

ARCHAEOLOGY

Ancestors of the Incas

The culture of the prehistoric race gradually increased in complexity over 2,000 years. History traced by the remains of statues, temples, baths.

By EDITH GOLDMAN

► THE EARTH-WRITTEN story of how the culture of the prehistoric ancestors of the Incas originated in Colombia, and then gradually developed for 2,000 years, leaving a 4,000-mile trail of temples and statues, has been brought to the United States by a leading South American archaeologist, Dr. Gregorio Hernandez de Alba, director of the National Archaeological Museum of Colombia.

Scientists Disagree

Scientists disagree as to how this cultural cycle was created. Some think that only customs, arts and traditions were passed along from tribe to neighboring tribe. Dr. Hernandez de Alba, however, believes that in many cases the Indians themselves were uprooted from their home grounds by other tribes on the warpath, and that they spread their culture by settling in new locations.

This long, slow cycle of Indian culture started in Colombia, moved south-

ward into Bolivia, then northward again through Peru, and was within 50 miles of its original starting point when the disrupting invasion of white men from beyond the seas froze it suddenly in its tracks.

Oldest Remains

In San Agustin, 560 miles from Bogota, capital of Colombia, are found the oldest archaeological remains in the Andean region of South America. And here, states Dr. Hernandez de Alba, was the starting point of a cycle that was to develop into the highest of South American cultures, that of the Incas.

Over 2,500 years ago, one of the most primitive peoples on the South American highlands were the San Agustin Indians. Their civilization is lost in antiquity, and only by archaeological studies can their customs, their traditions, their way of life be partially pieced together.

A prehistoric art gallery composed of over 300 grotesque statues set up

in the forests of San Agustin valley gives a tangible picture of this lost civilization. The prehistoric stone images have many features in common, such as bushy hair, long canine teeth, fantastically broad noses and no necks. In many crude statue-pillars, the heads are from one-third to one-half the entire height.

Another key to this prehistoric community is the excavation of three bathtubs hewn from a rocky slope during the same period and in the same region. (*See SNL*, Nov. 13, 1943) The prehistoric hydraulic engineers cleverly diverted a nearby stream into a series of little canals headed down the slope to provide a continuous water supply for these elaborately carved baths.

Baths for Ritual Uses

Although there is no written record of the religion of this people, Dr. Hernandez de Alba believes that these baths were for ritual uses. Bathing is symbolic of purification in modern Indian culture, and now this present-day practice may be traced back 2,500 years.

The story delved from the earth is one of constant change during the prehistoric era. According to Dr. Hernandez de Alba's interpretation, enemy tribes of inferior culture dislodged the San Agustin Indians, driving them southward.

More highly developed sculpture, weapons, architecture and pottery uncovered in the southern regions indicate an increasingly high cultural level accompanying this spread of the early civilization, he explains. At Tiahuanaco, Bolivia, the true Inca culture came into being.

Influenced All Tribes

This newly developed Inca culture, Dr. Hernandez de Alba continues, seeped northward, influencing all tribes in its path. When the Incas were less than 50 miles from San Agustin, having practically completed this historical cycle, the Spanish conquest abruptly stopped any further activity.

All along the path taken by the traveling culture, Dr. Hernandez de Alba has found evidence in the form of archaeological remains to substantiate his theory.

As the culture moved southward from San Agustin, the general outlines of



GOD AND MAN—The big-eared stone image on the left is thought to represent an ancient Colombian god because of its location in a temple. The entrance of a hall is frequently guarded by the statue of a human being, such as the one on the right.

the statues remained the same, but a more skilled carving technique was developed. In Ecuador, Peru and Bolivia the figures were covered with carved reliefs, which grew intricate in the southern areas.

Complexity of Architecture

Architecture followed the same trend of greater complexity as the people migrated towards the south. Two stone slabs for the base of the structure and one for the roof formed the dolmenic type of construction used in Colombian temples and tombs. To the south, *tolas*, Indian mounds, made of stone heaps, and *pircas*, stone fences, were predominant. Reliefs were carved on the fences.

Construction of stone buildings such as the temples of Chavin in Peru and the palace of Tiahuanaco in Bolivia, marked the height of pre-Inca architectural development. Inca architecture was the most highly developed of all.

Dr. Hernandez de Alba's theory of a migrating Indian culture is borne out by pottery remains dug from the earth. A poorly styled, crude type of three-legged bowl is representative of San Agustin pottery. Very few variations in style and lack of any decoration emphasize the primitive nature of these Indians. Remains unearthed in areas farther south exhibit increasingly greater perfection of form, style and decoration of the original tripod.

Stone Knives Uncovered

Implements found in the San Agustin region generally resemble the type used hundreds of centuries ago in the Stone Age. Stone knives, hammers, points and axes have been uncovered. The height of development attained by these tribal weapons is exhibited in the polished stone axes and chisels.

Stone implements were rarely found in excavations farther south. Apparently, with the rise in the cultural level came the use of copper and bronze instruments in Peru and Bolivia. Again, the high point was achieved by the Incas in the development of tools.

Where the primitive Indians living in San Agustin came from is still shrouded in mystery and legend. All earlier cultural development is a matter of conjecture. On the basis of the recently unearthed archaeological treasures, the story in stone is presented by Dr. Hernandez de Alba as a record for posterity.

Science News Letter, February 19, 1944



DRY WATER HOLE—Ancestors of the Incas once drank cool water from the hole in this rock, now filled with weeds. It was they who carved the animals in the rock. The lizard on the right is supposed to have the face of a human.

GENERAL SCIENCE

Washington the Scientist

Balloons, submarines, crop rotation, "camouflaged" military uniforms and a patent law were among the interests of the first president of the United States.

► IF George Washington could see the world as it is today, he might not be amazed at modern scientific achievements. He might enthusiastically accept them as very satisfactory developments of ideas born during his day, some of which he financially backed.

Submarines, power boats, aviation and scientific farming were not unfamiliar to Washington, although in many cases they were, in his time, mere shadows in relation to what was to come.

If you look back to your grade school impressions of Washington, you would probably picture little George tearfully but truthfully standing by the fallen cherry tree, hatchet in hand. And you would probably recall teen-age George surveying the wilderness. The breathtaking exploits of Washington the soldier and statesman would also be clear in your mind. But, what many history books completely overlook is Washington, the great scientist and engineer.

As an engineer, Washington was truly a self-made man. No scientific schools existed in the American colonies at that

time, and a scientific education had to be obtained by home study of necessity. This engineering training was useful to him in later life (*Turn to next page*)

**PREPARE NOW for
POST-WAR
OPPORTUNITIES
with LINGUAPHONE**

In your own home you can now prepare for peace-time opportunities in many fields by learning to speak in an amazingly short time any of 29 languages by the world-famous

LINGUAPHONE Ear-Eye METHOD
It's quick, easy, correct

SPANISH	JAPANESE	RUSSIAN
PORTUGUESE	FRENCH	GERMAN
ITALIAN	CHINESE	NORWEGIAN

and 20 others.

Successfully used by Army, Navy, Flying and Signal Corps and other services; in thousands of schools and colleges; endorsed by leading educators.

Send for FREE Book—
Call for FREE Demonstration

LINGUAPHONE INSTITUTE
31 RCA Bldg., Rockefeller Plaza, N. Y. (20)