

CHAPTER IV

ARTIFICIAL CRANIAL DEFORMATION IN AFRICA

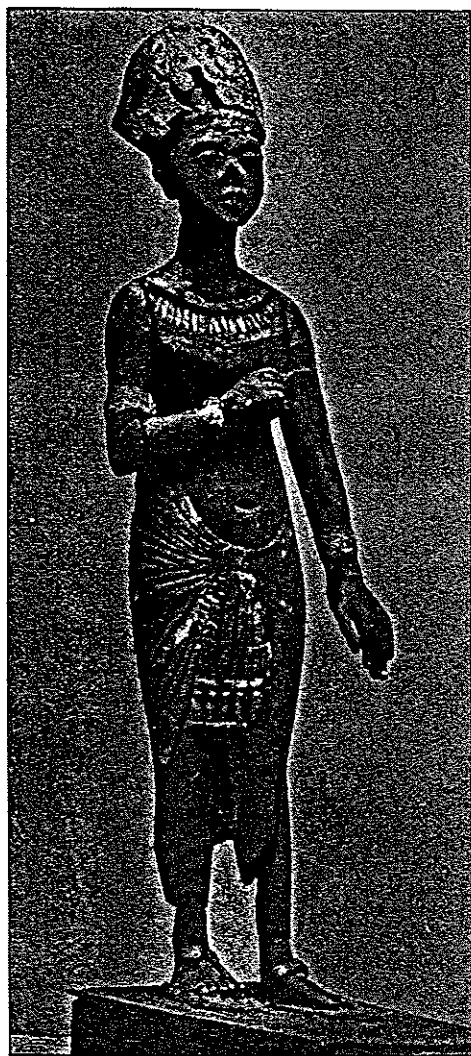
JUST as in Europe and Asia so is cranial deformation to be discerned in Africa. In various specific but separated areas the custom is to be found, yet in nearly all localities striking points of similarity are manifest, both in the methods employed and also in the various classes of the community among which the practice is exercised. Few ancient skulls showing traces of artificial deformation have been discovered. If we except certain of the early Egyptian crania which exhibit decided occipital flattening, due, I think, probably to decubitus,¹ there seems to be practically nothing recorded with the exception of a certain example from a Coptic cemetery which we will discuss in a later place. Cases due to pathological causes are not unknown, and since there is some evidence for the existence of rickets² in Ancient Egypt this would naturally be expected. The evidence for artificial, intentional deformation from Egypt is of a different character. It is so important to understand the problem and its relation to the present question that it may be as well if a short review of the facts be attempted.

Firstly then as to date. As far as our present knowledge extends, it is, I think, true to say that no evidence exists which suggests that intentional cranial deformation was practised in Egypt prior to the Eighteenth Dynasty, or to the period of the heretic king Akhenaten. The period corresponds roughly to late Minoan III, when Bronze Age Cretans had a lively trade with Egypt and the latter country was one of a series of flourishing States interlinked both politically and

¹ See Thomson and Randall-MacIver, especially Pl. VIII, A9, J9 and J32, and Pl. XI, A14 and A50. Through the kindness of Mr. Dudley Buxton I have had the opportunity of examining a number of these skulls in the University Museum at Oxford, and I cannot doubt that the posterior flattening had been artificially produced.

² Cf. Chapelain-Jaurès, p. 23.

PLATE V.

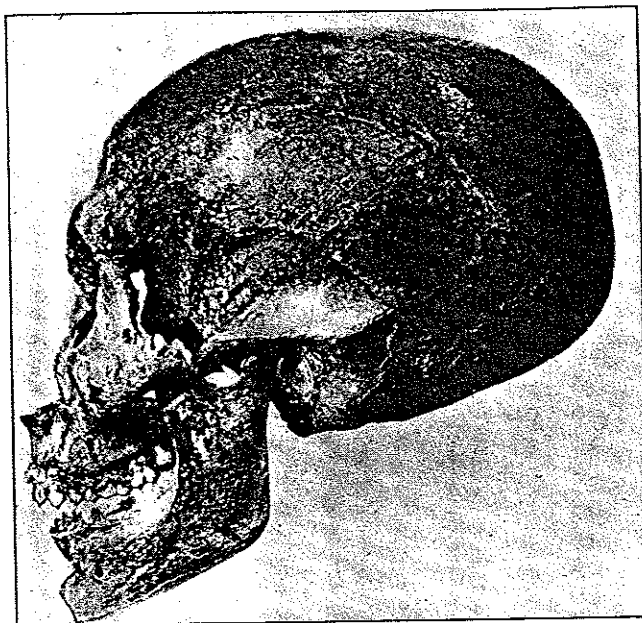


Berlin

Akhenaten.

21836.

PLATE VI.

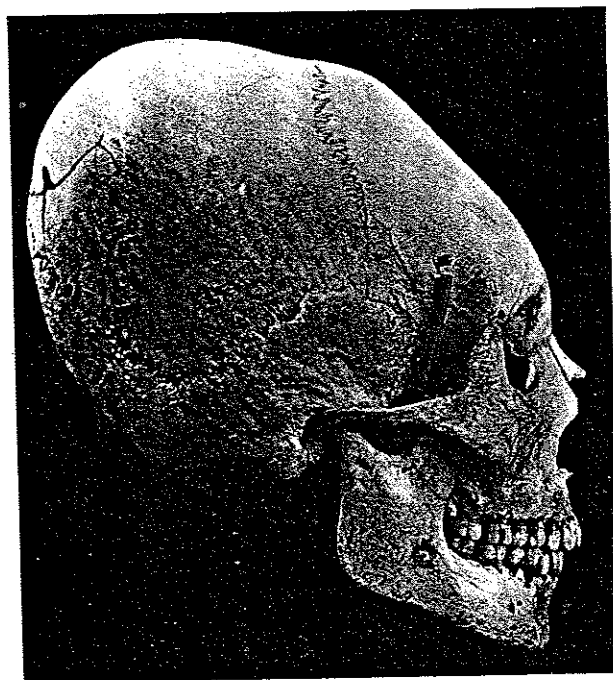


Cairo

Museum.

a

Akhenaten's Skull.



Royal College of

Surgeons.

b

The Medall Skull.

PLATE VII.



Berlin

15000.

The Queen presents a Flower to the King.

commercially. It was to this world of nascent civilization that Akhenaten (see Pl. V) presented his new religion, and the art of this period indicated how radical were the changes proceeding in the customs of at least some of his subjects. We cannot enter here into any discussion of the general differences between the art of the period and that which preceded it. We must confine our attention strictly to anatomical details and especially to head forms. The essential characteristics of the form of the ancient and pure Egyptian type of skull, were its medium size and its inclination to be somewhat long, narrow and low; the facial region being of medium length, breadth and height.³ Brachycephaly was not common⁴ and although foreign admixture may have tended to modify the original type, it could hardly have caused suddenly the amazing bodily changes in Akhenaten's age. For here we find the skull inordinately elongated, the chin pointed, whilst the bodies of the persons portrayed showed signs of emaciation, their necks often being depicted as thin, long and scraggy.⁵ That this new artistic conception was somewhat sudden may perhaps be seen from the representations in the Tomb of Two Sculptors, which is dated as just prior to Akhenaten's reign or during the first few years of it. Here there is no sign of those elongated skulls which both in drawing and sculpture are so numerous at a later date.⁶ Before considering these portraits, it will be as well to discuss at least one example of an actual skull which cannot be called normal, and which in shape strikingly recalls the forms of those as seen upon the monuments. I refer to the head of Akhenaten himself.⁷ Although in some quarters the evidence that the mummy is that of Akhenaten is rejected, there would seem to be some reason for supposing that it is indeed that of the young king. It lay in his coffin, enclosed by bands bearing his name and accompanied by his canopic jars. The age is about the same as might have been expected: the general form corresponds to the existing representations; and there seems little doubt that the embalmers really believed that the body they were

³ Schmidt, p. 35.

⁴ Oetteking, 1, p. 54.

⁵ Cf. Weigall, 1, p. 68: Schäfer, 4, p. 239.

⁶ See N. de G. Davies, 3.

⁷ It ought to be remembered that the skull of Tutankhamen was also reported as being elongated, although I am not aware whether examination has detected any pathological changes. See Carter and Mace, vol. II, p. 155.

preparing was that of the King himself.⁸ But it is the skull that deserves closer attention. The cranium, according to Professor Elliot Smith, is broad and relatively flattened (see Pl. VI, *a*). It has exceptional breadth for an Egyptian skull (the skull of Tutankhamen is actually broader) and is thin in some places but thicker in others. Although there are differences of opinion, both Professor Elliot Smith and Professor A. R. Ferguson are agreed that the skull shows signs of hydrocephaly.⁹ Perhaps the most characteristic feature of the skull is its elongation backward and it is this same elongation that is so noticeable in the art of the period and especially in portraits of members of the royal family and it is to these that we will now turn our attention.¹⁰

Firstly then regarding the King himself. An example showing the King praying towards the sun was found on a stone at Tell el-Amarna, a cast of which is now in Berlin. A lateral view of the King is presented and shows well the thin body and emaciated neck characteristic of the period. But it is the head of the King which is particularly striking. The forehead is excessively retreating and the back of the head is crowned by a sort of close-fitting cap which tends rather to increase than to diminish the deformity.¹¹ Similarly in a much broken votive offering, the skull of the King is well represented. In this case the object is an alabaster statuette which, when perfect, represented the young King as a child of the Sun. Parts of the Horus lock are visible, but almost the whole of the face is lost and Borchardt reports that in spite of these deficiencies there can be no doubt that the figure represents Akhenaten.

The uræus is seen upon his forehead and his name is indicated beneath his chin while the remarkable elongated shape of his head is clearly shown.¹² The fact that Akhenaten had an abnormally shaped head is suggested not only by the

⁸ G. Elliot Smith, 1, pp. 51-56; Weigall, 2, pp. 193, &c.; T. M. Davis, p. xxiv.

⁹ G. Elliot Smith, 1, p. 55; cf. Carter and Mace, vol. II, p. 154.

¹⁰ It may be noted here that the skull of the boy found in the tomb of Amenhotep II is reported as being "exceptionally broad and flat," although artificial deformation has not, I think, been suggested. See G. Elliot Smith, 1, pp. 39-40, Pl. XCVIII; G. Elliot Smith, 3, p. 91; Loret, pp. 103-104.

¹¹ See Schäfer 4, Abb. 65, p. 241.

¹² See G. A. Bollacher's drawing reproduced as fig. 6 in Berkhan, p. 159.

PLATE VIII.

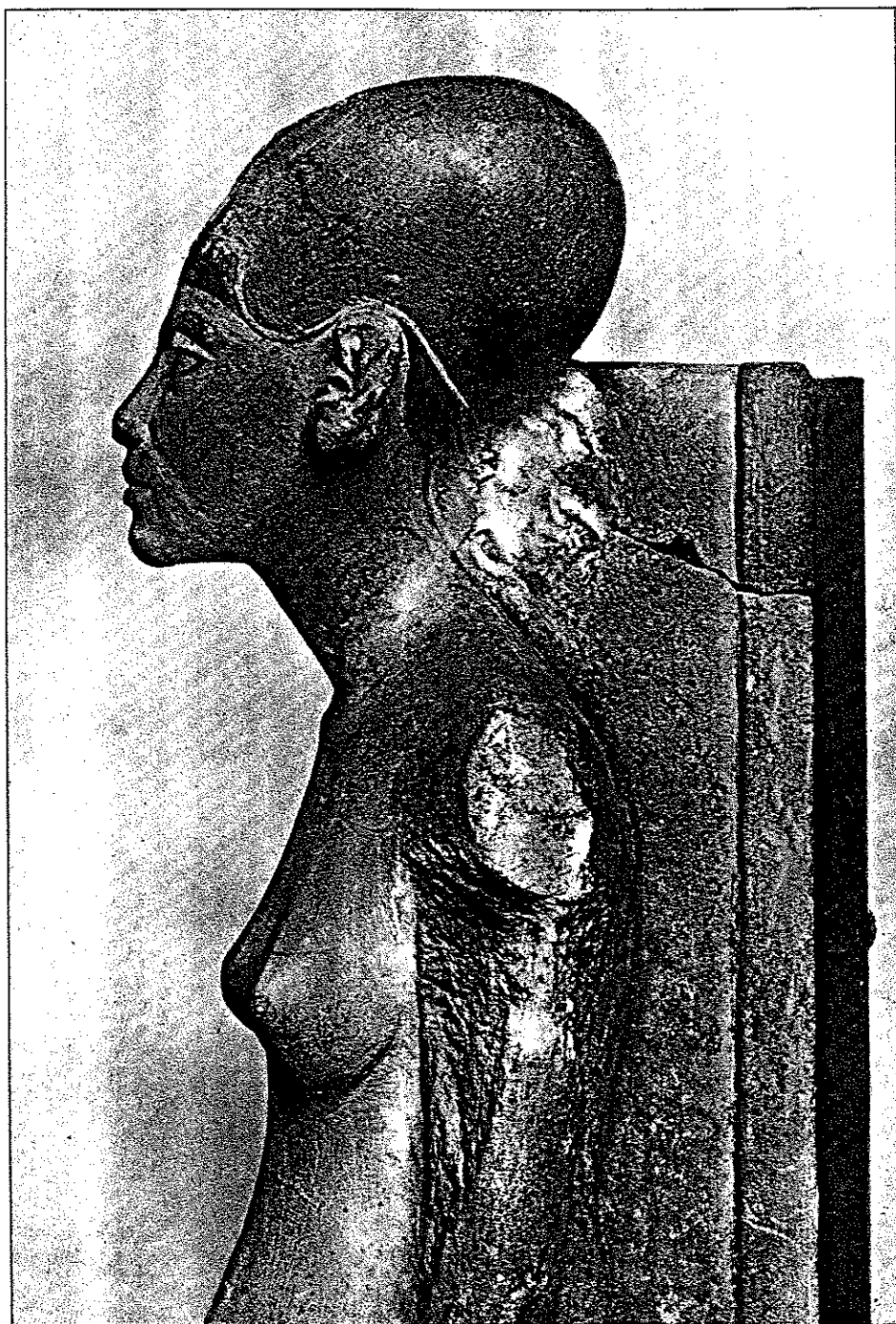


Berlin

Queen Nefertiti.

21263.

PLATE IX.



Berlin

21263.

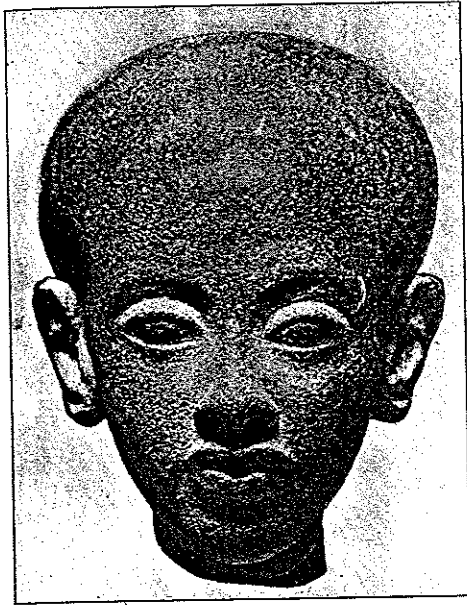
Queen Nefertiti.

PLATE X.

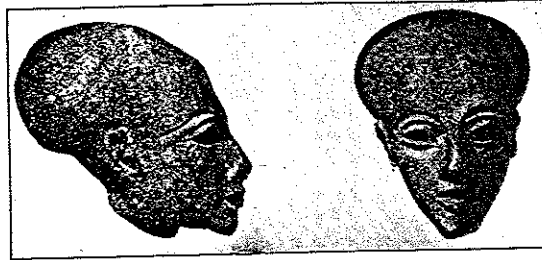


Mask from Lagos. (After Frobenius.)

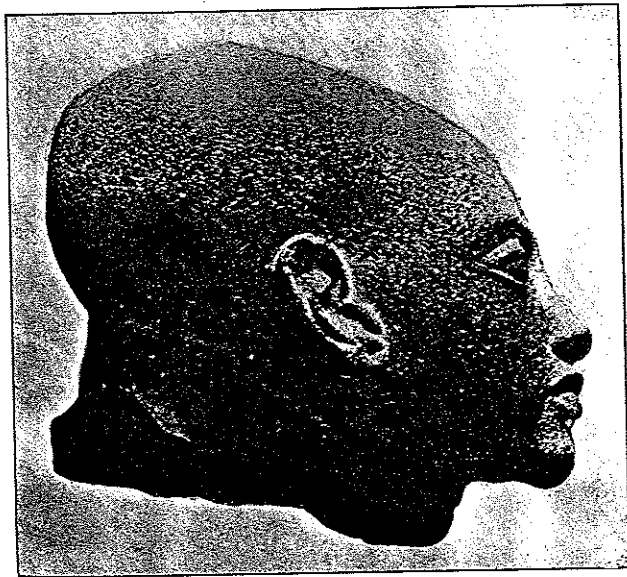
PLATE XI.



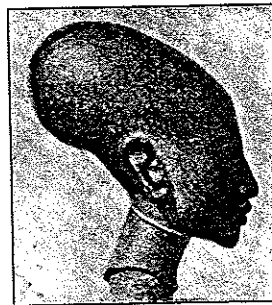
After *a* Frankfort.
Akhenaten's Daughter.



After *c* Borchart.
Akhenaten's Daughter.

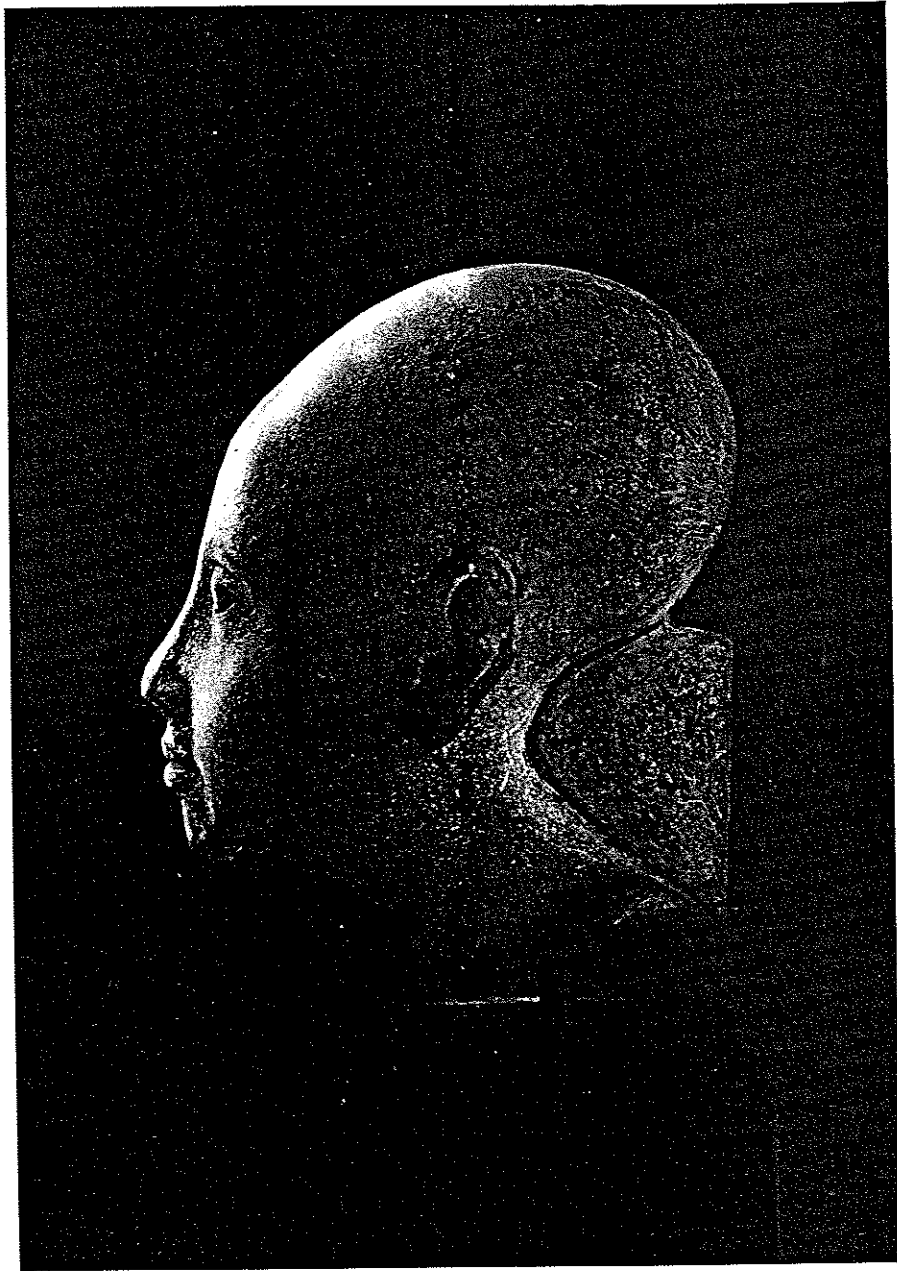


After *b* Frankfort.
Akhenaten's Daughter.



After *d* Berkhan.
Akhenaten's Daughter.

PLATE XII.

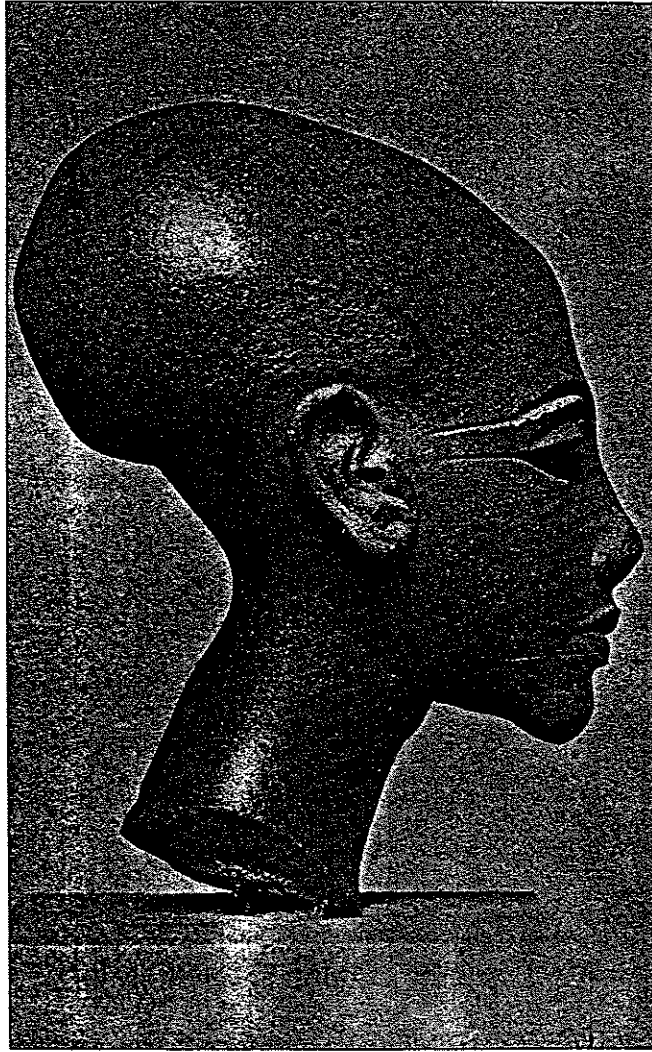


Berlin

14113

A Daughter of Akhenaten.

PLATE XIII.

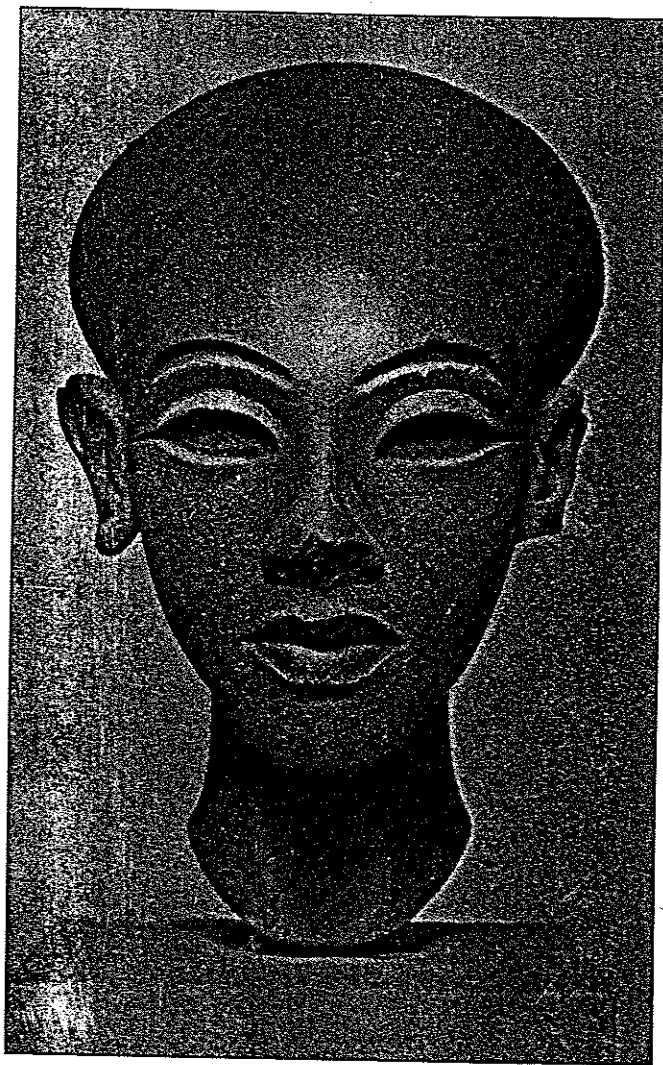


Berlin

21223

Akhenaten's Daughter.

PLATE XIV.

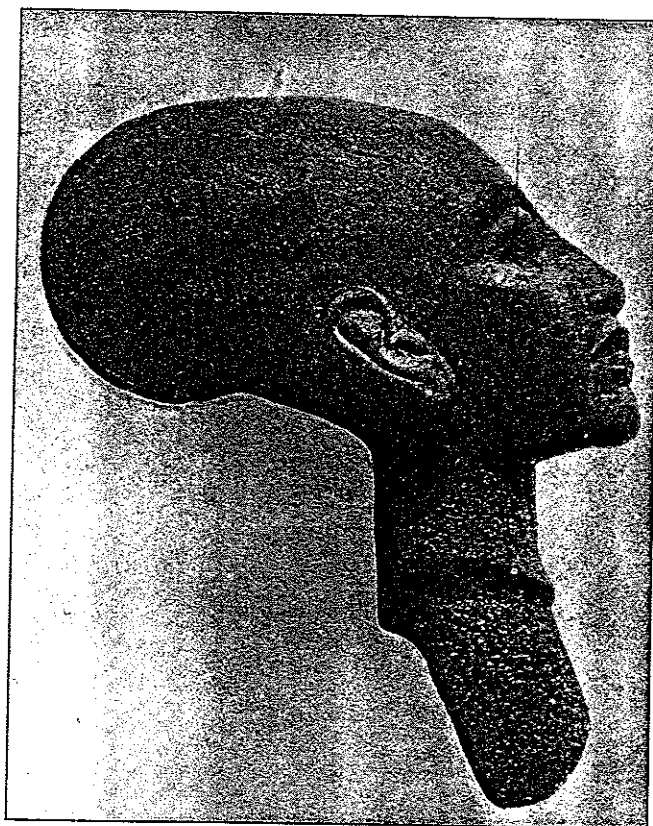


Berlin

21223.

Akhenaten's Daughter.

PLATE XV.

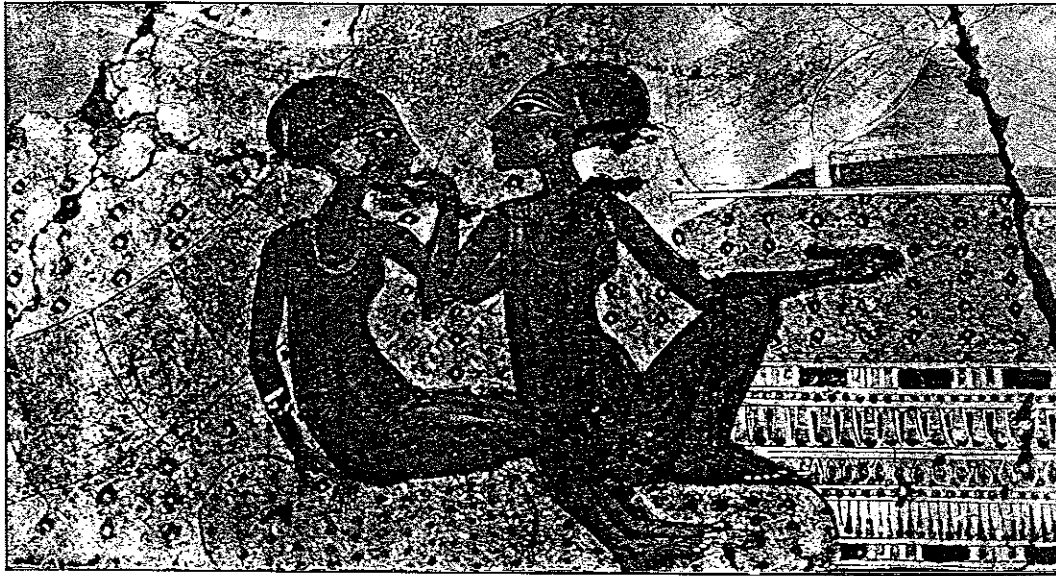


Cairo

Museum.

Akhenaten's Daughter.

PLATE XVI.



Ashmolean

The Ashmolean Fresco.

Oxford.

PLATE XVII.



Cairo

The King and his Daughter.

Museum.

representations in art, but, as we have seen above, by the state of the skull itself. We have no evidence, however, that the Queen's head was in any way deformed, and it is clearly very improbable that her head had been artificially distorted during infancy.¹³ Yet in the artistic representations it would appear that she also is occasionally shown with an elongated skull similar to that portrayed in the case of her husband and their children. Since this seems to have created some difficulty it may be as well to state clearly that nowhere to my knowledge is the Queen portrayed with a shaven head exhibiting elongation. This supposition apparently arose from the fact that the Queen is portrayed occasionally wearing a very tight-fitting cap which, when in position, gives her head an appearance closely resembling that of her daughters' bare heads (see Pl. VII). One of the very best examples is the portrait head of the Queen in limestone now in Berlin, (nr. 21263) (see Pls. VIII and IX).¹⁴ Berkhan is apparently of the opinion that the line going round the ear and above the forehead indicates the limits which the sculptor had drawn for clipped hair, but I can hardly doubt that this interpretation is incorrect, and that the line really represents the edge or hem of the cap which extends backward from the head. Another somewhat similar representation (Berlin, nr. 15000)¹⁵ shows the Queen in the act of giving a flower to the King (see Pl. VII). Here the cap seems clearly indicated and it again gives the head that curiously elonged appearance which is usually characteristic of the heads of Akhenaten's daughters, to which we must now turn our attention.

During the period with which we are dealing it was customary to shave the heads of the ladies,¹⁶ and the young

¹³ Holländer, however, seems to incline to the view that the Queen's head was deformed. See Holländer, p. 39.

¹⁴ Cf. Berkhan, fig. 2, p. 158.

¹⁵ Schäfer, 3, vol. II, p. 6; cf. N. de G. Davies, 1, Pt. I, Pl. XXX, where Meryra is rewarded by the King. Cf. also the Yoruba mask from Lagos (see Frobenius, p. 25, Taf. X, fig. 100b, and Pl. X), which shows a curiously similar head-dress especially as regards the line going over the ears and across the temples.

¹⁶ It ought to be added here, perhaps, that Miss Margaret A. Murray, to whom I owe much information, is not of the opinion that the heads of the princesses are shaven. She is inclined to the view that the shape of the skulls is not due to any desire to portray an abnormality, but is simply

princesses do not seem to have been any exception to the general rule. If we can judge from the sculptured models they are usually represented completely bald, a feature which throws into strong relief the truly extraordinary shape of their skulls. We will take the sculptured portrait heads first, dealing with the other representations later. A hard brown sandstone portrait head of the eldest princess was found at Tell el-Amarna during some excavations, and a water-colour reproduction was made by H. Jones, which is found among Borchardt's illustrations of the royal portraits.¹⁷ The forehead is retreating and the skull curves backward like the contour of an egg. The occiput is rounded and sharply curved, whilst viewed in norma facialis the parietals show much splaying out on either side. Again, a similar limestone head (Berlin, nr. 14113), and another in bluish alabaster are shown by Fechheimer¹⁸ in his books on Egyptian sculpture, and of these Schäfer selects the first as representative.¹⁹

Similarly, another portrait head shows a more exaggerated elongation. This specimen is made of sandstone and is now in the Museum at Cairo, a cast (nr. 473)²⁰ being found at Berlin, and we may compare this example with another, also in Cairo,

the result of a coiffure, not, however, indicated as hair in the drawings and portrait heads. I find myself unable to agree with her upon this point, although fully recognizing that certain coiffures may have the effect of suggesting cranial abnormalities when represented in stone. The famous bust of "L'Inconnue," at Versailles, is a striking example of this. Similarly the towering coiffures (hérissons) of eighteenth century France cause the heads of their wearers to assume a remarkable appearance. The hair was brushed up in front and then flattened on the top, whilst on either side there were four or five ringlets, these occasionally appearing on the top also. The brushed-up frontal portion seems to elongate the head in an upward direction, and these astounding wigs excited much ridicule, barbers being represented on step-ladders attending them. The saying went:—

Des François, autrefois, on empruntoit les modes,
Tous leurs ajustemens étoient simple commodes,
Mais ils sont à présent contre le goût et l'art
Et l'étranger les croit, des seuls fous d'étendard !

(Engraving, Musée Carnavalet, Paris.)

For the shaving of ladies' heads in ancient Egypt see *Cambridge Ancient History*, Plates, p. 139, and cf. Murray, pp. 136-7.

¹⁷ Borchardt, Abb. 9.

¹⁸ Fechheimer, 2, p. 91. Cf. Fechheimer, 1, pp. 82, 83, 87.

¹⁹ Schäfer, 2; Taf. 24.

²⁰ See Berkhan, fig. 3, p. 158.

PLATE XVIII.



After

The Royal Family.

Borchardt.

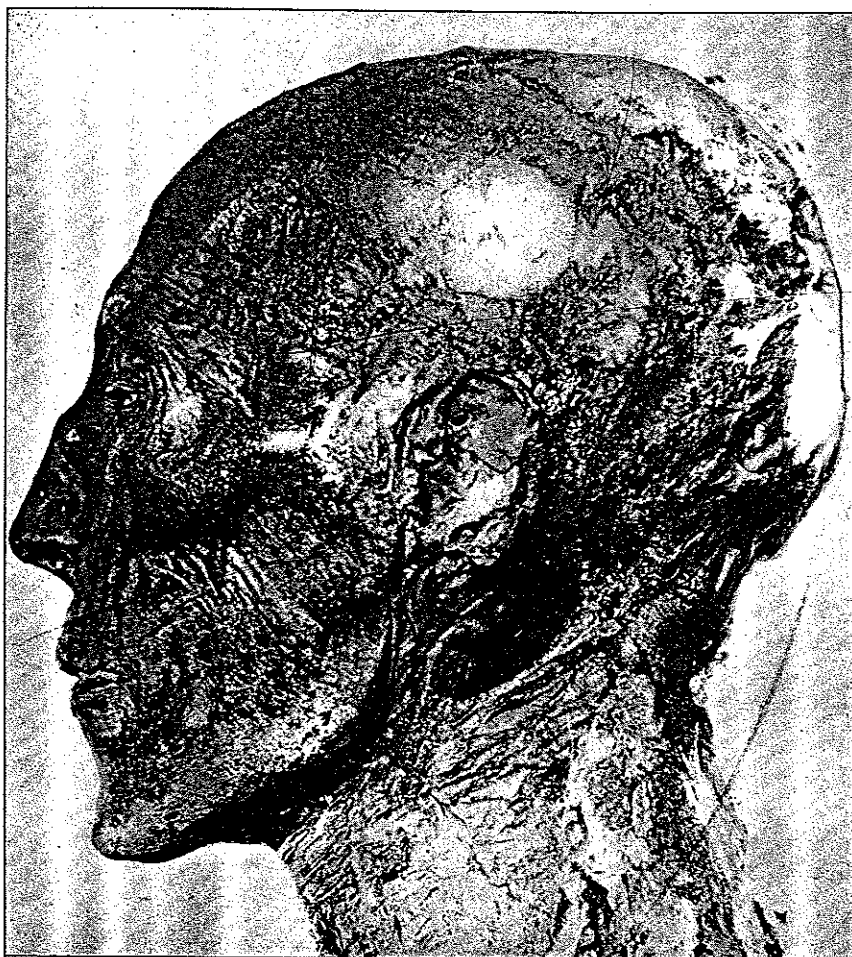


14145.

The Royal Family.

Berlin

PLATE XX.



After

Seti I.

Elliot Smith

of which the Berlin cast number is 466²¹ (see Pl. XI, *d*: *cf. c* and Pls. XII-XV). Another example, made of violet sandstone, is also to be found in the Cairo Museum,²² but this is apparently unfinished and is very similar to another specimen found during the 1926-27 excavations at Tell el-Amarna. This head is of red quartzite and was found in the grounds of House U. 37.1.²³ On the other hand a small portrait head in the Louvre, which now rests in the department of Egyptian antiquities and which is said to represent one of Akhenaten's daughters, shows no sign of deformation, whereas a small limestone head in the Municipal Museum, Bristol, which I carefully examined, thanks to the courtesy of Mr. Stanton, is very similar to the heads of the princesses with one remarkable exception, namely that the ear-lobes are neither elongated nor pierced.²⁴ The other representations of the royal children found in frescoes and mural decorations show the same peculiarity. The best known of these is the fresco (see Pl. XVI) now in the Ashmolean Museum, Oxford, which shows two of the princesses seated on a couch, their heads turned towards one another. The hinder parts of both heads are darker in colour than the frontal regions, although but slightly; the reproductions by Mrs. Davies²⁵ and the half-tones published by Borchardt²⁶ giving a wrong impression. The slightly darker colouring may represent down upon a shaven head: it does not in any way suggest that a coiffure is responsible for the abnormal shape. In Borchardt's account of the portraits of the royal family a number of reproductions are given which will illustrate the extraordinary shapes the artists have given to the heads of the princesses. Thus, for example, in a limestone relief showing Akhenaten and family (Berlin, nr. 14145), the King is shown seated upon a stool supporting one of his daughters upon his right arm (see Pl. XIX). His left hand seems about to caress her head, which is turned towards him. The skull is exceedingly

²¹ Berkhan, fig. 4, p. 158.

²² Berkhan, fig. 5, p. 159.

²³ Frankfort, p. 217, Pls. LII-LIII: British Museum cast number 58875 (see Pl. XI, *a*, *b*).

²⁴ No record of the origin of this object can be obtained. The number of the head is H. 367. *Cf.* also the representation of one of the princesses in Pl. XVII.

²⁵ N. de G. Davies, 2, Pl. I: *cf.* Spearing, fig. 192.

²⁶ Borchardt, Abb. 26, p. 29.

elongated, so much so indeed, that its length is almost four times the breadth of the neck.²⁷ Similarly, in an altar piece, one of the daughters is shown standing on the lap of her mother, whose left hand appears to caress the head of another of her daughters who is seated upon the Queen's knee. Here again the head is remarkably elongated and its appearance can certainly be described as more like an egg than anything else (see Pl. XVIII).²⁸

The elongated heads of the period are not confined to the royal family. In a painted limestone figure in relief (Brit. Mus. 55606) from the Palace of Maru-Aten at Tell el-Amarna, the head is elongated backward in a similar way, the occiput being sharply curved and rounded. Again, in the rock tombs of Tell el-Amarna, many examples can be found of these elongated heads. Thus in the tomb of Any, where offerings are being received from the hands of a servant, the head of the latter is shown somewhat lengthened.²⁹ Similar examples can be found throughout the tombs of the district, and Mr. Davies rightly points out that the grotesque angles given to the skulls and especially to the occiputs of the period destroy their relative proportions.³⁰ The custom of portraying heads according to this model did not apparently cease immediately after the end of the Akhenaten régime. In the temple of Seti I at Abydos, the monarch has a suspiciously elongated head, which, whatever may be the cause of the appearance, cannot correspond with actual fact, since the mummy shows no indication of any cranial deformation, artificial or otherwise (see Pl. XX).³¹

Now that some of the facts are clearly before us we shall be in a better position to discuss any theory which may be said to describe them adequately. Let us assume for the sake of argument that actual artificial cranial deformation was practised in Egypt during the Akhenaten period in order possibly to imitate the shape of the King's skull, which, through

²⁷ See Borchardt, Abb. 10, p. 13. Just above the Queen's shoulder appears the head of another daughter whose skull is also shown excessively elongated (see Borchardt, Abb. 8).

²⁸ See Borchardt, Taf. I and Abb. 12. This piece was found in January, 1913, and is now in the Cairo Museum.

²⁹ See N. de G. Davies, 1, Pt. 5, Pl. IX. Cf. the Syrian scene (Berlin, 14122) in Pl. XXI.

³⁰ N. de G. Davies, 1, Pt. 4, p. 19.

³¹ See Capart, Pl. XXVI.

pathological causes, was of abnormal form. A number of difficulties, however, immediately present themselves. No skulls showing forms in the least resembling those shown in the portraits of the princesses have been found in ancient Egypt.³²

This does not prove that cranial deformation was never practised in that country but it does suggest the possibility of it. We have not a great number of skulls from Tell el-Amarna,

³² In 1918, Mr. G. P. G. Sobhy published an account of a skull which was said to have been found in a tomb at Tell el-Amarna. The skull was thus described by him: "L'os frontal présente la suture métopique qui n'est pas encore ossifiée. Sa portion squameuse s'incline beaucoup dans sa partie postérieure et présente un front très bas. Près de son bord supérieur l'os présente aussi deux proéminences symétriques très bien marquées et qui ne se trouvent pas dans les crânes normaux. La suture coronale est située très en arrière postérieurement au plan coronal du sujet, et ceci à un tel point que les deux os pariétaux sont placés très obliquement d'arrière en avant et en bas et sont très réduits dans leur largeur. Ceci est dû à la grande inclinaison de la partie squameuse de l'os frontal. Les tubérosités pariétales sont poussées très en arrière. La suture sagittale est très courte, la lambôidale peut à peine être distinguée dans la *Norma verticalis* du crâne. La partie squameuse de l'os occipital est très étroite et allongée à son angle supérieur et ressemble au type simien. Les parties squameuses des os temporaux sont courtes et plus petites dans les diamètres que les os normaux." The skull had a C.I. of 70 and Sobhy compared its form to that seen in the representations of the royal children of Akhenaten (Sobhy, 1, pp. 66-67). In 1922, M. Gâtineau published a short account of some Coptic remains from Medall, near Fachn in Upper Egypt, amongst which figured the skull described by Sobhy as coming from Tell el-Amarna (see Gâtineau). It is of unknown date but may be later than the sixth century, and is certainly not of the Eighteenth Dynasty (see Pl. VI, b).

A year later Sobhy published a note in the *Journal of Egyptian Archaeology* saying that he had been wrongly informed concerning the Gâtineau skull (see Sobhy, 2), and the matter remained in abeyance until 1927, when Mr. Warren R. Dawson contributed a note to the *Lancet* of November 5, in which he suggested that the original paper by Sobhy indicated the presence of artificial cranial deformation in ancient Egypt. In the issue of the same journal for December 24, Dr. D. E. Derry pointed out Mr. Dawson's oversight regarding the discovery of the Coptic skull, a point which Mr. Dawson himself had noted in the issue for November 26. Dr. Derry added that it may be taken as certain that the custom of artificial cranial deformation did not have its origin in Egypt nor was ever practised in that country.

Deformed skulls of late date, showing a fronto-occipital distortion, have also been found in Lower Egypt, but these are considered to be of Semitic type and may have originated in Syria (see Pruner-Bey, 1, p. 46).

and the remains of the princesses have unfortunately not yet been discovered.

Now this theory involves the assumption that the Egyptians, having noted the form of their King's skull, proceeded according to the dictates of a new fashion to deform artificially the heads of his daughters, and, without any previous practice, succeeded in devising just that form of constriction which would produce the desired result. This is certainly not impossible but some may think it improbable. We have also to remember that the head of Seti I is seemingly represented as deformed and his mummy shows that in actual fact the head is normal. Therefore *if* we can accept this portrait of Seti I as an attempt to show an abnormally shaped head, then it is clear that at least in one case these portraits do not represent actual facts but are either the effect of bad artistic effort or are idealistic. The possibility of this latter interpretation leads us to another theory, namely that these portraits are ideals of what might have been or ought to be and not what actually was. According to this idea the heads of the princesses were sculptured after some fashionable model and have no relation to reality. The fact of the Queen's tight-fitting cap would suggest this, yet on the other hand the apparent absence of a head-dress in the case of the princesses is suggestive of actual deformity. Finally we have the theory favoured by Miss M. A. Murray, that the shape of the skull is due to a fashionable coiffure and has no relation whatever to reality, or to any kind of artificial deformation. Of these suggestions it appears to me that the balance of probability is equally divided between the theory which suggests attempts at actual artificial deformation and that which assumes that the portraits are idealistic. Whichever of these two theories may be true one fact is clear; namely, that in the time of Akhenaten the royal family and other personages were content to have themselves portrayed in stone and paint as possessing skulls of remarkable form, and that this shape had a close resemblance to the actual form of the king's skull as we know it from his mummy.

Whether actual deformation was practised, or whether the heads are portrayed according to some ideal form does not appear to be of importance for our present purpose. What is worthy of note is that at the time of Akhenaten we have what at present is the earliest date at which persons are represented

with skulls of a consistently abnormal shape, and as we proceed we shall remark how in other parts of Africa precisely the same form of head is produced by actual distortion at the present day. From the position of Egypt at the period and the relation between the royal family and foreign courts it would seem possible that the idea of these cranial peculiarities would be widely spread. How they were interpreted in distant lands and what influence they may have had upon foreign custom, we have no sure means of telling. We know that actual deformed skulls of about the same date have been found in Crete and elsewhere, and it would seem possible that the practice of actual cranial deformation spread northward through the Hittite Empire with which Akhenaten's Egypt was in touch. All we can hope to do is to trace the various threads as they go backward into the dim past and try to estimate the probabilities both of origin and influence.

We now pass to more modern times. The practice of head manipulation has long been known among the people of Ethiopia. Parkyns, in his book on life in Abyssinia, states that after birth the infant is immediately washed in cold water and then perfumed. The head and face are then moulded, the mother or nurse pressing the features with her fingers, whilst if the child is a boy a man pokes a lance into his mouth in order to make him courageous.³³ Similarly Mérab reports that if it be considered that the child's head is in any way ill-formed, then it is massaged and pressed with hands smeared with butter. The midwife also thinks that it is very important to press and manipulate the nose in order to give it a desired shape.³⁴ Similar customs are also mentioned in connection with tribes loosely called "Arabs," and it is said that the tenth century author, Abou-Zeyd, declared that in his day the heads of infants were moulded and manipulated, and that noble families attached great importance to the massage.³⁵

It is in Algeria and Tunisia, however, that the most striking forms of cranial deformation are to be found. Here the custom of bandaging heads is to be found and also children's features are manipulated.³⁶ Among the Berbers the custom is widespread, although I am not aware how

³³ Parkyns, vol. II, p. 35.

³⁵ See Furnari, pp. 23-26.

³⁴ Mérab, p. 182. Cf. Bieber, p. 47.

³⁶ Villot, p. 26.

ancient it may be. According to MM. Bertholon and Chantre there exists in the north-east of Algeria a vast tract of country in which the inhabitants have the custom of wearing upon their heads a mass of a voluminous material which is called *Ganour*. It is composed of a number of parts. First of all there is a sort of red skull cap which is covered with a piece of cotton cloth. Both these are bound round the head with a bandage or with the hair of the goat or camel, and this passes several times round the skull. Male children have this head-dress put on a short time after birth and it remains in place both day and night, only being taken off when it is worn out, a new one immediately taking its place. It thus happens that the skull is submitted to a compression which prevents it from developing normally. It becomes elongated upwards, the hinder portion rising and becoming cuneiform. Many of the people escape deformation altogether, their heads remaining quite normal; whilst in other places where the method of attaching the head-dress differs the resulting cranial forms become changed. Some parts of the country are more notorious for these deformations than others, for example the mountainous country to the north of the river Medjerda. Another locality which perhaps provides the greatest frequency of such deformations is the coastal area which extends from Philippeville, north of Constantine to Djidjelli. In these districts it is customary to surround the head with longer strips of material than is done elsewhere.³⁷

Bertholon and Chantre divide the deformations resulting from this circular constriction into three main divisions. The first type they describe as *inio-frontal*. Here compression is exercised mainly on the frontal bone and sometimes on the whole of the anterior portion of the vault. The second type they describe as *inio-fronto-bregmatic* in which the constriction is exercised mainly in the neighbourhood of bregma, a depression often appearing at this point giving the skull a bi-lobed appearance. The third type resembles the first, only in this case the elongation is upward rather than oblique. Owing to the varying nature of the bandages, and doubtless also to the different ways in which they are applied, deformations in this region present diverse types.³⁸

³⁷ Bertholon and Chantre, vol. I, pp. 88-89.

³⁸ Bertholon and Chantre, vol. I, p. 88.

PLATE XXI.



Berlin

A Syrian Scene.

14122.

We have already seen in our consideration of cranial deformation in France, how in many cases the ears have become distorted owing to pressure from the bandages. Precisely the same phenomenon has been observed in these regions of North Africa, the ears being often almost folded double through constant pressure in infancy (see Pl. XXII).

When considering cases of these deformations, some mention of the cephalic indices may be of interest. Out of 200 persons examined by Bertholon and Chantre, 90 presented cases of the first type of deformation, 72 of the second type and 34 of the third type. In Type I, 48 had shortened skulls and 42 lengthened; in Type II, 38 shortened and 34 lengthened; and in Type III, 30 shortened and 2 lengthened. Thus in Kef, where the C.I. of normal cases is on an average 73.52, the 9 deformed subjects showed indices varying from 72.5 to 79.23. A similar change can be found in Tunis itself, where the normal C.I. averages 75.59, whereas the indices of the deformed subjects vary from 72.22 to 78.14.³⁹

Among the population of the Sudan also, cranial deformations are occasionally observed, although these are not common, the region around Lake Chad⁴⁰ supplying the majority of cases. Among the rather primitive Bobo the new-born child is rubbed and has its arms stretched out in order to assist growth, although it does not seem that any definite head manipulation is practised among this people.⁴¹

Again, among the people of Ashanti, when a child is born, the head is often tightly bandaged so as to compress it and make it cone-shaped. This practice is reported as being most common amongst those of the purest lineage and amongst the aristocratic classes generally. When those who are thus deformed become adults they are said to resemble Egyptian types, and there seems no doubt that an elongated head is much admired.⁴² In this connection it is interesting to record the fact that pregnant women often carry about with them a little black doll (*Akua'ba*) which has a very long pointed head,⁴³ and Dupuis, during his residence in Ashanti, mentions certain specimens of Ashanti carving where the heads are represented as cone-shaped.⁴⁴

³⁹ Bertholon and Chantre, vol. I, p. 90.

⁴¹ Cremer, p. 61.

⁴³ Rattray, p. 54.

⁴⁰ Decorse, p. 136.

⁴² Moir, p. 109.

⁴⁴ Dupuis, Pl. VII.

Among the tailed head-hunters of Nigeria the heads of babies are massaged after birth in order to give them the correct shape and to keep them from becoming too broad. Both sexes are thus treated and the hands of the operator are warmed and greased before commencing work.⁴⁵ Amongst these people circumcision is also prevalent, and men's left ears and both women's ears are pierced, whilst the custom of lip perforation is occasionally found. In Southern Nigeria also, especially amongst the Ibo, the heads of children are moulded after birth, particularly if the back of the head seems to rise in the form of a crest. Flat and round heads are preferred as pointed ones are hardly adapted for carrying burdens. A depression is occasionally observed running along the sides and top of the head, continuing sometimes into the hollow between the eyebrows, which groove is said to be due to unskilful manipulation during infancy.⁴⁶

In the Cameroons the custom of artificial cranial deformation is not unknown. Amongst the Garegas in the north Cameroons the custom is found of pressing the heads of infants softly but repeatedly with the flat hand. The upper part of the forehead is firstly attended to and then the occipital region is moulded in the attempt to give it an ovoid shape.⁴⁷ Again, amongst the dolichocephalic Bali, a negro people of Sudan, who dwell in the Cameroons, Hutter observed that in many cases the forehead had been flattened backwards and the parietal region somewhat pointed. The heads of children were pressed and moulded soon after birth, the aim again being to give their skulls an egg-like appearance.⁴⁸ In the grassland area, Berké, in his anthropological notes upon the Cameroon negroes, does not record any examples of artificial cranial deformation. But in the Bagam area it appears that two forms can be distinguished, one where the head is elongated posteriorly and the other in which the parietals bulge in a lateral direction. This latter form of deformation is said not to be intentional, but I am not aware what accident is to be held responsible. The intentional elongation is said to be produced by the mother, who moulds the heads of her infants immediately after birth. Long heads are considered to be signs of racial distinction and skulls thus formed are much

⁴⁵ Tremearne, 1, pp. 152, 161, &c.: Tremearne, 2, pp. 110, 162.

⁴⁶ Talbot, vol. II, p. 356. ⁴⁷ Zintgraff, p. 209. ⁴⁸ Hutter, pp. 327-329.

PLATE XXII.



After *Bertholon and Chantre.*
a
From El-Arrouch.



After *Bertholon and Chantre.*
b
From Oulban.



After *Bertholon and Chantre.*
c
From Palestro.



After *Bertholon and Chantre.*
d
From Khememsa.

admired. In order sometimes to increase the effect of the elongation a skull cap is attached to the hair of the occiput.⁴⁹ Amongst the tribes of a neighbouring area Thorbecke is said to have referred to signs of similar deformation,⁵⁰ and in his discussion of ninety-three skulls from the Cameroons Drontschilow⁵¹ mentions the decided flattening of the occiput in a number of cases, which Berké⁵² has attributed to the method by which children are carried, an explanation which does not seem to me to be very probable.

We will now glance at the custom as it is practised among the mixed Mangbetu people who live in a region south of the Niam-Niam and east of Uganda.⁵³ In colour this people varies from dark chocolate to light coffee, and some people of even paler skins have been observed, although these may have been cases of albinism.⁵⁴ Their country is densely populated and the general civilization of the people is remarkable. The land is divided into kingdoms, east and west,⁵⁵ and government is carried out by underlings who rule the various provinces. They can be hardly said to practise any agriculture and have no domesticated animals with the exception of the dog. Weaving is unknown,⁵⁶ but pottery and basketry show advanced technique in workmanship. Commerce is mostly carried on in ivory with neighbouring peoples, but formerly the Mangbetu were much feared on account of their slave-raiding expeditions. What is perhaps most striking in their civilization is their architecture. Munza's great hall was reported to be 100 ft. long, 50 ft. wide and 40 ft. high,⁵⁷ whilst even the smaller buildings have excited the admiration of travellers. Although the Mangbetu are undoubtedly by far the most advanced people in Central Africa,⁵⁸ cannibalism was at one time extremely prevalent,⁵⁹ but it is probable that the ritual significance of the custom had been underestimated. Among the deformations and mutilations observed among the

⁴⁹ Malcolm, p. 11. ⁵⁰ See Malcolm, p. 11. ⁵¹ Drontschilow, p. 167.

⁵² See Malcolm, pp. 11-12 and Berké.

⁵³ See map by Czekanowski, and *cf.* Mombuttus, &c., I, 95.

⁵⁴ Miani, p. 19. This writer lived among the Mangbetu for seven years, and according to Christiaens he died amongst them.

⁵⁵ Overbergh, p. 505.

⁵⁶ Schweinfurth, 2, vol. II, p. 88.

⁵⁷ Wills, p. 296.

⁵⁸ See Junker, 2, p. 132, and *cf.* Paulitschke.

⁵⁹ See Cannibalisme (Le); Schweinfurth, 2, vol. II, p. 93.

Mangbetu, Schweinfurth⁶⁰ says that perforation of a part of the ear⁶¹ and the circumcision⁶² of boys are the only ones that he has observed, whereas other authors have furnished different reports.

Some variance for example is shown on the question, whether teeth are mutilated or not,⁶³ Czekanowski affirming that in some cases the distance between the middle incisors is increased,⁶⁴ whilst Colonel Long states that the teeth are in some instances filed to a point.⁶⁵ The majority of the authorities however are agreed on the question that the upper classes among the Mangbetu take great trouble to deform the heads of their children, although Father van Mol does not appear to mention it in his account⁶⁶ of birth among the Mangbetu, and his illustrations of women in his paper⁶⁷ on puberty ceremonies and circumcision do not appear to show any artificial deformation of the head. The form of the Mangbetu skull is said to resemble somewhat the Semitic type⁶⁸ but Shrubsall who reports having examined two Mangbetu skulls in 1901 does not say anything about either of these being deformed.⁶⁹ This may be due to the fact that, as in so many other parts of the world, the practice is not universal among the Mangbetu, but is usually confined to the more aristocratic⁷⁰ of the community.

The operation of deforming the child's head begins very early in its life. Before it is weaned⁷¹ the head is bound round and round with bands of bark cloth,⁷² string,⁷³ fibre⁷⁴ or the hair of the giraffe.⁷⁵ Junker, in his travels in Africa during the years 1879-83 was much struck by the form of skull produced by bandaging (see Pl. XXIII, a). He says

⁶⁰ Schweinfurth, 2, vol. II, pp. 106-107; Schweinfurth, 1, p. 18.

⁶¹ Long, C. C., 2, p. 272.

⁶² Parke, p. 400; Junker, 1, p. 366; Emin Pasha in Central Africa, &c., p. 212; Mol, 2.

⁶³ See Overbergh, p. 575.

⁶⁴ Czekanowski, 2, p. 138.

⁶⁵ Long, C. C., 1, p. 233, but *cf.* Levy, p. 66, who denies this. *Cf.* also Emin Pasha, p. 167.

⁶⁶ Mol, 1.

⁶⁷ Mol, 2, p. 364.

⁶⁸ See Heawood, 1, p. 467.

⁶⁹ Shrubsall.

⁷⁰ *Cf.* Burrows, p. 95: Emin Pasha and G. Casati, p. 208.

⁷¹ See Junker's (Dr.) Last Explorations, &c., p. 342.

⁷² Christiaens, p. 17: Levy, p. 66: Flandrau, pp. 161, 176.

⁷³ Burrows, p. 95.

⁷⁴ Brett, p. 82: Migeod, p. 208.

⁷⁵ Haardt and Dubreuil (ap. Léon Poirier), p. 206: "Black Journey" Women, &c., p. 135.

that fillets, made of numerous black threads of about the thickness of knitting-needles and when made up forming bands of from two to four inches wide, were used for the purpose of constriction (see Pl. XXIII, *d*, Pl. XXIV).⁷⁶

Another interesting description of the process of deformation was given by Capitaine Commandant Christiaens in a lecture to the members of the Cercle Africain of Brussels on November 28, 1896. "Mangbetu mothers," he says, "compress the heads of their new-born children by means of thin bandages made of bark, with the aim of causing their skulls to become elongated backwards as far as possible so that when they are grown up they may be admired."⁷⁷ As Christiaens points out, the skull under this treatment is lengthened in a posterior direction, becomes ovoid⁷⁸ and in shape closely resembles the heads of the young princesses of the Akhenaten period (see Pl. XXIII, *e*).

In the letters and journals of Emin Pasha, he mentions this lengthening, and states that the form of head amongst the ruling families shows an extraordinary increase in length,⁷⁹ this being also noted by Czekanowski, who observed a case in which the breadth was 82 mm. and length 161 mm.⁸⁰ In order further to accentuate this cranial elongation, the Mangbetu fashion of coiffeurs and head-dresses is of great service. The correct method of hair-dressing is to arrange the hair so that it resembles a little tower leaning backward, on the top of which a small straw cap is often perched (see Pl. XXIII, *c*).⁸¹ The prevailing fashion in heads is reflected

⁷⁶ Junker, 1, p. 241. Lang told Oetteking that bast from *Raphia vinifera* P.B., and *Raphia monbuttorum* Drude were used. See Lang, p. 13.

⁷⁷ Christiaens, p. 17: Cf. Levy, pp. 66-67. Through the kindness of the Librarian of the Union Coloniale Belge I have been able to inspect this very rare book in the original.

⁷⁸ Burrows, p. 95. Sir Harry Johnston states that another method of head deformation among the Mangbetu is to tie flat pieces of bark on either side of infants' heads, and the resulting forms are imitated in certain masks in the South Central Congo. A similar form of deformation, he states, is practised amongst the Bopoto and the Ngombe of the Northern Congo. This may perhaps illustrate the fact that it appears that methods of deformation seem to change and then finally disappear as distance increases from the central area (see Sir H. Johnston, vol. II, pp. 580, 672).

⁷⁹ Emin Pasha in Central Africa, &c., p. 212. ⁸⁰ Czekanowski 2, p. 139.

⁸¹ Casati, 1, vol. I, p. 121: Vandevliet, p. 150. For a good idea of the shape of the deformed head apart from the hair see Hutereau, p. 77 and cf. Mittelholzer, Abb. 87.

not only in art but in its imitation by other peoples. Vram notes that knife handles are occasionally carved with cylindrical-shaped heads as ornaments,⁸² and as we have seen, other Congo peoples have been reported as practising cranial deformations. Thus the BaKongo (BuShongo), who came from the north, practise a form of head massage. During the first few days after birth, the head of the baby is moulded by an old woman, who is considered an expert in the art of massage (*unkwa kufuta*). By this moulding she tries to make any irregularities disappear and to cause the fontanelles to close, thus giving the child "a good head."⁸³ It would appear also that more complicated forms of cranial deformation are practised among this people, since Brumpt reports that the resulting distortion can be compared to that which we have already seen described in Europe as "*la déformation toulousaine*."⁸⁴ Again, certain of the peoples living near the rivers Lopori in the Belgian Congo and on the Balombo, which flows into the sea just north of Benguella, are said to compress their children's heads into shapes resembling cones or sugar loaves,⁸⁵ and a similar story is reported of peoples living in the Massumba and Lunda districts. Here Pogge states that after birth the heads of children are frequently compressed so that the posterior portion of the head is elongated backward to a monstrous extent (*so dass der Hinterkopf monströs weit nach hinten steht*). In the case of Muata Yanvo's little children, the heads have been compressed to such an extent that Pogge adds, one might suppose that as monstrosities they had entered the world.⁸⁶ Again in Kiziba, on the western side of the Victoria Nyanza, native midwives are accustomed to press the heads of babies with the palms of their hands, smeared with fat and warmed at the fire to give the skulls a special shape. This system of head pressing is called *kubumba*,⁸⁷ and Claridge states that it is a common custom, among certain of the bush tribes in the Congo, to massage the limbs of infants with pieces of iron to mould their

⁸² Vram, 4.

⁸³ Wing, p. 247: a good example of a BuShongo deformed skull is in the Peabody Museum, Harvard, Mass., nr. 59716.

⁸⁴ Brumpt, p. 439.

⁸⁵ See *Tatouages (Les)*, &c.

⁸⁶ Pogge, p. 242. The son of the founder of the Lunda empire was named Yanvo and Muata Yanvo then became the hereditary title of Lunda rulers.

⁸⁷ Rehse, p. 24.

muscles.⁸⁸ Here again we see the same process of apparent degradation at work. One centre has a strictly enforced custom of head deformation. Radiating outwards from this centre like the spokes of a wheel are other communities where either the same process of deformation is carried out to a less extent, or other methods are substituted for it. We then have the practice of simple manual moulding of the infant's head, and then of the whole body till finally the practice fades away altogether.

It may well be that certain of the carved wooden figures from the Congo represent that form of deformation which is most admired in African territory. Many of these show an elongated skull and flattened crown, resembling in their rude way the elongated heads of the daughters of Akhenaten, the aristocratic women among the Mangbetu and the children of the Muata Yanvo. In the Museum at Frankfurt a/M., there is preserved an excellent example of one of these magical carved figures from the Congo. It is of dark brown wood finely polished and is 37.5 cm. high. The head slopes backward from the supra-orbital ridges in almost an horizontal line. The occipital region is slightly raised and extends backwards, whilst the jaws are inclined to prognathism. Both belly and breasts suggest that the figure may have been used for fertility rites, and such figures are fairly common throughout the district, the heads often exhibiting an extreme degree of distortion (see Vatter, Abb. 26 and Pl. XXIII, b).

In South Africa I am not aware that artificial cranial deformation has been reported to the extent that we are justified in regarding it as an actual custom. Scattered references occur here and there, such as that by Fritsch, who in 1886 reported the discovery of a Hottentot deformed skull with an extreme elongation as if produced by constriction of bandages.⁸⁹ I am not, however, satisfied that any valid evidence exists that the practice of cranial deformation was ever carried on by the Hottentots, and we can more profitably turn to Madagascar, where it would appear that the custom was at one time in full swing. The Vazimba, or rather what was left of them after the Antimerina absorption, are said to

⁸⁸ Claridge, p. 101.

⁸⁹ Fritsch, 2, cf. J. B. Davis, 5, p. 213, nr. 859, and for a Zulu example, p. 215, nr. 573.

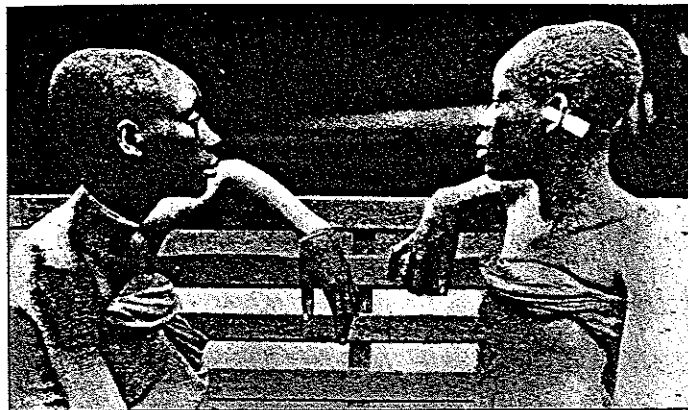
have practised a form of head deformation which resulted in a skull of pyramidal shape. Drury, who was for some fifteen years in Madagascar during the early part of the eighteenth century, is our authority for this statement and he says that the heads of this people "are of a very singular Shape, the hinder part as flat as a Trencher, and the forehead very near so; which I do not think to be natural, but framed thus by pressing, and squeezing the Children from their Birth."⁹⁰ This account of what is apparently a form of fronto-occipital flattening is accepted by Grandidier,⁹¹ and it would seem that there is some reason to suppose that the Vazimba, with whom Drury associated, did actually endeavour to modify the shape of their children's skulls. How they acquired the custom we have no means of telling, and the meagre information left by Drury is not sufficient to supply any details as to the custom. It is possible, however, that the practice is another of those features which were brought over from south-east Asia, but at present our knowledge of the populations of Madagascar is not sufficient to supply us with any theory based upon a solid foundation of fact.

Having given a short and very incomplete survey of the practice of artificial cranial deformation in Africa, it may be as well if we briefly summarise some of the facts which we have acquired. We have seen how in Ancient Egypt the heads of certain members of the royal family of the Eighteenth Dynasty exhibit a strange anomaly inasmuch as they are represented as being elongated backwards to an amazing extent. Whether or not the appearance indicated an ideal or an actual anatomical fact we were unable to decide, but we pointed out that the important fact to be remembered was that undoubtedly there would have seemed to be a desire to cause the heads of certain persons of the period to appear as if they were deformed. It was also seen that this gave us an opening date for the appearance of cranial deformation as far as our present knowledge extends. It was also shown that up to the present no skulls showing artificial deformation and of indubitably ancient date have been discovered in Egypt, the earliest being about the sixth century A.D. We then glanced at the same custom in north Africa and then we

⁹⁰ Drury, p. 406.

⁹¹ See A. Grandidier, 1, p. 130; A. Grandidier, 2, p. 34.

PLATE XXIII.



After

a

Hutereau.

Mangbetu Women.



After

b

Vatter.

Carved Figure from
the Congo.



After

*Haardt and
Dubreuil.*

c

Mangbetu Woman.



After

*Haardt and
Dubreuil.*

d

Mangbetu Mother and
Child.



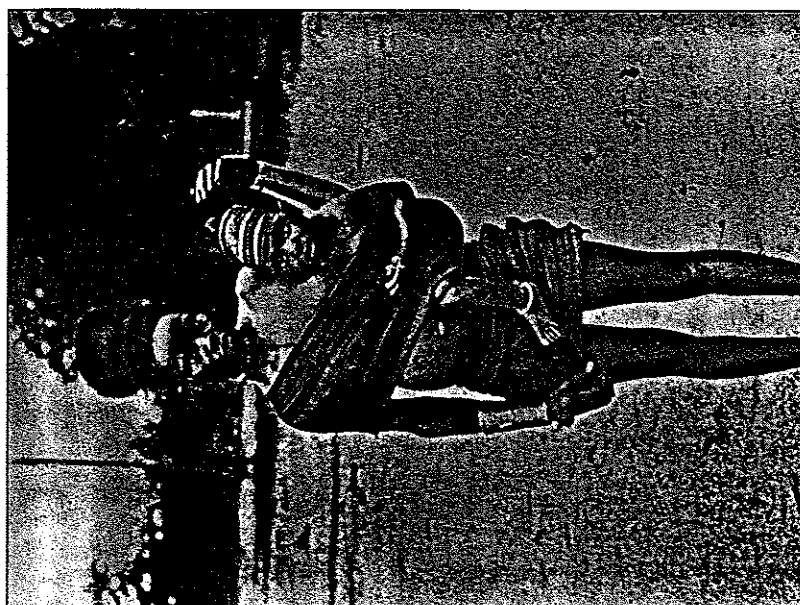
After

e

Jacovleff.

Mangbetu Woman.

PLATE XXIV.



After
a
Ozekanowski.
 Mangbetu Mother and Child.



After
b
Migeod.
 Mangbetu Mother and Child.

proceeded southward and saw how the same practice was to be found from Ashanti to Angola. Next the land of the Mangbetu was visited, and we saw how the practice seemed to be borrowed by the neighbouring tribes from this powerful people. Finally in Madagascar we saw how some of the population have been reported as practising a form of cranial deformation which will remind us of the same practice as it is carried out by peoples of Oceania. Similar features here as in other parts of the world can again be discerned. The custom is only carried on by ruling groups and not by commoners. It flourishes in certain centres and then is either changed or dies away as distance increases from those centres.