change of genes. The proto-hominoids apparently did not have the power of speech.

Some of the descendants of the proto-hominoids had to move out of the trees and become erect bipeds. Geological evidence suggests that during the time period in question, climate changes thinned out the vegetation, leaving stretches of broad plains with only clumps of trees.

Some bands of hominoids stayed with the trees, and their descendants are today's gibbons. Other bands were caught in small, rapidly diminishing groves. Those whose physiques made it possible for them to go across open country to another forest survived. Those that could not do this died out.

The two scientists attribute the trick of carrying as essential to survival. Early carrying, they say, consisted of transporting some weapon and scavenged food. Carrying led to more locomotion on foot instead of all fours, so the hands would be free. Moreover, holding a weapon and taking food from where it was found to another spot for later consumption shows the development of foresight and memory.

Among the proto-hominoids the band leaders were the strongest adult males. Once they learned to communicate through language, however, this was changed. The oldest members of the group were valued because they had had time to learn more.

What of Future?

Aside from natural curiosity of where we came from, the facts about the evolutionary process may give science keys to the future. Always intriguing is—what will man be thousands of years from now?

Who knows whether modern man is the final product? Evolution deals in terms of millions of years. It would be a courageous seer indeed to say that no further physical biological changes in man could possibly be forthcoming in the next million years.

Most anthropologists shun direct speculation on the future, properly preferring to limit themselves to statements on fact, at least fact as they interpret it. Most, however, will answer the question about future evolutionary changes with a question, "what will be the effect of the conquest of space or the effect of radiation on future generations?"

Methods for Protection Devised

Discussion of this issue must take into consideration that as man is putting radioactive material into the atmosphere, scientists simultaneously are devising methods to protect man and his food from contamination. For example, the U.S. Department of Agriculture announced recently that it is now possible to protect milk from radiation.

Moreover, nature has proved surprisingly tough in bouncing back after having been ravaged by nuclear explosions. In the seven years since the end of nuclear testing on Pacific atolls, plant life is practically back to normal.

Nevertheless, no scientist can be quite sure what man in the future will try to do to his world.

But for the present, the consensus appears to be that modern man is ideally suited to his current environment. If something should happen to change the environment radically, anthropologists concede that nature conceivably could change man to meet the future demands.

Regardless of what the future may hold, the fascinating quest for truth turns up new information, new discoveries and new theories.

As the theories of Darwin's day have become the fact of today, so should the theory of today become the fact of tomorrow as science moves step by step closer to understanding the origin of man.

• Science News Letter, 87:346 May 29, 1965

UNEARTHING EVIDENCE—Dr. Louis S. B. Leakey and his wife, Mary, dig and sort at Olduvai Gorge, Tanzania, East Africa. Their findings have been recognized as significant contributions to anthropology but have touched off controversy over the course of the evolution of man.

ZOOLOGY

Pituitary Removal Makes Brown Weasel an Ermine

➤ BY REMOVING the pituitary gland from a brown weasel, scientists have been able to change its fur to white, even in summer.

Weasels usually have a brown coat in the summer, which changes to white as the days get shorter and winter snow arrives. The white weasel is also called ermine, a valuable animal to fur ranchers.

Change in hair coat in spring occurs at about the same time as the onset of the animal reproductive cycle, said Dr. Charles C. Rust of the University of Wisconsin. Light stimulates the pituitary gland, which controls the sex hormones, so scientists speculated that the pituitary gland also controls the growth of summer and winter coats of hair.

By experimenting on 64 weasels, Dr. Rust showed that time of year and amount of light made no difference on the coats of those weasels with pituitary glands removed.

• Science News Letter, 87:347 May 29, 1965

ARCHAEOLOGY

Mexican Pyramids Show Signs of Early Writing

➤ AN INDIAN CIVILIZATION developed writing and accounting as early as 500 B.C., archaeologists have concluded from excavations north of Mexico City.

The symbols and letters and numbers on pyramids dating back to the third and fourth centuries B.C. indicate that the Indians developed the concept and practice of writing in about the fifth or sixth centuries B.C., Dr. Donald C. Brockington of San Diego State College believes.

The discoveries support anthropologists' theories that the first men to settle in North America were the big game hunters from Siberia who walked 1,000 miles across the frozen Bering Straits from Siberia.

Dr. Brockington advanced this theory from the latest archaeological discoveries in Mesoamerica.

Between 50,000 and 10,000 years ago, small bands of men called paleoindians entered America and migrated down the western regions into Mesoamerica. They were big game hunters and preyed on bison and mammoths, which were large elephant-like beasts, now extinct.

By 8000 to 6000 B.C. the climate of Mesoamerica changed and the paleoindians had to rely on wild vegetation for food. Chili peppers, squash, corn and beans became their major sources of food. The changing climate brought about technological advances in agriculture, as well as in pottery-making. The paleoindians began to build homes and live in villages, and by 3000 B.C. they were building pyramids.

The paleoindian population flourished in Mexico's Tehuacan Valley, north of Mexico City. It had reached 125,000 persons by 1519 when the Spaniards conquered the Aztecs.

• Science News Letter, 87:347 May 29, 1965