Old World Archaeologist - Winter 1983

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Who were the oldest Frenchman?

Articles in our journal have described aspects of the late Old Stone Age, with illustrations from the art in the caves of Font-de-Gaume and Rouffignac. The story of the Neanderthals, the immediate predecessor of Cro-Magnon, has also been outlined.

It may now be appropriate to give some respectful attention to the really aged – the first inhabitants of the Gallic hexagon. It is the contemporary of Java Man and Peking Man who will be considered. People who lived between 200,000 and 500,000 years Before the Present (B.P.) share the designation Homo erectus.

No prehistorian challenges Africa's claim to being the home of mans ancestors who lived millions of years ago. Mary Leakey's 'Zinj', Donald Johanson's 'Lucy', their fellow Australopithecines, and their predecessors were native to areas that are now countries in East Africa.

#### Arago Man

In a corner of France bounded by the Pyrenees and the Mediterranean lies the village of Tautavel. This small community, thirty kilometers northwest of Perpignan, is indicated only on detailed regional maps. A huge cavern nearby, the Caune de l'Arago, provided shelter for the inhabitants during a cold phase 350,000 years ago. In 1963 explorers found evidence of this early life and reported it to the distinguished prehistorian, Monsieur Henry de Lumley, who was put in charge.

Between 1967 and 1971 excavation disclosed the bones of panther, wolf, rhinoceros, bison and an archaic horse. Still more exciting were human remains – teeth, two jawbones, hipbone, and a foot bone. On July 22, 1971, there appeared a partial human skull, one of the oldest craniums discovered in Europe. This skull, believed to be that of a twenty year old male, consists of a face, forehead, temple bones, and an upper jaw. Five teeth are in place. While the type is identified as Homo erectus, there are modifications that suggest it is filling a gap between Homo erectus and the Neanderthal.

A front view of Tautavel man, officially known as 'Arago XXI', is shown on the postmark used at the time an International Scientific Congress on Pre- and Proto-history was held at Nice in 1976.

A cranial bone was found in 1979 three meters from where Arago XXI was picked up. It fits quite well into the earlier skull and is believed to have belonged to the same person.

A representation of the two specimens joined together was chosen for the logo used on publications for the 1982 Congress of Anthropologists in Nice. Some liberty was taken with accuracy, and the back of the skull was filled in.

Groups of hunters came to this cave regularly to establish temporary camps. The occupants stayed in a dimly lit area some distance from the cave entrance. There must have been residences of some duration, too, for stone slabs brought in to stabilize places in the sandy floor surface were one meter thick. A pile of bones marked a garbage disposal spot, and flint chips identified a work area. More than 100,000 artifacts have been collected.

These objects comprise the principal treasures in the new museum of prehistory at Tautavel. Not surprisingly, the star exhibit is the Arago XXI skull. Tools and fossils from earlier periods are displayed. The visitor may also study life in subsequent millennia extending through the Neolithic, the ages of metal, Gallo-Roman culture, into the Middle Ages.

This fine, modern museum is shown at the left on the cancellation from Tautavel. The promontory is a signal tower from the tenth century. The young woman holding the fruit of the local vine seems to relate to our own time.

Microscopic analysis presents an interesting possibility. Pollen from wild grapes was detected among the layers of habitation in the Arago Cave. Indeed, the girl with the bunch of grapes may symbolize a French tradition of longer standing than we have suspected.

Monsieur de Lumley who is conducting the excavation is now director of the laboratory of prehistory at the celebrated Musée de l'Homme in the Palais de Chaillot (France, September 21, 1948, Scott No. 605) in Paris and professor at the Museum National de'Historie Naturelle. His brilliant collaborator is his wife, Marie Antoinette, a physician, research expert and director of the laboratory of Anthropology at the University of Aix-Marseille.

The Lumleys were in charge of the International Congress of Human Palaeontology in Nice, October 16-21, 1982. The congress, under the patronage of Monsieur François Mitterand, President of the Republic, was indeed prestigious. The distinguished committee and roll of speakers who led the symposia included Mary Leakey, Richard Leakey, Yves Coppens, Arlette Leroi-Gourhan, Donald Johanson, the Lumleys, and a score of other scholars. Nearly all their presentations dealt with the theme: 'Homo Erectus and the Position of Tautavel Man Amongst the Fossil Hominids'.

Sharing the program with these speakers, other outstanding prehistorians and anthropologists from many parts of the world presented studies. Although there was a

choice of six languages, most of the two hundred shorter papers were given in French or in English. The range of subjects extended from non-human primates through people of the ages of metal. Section three of the eight categories was concerned with Homo erectus and variants.

Inevitably, the program offered the opportunity to visit the neighboring museum of Terra Amata and the Grotte de Lazaret.

#### Terra Amata

In 1966 preparation was being made for the construction of some luxury apartments in Nice not far from the commercial port. Bulldozers digging in a hillside near a small street called Terra Amata came upon evidence of an ancient encampment. Henry de Lumley was called to the scene. Daily negotiations went on with the housing promoters to suspend the construction.

Three hundred volunteers, many of them students, directed by Monsieur de Lumley, performed 40,000 man hours of excavating during the ensuing five months. 35,000 objects were found in the 1100 square foot area, but no human bones. The series of levels gave evidence of repeated short-term occupation at three separate locales. The imprints of rows of upright branches were uncovered. They must have met at the top to form huts. The uprights were braced by good-sized stones. The huts, which measured from seven to fifteen meters in length, were always oval. Each hut contained a crude hearth made either of a small pit scooped out to a depth of six inches or of a low wall constructed of pebbles to protect the fire. The size of the encampments suggested a population of about 25 persons. The time was estimated at 400,000 B.P. Analysis of pollen in fossilized human excrement indicated occupancy during the late spring.

From a nine and a half inch footprint found in the hardened floor, Madame de Lumley estimated the height of that occupant to be five feet one inch. The inhabitants ate well. Piles of kitchen refuse were left from menus of stags, elephant, bison, small game, turtle, oysters, mussels and fish. Deer and elephant appear to have been the principal game. The many tools were identified as the type called early Acheulian. Cleavers, scrapers and projectile points made up part of the collection. Accumulations of tool-making debris showed that many had been made on the site. The location of the quartz, flint, and limestone supply is no mystery to those visitors who have crunched over the rocky, pebbly beach at Nice. 73 pieces of red ochre were collected. Most of these were fragments, but one was sharpened like a pencil. It is believed that the function of the color was to decorate the body, but the significance of this may remain a mystery.

When the apartments, called the 'Palais Carnot', were constructed, provision was made in the building for a museum. The new Musée de Terra Amata presents artifacts and

information in the attractive manner typical of modern museums. On the ground floor there has been constructed a 30' x 20' model of the excavated area featuring objects from the various levels. The displays in the five galleries of the upper floor include a reconstructed hut, model of several hearths, stone tools, and fossil animal bones.

Regional finds keep enriching the collection and constant study is pursued in order to understand better the life of the early inhabitants.

#### Erectus Moves Inside

Excavation in a cave in the Lazaret quarter a few hundred yards away has disclosed a habitation of a somewhat later period. Toward the end of the Riss glaciation, about 130,000 B.P., Homo erectus undertook to improve his home. At Lazaret we have the very early use of a dwelling inside a cave. Near the entrance a huge hut was constructed, thirty-five feet long and eleven and a half fee wide. A frame was set up forming one side and the two ends. The east wall of the cave served as a fourth side, while the other three sides and sloping roof were covered by skins. The boundaries were well marked by large stones that had anchored the uprights.

Tools were scattered about in a closed off work area. They were largely choppers and cutters of the Acheulian types. The half of the interior next to the rock wall was free of tool debris. In this section fires had been made in two shallow depressions dug into the clay floor. Here and there the residents had bedded down on sea grasses covered with furs. The claws of furry animals still remain.

The climate was similar to that which now prevails about 3,000 feet higher in the Maritime Alps. Though food sources were varied and abundant, the favorite game was deer from the nearby forests. Ibex were hunted in the fall when they came down from the heights to seek food. Wolf, fox, lynx, panther and marmots provided furs. In all, barring illness and accident, Homo erectus seems to have developed a rather comfortable life for himself. The site, originally on the beach, is now far from the shoreline.

The remains of three humans have been uncovered. A single incisor had been shed by a two-year old child and a large canine tooth had belonged to an adult. The parietal bone from the right side of a cranium was that of a nine-year old youth. Medical examination of a large lesion in the bone revealed that the child must have died of a meningeal tumor.

There has been established at the site a laboratory of prehistory which offers two to four week courses on the material discovered.

#### Tool Kit

Traces of this early culture had already been detected in northwestern France. In 1847 Boucher de Perthes, the local controller of customs, had published the results of more than a decade of investigation near his home in Abbeville. This amateur archaeologist had gathered flints of regular shapes in the gravel terraces above the Somme River. His claims were not credited by French scholars in Paris, who scorned the report, not deigning even to visit the area.

Dr. Rigollet of Amiens, motivated by the discoveries made at Abbeville, excavated the gravel pits on the banks of the Somme River at Saint-Acheul not far from his home. In 1854 he published "A Report on the Chipped Flint Instruments Found at Saint-Acheul". His report and the persistent efforts of Boucher de Perthes prompted a visit by British scholars in 1858. Their serious examination of both sites caused the significance of the work to be recognized.

The tools uncovered now bear the designations 'Abbevillian' and 'Acheulian' as do others of Pithecanthropine culture. The Acheulian are later than the Abbevillian and are considered more advanced. These products were shaped for chopping, skinning, cutting, scraping and digging. For the first time, a two edged, biface tool was produced. Though the skills were not equal to achieving completely symmetrical results, the techniques prevailed even into Mousterian (Neanderthal) times and were improved.

Samples of the earlier Australopithecine tools are illustrated in Figure 7. A more advanced type like those of Homo erectus is illustrated by the ones pictured on Afars and Issas Scott No.C77 (March 18, 1973). The flint point shown on Chad Scott No. 135 (December 11, 1966) was, of course, not done by Cro-Magnon, but demonstrates the refined quality attained in the late Palaeolithic period.

Dampness, age and acid soil in the coastal areas were unkind to bones. Stone artifacts, though, were practically indestructible and have survived by the hundreds of thousands.

Important displays of old Stone Age objects of northwestern France may be seen and studied in the Boucher de Perthes Museum in Abbeville. Specimens of fossil fauna and stone industry were gathered from sites in the Valley of the Somme. The museum, rebuilt after being destroyed by bombing in 1940, is located several steps away from the city hall shown on the cancellation. Soon to be installed, is a cross section of strata from excavations at Biache Saint-Vaast.

The cancellation from this small northern community in the department of Pas de Calais shows fisherman of two thousand centuries ago. This successful food gatherer is probably no more enthusiastic than the angler camped on the other side of the coat of arms.

The mammoth observing the scene must be the Mammuthus (or Elephas) meridionalis rather than the later wooly mammoth made familiar to us by skeletal remains and cave paintings.

Ancient human occupancy on the banks of the Sarthe at Biache St. Vaast near Arras was not detected until 1976. Workmen grading an area for the construction of a furnace for a metallurgic shop uncovered several levels of prehistoric culture. The excavation now extends beyond the industrial plant. It is estimated that humans lived there at a time of brief warmth during the Riss Glaciation period.

Fossil bones indicated a predominance of bovines, rhinoceros and bear rather than the mammoth portrayed on the cancellation. The bones of two Homo erectus individuals added slightly to the small total found in Europe. A section of a palatine bone remained from the roof of the mouth of one inhabitant. The back or occipital portion of a cranium, attributed to a young woman, had some characteristics of a Neanderthal skull. Tools varied from early Acheulian to the better quality Mousterian products found in the upper levels. Clearly the evidence points to a people and culture often called 'Pre-Neanderthal'.

In noting the story of the oldest human remains found in France, it is not being suggested that Homo erectus lived only there or that he was first found on that continent.

The skullcap and other bones of Java Man, for years known as Pithecanthropus erectus, were discovered on that island in 1890 (Cuba, 1967 S.G. No.1464). Excavation revealing the equally celebrated 'Peking Man' (originally 'Sinanthropus pekinensis'), was done at Chou K'ou Tien near Peking in the 1920s and '30s (Cuba, 1967 S.G. No. 1465). Both of these are now known as 'Pithecanthropus' or Homo erectus.

At Chou K'ou Tien, parts of more than forty skeletons were assembled. This collection, (S.G. No. 1464) is the largest accumulation of human bones. The (S.G. No. 1465) bones discovered at one site were packed in boxes and entrusted to the United States Marines when the Japanese invaded China in December, 1941. The Marines were captured and the two footlockers full of bones disappeared. Searchers have gone to great effort and expense and have offered rewards but have never been able to recover this anthropological treasure. Fortunately, thorough descriptions, casts, and photos of the finds have survived. Excavation at the Chou K'ou Tien site has been resumed.

Other important early discoveries were Heidelberg Man, based on a 600,000 year old jawbone unearthed in 1907 and Rhodesian Man in Zambia, 1921 (Zambia, February 1, 1973, Scott No. 95 and - skull on right - Great Britain, February 10, 1982 Scott No. 968). The latter is considered by some scholars to represent an erectus-sapiens transition.

In recent years the Richard Leakey team has unearthed skullcaps and faces in Kenya that Leakey identifies as those of Homo erectus (Kenya, January 16, 1982 Scott No. 213). The

date, established at 1.5 million years BP, points to the co-existence in Africa of Homo erectus and Australopithecus, who was an early hominid. The former must have lived there for thousands of years before migrating to Asia and Europe. The population spread across Europe into what are now a dozen countries stretching from the United Kingdom to Hungary. One site, still farther east, is located in the Soviet Union near the Caspian Sea.

#### Who Was Homo Erectus?

What kind of creature was this early human who survived for more than a million years in a harsh world? The most complete documentation comes from the many specimens found at Chou K'uo Tien. The concept is doubtless a composite based on collected fragments.

The brow ridge is heavy and the receding forehead leads into a low cranial vault. The prognathous jaw protrudes over an almost non-existent chin. The molars in Homo erectus were smaller than those of Australopithecus, but the front teeth were larger. The brain size, 900 to 1,000 cubic centimeters, was about twice that of his predecessor. The brain of modern man averages about 1450 cubic centimeters.

The skull bones and skeleton were heavier than those of any hominid before or after. The areas for muscular attachment were very large, indicating enormous physical strength.

One suspects the possession of considerable intelligence, as much skill and cunning would have been required to kill the large game whose bones were found in Pithecanthropine dwellings. Several quite large stone tools were found, which suggests to some that a spear may have been devised as a part of the equipment. The use of this invention would have facilitated the bagging of large game. It is generally believed that there was verbal communication.

#### No Fashion Model

The notion persists that the body was not covered with hair, but no one can really say. There is a striking difference between the concept pictured on the 1967 Cuban stamps and that expressed on the Nice and Biache cancellations in 1982.

Much of the literature is non-committal on the subject of clothing. The postal department endowed the man on the Biache St. Vaast postmark with a fishing spear but no garments. There is a widely held belief that erectus, living in a temperate zone, was clothed. The fact that no needles have appeared among the artifacts left by the Pithecanthropines does not rule out the possible fashioning of garments from skins.

The man on the postmark announcing the congress at Nice has no concern for attire. If one applies the traditional schedule of glacial and interglacial stages, the Terra Amata population 400,000 years ago must have been living toward the end of the Mindel glacial period. While the climate may be considered temperate, it is believed that the weather was somewhat damper and chillier than it is now. The aspect of the terrain was quite different. Pines and firs, which still populate the Maritime Alps, grew closer to the shore at that time. The waterline was one hundred feet higher than now, and the camp was on the beach. Melting in the great ice-fields during the warmer periods brought about the rising of sea levels worldwide.

The fire nurtured by the ancient Niçois of the cancellation is completely authentic? Its use was shown by the presence of the hearths in the remains of the huts at Terra Amata and Lazaret. The man on this cancellation is copied from the more refined drawing on the cover of the Terra Amata Museum catalogue.

The research at Chou K'ou Tien likewise revealed the use of fire. It is not known how long fire has been produced by man, but its significance for providing light, warmth and protection is very great. The point at which he started cooking his food is vague indeed.

"FOR 200,000 YEARS" – the caption on the Biache postmark – reminds that dates applied to such remote times are approximate. The great biological and cultural divisions are named to make possible some organization but they do not have precise boundaries like entering a new year or declaring a war. That cultures overlapped is not disputed.

Some stages of human progress have attracted more general interest than others. The Neanderthal type has received a good bit of attention, much of it brilliantly uninformed. The cave paintings of the Cro-Magnon artists have aroused considerable popular interest and have been the source of intense interest by experts. There is a public announcement whenever a field anthropologist finds a hominid considered to have lived a million years earlier than any other. No such public fancy seems to surround Homo erectus.

There are actually large gaps in the information collected about this species. Though the population was spread over three continents, the skeletal bits retrieved have been comparatively few and widely scattered. We know about the life, diet, habits, tools and homes of Homo erectus, but we will not really know what he looked like until some nearly whole skeletons can be found.

Another factor in the puzzle is the phenomenon of this ancestor existing practically unchanged for a million years and then starting to evolve between 300,000 and 100,000 years B.P. Some scholars submit that the later physical advances kept pace with the rapid technical development, notably in the production of tools.

For millions of years the early hominids had inhabited tropical and equatorial climes. It

was Homo erectus who undertook to cope with the temperate zones about half a million years ago. This enterprising hominid can be credited with other important innovations. We owe to him the domestication of fire, the production of biface tools and the creation of hunting techniques. The installation of organized encampments correlated with the development of social structures.

This first resident of France was not the oldest or the most spectacular of our predecessors, but he is indeed the earliest ancestor who has been accepted without dissent into the society of human beings.

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