

## SKULL 1470 — A NEW LOOK

JOHN W. CUOZZO\*

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*The skull 1470, which Leakey found a few years ago in Kenya, has puzzled both evolutionists and Creationists. For it is much more human in many ways than anything which evolutionists had expected to find from as long ago as they believed it to be. On the other hand, there were some ape-like features. Reasons are presented here for believing that the ape-like features may be due to environmental happenings to the skull after its owner's death. Thus the owner may well have looked very much like a present-day man.*

After his discovery of skull 1470 near Kenya's Lake Rudolf, Richard Leakey<sup>1</sup> asserted in 1973, "Either we toss out this skull or we toss out our theories of early man." Speaking of the 2.8 million-year-old fossil which has been tentatively identified with the genus *homo*, he said that this "leaves in ruins the notion that all early fossils can be arranged in an orderly sequence of evolutionary change."

From the cranial capacity of 800 cc. and the three hundred implements that were also found near the site, it has been concluded that someone of a high order of intelligence and dexterity inhabited this area approximately 2.6-2.8 million years ago.

From the reconstructed skull (Fig. 1) it is obvious that the conspicuous absence of the beetle brow was unlike the contemporary *australopithecus* or later *homo erectus* crania.

Holloway in 1976<sup>2,3</sup> studied an endocast of the 1470 skull and found a well defined Broca's area which may indicate a capacity for speech. He thus added a significant new dimension to this discovery.

I would like to submit more evidence that would place this skull still closer to the line of human ancestry.

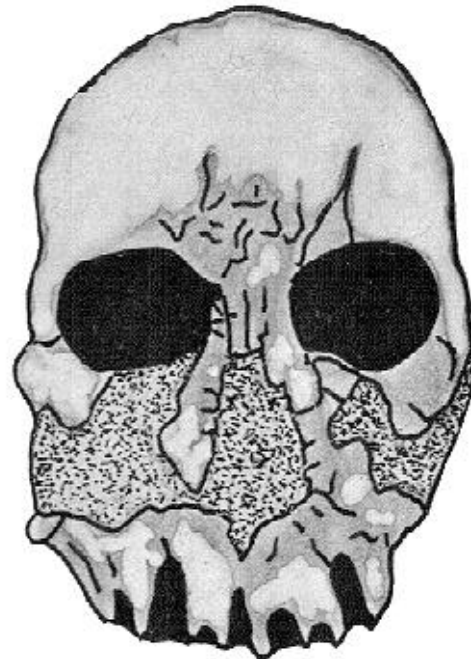
### Features of the Skull

In his National Geographic article of 1973, Leakey states,<sup>1</sup> "Adding ears, more cartilage, eyebrows, and lips, plus salivary glands, superficial muscles, and fatty tissue, the artist approaches the finished portrait (Fig. 2)." He continues, "narrow nasal aperture of the original skull and a lack of bony support beneath the nostrils might indicate a rather gorilla-like nose. This characteristic is perhaps the most strikingly unhuman feature in a physiognomy that displays an intriguing mix of the primitive and the advanced."

The important point to notice here is that the narrow nasal aperture and lack of bony support for the nasal septum and cartilage provide the only criteria (Fig. 3) for the reconstruction of an ape-like nose in the fleshy likeness of "1470 man".

The nasal aperture of the gorilla (Fig. 4) is commonly a wide one while the narrow and more piriform shape is found in *homo sapiens* (Fig. 5). This fact doesn't seem to support the reasoning behind the ape-like nasal reconstruction.

In *homo sapiens* the anterior nasal spine (*ans*) is an anteriorly pointed projection of bone at the base and center of the nasal aperture. The malar surface of the maxilla extends medially to the edge of the border of the



SKULL 1470

Figure 1. A drawing of Skull 1470. Other pictures may be found in References 1 and 6.

piriform aperture; in the midline the bone projects forward and with the corresponding projection of the contralateral half forms this spine (Fig. 6). With this spine and the support it would provide for the nasal cartilage, septum and columella, a nose that would be very much within the human range of normal could be reconstructed for "1470 man".

The maxillary and mandibular procumbencies are unremarkable and likenesses can be found in orthodontists' offices around the world (Fig. 7, 8).

In his description of skull 1470 in *Nature*, 1973,<sup>7</sup> Richard Leakey notes that "the glenoid fossa and external auditory meati are positioned well forward by comparison with *australopithecus*". In the occipital area, thought it be incomplete, there is no indication of a nuchal crest or other powerful muscle attachments.

The palate is shallow and broad and very wide. The labial border is described to be nearly straight like the large *australopithecus*.

A short broad palate is not outside the range of normal in the human as seen in Fig. 9. The palate in Fig. 9 is cleft and the skull belongs to Hrdlika's collection in

\*John W. Cuozzo, D.D.S., M.S., receives mail at 200 Highland Avenue, Glen Ridge, New Jersey 07028.

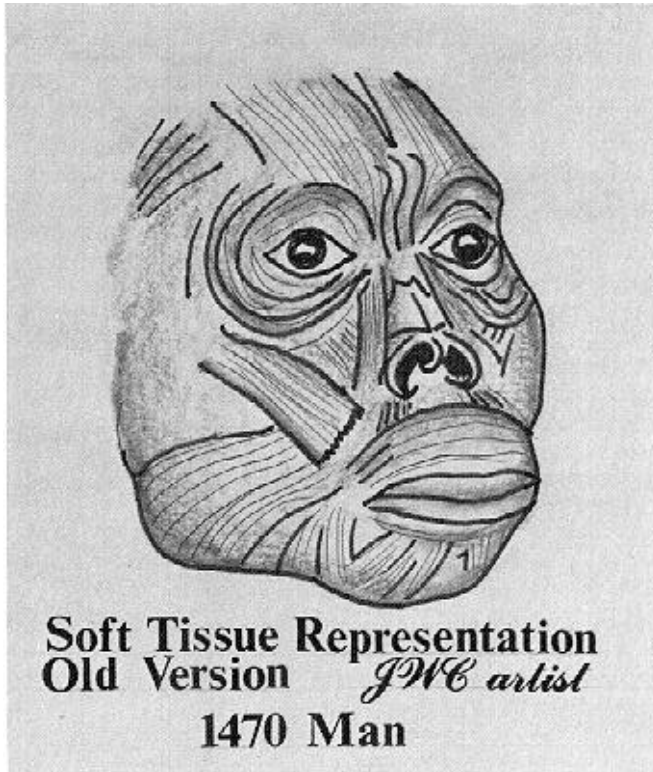


Figure 2.

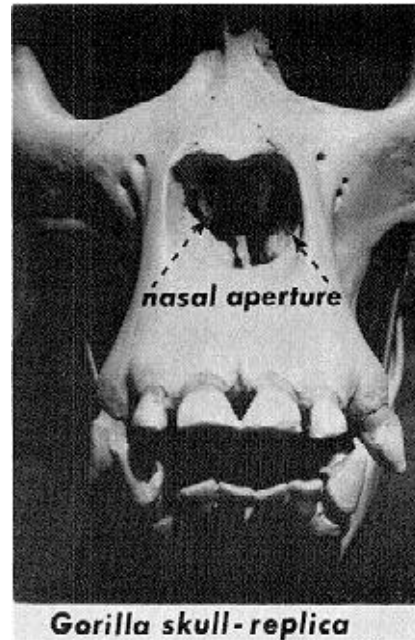


Figure 4.

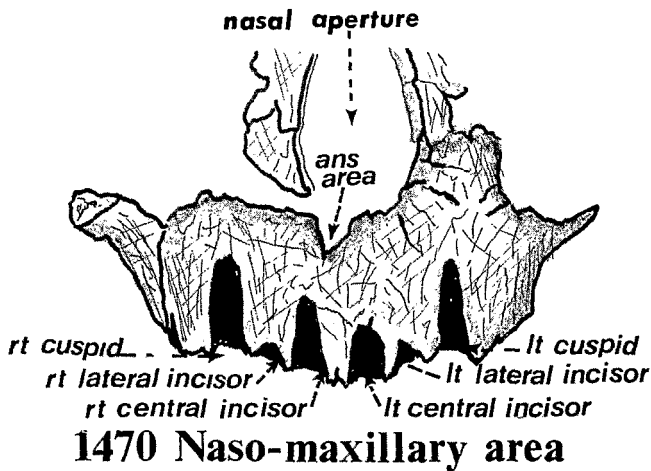


Figure 3.

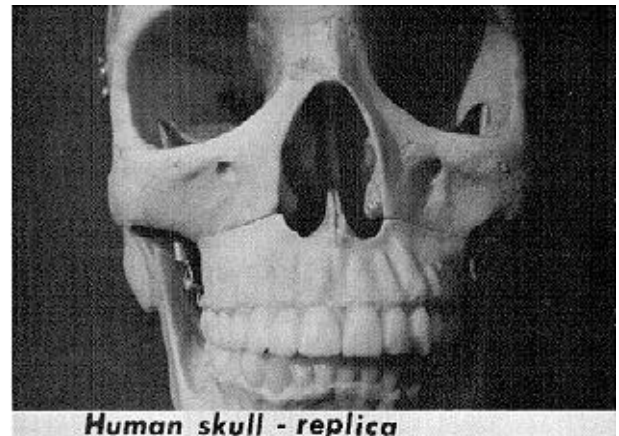


Figure 5.

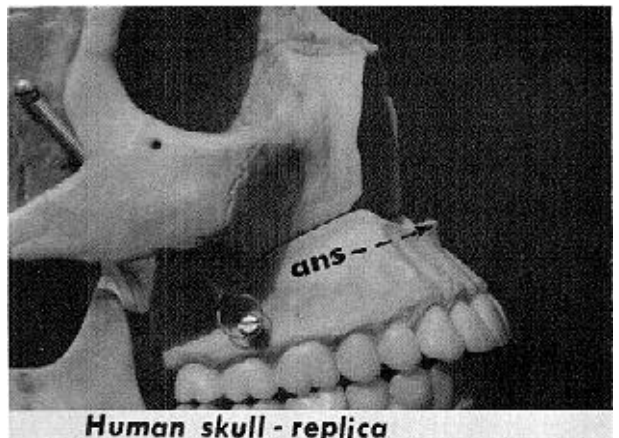
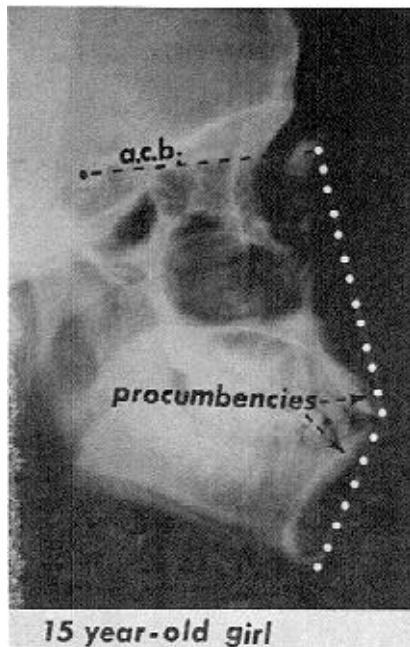


Figure 6.

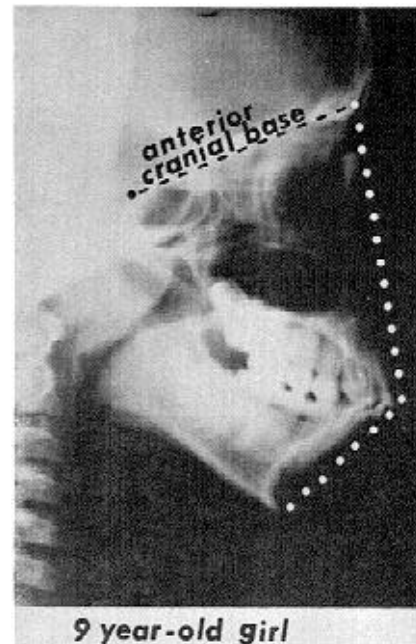
the Smithsonian museum, Washington, D.C. It is approximately one-thousand to one-thousand five-hundred years old. It clearly belongs in the *homo sapiens* category, and was found in 1910 in Peru.

In the 1470 specimen Leaky further states in *Nature* that "the molar and premolar crowns are not preserved but the remaining roots and alveoli suggest some mesiodistal compression." He also mentions that the large alveoli (sockets) of the anterior teeth suggest the presence of large canines and incisors.

Fig 10 shows a modern day Caucasian boy of eleven years with very large teeth and in need of orthodontic



15 year-old girl  
Figure 7.



9 year-old girl  
Figure 8.

care. Certainly large anterior teeth are not outside modern man's range of normal.

Therefore it must be concluded that if it can be shown that the ape-like nasal reconstruction was unjustified, it can then be inferred that 1470 man or "woman" was well within the range of human facial variations commonly seen today.

**Evidence of Post-Mortem Damage**

A closer external examination of the maxillary frontal view (Fig. 3) discloses six empty tooth sockets. Proceeding from left to right they are: the maxillary right cuspid or canine socket immediately inferior to the canine eminence. The maxillary cuspid when present forms the cornerstone of the arch and gives form to the face in that area. The next very small socket (it may be larger inside the alveolar process) belongs to the right lateral incisor. The next two sockets on either side of the midline are for the central incisors, left and right respectively. Another small socket for the lateral incisor on the left side is followed by the longer maxillary left cuspid or canine socket. Here the canine buttress that Sicher<sup>4</sup> first described is very evident.

The interesting fact about these tooth sockets is that they still remain open and have not filled in with bone as would result from the normal healing process. In a study of the time sequence of tissue regeneration in human extraction wounds Amler<sup>5</sup> establishes that alveolar socket healing in humans is two-thirds complete after forty days. Shortly thereafter the entire socket fills in with bone and the socket disappears.

Based upon this study and the common knowledge among those in the dental profession that in approximately 6-8 weeks the average socket will fill in with bone, we must conclude that "1470 man" either lost these teeth less than six weeks before his death or that they were lost in the post-mortem period.

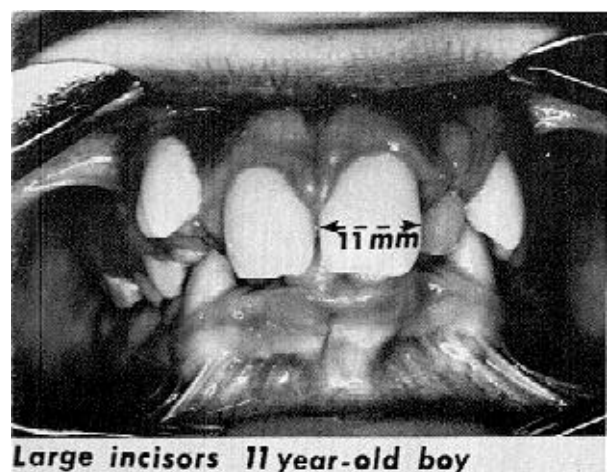
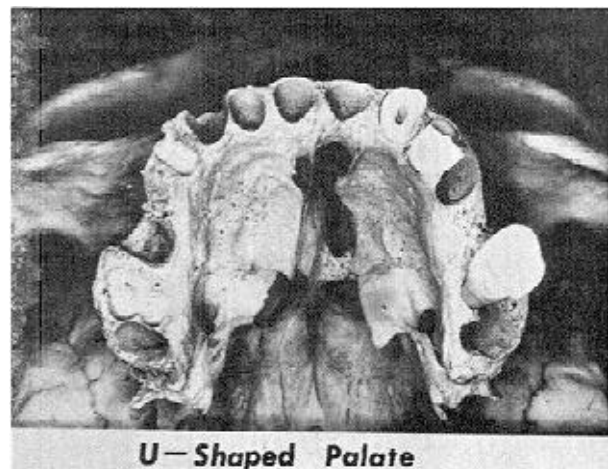


Figure 10.

Amler<sup>5</sup> states that in the osteogenic sequence even at twenty-five days some calcification of osteoid can be seen.

The restrictions that these facts place upon the chances of the teeth being lost in vivo are very severe. The probability that they were lost in the years of the post mortem period when the skull was subjected to numerous environmental influences is very high.

Can one then not reasonably assume that if the teeth were lost in this period due to traumatic conditions, the anterior nasal spine might have been subjected to the same fate? Does the presence of the V-shaped notch in that area (Fig. 3) testify to the absence of some structure that was once a part of the bone?

Utilizing the evidence which has just been presented, a normal human nose can be reconstructed with confidence.

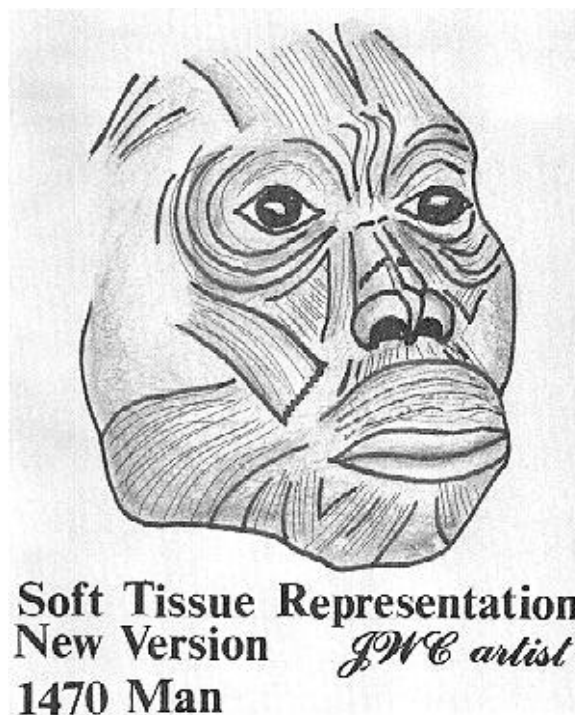
This, of course, produces an entire face within the normal range of human variation.

With this new look for "1470 man" (Fig. 11) and the three million year old fossils found by Johanson<sup>6</sup> in Ethiopia, we are suddenly left with our oldest ancestors looking very much like us.

**Acknowledgement:** Figure 9 is used here by permission of the division of Physical Anthropology of the Smithsonian Institute.

### References

- <sup>1</sup>Leakey, Richard E., 1973. Skull 1470—a new clue to earliest man? *National Geographic Magazine* 143(6):819-829.  
<sup>2</sup>Holloway, Ralph, 1976. New study: brain casts in old skull. *New York Times* 39, 74. (21 April).  
<sup>3</sup>Holloway, Ralph, Paleoneurological evidence for language origin. *Annals of the New York Academy of Science* 280.



**Figure 11.**

<sup>4</sup>Sicher, Harry, 1960. Oral anatomy, C.V. Mosby Co., St. Louis, Missouri. p. 87.

<sup>5</sup>Amler, Melvin H., 1969. The time sequence of tissue regeneration in human extraction wounds. *O. Med., O. Surg., O. Path.*, 27, 309-318.

<sup>6</sup>Johanson, Donald C., 1975. Ethiopia yields "first family" of early man. *National Geographic Magazine* 150(6):791-811.

<sup>7</sup>Leakey, Richard E. 1973. Evidence for an advanced Plio-Pleistocene hominid from East Rudolph, Kenya. *Nature* 242(5398):447-450.

## PANORAMA OF SCIENCE

### The Atmosphere Has Always Contained Oxygen

Evolutionists, who want to ascribe the origin of life to random chemical processes long ago, commonly suppose that, at the time about which they are imagining, the atmosphere contained no oxygen, but rather was reducing. For the presence of oxygen would spoil their alleged processes.

But there is a growing body of evidence to show that the atmosphere has always contained oxygen, evidently being about the same as it is now.

One study, for instance, has dealt with the presence of various elements in sedimentary rocks, considered very old by the uniformitarian view.<sup>1</sup> The conclusion was that: "The sedimentary distribution of carbon, sulfur, uranium, and ferric and ferrous iron depend greatly upon ambient pressure and should reflect any major change in the proportion of oxygen in the atmosphere or hydrosphere. The similar distributions of these elements in sedimentary rocks of all ages are here interpreted to indicate the existence of a Precambrian atmosphere containing much oxygen . . . we find no evidence . . . that an oxygen-free atmosphere has existed at any

time during the span of geological history recorded in well preserved sedimentary rocks."

Another study has considered not only evidence of the kind just mentioned, but also the fact that, even if the Earth had begun without oxygen in the atmosphere, processes such as the decomposition of water vapour in the atmosphere by ultraviolet light, and of oxides which presumably have always existed would have provided oxygen in the atmosphere in a time short by uniformitarian standards.<sup>2</sup> Thus: ". . . no other conclusion than that oxygen has always been an important constituent of the atmosphere seems possible."

Dr. R.H. Brown, of the Geoscience Research Institute, Berrien Springs, Michigan, called these items to my attention.

May I add a philosophical point? The problem which the evolutionists set themselves was to find the cause of life, i.e. of living things, in non-living. But it has been pointed out that the only cause which means anything is that which sees the origin of something in a living, sentient, being.<sup>3</sup> Thus the evolutionists, in their approach, have the cart about as squarely before the horse as it has