

PROCEEDINGS OF THE PARIS ANTHROPOLOGICAL  
SOCIETY.\*

---

*Hair as a race character.*—M. Bonté, in reply to M. Pruner-Bey, observed that although we cannot expect the most *rigorous conformity* between the hair of the same head, two conditions are nevertheless required in order that it should constitute a race character. The first is that there should exist a general form upon the same head; the second that this general form should belong *exclusively* to that race and not to any other foreign races.

Starting from this principle he had two objections to offer to M. Pruner-Bey's theory: first, there are met with on the *same head* the most *different* sections, nor is there any general specific character seen; second, so little can the hair be considered as a race character, that the most similar sections are found on the heads of races quite distinct from each other.

If this diversity were only met with in heads of mixed blood it would be very natural, but such is not the case. To commence with the Arab. In five sections of the hair of the same head *not one resembles the other*. Now the Arabic race is by M. Pruner-Bey himself considered as perfectly pure. The same applies to the hair of the Esquimaux, the Jambas, and the Malays, in whom the sections of the hair on the same head greatly differ.

As regards the second objection, namely, that he found similar forms in the most distinct races, he would mention that he met with a circular form in the Japanese, the Chinese, the Mongols, the Aymarus, the Peruvians, South Americans, Turks, Gonds, and Basques. He would admit that the first four are allied in blood, but still there subsists a marked difference between some of them. Compare, for instance, the dolichocephalic Chinese and the brachycephalic Japanese with the pure Calmuck! Are all the Americans of the same race? Why, M. Pruner-Bey considers the American as a heterogeneous race, despite the uniformity of their hair. Thus, according to our author, the same hair may exist in the heads of races differing in every other respect, which was quite sufficient to establish his (M. Bertillon's) starting points.

Boucher de Perthes read a paper "On New Discoveries of Human Fossils in the Diluvium", already noticed by the *Anthropological Review*.

November 3, 1864.—*London Anthropological Society*.—Mr. Carter

\* Continued from No. xv, p. 386.



Blake transmits to the society a printed list of the papers to be read before the Anthropological Society of London during the session 1863—1864. This list comprises twenty-four memoirs on a variety of interesting subjects. This is the best answer to a recent decision of the British Association which has decreed “that Anthropology forms but an *inferior* branch of Ethnology”—(laughter). Despite this decree, which fortunately may be appealed from, the London Society is becoming rapidly developed, numbering already 439 members.

*Merovingian Crania of Langres.*—M. de Saulcy presents to the society four crania found at Langres in Merovingian tombs. Col. Fernel, who superintended the excavations, gives the following account: There exist in the territory of Langres two Gallo-Roman cemeteries, the one within the citadel, the other at the northern extremity of the suburb called *Sous-Murs*, about forty mètres from the wall. The latter cemetery is about three hundred mètres long and fifty mètres wide. The former is in the west limited by a Roman road and is filled with cinders, carbonised substances, and sculptured tombs. The quantity of animal bones is so great that the workmen trade in them. Bones of the wild boar are specially abundant.

All the tombs are monolith troughs with monolith lids. In these tombs were found earthen lamps, oil vases, ivory hair pins, medals from the time of Tiberius and Constantine; urns filled with cinders and bones have been found in the vicinity. The number of the tombs is so great that a suburb called *des Anges* has taken its name from them, though the learned assert that the name *Anges* is derived from *aage*, water. Langres is known to have been a vast necropolis, and there is daily found varnished pottery with the names of the manufacturers Germanus, Primus, Sigillus, Macrinus. Most of the crania crumble into dust on exposure to the air.

M. Broca places on the table the first copy of a chromatic table (already noticed in the *Anthropological Review*). M. Meillet gives some particulars concerning the manufacturing of worked flints near Pressigny-le-Grand. The fields of Pressigny, of which there are about twenty-five, are encumbered with *débris* of worked flints, knives, etc. Flint hammers are found which served for the manufacture of the various objects. M. Meillet found also hatchets well worked of the same form as those found in dolmens. Two of these hatchets were three-fourths polished. Some amateurs of Pressigny possess a dozen of them found in a particular field. The large flints which are found in immense numbers are the nuclei from which the knives are split off which are found in every stage of workmanship. What is singular is that the principal field where these objects are found,



though situated in the open country far from towns and villages, is still called *Champ du Commerce*. These museums of a novel kind are not in a diluvian terrain but on the surface of the soil or covered with a recent deposit. M. Meillet thinks that they belong to the third period of the stone age, which preceded the appearance of metal.

*M. Pruner-Bey on the Neanderthal Skull, in reply to Dr. B. Davis.*—The question relative to the Neanderthal cranium has entered a new phasis. An English officer has in the environs of Gibraltar discovered an enlarged edition of this cranium, *i.e.* with an identical cranium, but with an *entire face*. I place before the society the photograph of this object for which I am indebted to Mr. Busk. The original is in possession of our eminent colleague, and we shortly expect to hear the particulars.

I fully agree with the judicious views of Dr. Barnard Davis with respect to the first condition in the examination of any cranium. First, it must be determined whether the object is in a normal state. As regards the Neanderthal cranium I also admit that the state of the sutures corresponds with the clear and precise description given by Dr. Davis, and that their obliteration may partly at least have been premature. But in admitting this possibility I should be much embarrassed to prove its reality. There is no doubt that the Neanderthal man is an aged subject, as shown by the sinking of the anterior lobe of the brain and the state of the arteries, which may be ascertained in the internal cast of the cranium. Besides this the coronal suture presents in the line of its obliteration the senile character. Secondly, if this cranium is abnormal from the cause assigned by Dr. Davis, how can we explain the concordance of its circumference and its principal diameters with those of other ancient Celtic crania which are found in the normal state?

There is another argument which appears to me decisive. The piece I have the honour of submitting to the inspection of the society comes from an ancient tumulus of Poitou (Pictones). It is a frontal bone to which fragments of the parietals are still attached. The coronal suture finely indented is still open. But what is most remarkable is, that in the centre of this suture there exists an intercalated ossiculum where ordinarily the sagittal suture commences. This ossiculum in form of a parallelogram has a length of 41 mm. and a breadth of 27 mm. The four sutures by which it adjoins the frontal and the parietals are also open and finely denticulated. Here we have a multiplication of sutures, *i.e.* a disposition reverse to that pointed out by Dr. Davis in the Neanderthal cranium, and yet by the development of the frontal sinuses, and still more by the lowness of the forehead we are permitted to approach it to the Neanderthal cranium. At least



its internal surface adapts itself perfectly to the cerebral mould of the latter ; and, taking into account the difference of age of these two individuals, it is presumable that the projection of the supraciliary arches would have increased in the posterior if he had lived longer. His frontal sinuses have an elevation of at least 30 m.m., a width of 45 m.m., and a depth of 13 m.m. Their cellules are in horizontal juxtaposition as is the rule in ancient dolichocephalic crania, whilst in brachycephalic they are vertically superposed. The fragment of the cranium just described comes from the territory of the ancient Celts, another motive for insisting upon a similar origin of the Neanderthal man. Lastly, whilst recognising the great influence of a spontaneous and premature obliteration of the sutures on cranial forms and *vice versa*, I am not aware that the cranium thereby changes its primitive form so that its national character is no longer recognisable. I ask, can the spontaneous obliteration of the sutures without artificial compression convert dolichocephali into brachycephali and *vice versa* ?

I am happy to agree with our eminent colleague as regards the human and European characters of the Neanderthal skull, and I may by the way mention that Mr. Carter Blake has compiled a complete and remarkable collection of the literature relative to this subject which has been discussed more or less successfully in all Europe. Very lately M. Meyer has found traces of rachitis in the left forearm and the ribs of the Neanderthal man. This individual was then in a pathological condition. Finally Mr. Turner has as appears to me proved, even to the satisfaction of Mr. Huxley, the parallelism between modern crania of Europe and that of the Neanderthal.

November 17, 1865.—*Distribution of the Basque Language in France*.—M. Broca in presenting to the Society a manuscript map indicating the actual limits of the Basque language in France, said, in one of our preceding discussions, the question of the gradual extinction of languages was mooted. I endeavoured, therefore, to ascertain whether the Basque had lost ground during the last centuries. For this purpose I have searched the various authors on this subject, but to my surprise none of them indicates these limits. All that is said on the subject amounts merely to a statement, that the Basque is spoken at the foot of the Pyrenees in Soule, Basse Navarre, and Labour. Old authors are equally vague, and with such data it was impossible to compare the past with the present. After an interesting account of the history and distribution of the Basque language, M. Broca expressed his opinion that the Basque would sooner or later be supplanted by the French language, and not, as some think by the Bearnese dialect ; and that everything leads to the conclusion that in a few generations the Basques will all speak



French, and have forgotten the language of their ancestors. In Spain the Basques had lost territory since the commencement of this century ; half a century ago it extended south to Puerta del Reyna ; at present the limits of this language pass a little north of Pampeluna, and have thus diminished by eight leagues towards the north. The Basque country of France, from its greatest length from the Pic d'Anié to the mouth of the Bidassoa, is only twenty-five leagues. In its eastern portion it was, on the average, ten leagues in breadth, and in the west its width does not exceed four to five leagues ; M. Broca also stated that he was, with the assistance of M. E. Réclus, preparing a similar map of the Spanish Basque provinces, for which he would claim the assistance of M. Velasco.

M. Martin de Moussy thought that these researches should be hastened as much as possible, for the alteration of the Basque language proceeds so rapidly that those speaking it reproach each other for altering it. Moreover, the Spanish and the French Basques accuse each other of not speaking the genuine Basque.

M. de Quatrefages said, that there are such profound differences in the dialects, that he had seen French and Spanish Basques, who were obliged to have recourse to French to understand each other.

M. Goussin considered such a map of the distribution of the Basque language of the highest importance, and proposed its immediate publication.

M. Broca, however, thought it would be better to wait till that for the Spanish Basque provinces was ready, when one map embracing the whole region where Basque is spoken might be published.

*On the Larynx of Negroes.*—M. Auburtin called the attention of the Society to a memoir by Dr. Gibb, which recently appeared in the Report of the British Association, and which was based on the examination of fifty-eight dissections of the larynx of Negroes compared with the larynx of the white. If the facts are correct, we are authorised to think that the particular *timbre* of the voice of the Negro is owing to these anatomical differences.

M. Pruner-Bey said that he had dissected many larynges belonging to distinct races, and the differences he could detect applied chiefly to the form of that organ, which is rounded in the Negro and angular in the Arab, for instance. M. Eschricht has found in the larynx of the Negro, an internal cricoidian muscle, which also exists in the ape ; but it is possible that this is only an individual character which is not applicable to the whole race ; an error to which we are liable when inferred only from few cases.

December 15, 1865. — *Crania of the Sepulchre near Maintenon (Stone age).*—M. Leguay presents to the Society in his own and Dr.



Lamy's name three crania found in a sepulchre, of which he gives a minute description. He expressed the hope that well-directed excavations will reveal the mystery attached to this interesting monument. One of the three heads presents all so-called Celtic characters, and the form of all the three crania resembles much that of the crania he found in 1862 at La Varenne, Saint Hilaire, and which he had assigned to the period of polished stone preceding the bronze period. The three tibias which he also presented, although belonging to adult subjects, differed considerably in size; one of them presented an alteration resulting from a chronic ulcer.

*Prognathic face of a Cranium of the Stone period.*—M. Pruner-Bey showed to the Society a plaster-cast of a human face found in a stalagmite breccia by Viscount de Sambucy in the cavern of Larzac (Aveyron). Near this piece were two crania of the ancient Celtic type, small fragments of brachycephalic crania, fragments of the pelvis and the tibia, a fragment of the humerus of a child, pieces of charcoal, and of coarse pottery containing grains of quartz.

The piece must have belonged to an infant, there being in the jaws only room for six teeth. What strikes us first is a prognathism as decided as in the chimpanzee at the commencement of the second dentition. The alveoli of the incisors and of the canine teeth are very wide and deep; those of the latter projecting from the face. No trace of an intermaxillary bone, nor of a incisive suture. The length of the alveoli is as considerable as in the most prognathous adult Negro, but their forward inclination exceeds that observed in the latter. After some further descriptive remarks, M. Pruner-Bey continued: What are we to think of this specimen? Its human origin is unquestionable, since its prognathism, owing to the absence of the intermaxillary, is not that of the ape, nor has it any other character of the anthropomorphous apes. He thought that it was a pathological specimen. Crétinism presents two series of phenomena; one series manifested in the cerebral cranium, indicates arrest of development, whilst the other shows in the face, by an inverse progress, the features of animality. Crétins have usually the tongue very large; many of them are prognathous. He admitted, however, that he had never seen any analogous cranium.

M. Gratiolet said that the prognathism of this piece was certainly considerable, but did not present the prognathism of the ape, in which the alveoli project forward, but the line from the maxillary to the nasal spine is always curved and convex. In man it is curved but concave; so that even in the absence of the intermaxillary bone we are enabled to assert that it is not a pithecoïd prognathism, but a prognathism peculiar to man.



*On the Pelvis of Different Races.*—M. Pruner-Bey read a long and interesting historical and critical essay containing a summary of the views of various authors on the form of the pelvis in different races of mankind. The greater portion of this paper is devoted to an analysis of M. Joulin's interesting treatise, *Sur le bassin considéré dans les races humaines*,\* in which that author, differing from his predecessors, endeavours to demonstrate :—

I. That the important anatomical peculiarities which have been signalised as characterising the pelvis of the Negro and Mongol races have no existence.

II. That the slight differences observed in the pelvis of three human races have nothing characteristic in them ; they only appear when the comparison is made in a number of subjects.

III. That the Mongol and Negro race present, in the conformation of the pelvis, an identity which does not admit of their being distinguished.

IV. That whilst, by the examination of the cranium, we ought to divide the genus *Homo* into three principal races, the examination of the pelvis only furnishes two groups. In the first group the author places the Aryan or Caucasian race ; in the second the Mongol and Negro races.

*On the Crania from the Cave of Lombrives.* By M. GARRIGOU, read by the Secretary General.—Our readers will find a description of the caverns and of the crania in Professor Vogt's *Lectures on Man*. Here we give a few more extracts of M. Garrigou's paper :—The tear and wear of the teeth observed in fossil human jaws is so general that it must be owing to a general cause. Prof. Richard Owen, to whom a speculator of Avignon sold fossil bones from the cave of Bruniquel, has expressed on this subject an opinion which certainly would not have presented itself to his mind had he been present at the excavations. He thought that the men of Bruniquel did not cook their food, since all the teeth were completely used up by the mastication of raw aliments. I have no hesitation in saying that this interpretation is erroneous.

The bones of all the caverns, especially those of the polished stone age, may be divided into two categories ; such as adhere to the tongue and such as do not adhere, which two categories exist in almost all caverns formerly inhabited by man. I believe that the first of these bones belonged to animals, the flesh of which was either roasted or boiled, whilst the second were not subjected to any preparation. These bones are frequently found amidst cinders and charcoal, or in a mass agglutinated by grease, cinders, and coal. The

\* *Archives Générales de Médecine*, Juillet 1864.



condition of bones used for the fabrication of instruments supports my opinion. These bones are usually hard; they have preserved their gelatine, and do not adhere to the tongue. It is presumable that the men of the prehistoric period had still sufficient experience to know that fresh bones, containing still their gelatine, were preferable for making implements to bones whose solidity was diminished by cooking. I conclude, therefore, that the men of Bruniquel, like those found in stations of the pre-historic epoch, cooked the flesh of animals, and that the excessive wear of their teeth must be ascribed to some other cause than that assigned by the learned English professor. For my part I am inclined to ascribe the wear of the teeth of the peoples of the quaternary period to the use of raw vegetables, roots, or other parts of trees and plants. I also agree with MM. Vogt, Morlot, and others, that the mastication of coarse bread, intermixed with stony particles, is the chief cause of this wear and tear of the teeth.

After giving the description of these crania by Professor Vogt, with whose conclusions, as regards their elevated type and their osteological construction, he agreed; he, nevertheless, did not share his opinion that they were Basque crania. He looked upon these two crania as having belonged to mongrels of Celts and Iberians, presenting however more of the type of the latter. He could not conclude without offering some observations on craniology and its results as affecting the antiquity of man upon the earth.

Hitherto two great divisions have been established for the study of crania. Round, short, Iberian, brachycephalic, and elongated, Celtic, dolichocephalic heads. These divisions may suffice for the present; but the time will arrive when a new and more ancient form will be established, and when the dolichocephalic and brachycephalic crania, now forming separate species, will only be considered as varieties. Already human remains, probably more ancient than such at present known, discovered by M. Alzien and by himself, and of which M. Pruner-Bey has promised to give an account, do not present the character of pure dolichocephaly. He felt convinced that, despite the authority of Lyell, the primitive type of man will be found not merely in the post-pliocene and even the pliocene beds, but in lower geological strata. Wherever such perfect mammals as the mastodon, the lion, and the hyæna, could live, man could exist. Whether or not the theories of Lamarck and Darwin be correct, we see the progress of nature from the trilobite to the ape; and if nature has contrived to mould and animate the brain of the ape, why should it be more difficult for her to rise to that of man?

*(To be continued.)*