

IV. THE OPHIR SKULL FROM VIRGINIA CITY, NEVADA

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In 1960 one of us (RFH) encountered in the collections in the Musée de l'Homme the plaster cast of a skull upon which was written "Trouvé à 400 pieds de profondeur dans l'Ophir Mine - Comstock lode - Nevada. Coll. Alph. Pinart, no. 44. 1876."¹ This could only be a cast of the skull described by D. De Quille [William Wright], who wrote (1876:505):

In working out the first or upper bonanza of the Ophir mine, there was brought to light a human skull of a very ancient and curious type. The skull was dug out where a drift was being run in the ore-body at a depth of about three hundred feet below the surface. It was brought out and dumped with a car-load of ore, not being observed by the miners. United States District Judge A. W. Baldwin, since killed by a railroad accident in California, happened to be present when the car-load of ore was dumped. Seeing an object of peculiar shape roll toward his feet among the ore dumped from the car, the Judge picked it up, and found it to be a human skull of a peculiar form and thickly crusted over with sulphuret of silver. He carried it into town and presented it to Wm. Shepard, of the firm of Tinker & Shepard, who placed it in a cabinet of curiosities, where it still remains.

The skull attracted no attention outside of Virginia City until 1874, when, mention being made of it in the newspapers, the Academy of Sciences of San Francisco sent for it for the purpose of making a critical examination of it. While it was in San Francisco a plaster cast was made of it, and at a meeting of the Academy of Sciences, Dr. Blake exhibited the cast and spoke of it as follows: 'There is in this skull a peculiarity that is seen in some of the ancient Peruvian skulls, namely, an inter-parietal bone. The general contour of the skull is of a very low type; the anterior portion is very slightly developed and receding; the hinder portion is largely developed. It bears a similarity to the skull of the carnivorous apes, the cavity for the lower jaw-bone being very deep and not allowing of any grinding motion of the jaws. The skull when found was covered with a metallic layer. It is of a different type from any that have been found, and belonged to a carnivorous man, who could walk easier on all fours than on two feet.' Several ancient

Peruvian skulls were then produced in order to show the interparietal bone.

Professor Whitney was very anxious to be allowed to send the skull to the Atlantic States and Europe, but the owners would not part with it for that purpose. The plaster cast taken was sent to Dr. J. Wyman of Cambridge. It would seem that the conclusion arrived at in San Francisco was that the skull was that of a man belonging to a pre-historic race. He probably was adorned with a tail. At the time the great fissure was formed in which the Comstock lode was deposited, or perhaps at the time the fissure was being filled with its rich ores, this pre-historic creature was probably fooling about the edge of the chasm, looking down into it to see what discoveries he could make, when the earth crumbled beneath his weight, and he rolled down and was incorporated in the heart of the vein. His sad fate must have proved a salutary warning to all others of his tribe, as his skull is the only thing in the way of ancient human remains that has ever been found in any mine on the lode.

In the Proceedings of the California Academy of Sciences for the regular meeting on February 2, 1874 (p. 258), Dr. James Blake, M.D., exhibited a cast of the skull and the following account under the title "Verbal Remarks on a Human Skull Taken From the Ophir Mine, Nevada," was printed:

Dr. Blake exhibited the cast of a skull that had been taken out from the Ophir mine, on the Comstock Lode, Nevada. The skull had been brought up with some dirt from the 400-foot level; but it is probable that it had been carried down in dirt from a neighboring ravine, which, at an earlier period, had been used to stop some of the former workings. But, independently of its history, the skull presents some features which render it extremely interesting, from an ethnological point of view. The principal of these, were the presence of a large interparietal bone, extending almost to the occipital protuberance, the heavy superciliary ridges, the very low forehead, and great development of the posterior portion of the skull, the peculiar position of the socket for the articulation of the lower jaw, and the great

development of the processes for the attachment of muscles. Unfortunately the whole of the palatal portion below the orbits and a large part of the base of the skull were missing; but what remained, the Doctor considered that it presented a form more removed from that of any existing race of human beings than that of any skull that had heretofore been found. It was submitted to Dr. Blake by Professor Whitney. The original skull was covered with a thin metallic scale deposited by water, and it had been somewhat broken by the pick-axe in being excavated.

The newspaper Daily Alta California (Vol. 27, No. 8709) of February 3, 1874 (p. 1) carried a brief notice of the February 2 meeting of the Academy as follows:

ACADEMY OF SCIENCES

Meeting in the New Hall

An old Skull

Dr. Blake exhibited a cast of a skull found 400 feet in the Ophir mine, Nevada, and described the peculiarities of some bones on the back of the skull, similar to the Peruvian skull: the most noted point was the development on the posterior of the skull; the muscles holding up the head were more largely developed than usual. It was of a type of which none had been found before, and evidently was very old. The skull was found by Prof. Whitney.

At what date the skull was first discovered in the Ophir Mine in the Comstock Lode at Virginia City is not known to us, but this could probably be determined by searching through the Virginia City newspapers. By 1874, however, the famous Calaveras skull was well known, having been officially presented to the scientific world via the California Academy of Sciences in 1867 and being referred to repeatedly for two decades afterward.² The fact that J. D. Whitney's name was associated with the Ophir skull is of interest since Whitney was the chief scientific authority for the Pliocene antiquity of the Calaveras skull. Judging from the account of De Quille (1876:506), Whitney may have been the person chiefly responsible for having the Ophir skull brought to San Francisco and securing the plaster cast which was sent to J. Wyman at Harvard University. At least one other cast must have been made in San Francisco since A. Pinart, who was in that city in 1878, was able to secure it.³

The Ophir skull can probably be dismissed as an attempted hoax—a fraud which misfired. Blake's suggestion that the skull was inadvertently taken into the Ophir Mine as an element of earth fill used to seal off old workings is possible though improbable. Whitney seems not to have considered the skull of very great importance nor as having much bearing upon the argument he was engaged in regarding the Calaveras skull, since the Ophir skull was either too ancient—if it were argued that it dated from the time the Comstock lode minerals were being deposited—or, if obviously intrusive, irrelevant to his defense of the Calaveras skull as having been deposited as an integral element of the Pliocene auriferous gravels.

The fate or present whereabouts of the Ophir skull is unknown. It is reported by De Quille (1876:505) as "thickly crusted over with sulphuret of silver," and, in the brief report of the meeting of the California Academy of Sciences of February 2, 1874, as "covered with a thin metallic scale deposited by water." Prehistoric Indian burials in rock crevices are known for the area of western Nevada, and it is barely possible that the skull came from such an interment, fell down an open fissure, and lay there long enough to acquire a surface deposit of water soluble mineral salts. The Calaveras skull, when studied with objectivity by Holmes (1901) and Sinclair (1908), was shown to be an intrusive feature into the gravels where it was claimed to have been found because it bore an adherent calcareous accretion. No such study seems to have been made of the Ophir skull.

This brief note is not published with any intent to argue that this probable hoax is of any importance, but it did come before the scientific public in 1876 and was then forgotten. It would be interesting to know what Whitney's reasons were for not considering it to be more significant. Between 1866 and 1900 the Calaveras skull was considered by many as a significant piece of evidence favoring man's great antiquity in the New World, and as such (regardless of the ultimate demonstration that it was a hoax) it holds an important place in the history of anthropological inquiry. Modern scholars sometimes forget that so little was known about human evolution in the 1870's that there was nothing really improbable about the idea of man's existence in the Tertiary. That is why Whitney's belief in the great age of the Calaveras skull was considered defensible by some scholars. One is reminded of the old adage, "You can prove anything if you have few enough facts." The Calaveras skull as a contender for representative of Pliocene man is one part of the larger question about the presence of Paleolithic cultures in the New World. No historian of archaeology has yet traced the course of these theories.

SUMMARY OF OBSERVATIONS ON THE OPHIR SKULL

The Ophir Mine skull cap found at Virginia City, Storey County, Nevada, sometime before 1876, at a depth of three or four hundred feet below the surface, has been described here according to the plaster cast given to the Musée de l'Homme Anthropological Laboratory (Paris) by Alphonse Pinart in 1876 (Pls. 1, 2).

The skull probably belonged to a male, "middle aged" individual.

Its more salient morphological features are:

- (a) the lowness of the vault
- (b) the enlargement of the base of the skull
- (c) a transversal bent of the parietal bones with a "vertex" nearly equidistant from bregma and lambda
- (d) the shape of the occipital: flattening of the superior squama that is at an angle of about 90 degrees with the inferior one, and "chignon-like" aspect
- (e) the so-called "rectangular" shape of the temporal bone and its feeble contribution to the side of the braincase
- (f) the interparietal bone
- (g) a slight plagiocephaly

The configuration of the asteric region was examined but we cannot say if the lack of the tympanal part (left) is of accidental or congenital origin.

As for its metrical values, the Ophir Mine calvarium has a meso-cranial index; it exhibits platycrany and is at the limit of eucrany and aristocrany.

Among the chords and arcs the most characteristic are: the relative values of the frontal, parietal, and occipital sagittal arcs; the length of the temporal bone; the relative values of the two squamae of the occipital; and the bi-asteric curvature index.

From comparison with other crania from the Great Basin,⁴ it appears that the morphology of the Ophir Mine skull is distinct from that of these examples. The Salt Lake skull referred to below and whose measurements

are presented in Table 1 is a specimen (catalogue number 6580) in the Simonin Collection, Laboratory of Anthropology, Musée de l'Homme. Its antiquity is not recorded but it is a Great Basin Indian skull and, because of the scarcity of anthropometric information from this area, it has been thought worthwhile to make the information on it available. Some measurements of the Ophir skull do not show any important differences (glabella-occipital length, maximum breadth, arc nasion-opisthion, etc.), but they are "composite measures" of little biological significance. On the other hand, the comparison of the metrical values of the bones shows real differences between the Ophir Mine skull cap and the Salt Lake skull, for instance.

With regard to conclusions, it seems that they should remain a matter of discussion for the reason that an isolated, aberrant specimen always leaves a doubt as to its significance, especially one in such fragmentary condition. We shall say, however, that we do not think the Ophir Mine skull cap must be considered as an abnormal one. Maybe the transverse carêne has been accentuated, if not shaped post mortem. But without the original skull it is difficult to be positive.

An association of some "primitive" with other quite normal characters is evident. Without knowing the antiquity of the Ophir skull, it is considered pointless to speculate further on the possible significance of its metrical characteristics.

TABLE 1
Cranial Measurements of the Ophir and Salt Lake Skulls

	Ophir Skull	Salt Lake Skull
<u>Capacity (calculated*)</u>		
with porion-bregma	1,447.0	1,507.0
with "mean height"	1,486.0	
<u>Cranial Diameters</u>		
Glabella-occipital length	189.0	182.0
Maximum breadth	142.0	147.0
Porion-bregma (left)	111.0	117.5
Minimum frontal	95.0	97.0
Bi-asteric	(111.0** (117.0	115.0
<u>Chords and Arcs</u>		
Frontal:		
Nasion-bregma: chord	109.0	117.0
arc	123.0	131.0
Bregma-sphenion: chord	93.5	96.5
arc	109.0	114.0
Parietal:		
Bregma-lambda: chord	114.0	107.0
arc	130.0	116.0
Bregma-sphenion (see Frontal)		
Sphenion-asterion: chord	(108.0** (100.5	99.0
arc	(115.0** (105.0	105.0
Asterion-lambda: chord	(82.0** (88.0	84.0
arc	(91.0** (95.0	91.0

* With the Lee-Pearson interracial formula for men and for Ophir Skull, with two figures: porion-bregma = 111; and "mean height" = 115.

** Alternative possibilities depending upon point of measurement selected in this incomplete specimen.

TABLE 1 [cont'd.]

	Ophir Skull	Salt Lake Skull
<u>Cranial Indices</u>		
Horizontal cranial I.	75.13	80.77
Vertical cranial I. †	58.73	64.56
Transverso-vertical I.	78.17	79.93
Fronto-parietal I.	66.90	65.98
Parieto-occipital I.	(78.16** (82.39	78.23
<u>Curvature Indices</u>		
Frontal:		
Sagittal line	88.61	89.31
Parietal border	85.77	84.65
Parietal:		
Sagittal border	87.69	92.23
Frontal border	85.77	84.65
Temporal border	(93.90** (95.70	94.28
Occipital border	(90.10** (92.63	92.30
Temporal:		
Krotaphion-asterion: chord	(100.00** (92.00	85.00
arc	(106.00** (95.00	90.00
Occipital:		
Lambda-opisthion: chord	98.00	100.00
arc	131.00	126.00
Lambda-inion: chord	75.00	66.00
arc	79.00	68.00
Inion opisthion: chord	50.00	54.00
arc	51.00	56.00
Lambda-asterion (see Parietal)		
Bi-asteric: chord	(111.00** (117.00	115.00
arc	(147.00** (156.00	130.00

TABLE 1 [cont'd.]

	Ophir Skull	Salt Lake Skull
<u>Curvature Indices</u> [cont'd.]		
Total sagittal arc (Nasion- opisthion)	384.00	373.00
<u>Sagittal Diameters</u>		
Glabella-lambda	180.00	173.00
Nasion-lambda	180.00	173.00
Glabella-bregma	104.00	111.00
Glabella-opisthion	142.00	136.00
Nasion-opisthion	136.00	130.00
<u>Curvature Indices</u>		
Temporal:		
Parietal border	(94.35** (96.84	94.44
Occipital:		
Whole occipital	74.80	79.37
Superior squama	94.93	97.05
Inferior squama	98.03	96.42
Parital border (see occipital border of the Parietal)		
Bi-asteric	(75.51** (75.00	88.46

* With the Lee-Pearson interracial formula for men and for Ophir Skull, with two figures: porion-bregma = 111; and "mean height" = 115.

** Alternative possibilities depending upon point of measurement selected in this incomplete specimen.

† With the "mean height" (= 115), the vertical index would be 60.84; the transverso-vertical, 80.98.



Plate 1. The Ophir Skull
(Courtesy of Musée de l'Homme)



Plate 2. The Ophir Skull
(Courtesy of Musée de l'Homme)

END NOTES

1. Presently catalogued as No. 5260 in the collections of the Laboratoire d'Anthropologie, Musée de l'Homme.

2. For the Calaveras skull, known to be a hoax since W. H. Holmes' investigations which were published in 1901, see Heizer 1948:4-8, in bibliography.

3. For Pinart's activities in California see Reichlen and Heizer 1964:9-23, in bibliography.

4. The comparisons made are mainly with data presented by Kennedy (1959), this being the only recent investigation of Great Basin skeletal material performed by a qualified physical anthropologist. A much fuller report on the Ophir skull by Paulette Reichlen is on file in the Archaeological Research Facility, Department of Anthropology, University of California, Berkeley, catalogued as manuscript No. 388.

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