadelphia, 1900), II, 179.
 49. Garcilaso, *op. cit.*, Bk. VII, ch. xxvii. Even the severe Sarmiento assures us that this was "something wonderful to behold" (*op. cit.*, p. 100).

50. Squier, *Peru, etc.*, p. 520; Wiener, *Pérou et Bolivie, etc.*, p. 374.
51. Squier, *ibid.*, p. 493; Bingham, "In the Wonderland of Peru," *op. cit.*, p. 401; Markham, *The Incas of Peru*, ch. x; Wiener, *ibid.*, pp. 336 *et seq.*; Grandidier, *op. cit.*, p. 93. O. Schmieder has described one of the southernmost fortresses of the empire, Condor Huasi, in southern Bolivia ("Eine befestigte Siedelung der Inkas in südlichen Bolivien," *Petermanns Mitteilungen*, Nos. 9-10 [1924], p. 229).
52. E. Harth-Terré, "Incahausi," *op. cit.*, p. 101.
53. Bingham, "In the Wonderland of Peru," *op. cit.*, pp. 416 *et seq.*
54. P. Fejos, *Archaeological Explorations in the Cordillera Vilcabamba, Southeastern Peru*.
55. Wolf, *op. cit.*, pp. 41-52.
56. Joyce, *op. cit.*, p. 221.
57. Nordenskiöld, "Deductions Suggested, etc.," *op. cit.*; De Morgan, "La notion innée du progrès dans l'esprit humain," *Revue de synthèse historique*, June, 1923, p. 29.
58. Uhle, "Las relaciones prehistóricas entre el Perú y la Argentina," *op. cit.*; Boman, "Los ensayos de establecer una cronología prehispanica en la región diaguita," *Boletín de la Academia nacional de historia* (Quito, 1923). The Incas may have gone as far as Tarija and Tucumán (the Quechua verb *tucuy* means "to end," and the province of Tucumán may thus have been the "Land's End" of the Peruvians). Cf. Cúneo Vidal, "El Tucumán de los Incas," *Boletín de la Sociedad geográfica de Lima*, 1920, p. 85; J. Ambrosetti, "Notas de arqueología calchaqui," *Boletín del Instituto geográfico argentino*, 1896, p. 177; R. Levillier, *op. cit.*, p. 10.
59. Quechua was one of the eleven languages spoken by the missionaries in that country.
60. The name of Cundinamarca is Peruvian, and the Chibchas probably got the use of coca from Peru (Uhle, "La esfera de influencia, etc.," *op. cit.*). Seler maintains that the Inca culture extended far to the south, but in the north it clashed with the Mexican influence (*Gesammelte Abhandlungen zur amerikanischen Sprach und Alterthumskunde* [Berlin, 1902-04], II, 13).
61. Like the Incas, their adversaries built huge fortresses, like that of Parmunca in the southern part of the territory of the Chimús.

NOTES TO CHAPTER XI

1. Garcilaso, *op. cit.*, Bk. VIII, ch. xiii; M. Saville, "Pre-Columbian Decoration of the Teeth in Ecuador," *American Anthropologist*, XV (1913), 377.
2. Cobo, *op. cit.*, Bk. XIV, ch. vi. There were six different deformed shapes. Cf. M. Macedo, "Las deformaciones artificiales del cráneo en el antiguo Perú," *Revista universitaria de Lima*, Year 7, Vol. I, January, 1912; Helmer, *La vie économique au XVIième siècle*, p. 129.
3. Las Casas maintains that the inhabitants of each province were distinguished by their own particular shape of head, but this is manifestly inaccurate, for no other author notes what would have been a remarkable fact ("De las antiguas gentes, etc.," *op. cit.*, p. 175).

4. *Op. cit.*, p. 253.
5. Joyce, *op. cit.*, p. 35. Cobo says that "the Collas made the head long and pointed" so that the woolen cap would fit well on it (*loc. cit.*). With us the caprices of fashion have not yet gone so far as to adapt the head to the headdress instead of the other way round. Matienzo prohibited the practice of deformation in the province of Charcas (Pietschmann, *Aus den Göttingischen gelehrten Anzeigen*, p. 732).
6. According to Bandelier, the Aymaras are very inferior to the Quechuas in this respect (*The Islands of Titicaca, etc.*, p. 19).
7. The reader interested in Peruvian design will find magnificent examples of pottery and tapestry reproduced in the works of Uhle (*Kultur und Industrie südamerikanischer Völker*), of D'Harcourt (*La céramique ancienne du Pérou* [Paris, 1924]), and of W. Lehmann (*Kunstgeschichte des alten Peru* [Paris, 1924]). A. Villar y Córdova calls Peruvian art "cubist" (*op. cit.*, p. 510). H. Bingham believes that the Peruvians had the same prejudice as the Arabs against representing the human form ("The Inca Peoples and Their Culture," *op. cit.*, p. 254). This observation could not apply to the peoples living on the coast. The Chimú artists tended, on the contrary, toward realism and showed even facial expressions and physical deformities. The Nazca artists practiced stylization, but their favorite subject was still the human head (D'Harcourt, *ibid.*, pp. 10, 19, 38).
8. *La civilisation des Incas, etc.*, p. 44.
9. Cf. *supra*, ch. viii.
10. "Ceramografía peruana," *Revista del Museo nacional de Lima*, 1938.
11. Larco Hoyle, *op. cit.*, II, 147.
12. It was probably done by hammering. After calculating the thickness of the gold plating on certain articles, Verneau and Rivet write: "If one grants that the plating was done by hammering, then the skill of the pre-Columbian craftsmen was equal to that of our goldbeaters today, who, with much more highly perfected tools, are practically unable to obtain sheets of a thickness notably less than those" (*op. cit.*, p. 337). The plating of metals was known in Ecuador and on the Peruvian coast, but not in Upper Peru or Bolivia (Rivet, "L'orfèvrerie précolombienne des Antilles," *Journal de la Société des Américanistes de Paris*, 1923). The metalworkers succeeded in making golden butterflies "whose center of gravity was so well placed that when they were launched into the air, they remained aloft for some time before fluttering to the ground" (Wiener, *Pérou et Bolivie, etc.*, p. 586; Beuchat, *op. cit.*, p. 684). The Museum of Ethnology at Paris has a beautiful vase made of a single piece of repoussé silver.
13. Buffon speaks of Peruvian mummies, citing Garcilaso and Acosta (*Oeuvres complètes*, IX [1833], 88). For the mummifying of human heads, cf. J. Tello, "El uso de las cabezas humanas artificialmente momificadas," *Revista universitaria de Lima*, No. 13 (1918). The Peruvians know how to shrink human heads to a very small size without distorting the features. The Jívaros of the virgin forests of eastern Ecuador still continue the practice of shrinking human heads, and the government of Ecuador has

- been obliged to prohibit trade in these peculiar works of art, which are much sought after by Europeans.
14. *Pérou et Bolivie, etc.*, pp. 634 and 550, n. 1.
 15. Daniel Réal, "Un chef-d'oeuvre de la céramique péruvienne," *Journal de la Société des Américanistes de Paris*, 1921.
 16. *Op. cit.*, p. 23, note. On the taste of the Mexicans for metal objects representing animals, cf. Pierre Martyr, *De orbe novo* (F. tr.; Paris, 1907), p. 452.
 17. Cf. R. and M. D'Harcourt, "La musique dans la sierra andine," *Journal de la Société des Américanistes de Paris*, 1920, and the handsome book by the same authors entitled *La musique des Incas et ses survivances* (Paris, 1925).
 18. *Op. cit.*, Bk. XIV, ch. xvii; Bandelier, *The Islands of Titicaca, etc.*, Pt. III, n. 131.
 19. "The perforations made in the bone are placed exactly where they should be in order to obtain the right pitch" (Capitan and Lorin, *op. cit.*, p. 154). "It was in the Inca empire that these flutes attained their most perfect form" (D'Harcourt, *La musique des Incas, etc.*, p. 87).
 20. Flutes of different size corresponded to the different ranges of tone, from soprano and tenor to contralto and bass (Garcilaso, *op. cit.*, Bk. II, ch. xxvii).
 21. A. Villar y Córdova maintains that the ancient Indians did have such instruments, but he gives no reference (*op. cit.*, p. 536).
 22. Garcilaso, *op. cit.*, Bk. I, ch. xxvi; Ondegardo, *Relación*, p. 85.
 23. Suárez, *op. cit.*, I, 175.
 24. Betanzos, *op. cit.*, ch. xii and xvi; Sarmiento, *op. cit.*, p. 80.
 25. There was a certain correspondence between the zodiac of the Incas and that of the Aztecs and even that of the peoples of Asia, which should occasion no surprise in view of the probable origin of the peoples of South America ("El zodiaco de los Incas en comparación con el de los Aztecas," *Proceedings*, 17th International Congress of Americanists, Mexico, 1912). Certain modern authors believe that the spring equinox (September 21) and later, beginning with the reign of Pachacutec, the summer solstice (December 22) marked the beginning of the year and, according to certain indications given by Garcilaso, that the Peruvians added to the lunar year the number of days needed to make it coincide with the solar year (G. V. Callegari, "Conoscenze astronomiche degli antichi Peruviani," *Rivista abruzzese*, 1914). Betanzos, Balboa, and Molina give different dates for the beginning of the year, but did the year have any beginning? Nothing is less certain. The common people counted the years in terms of the time between sowing and harvesting the crops (J. du Gourcq, "L'astronomie chez les Incas," *Revue scientifique*, 1893, pp. 15 *et seq.*). According to Montesinos, after a certain date the Peruvians fixed the length of the month at thirty days, divided into weeks of ten days (*op. cit.*, ch. xi).
 26. Garcilaso, *op. cit.*, Bk. II, ch. xxii. Desjardins is mistaken in declaring that astronomy was the most highly perfected science in Peru (*op. cit.*). However, it is possible that later discoveries may yet reveal among the

elite a considerable body of astronomical knowledge unknown to the common people and of whose existence their white conquerors learned nothing. Nordenskiöld believes that it can already be said that there was a great difference between the calendar developed by the "medicine men" (i.e., the *amautas*) and the primitive calendar of the ordinary Indian ("Le calcul des années et des mois dans les quipus péruviens," *op. cit.*, p. 56). Cf. Howland Rowe, "Inca Culture at the Time of the Spanish Conquest," p. 323.

27. Leadbeater, a specialist in this subject, declares that there was nothing in Peru worthy of "the name of occultism" (*op. cit.*, p. 412). Yet it is certain that the Indians had a numerological magic. The number four, according to Payne, and the number seven, according to Nordenskiöld, were regarded as sacred. To find out whether it would be a good year, the Indians would count the potatoes in a sack (Payne, *op. cit.*, II, 283; Nordenskiöld, "Le calcul des années et des mois dans les quipus péruviens," *op. cit.*, p. 55). The number four had prophetic significance in Mexico, Guatemala, and Colombia (Helps, *op. cit.*, IV, 285). Sorcerers had no followers except among the lower classes (Balboa, *op. cit.*, ch. xxix).
28. Poma de Ayala, *op. cit.*, pp. 274-282; P. de Arriaga, *op. cit.*; G. A. Otero, *La piedra mágica*; H. Castro Pozo, *Nuestra comunidad indígena*, pp. 185, 218, 287.
29. Morua, *op. cit.*, p. 114; H. Valdizán, *Acerca de los orígenes de la medicina peruana* (Lima, 1922). We find it difficult to grant that the medical knowledge of the Peruvians was as great as Fidel López says it was (*op. cit.*, p. 320).
30. *Op. cit.*, Bk. VII, ch. v *et seq.* Frazer reproduces this account in *The Golden Bough* (London, 1922), p. 553. This festival recalls those held to "drive out the spirits" in certain Negro villages. Many Indians still believe that diseases are maleficent disembodied beings—such as smallpox, which they call *tayta-capac*.
31. Wrigley, "The Traveling Doctors of the Andes," *Geographical Review*, IV (1917); Otero, *op. cit.*; Markham, *The Incas of Peru*, p. 158. The legend of the Collahuayas has been recounted by Oliveiro Cezar in *Las leyendas de los indios Quichuas* (Buenos Aires, 1893), p. 34.
32. Tschudi, "Contribuciones, etc.," *op. cit.*, p. 69.
33. Morua, *op. cit.*, p. 116; G. de Santa Clara, *op. cit.*, Vol. III, ch. xlix; H. Valdizán and A. Maldonado, *La medicina popular peruana*; R. d'Harcourt, *La médecine dans l'ancien Pérou*.
34. Villar y Córdova, *op. cit.*, p. 56.
35. Velez López, "Las mutilaciones en los vasos antropómorfos del antiguo Perú," *Proceedings*, 18th International Congress of Americanists (London, 1912), II, 267 *et seq.*
36. Raurich, *op. cit.*, pp. 34-35; Garcilaso, *op. cit.*, Bk. II, ch. xxvii. Why does Hanstein maintain that the Peruvians did not sing? (*Op. cit.*, p. 78.)
37. Morua makes two references to Quechua dramas (*op. cit.*, pp. 24 and 114), and Santa Cruz Pachacuti even gives the names of some of them: a comedy called *Anay Sauca* (which means, "How Amusing!"), a farce

- entitled *Llama-llama*, and some tragedies called *Hanamsi* and *Hayachuco* (*op. cit.*, p. 268). Still another drama has sometimes been mentioned—*Uska Paukar*, but entire roles have been shown to be of Spanish origin (Fidel López, *op. cit.*, p. 329). Cf. J. G. Cosío, "El drama quechua *Ollantay*," *Revista universitaria del Cuzco*, II (1941), 3. The text of *Uska Paukar* may be found in the *Biblioteca de cultura peruana* (Paris, 1938), I, 334.
38. Garcilaso says that the Indians did not use rhyme (*op. cit.*, Bk. II, ch. xxvi and xxvii). It was introduced into the drama after the conquest.
 39. Markham, *The Incas of Peru*, p. 148; L. Cordero, *Estudios de lingüística americana* (Cuenca, 1901), p. 29.
 40. Introduction to the English translation of the Second Part of the *Crónica* of Cieza de León, Hakluyt Collection (London, 1883).
 41. Cf. the Introduction to the French translation by Pacheco Zegarra (Paris, 1878). The Spanish translation of José Barranca (*Ollanta* [Lima, 1868]) bears the subtitle: *Ó sea la severidad de un padre y la clemencia de un rey*. The last Spanish translation is in the *Biblioteca de cultura peruana* (Paris, 1938), I, 198.
 42. As early as the beginning of the eighteenth century, Frézier speaks of the closing of a theater where the death of the Inca was being represented (*op. cit.*, p. 250). In the 1809 edition of *Voyages au Pérou* by M. Soreviela and Narcisso y Barcelo there is the following note: "In most of the large towns of Peru, the Indians are reviving the memory of the death of Atahualpa by a sort of tragedy which they show in the streets on the day of the Nativity of the Virgin. . . . The Spaniards are then by no means safe" (II, 374).
 43. Cobo, *op. cit.*, Bk. XIV, ch. v.
 44. Garcilaso, *op. cit.*, Bk. IX, ch. vii.
 45. Letourneau, *La condition de la femme dans les diverses races et civilisations* (Paris, 1903), p. 199. "In Peru woman was neither a chattel, as in the Orient, nor a beast of burden, as among savage tribes; she was the property of the state, to be disposed of according to its good pleasure, as authority might arbitrarily decide" (Castaing, *op. cit.*, p. 27).
 46. L. Pena, *Histoire du Chili* (Paris, 1927), p. 5.
 47. Saavedra, *op. cit.*, p. 87.
 48. Garcilaso, *op. cit.*, Bk. IV, ch. xii.
 49. Garcilaso, *op. cit.*, Bk. V, ch. xi. In ceremonies of this kind the *hanan* and the *hurin* Indians would squat facing each other and drink together.
 50. A number of ceremonial games have also survived as part of the funeral rites. Cf. Nordenskiöld, "Spieltische aus Peru und Ecuador," *Zeitschrift für Ethnologie*, II and III (1918), 169; Karsten, "Zeremonielle Spiele unter den indianen Sudamerikas," *Acta Academiae Aboensis Humaniora* (Åbo, 1920), Vol. I.
 51. Zárate, *op. cit.*, Bk. I, ch. xiv. A study of some of these dances may be found in R. and M. d'Harcourt, *La musique des Incas et ses survivances*, pp. 91 *et seq.*

52. Uriel Garcia, *Pueblos y paisajes sudperuanos*, ch. vi; Paredes, *El arte en la altiplanicie* (La Paz, 1913).
53. The chroniclers are not in agreement about the dates of these festivals.
54. The primitive native dances led by Indians covered with animal skins and feathers have continued to the present day in several regions (R. Paredes, *op. cit.*).
55. Garcilaso, *op. cit.*, Bk. VI, ch. xxi.
56. Montesinos, *op. cit.*, ch. xxii.
57. Joyce, greatly perplexed, calls the civilization of the Incas a *magnificent barbarism* (*op. cit.*, p. 76).

NOTES TO CHAPTER XII

1. Cieza de León, *Crónica*, Pt. I, ch. lviii; C. de Castro, *op. cit.*, p. 216; Falcón, *op. cit.*, p. 153.
2. Cieza de León, *Crónica*, Pt. II, ch. xix.
3. Garcilaso, *op. cit.*, Bk. V, ch. xv.
4. In the valley of Chinchá the *curacas* owned lands of unequal size following the distribution made by the Inca Yupanqui, according to C. de Castro (*op. cit.*, p. 218).
5. *Op. cit.*, p. 114. Lugones makes the same observation regarding the colonies of converted Indians in Paraguay under the rule of the Jesuits (*op. cit.*, p. 167).
6. Squier, *Peru, etc.*, p. 575.
7. Hanstein, *op. cit.*, p. 130.
8. Philippovich, in Trimborn, "Der Kollektivismus, etc.," *op. cit.*, p. 605.
9. *Crónica*, Pt. II, ch. xiii. "These Indians preserve very tender recollections of the last of their Incas and assemble from time to time to do honor to his memory. They sing verses in his praise and play on their flutes airs so mournful and so touching as to arouse the compassion of those who hear them. . . ." —Father Morghen, *Lettres édifiantes et curieuses, etc.* (ed. of 1839), V, 225.
10. *Op. cit.*, Vol. II, Bk. VI, ch. xii. Even today, "the Indian, servile and superstitious, ends by loving the tyrannies that oppress him" (García Calderón, *Les démocraties latines de l'Amérique* [Paris, 1912], p. 330). We must be suspicious of the answers received by the Spaniards during official inquiries, for it was to the conquerors' interest to spread the impression that the Incas had ruled by fear and that their subjects were restive under their yoke (Tschudi, "Contribuciones, etc.," *op. cit.*, p. 30).
11. Ondegardo, "De l'état du Pérou avant la conquête" (F. tr.), ch. xii.
12. The progress of the sciences was arrested by the impossibility of discussion (Cevallos, *op. cit.*, pp. 162 *et seq.*).
13. There was no convenient method of making flour, and this is why bread was not the staple food (Garcilaso, *op. cit.*, Bk. VIII, ch. vii). "The Indians are great imitators of what they see, but very limited in inventiveness" (Frézier, *op. cit.*, p. 240).
14. Pizarro by no means acted out of pure cruelty. That he was conscious of his moral obligations is shown by the letter he wrote in 1534 to

- Hernando de Soto from Jauja bidding him treat the Indians well (Colección de documentos del Archivo de Indias, XLII, 134).
15. Means, "Indian Legislation in Peru," *op. cit.*, p. 526.
 16. Von Buchwald, "*Propiedad rústica en tiempo de la colonia*," p. 3.
 17. Like the *mayoral* in the region of Riobamba (Rivet, "Étude sur les Indiens de la région de Riobamba," *op. cit.*, p. 64).
 18. *Op. cit.*, p. 199. "The Indian is without ambition for wealth," remarks Frézier (*op. cit.*, p. 240). It is impossible to speak adequately of their [the Indians'] indifference to wealth and even to all conveniences" (P. Bouguer, *op. cit.*, p. 102).
 19. Prescott, *op. cit.*, p. 1025.
 20. Means, "Race and Society in the Andean Countries," *American Historical Review*, November, 1918, p. 419.
 21. "De la orden, etc.," *op. cit.*, p. 107.
 22. *Op. cit.*, p. 72.
 23. "The Indian sees only the present; he does not think of tomorrow" (Grandidier, *op. cit.*, p. 69). Cf. Bandelier, *The Islands of Titicaca, etc.*, p. 19 and Pt. III, n. 56.
 24. This is the case, for instance, with the reserves of wool that the Indians today lay by in certain regions of the plateau (Colpaert, *op. cit.*, p. 44). The servile condition of the ancient Egyptians likewise killed in them any concern for the future (Maspero, *op. cit.*, I, 343).
 25. *Relación*, p. 87.
 26. Cf. Guevara, "Derecho consuetudinario, etc.," *op. cit.*
 27. Bandelier, *The Islands of Titicaca, etc.*, p. 13.
 28. Cieza de León, *Crónica*, Pt. I, ch. lxxviii.
 29. Lorente, *op. cit.*, p. 326; Humboldt, *Vues des Cordillères, etc.*, p. 197.
 30. Prescott, *op. cit.*, p. 817.
 31. Fournière, *Les théories socialistes au XIXième siècle* (Paris, 1904), p. 413. Bougainville notes the characteristic monotony of the colonies of converted Indians under the rule of the Jesuits in Paraguay (Chinard, *L'Amérique et le rêve exotique dans la littérature française aux XVIIième et XVIIIième siècles* [Paris, 1913], p. 373).
 32. *Op. cit.*, p. 162.
 33. Pedro Sancho, *op. cit.*, p. 198.
 34. *Op. cit.*, ch. cxcv.
 35. *Op. cit.*, p. 142.
 36. "Relación de las costumbres antiguas, etc.," *op. cit.*, p. 205.
 37. *Op. cit.*, I, 174.
 38. *L'influence des Jésuites, considérés comme missionnaires, sur le mouvement des idées au XVIIIième siècle* (Mémoires de l'Académie de Dijon, 1874).
 39. Bandelier, *The Islands of Titicaca, etc.*, p. 19; Bingham, *Inca Land*, p. 102.
 40. "De l'état du Pérou avant la conquête" (F. tr.), ch. xii.
 41. *Le Pérou contemporain*, p. 18.
 42. Can one agree with García Calderón in thinking that the Indian be-

comes intoxicated in order to forget the misery of his daily existence, when the immoderate love of liquor was already the cardinal vice of the race in pre-Columbian America? Cf. *Les démocraties latines de l'Amérique*, p. 330.

43. *Op. cit.*, I, 274. Cf. Lope de Atienza, "Compendio historial," ch. ix.
44. Ondegardo, "Copia de carta, etc.," *op. cit.*, p. 460.
45. *Op. cit.*, p. 51.
46. The subjects of the Inca, according to Chalón, were unable to make any progress in agriculture, mining, metallurgy, or jewelry-making (*op. cit.*, p. 94). If the Indians are refractory to European culture, it is, according to Dr. Carranza, because of "the static nature of their character, which is like nothing to be found in any other people or race, and the very civilization that they attained under the theocratic regime of the Incas" ("Colección de artículos," 2nd Series, p. 48, in Prado y Ugarteche, *Estado social del Perú durante la dominación española*, p. 160). "It was . . . a harmoniously constructed whole, a carefully balanced static form" (De Greef, *op. cit.*, II, 39). These conditions of life among the ancient Peruvians are in sharp contrast to those of our own present unstable and precarious existence. Are we to consider the empire of the Incas as a "stationary state" in the sense in which John Stuart Mill used these words (*Principles of Political Economy*, Bk. IV, ch. vi)? (Suárez uses the same term in his *Historia general*, I, 239). Are we to believe that in sparing his subjects the necessity of engaging in economic conflict, the Peruvian monarch was making it possible for them to pursue more exalted ends? In no wise. The Inca, in riveting chains on the body, did not free the soul, nor did he substitute nobler desires for those that he restrained.
 We may also add that the same stagnation, the same crystallization, is evident in their religion. One does not find among the Indians any mysticism, depth of devotion, or piety (Helps, *op. cit.*, III, 344).
47. Tschudi, "Contribuciones, etc.," *op. cit.*, p. 69. Without going so far as to accept Ribot's opinion that genius is hereditary, we must yet recognize that a member of the elite does, to a certain extent, transmit his aptitudes and capacities to his descendants.
48. García Calderón, *Les démocraties latines de l'Amérique*, p. 329. Cf. Bandelier, *The Islands of Titicaca, etc.*, p. 77. Rouma cites many examples of the Indian's hostility to any innovation and finds the reason for it in the Inca system (*Les Indiens Quitichouas et Aymaras des hauts plateaux de la Bolivie* [Brussels, 1913], p. 60).
49. "The imperative spirit of despotism would not allow them to be happy or miserable in any way but that established by law" (Prescott, *op. cit.*, p. 817). "What will be to the eternal glory of this wise government is that the fundamental maxim of the sovereign was actually to oblige his subjects to be happy" (De Carli, *op. cit.*, I, 202).
50. Santa Cruz Pachacuti speaks of a famine that lasted seven years and claimed a great many victims in the reign of Tupac Yupanqui (*op. cit.*, p. 97), but this information is dubious, as he is the only author who

furnishes it, and it is surprising that such a long period of misery, coming at a time so near the conquest, should not have remained in the Indians' memory.

51. Acosta, *op. cit.*, Vol. II, Bk. VI, ch. xv.
52. Brehm (*op. cit.*, p. 92) writes to the same effect.
53. Garcilaso, *op. cit.*, Bk. VI, ch. xxxvi.
54. And yet "the world at present is tending, with the advance of socialism and centralization, toward a social organization that is not very different from that of the Incas" (De la Riva-Agüero, "Examen, etc.," *op. cit.*, p. 156). The present writer drew some brief lessons from the Peruvian experience in his paper of July 5, 1927, submitted to the Société d'économie politique (*Journal des économistes*, July 15, 1927, p. 506, and *L'économiste français*, July 23, 1927, p. 99).
55. Prescott (*op. cit.*, p. 820) and Lorente (*op. cit.*, p. 328) maintain that patriotic feeling did not exist in Peru. Yet the theocratic and socialist state of the reductions seems to have created a strong national unity in Paraguay, as was very evident at the time of the terrible war of 1866. "The nation was formed in the missions," says Sagot (*op. cit.*, p. 113). The absence of patriotic feeling among the Peruvians is to be explained by the fact that the empire was of recent date and that many of its parts had not yet been unified (Jijón y Caamaño and Carlos Larrea, *op. cit.*, pp. 83 and 89; Suárez, *op. cit.*, I, 66).

NOTES TO CHAPTER XIII

1. Altamira, *Psicología del pueblo español* (Oviedo, 1902); Unamuno, *En torno al casticismo* (Salamanca, 1902); Navarro y Ledesma, *Vida del ingenioso hidalgo Miguel de Cervantes Saavedra* (Madrid, 1905); Blanco Fombona, *El conquistador del siglo XVI* (Madrid, 1922); García Calderón, *¿Cómo era aquel español?* Cf. A. Gerbi, *Viejas polémicas sobre el nuevo mundo*; J. Eyzaguirre, *Hispano-américa del dolor*; K. Vossler, *L'Espagne, l'homme et le peuple*.
2. The expression is Robertson's (cf. Velasco, *op. cit.*, I, 175). The fact is that the race of conquistadors quickly became enervated on the American continent. It gave birth to creoles, who were sensitive, agreeable, capricious, and superstitious, and who bore no resemblance to their ancestors. "It seems that softness and indolence are characteristic of the country, perhaps because life there is too easy and comfortable, for one notices that those who have been brought up to work in Europe become slothful in a very short time, like the creoles" (Frézier, *op. cit.*, p. 227). In modern times, however, one may discover once again many of the distinctive traits of the conquistadors in the South American *caudillos*, those audacious dictators who have made modern Latin America.
3. Calancha, *op. cit.*, Bk. I, p. 98. Marcos de Niza, (*op. cit.*, pp. 309 *et seq.*) details the crimes of the Spaniards. For atrocities committed during the expedition to Chile, cf. C. de Molina, "Relación de la conquista, etc.," *op. cit.*, p. 166, and for those committed on the coast of Ecuador, cf. the letter of Diego de Almagro, dated May 8, 1534 (Colección de docu-

mentos del Archivo de Indias, XLII, 104). Pereyra (*L'oeuvre de l'Espagne en Amérique*, p. 242) argues that the *Noticias secretas* should not be used against Spain because "they laid bare the vices of a society, vices independent of that society's political ties with Spain." But if the Madrid government is to be freed from responsibility, the Spaniards themselves are responsible for the growth of these vices. Cf. *Revista del Archivo histórico del Cuzco*, 1953, p. 91.

4. Juan and Ulloa, *Noticias secretas, etc.*, Pt. II, ch. ix.
5. Ondegardo, *Relación*, p. 72; Santillán, *op. cit.*, §60.
6. Anon., "Noticia biográfica del adelantado, etc.," *op. cit.*, p. 552.
7. Marshall Saville, *A Letter of Pedro de Alvarado Relating to His Expedition to Ecuador* (New York, 1917); L. Baudin, "Les régions occidentales de l'Équateur et la folle expédition de Pedro de Alvarado," *Revue de l'Amérique latine*, November, 1929.
8. Oviedo y Valdés, *op. cit.*, Vol. IV, Bk. XLVII; Herrera, *op. cit.*, Dec. V, Bk. X, ch. ii.
9. *Reflexiones imparciales sobre la humanidad de los españoles en las Indias, etc.* (Madrid, 1782), p. 225.
10. "The bringing in of ideas of exchange-value was like the introduction to some primitive people of a disease from which civilized nations by long habit had become largely immune" (Nicholson, *op. cit.*, p. 68). This is not correct, for, as we have seen, a system of barter and money did exist.
11. The internecine strife among the conquistadors themselves over claims to lands assigned by the Crown, whose boundaries were necessarily very inexact since the central power was ignorant of their precise geographical location, constitutes one of the most extraordinary pages in the history of the world.
12. *Crónica*, Pt. I, ch. lx, lxx, lxxv, etc. The Indians who did not die fled in great numbers to the mountains (Letter of the Licentiate Gasca to the Council of the Indies, dated January 28, 1547 [Colección de documentos inéditos para la historia de España, L, 27]). Cf. P. de Ribera and A. de Chaves y Guevara, "Relación de la ciudad de Guamanga," *op. cit.*, I, 110; Calancha, *op. cit.*, Vol. I, Bk. I, ch. xvi; Bollaert, *Antiquarian, Ethnological, etc.*, p. 133. Pereyra, in his desire to exculpate the Spaniards, goes too far. He maintains that the depopulation was inevitable, since the natives could not stand any work at all, even under the most benevolent regime (*L'oeuvre de l'Espagne en Amérique*, p. 328). If this observation is true of the inhabitants of tropical regions, in particular of the Antilles, to whom the author makes reference, how could it be applicable to the Quechuas of the plateau, long accustomed to the performance of heavy tasks? Juan Nuix goes even farther and denies that there was any depopulation at all (*op. cit.*, p. 120), but he bases his reasoning on the situation in Mexico. As we have seen, the fact that depopulation occurred is undeniable. Colmeiro (*op. cit.*, Vol. II, ch. lxxviii) lists among the causes of this depopulation epidemics and the colonial system itself. But this system was by no means peculiar to the Spaniards. Before them, the Portuguese had applied it in the East Indies, and all the nations of Europe followed their example. M. Sobreviela and

- Narcisso y Barcelo stress the ravages caused by epidemics (*op. cit.*, II, 369), and so does Lozano (*Historia del Paraguay* [Madrid, 1754], Vol. I, Bk. I, ch. xiii and xiv). Montesinos goes so far as to assert that the ancient sovereigns prohibited writing because the leaves that served as tablets carried disease (*op. cit.*, ch. xv).
13. Santillán, *op. cit.*, §53.
 14. Herrera, *op. cit.*, Dec. V, Bk. X, ch. viii.
 15. Juan and Ulloa, *Noticias secretas, etc.*, Pt. II, ch. i.
 16. Santillán, *op. cit.*, §25. The Spanish officials also became too numerous (Juan and Ulloa, *ibid.*, Pt. II, ch. vii).
 17. *Op. cit.*, §58. "When an Indian owes two pesos, the cacique takes eight or ten from him" (Santillán, *op. cit.*, §57). D. de la Bandera likewise writes: "With the arrival of the Spaniards, every cacique took on the powers of the Inca" (*op. cit.*, p. 99). "The Indians could not and dared not refuse the caciques the goods, the women and girls that they asked for" (Memorandum of Francisco de Toledo to Philip II in *Relaciones geográficas*, I, App. 3, cliii).
 18. Royal decree of November 27, 1560 (Colección de documentos del Archivo de Indias, XVIII, 489).
 19. "Even the violent and arbitrary government of Spain has, upon many occasions, been obliged to recall or soften the orders which had been given for the government of her colonies, for fear of a general insurrection" (Adam Smith, *Wealth of Nations*, II, 313). Yet Smith acknowledges the progress achieved by the Spanish colonies in America.
 20. Cf. *supra*, n. 12.
 21. *La fin de l'empire espagnol d'Amérique* (Paris, 1922); *Bolívar et la démocratie* (Paris, 1922); "Les guerres civiles et le césarisme en Amérique espagnole," *La Revue universelle*, December 15, 1925.
 22. "Resultados generales en el estudio de la historia colonial americana, criterio histórico resultante," *Proceedings*, 21st International Congress of Americanists (The Hague, 1924), p. 425.
 23. *L'oeuvre de l'Espagne en Amérique; Historia de la América española* (2 vols.; Madrid, 1920-24).
 24. Lewis Hanke, *La lucha por la justicia en la conquista de América* (Buenos Aires, 1949).
 25. As J. Prado y Ugarteche observes, it would not be fair to demand that the Spaniards should have done for the benefit of America what they had not done in their own country, and it should not be forgotten that in Spain at that time agriculture was scarcely in a flourishing state (*op. cit.*, p. 41).
 26. Cf. Friederici, *op. cit.*, p. 426.
 27. J. de la Espada, *Relaciones geográficas*, I, Introduction, lviii; *Recopilación de leyes de los reinos de las Indias* (Madrid, 1841); Gómara, *op. cit.*, ch. cli. Cf. the list of measures for the protection of the Indians given in the "Colección de documentos del Archivo de Indias," VI, 118; the instructions given to the corregidores in 1574 and 1597 (*ibid.*, XXI, 301); the "Código de leyes y ordenanzas para la gobernación de las Indias y buen tratamiento y conservación de los indios," September 24, 1571

- (*ibid.*, XVI, 376); the letter of protest from the Bishop of Cuzco to the Emperor (*ibid.*, III, 92); the *Ordenanzas que mandó hacer D. García Hurtado de Mendoza, marqués de Cañete, para el remedio de los excesos que los corregidores de los naturales hacen en tratar y contractar con los indios, i otras cosas dirigidas al bien de ellos* (Lima, 1594).
28. The office of Protector of the Indians was later eliminated, for it laid a heavy burden on the very people it was meant to defend (Schedules of 1582 and 1584 [Colección de documentos del Archivo de Indias, XVIII, 533 and 540]). Cf. *Memorias de los virreyes que han gobernado en el Perú durante el tiempo del coloniaje español*, II, 98. For the slave trade, cf. G. Scelle, *Histoire politique de la traite négrière aux Indes de Castille* (Paris, 1906), I, 135 *et seq.* In all transactions, the law treated the Indians as minors (Solórzano, *op. cit.*, Bk. II, ch. xxviii; Helps, *op. cit.*, IV, 246).
 29. Latham, *La existencia, etc.*, p. 52, n. 1.
 30. Garcilaso, *op. cit.*, Bk. VI, ch. xxxvi. This viceroy dreamed of creating a museum of the Indes, but he could not put this project into effect (J. de la Espada, *Tres relaciones, etc.*, p. xix).
 31. *L'oeuvre de l'Espagne en Amérique*, p. 242. Yet it is a fact that in some cases the Spaniards, and the clergy in particular, went to the opposite extreme. By dint of protesting so much against the behavior of their compatriots, they made the Indians think that every tax collection was an act of robbery ("Estado de un parecer del Doctor Vazquez sobre los repartimientos, encomiendas y aprovechamientos de las Indias" [Colección de documentos del Archivo de Indias, IV, 141]).
 32. J. de la Espada, *Relaciones geográficas de Indias*, IV, App. cxiv.
 33. Jean Terral, "L'oeuvre de l'Espagne en Amérique," *Revue des études historiques*, January, 1926. It was a war, not between two peoples or between natives and creoles, but between two opposing political factions (R. Altamira, "Resultados generales, etc.," *op. cit.*, p. 434).
 34. This is the phrase used by García Calderón, *Le Pérou contemporain*, p. 328.
 35. The first Inter-American Demographic Congress, held in Mexico in 1943, recommended that member states do away with all racial classifications in the gathering and reporting of statistics, since it condemned all racial discrimination. But this absurd measure would not do away with races; it would merely prevent the study of them.
 36. *Op. cit.*, p. 525.
 37. *Les démocraties latines, etc.*, p. 332.
 38. "Race and Society in the Andean Countries," *op. cit.*, p. 419; "Breves apuntes sobre la sociología campesina del Perú," *Mercurio peruano*, August, 1921, p. 45. In Mexico likewise, the Indians and mestizos make up the major part (about 85%) of the population.
 39. "Die Zahl und die Volksdichte, etc.," *op. cit.*, p. 103.
 40. According to Garcilaso, in 1603, less than a century after the conquest, the last descendants of the Incas presented a humble petition to their conquerors requesting a lightening of the burdens laid upon them, and at this time they numbered five hundred sixty-seven (*op. cit.*, Bk. IX, ch. xl). Frézier reports that at the beginning of the eighteenth century there

- was a family of the Inca race in Lima, the head of which was called Ampuero. The viceroy, on entering the capital, would not fail to offer him a sort of public homage (*op. cit.*, p. 249).
41. "Contribuciones, etc.," *op. cit.*, p. 38. We are by no means contending that the Indians are not capable of improving their condition. Several of them have already attained renown in the arts, science, or politics, and it is very likely that the masses will some day assert themselves (it would be interesting, in this connection, to know whether the Incas were of the same race as their subjects), but the red men today persist in looking upon themselves as the white men's inferiors to such an extent that those among them who have succeeded in reaching a certain social position often go to great pains to deny their past and to depreciate the members of their own race.
 42. Means, "Breves apuntes, etc.," *op. cit.*, p. 45.
 43. C. Ugarte, "El problema agrario peruano," *Mercurio peruano*, September, 1923, p. 138.
 44. J. Basadre, *Historia del derecho peruano*, p. 166; P. J. de Arriaga, *op. cit.*, ch. v and vi; P. de Villagomes, "Carta pastoral" (Colección de libros y documentos referentes á la historia del Perú, Series I, Vol. XII [1919], ch. xlv and xlvi); E. Romero, *El departamento de Puno*, p. 221; Paz Soldan, *Mi país*, III, 427; L. Baudin, "L'Indien dans l'économie des états andins," *Zeitschrift für die gesamte Staatswissenschaft*, CV, No. 2 (1949), p. 347.
 45. Castro Pozo, *op. cit.*, p. 10. In Peru in 1945, 43.3% of the total deaths were of children under five years of age. For a general study of these questions, cf. L. Baudin, "L'Indien dans l'économie, etc.," *op. cit.*, p. 339.
 46. J. Basadre, *op. cit.*, p. 141.
 47. Nothing is more difficult than to effect a change in attitudes that have their roots in the environment. "One would have to alter the landscape and transform the storms, the deserts, the lakes, and the sea winds" (E. Romero, *Tres ciudades del Perú*, p. 120).
 48. H. Castro Pozo, "El ayllu peruano ante una posible legislación tutelar," *Proceedings*, 27th International Congress of Americanists (Lima, 1939), II, 189; "El ayllu peruano debe transformarse en cooperativa de producción agro-pecuaria," *Revista de economía y finanzas*, July 1940, p. 15; M. Poblete Troncoso, *Condiciones de vida y de trabajo de la población indígena del Perú* (Geneva, 1938); J. Delgado, *Folklore y apuntes para la sociología indígena* (Lima, 1931).
 49. Payne, *op. cit.*, p. 247, n. 2.
 50. Rivet, "Étude sur les Indiens de la région de Riobamba," *op. cit.*, p. 64. J. Prado y Ugarteche emphasizes the "deep gulf" that continues to exist between the European and the native races (*op. cit.*, p. 160).
 51. E. Rabasa, *L'évolution historique du Mexique* (F. tr.; Paris, 1924), p. 24.
 52. Payne, *op. cit.*, I, 246, n. 1; Mendieta y Nuñez, *Situación de las poblaciones indígenas de América ante el derecho actual* (Mexico, 1925), p. 9. "It has been established that the type of the Aymara mother is dominant over that of the Spanish father; after several successive generations of mixed unions, the element due to Aymara lineage always becomes

evident in the so-called Spanish-American" (Reclus, *Géographie universelle*, XVIII, 654).

53. "Die Zahl und die Volksdichte, etc.," *op. cit.*
54. For example, the insurrections of 1570, 1743, and 1780, which we have already mentioned, that of Condorcanqui in the last century, and those of Azángaro and of Huancane as recently as December, 1923. In connection with the three native congresses held at Lima, the newspaper *El Comercio* expressed the opinion that the characteristic timidity, shyness, and resentment of the Indian have their source in his continued exploitation by the white man. It advocates special legislation on behalf of the native population based on respect for ancient customs (*El Comercio*, September 27, 1923). Means expresses the fear that these people, deprived of all education, may fall easy prey to Bolshevik ideas—all the more reason for taking an active concern with their welfare ("Race and Society in the Andean Countries," *op. cit.*, p. 424).

NOTES TO CHAPTER XIV

1. De Mazade, "Le socialisme dans l'Amérique du Sud," *Revue des deux mondes*, May 15, 1852.
2. Cf. *Lettres édifiantes et curieuses, etc.*, Vol. X, XI, XIX, XXIII; Lugones, *op. cit.*; Pablo Hernández, *op. cit.*; Charlevoix, *op. cit.*; Sagot, *op. cit.*; Demersay, *Histoire physique, économique et politique du Paraguay, etc.* (Paris, 1860-64); Pfothenhauer, *Die missionen der Jesuiten in Paraguay* (3 vols.; Gütersloh, 1891-93); Gothein, *op. cit.*; M. Fasbinder, *op. cit.*; R. Lozano, *op. cit.*; F. de Azara, *Viajes inéditos desde Santa Fé á la Asunción, al interior del Paraguay, y á los pueblos de misiones* (Buenos Aires, 1873); C. Baez, *Le Paraguay* (Paris, 1927).
3. E. Gothein, *op. cit.*
4. M. Fasbinder, *op. cit.*
5. Abbé Raynal, *op. cit.*, II, 277; Anon., *L'influence des Jésuites, etc.*; Prince Ruffo della Scaletta, "Le riduzioni del Paraguay," *Studium*, April, 1934, p. 229.
6. As chance would have it, a modern egalitarian socialist colony, without either an elite or a superior caste, was established in the same general region in 1893: New Australia. Conditions were very favorable. Fertile lands were granted to it; the Peruvian government was well disposed; the men were industrious; and the founder was honest. Yet the productivity of labor was so low that it was insufficient to provide the colonists with a living; there was no incentive to work. A great many left, and the lands were divided among those remaining (Droulers, "Une colonie socialiste au Paraguay," *Réforme sociale*, II (1895); Saint-Grahame, *Where Socialism Failed* (London, 1912); W. H. Koebel, *Paraguay* (London, 1917).
7. J. Costa, *op. cit.*, pp. 76-192.
8. His *Utopia* was published in 1516, and therefore before the discovery of Peru.
9. Campanella may have been acquainted with the accounts of Jerez, Gó-

- mara, Cieza de León, Zárate, and Acosta (Maus, "Analyse et critique de l'ouvrage de De Greef sur l'évolution des croyances et des doctrines politiques," *Le devenir social*, 1896, p. 370, n. 2). "Campanella must have read accounts of this strange country Peru" (P. Lafargue, "Campanella," *Le devenir social*, 1895, p. 574).
10. *Naufrage des îles flottantes ou Basiliade du célèbre Pilpai* (Messina, 1753), I, xli, 4, and 105.
 11. Cambridge ed., 1919, pp. 1 and 17.
 12. *Histoire des Séverambes* (Amsterdam, 1677).
 13. *Découverte australe* (Leipzig, 1782); *L'Andrographe* (The Hague, 1782).
 14. In his *Code de la nature*, Morelly provides strict rules of organization: obligatory marriage, the prohibition of private property, the establishment of public stores; but he clearly deviates from the Peruvian system in a number of respects: freedom of consumption, the principle of election, etc.
 15. *Voyage en Icarie* (Paris, 1840).
 16. *République*, Bk. V, ch. vi (ed. of Paris, 1577, p. 269).
 17. *Op. cit.*, Bk. III, ch. vi. Cf. P. Villey, *Les sources des Essais* (Vol. IV of the Strowsky and Gebelin ed. [Bordeaux, 1919]). Montaigne was familiar with a complete French translation of Gómara published in 1584, and Benzoni's translation of 1579. He took especial delight in the elegance and irony of the former (C. Pereyra, "Montaigne et López de Gómara," *Revue de l'Amérique latine*, August 1, 1924, p. 404).
 18. Chinard, *L'exotisme américain dans la littérature française au XVIème siècle* (Paris, 1911), p. 224.
 19. Agrippa d'Aubigné, by way of apology for not speaking of the conquest of Peru, expresses himself quite frankly: he is unable to enter upon the discussion of that subject "without waxing indignant at the cruelties and perfidies" perpetrated by the Spaniards. This would be "suspect in a Frenchman," and he therefore prefers to refer his readers "to the Spaniards" who have written to the same effect (*Histoire universelle* [Paris, 1616], Bk. I, ch. xvi).
 20. Vol. II, ch. cxlviii. Voltaire suspects, not without reason, that Las Casas exaggerates, but this does not prevent him from repeating that author's assertions.
 21. The characters in this play were wittily criticized by Abbé Galiani in a letter to Madame d'Épinay, dated February 20, 1773: "Alvarez, weak and whimpering, has nothing of the Castilian courage or pride. . . . Alzire is one of the best women theologians of her century. . . . Montèze, neither American nor Spanish, neither Christian nor savage—one does not know what he is, if not an imbecile."
 22. La Harpe called it "a masterpiece of stupidity" (*Correspondance*, IV, 250).
 23. Turgot informed Madame de Graffigny herself of his observations on her work (*Oeuvres de Turgot* [ed. Guillaumin; Paris, 1844], II, 785). Moved to enthusiasm by reading Madame de Graffigny's work, two Italians wrote an *Apologie des quipos*, full of errors, of which Skinner speaks (*op. cit.*, p. 17, n.).

24. Marmontel drew his inspiration from Garcilaso, Las Casas, and Benzoni. His work abounds in inaccuracies of detail. To quote a single example: He writes that the Inca raised the standard of war on one of the summits of Mount Illiniza (p. 238). Now the two peaks of this mountain are each more than 17,000 feet high, and the famous English alpinist Whymper, the conquerer of Chimborazo, was defeated by one of them. Chateaubriand borrowed from Marmontel one of the most important scenes in *Atala* (Chinard, *L'exotisme américain dans l'oeuvre de Chateaubriand* [Paris, 1918], p. 289).
25. The phrase is from A. Lichtenberger, *Le socialisme au XVIII^{ème} siècle* (Paris, 1895), p. 270. Cf. Appendix ("The Historical Sources"). De Pauw even went so far as to consider it a sign of weakness that the Indians wore no beards! We may pass over in silence the authors of secondary rank, like Abbé Lambert, who confines himself to summarizing Garcilaso (*Histoire générale, civile, naturelle, politique, et religieuse de tous les peuples du monde* [Paris, 1750], XIII, 225 *et seq.*).
26. La Condamine, *Relation abrégée d'un voyage fait dans l'intérieur de l'Amérique méridionale* (Paris, 1745); L. A. Bougainville, *Voyage autour du monde, par la frégate du roi la Boudeuse et la flûte l'Étoile* (Paris, 1772).
27. This uneasiness reached its peak with Chateaubriand, for the ideal of the simple life exemplified by the American Indian appears unattainable for Europeans; a civilized man would not know how to revert to savagery.
28. This statement is not correct.
29. *Op. cit.*, II, 314-315. It should be remembered that this book was published in 1776.
30. *Op. cit.*, Letter XVI, I, 233-340.
31. *Ibid.*, Letter XIX, I, 284.
32. The paper submitted by the Marquis de Chastellux on the same subject includes a critique of Spanish policy, but it is very general and written from the point of view of trade in particular.
33. *Op. cit.*, p. 29.
34. *Ibid.*, p. 294.
35. R. Gonnard, *La légende du bon sauvage* (Paris, 1946).
36. A. Gerbi, *Viejas polémicas sobre el nuevo mundo* (Lima, 1946).
37. Like, for example, *L'épouse du Soleil* of Gaston Leroux, who professes to have drawn his information from the writings of Garcilaso, Cieza de León, and Sarmiento.

NOTES TO APPENDIX

1. Bartolomé de Las Casas, for instance, seems to be obstinately intent upon mangling the Quechua words. He writes *padica* for *pachaca*, *hemo* for *hunu*, *tocrico* for *tucricuc*. Benzoni writes *Chito* for *Quito*, *Cassimalca* for *Cajamarca*, and *Ingui* for *Inca*.
2. Meillet and Cohen, *Les langues du monde* (Paris, 1924).
3. It should be remembered that in Spanish *u* has the sound of *oo* in *food*.

4. "Estuviesen como librerías" ("they were like libraries").—Sarmiento, *op. cit.*, ch. ix. Cristóbal de Molina and Bernabé Cobo refer to these documents, but indicate that the paintings were done on woolen cloth. According to Steffen, the drawings of Poma de Ayala are probably copies of paintings of this kind (Hans Steffen, "Anotaciones á la historia índica del capitán Pedro Sarmiento de Gamboa," *Anales de la Universidad de Chile*, Vol. CXXIX).
5. De Gennep, *Internationale Wochenschrift für Wissenschaft, Kunst und Technik* (Berlin, 1909), III, 136.
6. M. Uhle, "Los orígenes de los Incas," *Proceedings*, 17th International Congress of Americanists (Buenos Aires, 1910), I, 230-253.
7. Markham, Introduction to *The Second Part of the Chronicle of Peru* by Cieza de León. Cristóbal de Molina exaggerates when he asserts that with the aid of these knotted cords the Indians were able to recall all the events in the history of Peru for more than five hundred years. (*Op. cit.*, p. 24.) Among the Chibchas of Colombia, the situation was still worse. These Indians knew absolutely nothing of their own history (Restrepo, *op. cit.*, ch. xvi).
8. Cieza de León, *Crónica*, Pt. II, ch. xxxix.
9. "The Incas destroyed all the records of Peru's prehistory" (Hutchinson, *op. cit.*, I, 70).
10. Jijón y Caamaño and Carlos Larrea, *op. cit.*, p. 61.
11. J. de la Espada, *Relaciones geográficas*, p. 110, note *d*. There are many legends regarding concealed lodes. M. Sobreviela and Narcisso y Barcelo recount that of the Condoroma mine. Some Spaniards, disguised as devils, made their way into the hut of an Indian who was suspected of knowing the location of a mine and accused him of having turned this mine over to the white men. The terrified Indian led his accusers to the site of the lode in order to convince them that it had not been worked. Hence comes the Spanish proverb: "Para descubrir secretos, los diablos de Condoroma" (*op. cit.*, II, 161).
12. This infatuation for comparisons and analogies has lasted a long time. In 1825, O'Leary, Bolivar's secretary, wrote of Cuzco: "Manco Capac was its Romulus; Viracocha, its Augustus; Huascar, its Pompey; Atahualpa, its Caesar; Pizarro, Almagro, Valdivia, and Toledo are the Huns, the Goths, and the Christian destroyers; Tupac Amaru is a Belisarius, who gave a day of hope; and Pumacahua is a Rienzi and the last patriot" (Paz Soldan, *Diccionario geográfico-estadístico del Perú* [Lima, 1877]).
13. When an author finds himself obliged to defend different opinions that are inconsistent with one another, his position becomes difficult. Thus, Abbé Raynal considers ancient Peru a socialist state, but he is at the same time hostile to socialism and favorably disposed toward the Indians. The thesis he expounds is so odd that it hardly seems likely that he himself could have understood it (*op. cit.*, Vol. II, Bk. VII). See ch. xiv, *supra*.
14. The reader will readily understand that the various authors' ideas and reports give the impression of a veritable chaos. The most astonishing

contradictions are to be met with. Ulloa, De Pauw, and Robertson, on the one hand, and D'Orbigny, on the other, do not even agree in regard to the Indian's physical type! According to the first, the race is degenerate and enfeebled; according to the second, it is "Herculean." One could run through the whole gamut of opinions expressed by the authors who have concerned themselves with the Incas, and, within the same opinion, one could distinguish every variety of nuance: pity, for example, sincere with Montaigne, becomes skeptical with Marmontel, sarcastic with Raynal, and contemptuous with Acosta.

15. In his bibliography Pret mentions the *Biblioteca americana* of J. Diaz de la Calle (1646), the *Bibliotheca americana* of Barros Arana (Paris, 1862-64), and the *Bibliotheca americana* of J. Brown (Providence, 1865-71). Dorsey cites the bibliographies of Ebeling (Leipzig, 1777), of A. Alcedo (Madrid, 1807), of B. de Souza (Mexico, 1816-21), of B. de Richarderie (London, 1835-46), of H. Stevens (London, 1857), and of A. Castaing (Paris, 1880).
16. For the sake of brevity we have referred to this collection as the "Colección de documentos del Archivo de Indias."
17. Some of the chronicles have been translated into English and published in the Hakluyt Collection, and a very small number have been translated into French by Ternaux-Compans.
18. Raynal, *op. cit.*, II, 144. Moreover, on all subjects touching upon the conquest, the Spaniards themselves exercised a strict surveillance over their historians. Herrera, having allowed himself to express certain rather harsh judgments on Pedrarias, the governor of Darien, was subjected to vehement criticism by one of the latter's descendants. By order of the King, an inquiry was opened, and after a long controversy an arbiter was appointed, who declared the chronicler to be in the right. Many documents relating to this affair can be consulted in Vol. XXXVII of the "Colección de documentos del Archivo de Indias," pp. 75 ff.
19. It was translated into French at Lyon and into German in 1534 and into Italian at Venice in 1535. Jerez is probably also the author of a very brief narrative entitled *La conquista del Perú llamado la Nueva Castilla* (Seville, 1534). No doubt he wished to write this summary account on his return to Spain in order to satisfy public curiosity while awaiting the publication of his *Verdadera relación* (Toribio Medina, *Biblioteca hispano-americana*, I, 142).
20. *Relación de los primeros descubrimientos de Francisco Pizarro y Diego de Almagro, sacada del código número CXX de la Biblioteca imperial de Viena* (Colección de documentos inéditos para la historia de España [Madrid, 1844], Vol. V).
21. Francisco Pizarro himself wrote a letter in 1532 announcing the capture of Atahualpa, which, according to Dorsey, was translated in 1534 or thereafter into French, Italian, and German.
22. *Relación para S. M. de lo sucedido en la conquista y pacificación de estas provincias de la Nueva Castilla y de la calidad de la tierra, después que el Capitán Hernando Pizarro se partió y llevó á S. M. la relación de la victoria de Caxamalca y de la prisión del cacique Atabalipa*. Very little

- is known about the author. He had already ceased to be Pizarro's secretary in 1535 and went back to Spain in 1536. Having returned to Peru in 1539, he took part in the Chilean expedition, plotted against Valdivia, and was beheaded by order of the latter in 1547. His book was first published in Italian in the Ramusio collection, *Navigazioni et viaggi* (1556), Vol. III.
23. *Relación del descubrimiento y conquista de los reinos del Perú y del gobierno y orden que los naturales tenían, y tesoros que en ella se hallaron y de las demás cosas que en el han subcedido hasta el día de la fecha (1571)* (Colección de documentos inéditos para la historia de España [Madrid, 1844], Vol. V).
 24. *Historia del descubrimiento y conquista de la provincia del Perú, y de las guerras y cosas señaladas en ella, acaecidas hasta el venimiento de Gonzalo Pizarro y sus secuaces, que en ella se rebelaron contra Su Majestad* (Biblioteca de autores españoles, Vol. XXVI; *Historiadores primitivos de Indias*, Vol. II [Madrid, 1853]). A second edition was published in Seville in 1577; an Italian translation appeared in Venice in 1563, an English translation in London in 1581, and a French translation in Amsterdam in 1700 and in Paris in 1706. The titles of the first two Spanish editions are slightly different from the one cited above, which is that of the Madrid edition of 1853.
 25. The first part was translated into Italian and published in Rome in 1555 and in Venice in 1556 and 1560, and into English in London in 1709. An English translation of the second part appeared in London in 1883.
 26. Markham, Appendix to *History of the Incas* by Sarmiento de Gamboa (Cambridge, 1907), p. 276. An earlier English version of this book appeared under the title *Narratives of the Voyages of Pedro Sarmiento de Gamboa to the Strait of Magellan* (London, 1895).
 27. The Bibliothèque nationale in Paris possesses a fine copy of this work with the monogram of Gaston d'Orléans.
 28. Concerning this author, see the Introduction of Manuel Serrano y Sanz to the 1904 edition of his work.
 29. It was translated into Latin and published in Geneva in 1578, brought out in a German edition at Basle and a French edition at Lyon in 1579, and in the Dutch language at Haarlem in 1610. A good English translation is to be found in the Hakluyt collection (London, 1857).
 30. Even in our own day Pereyra sees in him "a Christian like those of the early Church and a statesman of mettle, a theologian of the Middle Ages, and a preceptor of the philosophers of egalitarianism." (*L'oeuvre de l'Espagne en Amérique* [Paris, 1925], p. 241.) The most celebrated poet of Ecuador, Olmedo, has sung of "the divine Casas" (*Canto á Bolívar*).
 31. "En cosas de Indias muy apasionado y en lo más sustancial dellas muy engañado" ("passionately fond of the Indies and very much deceived in regard to the most essential facts about them"), says Ondegardo ("Copia de carta," *op. cit.*, p. 426).
 32. Ondegardo, in the work cited above, asserts that on two occasions Las Casas tried to go there, but without success.
 33. The full title is *Apologética historia sumaria quanto á las cualidades,*

disposición, descripción, cielo y suelo destas tierras, y condiciones naturales, policias, repúblicas, maneras de vivir é costumbres de las gentes destas Indias occidentales y meridionales, cuyo imperio soberano pertenece á los Reyes de Castilla (1st ed.; Seville, 1552).

34. The title of the first French translation of the pamphlet on the destruction of the Indies is a good indication of the state of mind of the enemies of Spain: *Tyrannies et cruautés des Espagnols perpétrés ès Indes occidentales qu'on dit le Nouveau Monde, brièvement descrites en langue castillane par l'évêque Don Frère Barthelemy de Las Casas* (Antwerp, 1579). The title of the English translation is even more indicative of bias: *The Tears of the Indians; Being an Historical and True Account of the Cruel Massacres and Slaughters of Above Twenty Million [sic] of Innocent People* (London, 1656). The same pamphlet was published, in turn, in Dutch in 1578, in French at Paris in 1582 and at Lyon in 1594, in German at Frankfort in 1597, and in Latin in the same city in 1598, in Italian at Venice in 1626, in French once again at Rouen in 1630 and at Lyon in 1642. Few authors were as popular in France as Las Casas. His panegyric was read at the Institut national on the 22nd of Floréal of the year VIII.
35. An Italian translation was published at Rome in 1556 and at Venice in 1557; a French edition was published at Paris in 1568; and the English translation in London in 1578. The full title of the first Spanish edition is: *Primera y segunda parte de la historia general de las Indias, con todo el descubrimiento y cosas notables que han acaecido desde que se ganaron asta el ano de 1551*.
36. Our quotations from this author are from the Madrid edition of 1851-55. The original was published in successive fragments, under various titles, at Toledo in 1526, at Seville in 1535, and at Salamanca in 1547. A French translation was published at Paris in 1556.
37. Our quotations from Herrera are from the Madrid edition of 1730. Herrera sought to follow a chronological order, which is very detrimental to the clarity of his presentation. A French translation of the first part appeared in 1622 at Amsterdam, and a Latin translation was published at the same time. The entire work was published in French in 1659 at Paris and in English in 1725 at London.
38. We may mention in passing the Latin treatise written by a Dutch traveler, Levinus Apollonius, whose *De Peruviae regionis inter Novi Orbis provincias celeberrimae, inventione et rebus in eadem gestis* appeared at Antwerp in 1566 and was published in a German translation in the following year at Basle. The author devotes no more than a few pages to an examination of the state of affairs in Peru at the time of the conquest. Modern historians are not in agreement about whether he lived in America or whether he died in the Canary Islands before he could reach the New World. In any case, he never penetrated into the interior of Peru. To convince oneself of this, one need only glance at the map which he puts at the head of his treatise: Quito is placed south of Cuzco!
39. The first part of this work was published in Lisbon in 1609, and the second part in Cordova in 1617. The entire work was published in a

- French translation by Baudouin in 1633 at Paris, and in an English translation in 1688 at London. Meanwhile, Garcilaso had already published, in 1605, the *Florida del Ynca*, an account of the exploits of Hernando de Soto in Florida.
40. Markham, Introduction to *Rites and Laws of the Yncas*, p. xv.
 41. The manuscript of Blas Valera was lost during the siege of Cadiz by the English in 1596. Father Maldonado de Saavedra, professor of theology at Cordova, had given some sheets of it to Garcilaso. Blas Valera visited the mission of Juli on the shore of Lake Titicaca. He wrote between 1568 and 1591. Montesinos also made use of a part of his work.
 42. Speech given on April 22, 1916, at the University of Lima in celebration of his tercentenary.
 43. Reclus, *L'homme et la terre*, IV, 431.
 44. Menéndez y Pelayo, *Antología de poetas hispano-americanos* (Madrid, 1894), III, clxiii.
 45. Markham, *Narratives of the Voyages of Pedro Sarmiento de Gamboa to the Straits of Magellan* (London: Hakluyt Society, 1895).
 46. The title of the Spanish manuscript is *Segunda parte de la historia general llamada indica*.
 47. Colección de documentos del Archivo de Indias, VIII, 263.
 48. R. Levillier, *Don Francisco de Toledo, supremo organizador del Perú* (Madrid, 1935), I, 203.
 49. Our quotations are from the Madrid edition of 1792. The publication of the first sections, in Latin, was begun at Salamanca in 1588 under the title *De natura Novi Orbis libri II et de promulgatione Evangelii apud Indos sive de procuranda Indorum salute libri VI*. This book enjoyed a great success. An Italian translation was published at Venice in 1596, a French translation at Paris in 1598, a Dutch translation in Enckhuysen in the same year, translations in German and in Latin at Frankfort in 1601 and 1602, and an English translation at London in 1604. The best chapters of the *Historia natural y moral* describe the flora and fauna of South America. Acosta has been called the Pliny of the New World (Toribio Medina, *Biblioteca hispano-americana*, I, 497). At the time of his death in 1600 he was rector of the University of Salamanca.
 50. Carlos Romero, "El licenciado Polo de Ondegardo," *Revista histórica de Lima*, 1913, p. 452, and Introduction to Vol. III of the "Colección de libros y documentos referentes á la historia del Perú," p. xxiii.
 51. We have frequently cited this excellent translation, under the simple title, "Report."
 52. Cf. the Introduction of Carlos Romero to Vol. III of the "Colección de libros y documentos referentes á la historia del Perú," p. xxviii. In the Angrand collection at the Bibliothèque nationale in Paris, in a work entitled *Huit articles détachés des nouvelles Annales de Voyages*, there is a translation by Ternaux-Compans of a report which, in a note and without further reference, he attributes to Ondegardo. The title of this translation is "De l'état du Pérou avant la conquête."
 53. Pietschmann considers that the Matienzo manuscript kept in the British Museum is not this high official's own work (Pietschmann, *Aus den*

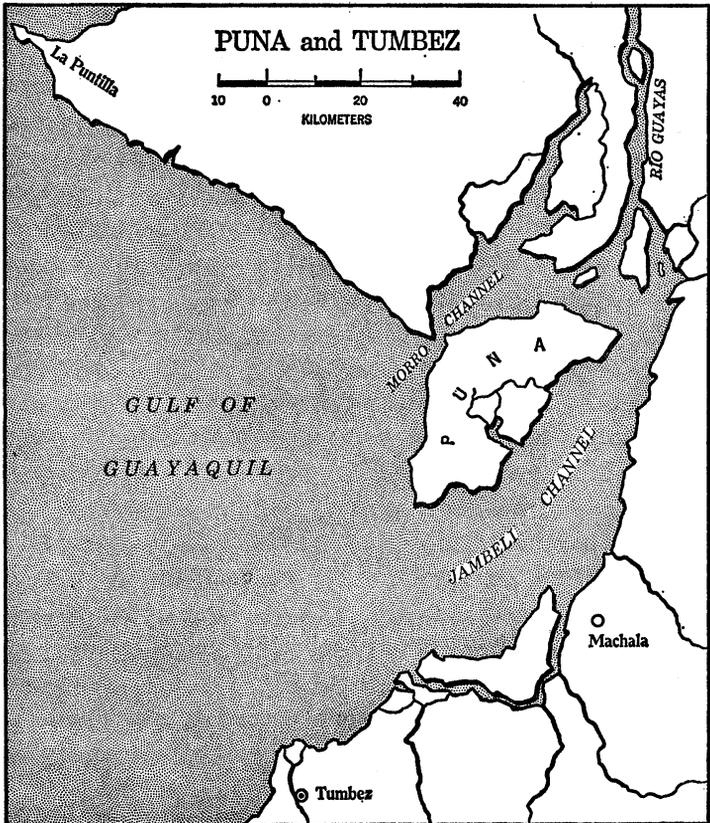
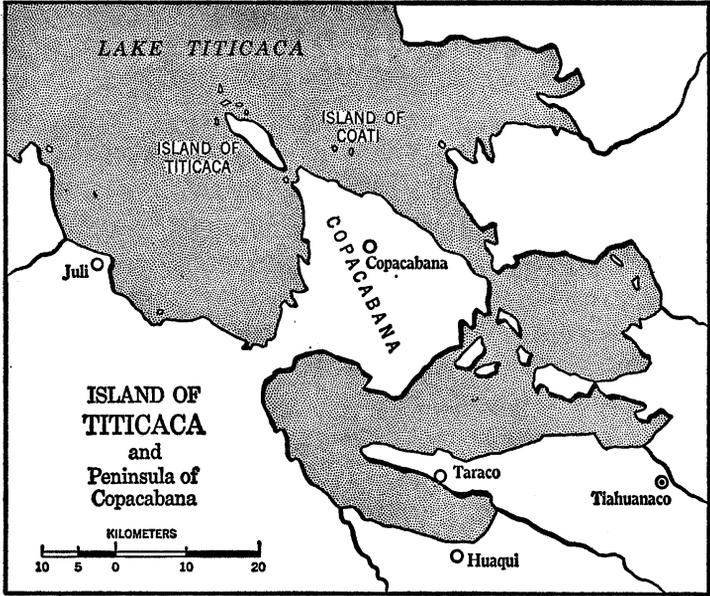
- Göttingischen gelehrten Anzeigen*, 1912, No. 12). An interesting report by Matienzo on the work in the mines appears in Vol. XXIV of the "Colección de documentos del Archivo de Indias," p. 149.
54. This account appeared in Madrid in 1879 in a work entitled *Tres relaciones de antigüedades peruanas*. It was translated by Markham in his *Rites and Laws of the Yncas* (London, 1873) under the title "An Account of the Antiquities of Peru." In the same volume is the translation of a report by F. de Ávila, dated 1608, and entitled "Tratado y relación de los errores, falsos dioses y otras supersticiones y ritos diabólicos en que vivían antiguamente los indios de las provincias de Huaro-chiri, Mama y Chaclla, y hoy también viven engañados con gran pérdida de sus almas" ("A Narrative of the Errors, False Gods, and Other Superstitions and Diabolical Rites in Which the Indians of the Province of Huaro-chiri Lived in Ancient Times"). It is one of the works that give some indications, though very vague, of the ancient civilization of the coast.
 55. De la Riva-Agüero, *La historia en el Perú* (Lima, 1910). René Moreno, in *Bolivia y Perú* (Santiago de Chile, 1905), compares Calancha to Betanzos. However, these writers are very different in every respect, Betanzos being by far the superior.
 56. A French monk had the ingenious idea of translating Calancha in a considerably abridged version, and this was published in 1653 under the title *Histoire du Pérou, partie principale des Antipodes et du Nouveau Monde*, by "an Augustinian father of the province of Tolosa." A partial translation in Latin was published at Antwerp in 1651.
 57. Arriaga made a long sojourn at Arequipa and returned to Europe around 1601 (Carlos Romero, "El Padre Pablo José de Arriaga," *Revista histórica de Lima*, 1919).
 58. Anello Oliva lived in Peru between 1597 and 1642, according to Dorsey (*Bibliography*), but these dates are not accepted by Jijón y Caamaño and Carlos Larrea (*op. cit.*, p. 64, n. 2).
 59. Also anonymous are the "Información de las idolatrías de los Incas é indios, etc.," reprinted in the "Colección de documentos del Archivo de Indias," Vol. XXI, and the "Relación de la religión y ritos del Perú, hecha por los primeros religiosos agustinos que allí pasaron para la conversión de los naturales," which appears in Vol. III of the same collection and in Vol. XI of the "Colección de libros y documentos referentes á la historia del Perú."
 60. *Historia del célebre santuario de Nuestra Señora de Copacabana y sus milagros é invención de la cruz de Carabuco*. The second part has to do with the miracles of the Virgin of Copacabana. Our citations from this work refer to the Lima edition of 1867.
 61. Certain other writers mentioned by Philip Ainsworth Means in his *Biblioteca andina* may be listed here. They are of secondary importance, but the student may sometimes discover interesting information in their work. Father Lope de Atienza, in his "Compendio," describes the clothing of the Indians; Father Hernando de Avendaño, rector of San Marcos around 1640, informs us of their folklore; and Brother Diego de Córdoba y Salinas, a compiler, the Dominican friar Gregorio Garcia, and Profes-

- sor Diego Andres Rocha, who was magistrate at Quito and Lima, all investigated the origins of the Indians.
62. Fidel López, *Les races aryennes du Pérou*, Introduction, p. xxiv.
 63. Pablo Patrón, "La veracidad de Montesinos," *Revista histórica de Lima*, 1906.
 64. J. de la Riva-Agüero, "Examen de los Comentarios reales," *Revista histórica de Lima*, 1906-07.
 65. William H. Prescott, *History of the Conquest of Peru* (New York: The Modern Library, Random House, n.d.), p. 1035.
 66. Montesinos is critical of Las Casas and Garcilaso, whose fame he has helped to dim, and extols Gómara, Zárate, Cieza de León, and, most of all, Herrera. The French translation of Ternaux-Compans is unfortunately often defective. The Spanish manuscript was published in *La Revista de Buenos Aires* in 1870 (Vols. XX, XXI, and XXII).
 67. Among the *Lettres édifiantes et curieuses écrites des missions étrangères par quelques missionnaires de la Compagnie de Jésus*, published at Paris beginning with the year 1717, there is one, written by Father Morghen and dated 1755, which treats of Peru, but it is concerned only with the cities of the coast.
 68. Frézier's account was translated into German at Leipzig in 1747 and published in Spanish at Santiago de Chile in 1902.
 69. A French translation appeared at Amsterdam in 1752.
 70. Also defensive, but more naïve and much more superficial than De Carli's book, is an essay by another Italian, Count Algarotti, entitled *Saggio sopra l'imperio degl' Incas* (Leghorn, 1764). We mention it here because it appeared twice in French translations: in April, 1760, in the *Mercure de France*; and in 1769 at London, following the *Lettres sur la Russie* of the same author.
 71. A more detailed discussion of De Pauw, De Carli, Raynal, and Genty may be found in ch. xiv, *supra*.
 72. By a decree dated December 23, 1778, the Spanish authorities were ordered to confiscate all copies of this book. A German translation was published at Leipzig in 1777, and a French translation in two volumes was brought out at Paris in the following year. There is a one-volume English edition which dates from 1828.
 73. This work appeared in a German translation at Weimar in 1808. The *Mercurio peruano*, established in 1791, was suppressed by the Spanish government in 1795.
 74. The first part, by De Rivero, appeared at Lima in 1841.
 75. Letter addressed to F. López in *Deux lettres à propos d'archéologie péruvienne* (Buenos Aires, 1878). Von Tschudi produced several other works that are of less interest for us: *Peru, Reisekizzen aus den Jahren 1838-1842* (St. Gall, 1846), *Die Kechua-Sprache* (Vienna, 1853), and *Organismus der Khetsua-Sprache* (Leipzig, 1884).
 76. *The Islands of Titicaca and Coati*, ch. I, n. 13 and 46.
 77. A. de Alcedo had already published at Madrid in 1786-89 a *Diccionario geográfico-histórico de las Indias occidentales ó América* in five volumes, translated into English in 1812-15. Following the publication of his dic-

- tionary, Mendiburu wrote his *Apuntes históricos del Perú y noticias cronológicas del Cuzco* (Lima, 1902), reporting a series of events very questionable historically.
78. Our citations from this book refer to the edition of 1902 in four volumes. The author speaks of the Incas in Bk. XVI of Vol. III.
 79. Among other books of lesser importance written by Bastian we may mention *Die Rechtsverhaeltnisse bei verschiedenen Voelkern der Erde* (Berlin, 1872) and *Kulturhistorische und sprachliche Beiträge zur Kenntniss des alten Peru* (Vienna, 1891).
 80. The *Histoires générales* in the French language contain only cursory expositions and are of no interest for us, even when they are carefully composed—as, for example, the work of A. Moireau, in Vol. IV of the *Histoire générale* of Lavissee and Rambaud (Paris, 1894).
 81. Among his other works we may also mention *Cuzco and Lima* (London, 1856); *Travels in Peru and in India* (London, 1862); *Contributions Towards a Grammar and Dictionary of Quichua* (London, 1864).
 82. Bingham, who was Director of the Yale Peruvian Expedition in 1911 and of the Peruvian expeditions of 1912 and 1914-15 under the joint auspices of Yale University and the National Geographic Society, published several other books on South America, including *Machu Picchu* (1930) and *In the Wonderland of Peru* (1913).
 83. Among archaeological studies in the German language we may mention a series by A. Baessler, the most important of which was published in an English translation under the title *Ancient Peruvian Art* (New York, 1902).
 84. He differs with Cunow on a number of points of minor significance for our purposes.
 85. The inhabitants of the coastal region have become Europeanized to some extent by contact with foreign civilizations. To find ancient Peru again, one must cross the Cordillera.
 86. *Relación*, p. 41.
 87. De Créqui-Montfort, "Exploration en Bolivie," *Bulletin de la Société de géographie*, 1902, p. 84. Boman, *Antiquités de la région andine, etc.*, II, 434.
 88. Bingham, *Inca Land*, p. 122.
 89. De Rivero and Tschudi, *Antiquités péruviennes*, p. 232.
 90. Rouma, *La civilisation des Incas, etc.*, pp. 31 and 54.
 91. Bingham, *Inca Land*, p. 107; Bandelier, *The Islands of Titicaca, etc.*, p. 123.
 92. R. and M. d'Harcourt, *La musique des Incas et ses survivances* (Paris, 1925).
 93. Guevara, "Derecho consuetudinario, etc.," *op. cit.*
 94. A French translation appeared at Paris in 1840, and a Spanish edition at Quito in 1844.
 95. "Examen crítico de la veracidad de la historia del reino de Quito del P. Juan de Velasco," *Boletín de la Sociedad ecuatoriana de estudios históricos americanos*, I (1918), 62.
 96. J. de la Espada, *Relaciones geográficas de Indias*, Vol. III.

97. De la Riva-Agüero, Preface to "Páginas escogidas de Garcilaso de la Vega," which appeared in the *Biblioteca de cultura peruana*; Raul Porras Barranechea, *El Inca Garcilaso de la Vega*; L. A. Sanchez, *Garcilaso Inca de la Vega, primer criollo*; C. D. Valcárcel, *Garcilazo [sic] Inka*; L. E. Valcárcel, *Garcilaso el Inca*; A. Miro Quesada, *El Inca Garcilaso*. The entire number of the *Revista universitaria del Cuzco* for the first half of 1939 was devoted to Garcilaso.
98. Vol. II of the *Handbook of South American Indians* published by the Smithsonian Institution (Washington, 1946).
99. In France, A. de Bosque and J. de la Noue published in 1935 an adaptation of Prescott in a handsome illustrated edition.
100. Discovered by the French explorer Flournoy.
101. The Shippee-Johnson expedition, for example, made use of this procedure.
102. R. Gonnard cites the Inca empire in his great *Histoire des doctrines économiques* (Paris, 1941), p. 267. But many historians, hypnotized by the civilizations of the ancient world, have not yet discovered America.





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Prepared by Vernelia Crawford

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