

Not to go into anatomical details, this difference is shown, before all, in the significant enlargement and bipartition of the *musculus retrahens auris brevis*, which Kirsten aptly calls *musculus abductor auris brevis*. Strikingly enlarged, too, in the ass are the *musculus abductor (retrahens) auris longus*; *musculus adductor (scutulo auricularis) auris inferior*; *musculi levatores auris longi, medius, et brevis*, and others. In consequence of the insertion, direct or indirect, of these muscles on the occipital *crista* and the *linea nuchalis* of the occiput, it is clear that in the ass a stronger pull is exerted on the occipital surface and the lever-arm which is formed by the *crista*. Through this action there must necessarily follow an inequality in the back part of the brain-skull.

Variations may of course be caused by the size of the ears, as also by the manner of carrying them, as the flap-ears of the Sudanese domestic ass, in contrast with the Asiatic. In my opinion, therefore, the most important characteristic in the bony head for determining the specific difference between the ass and horse is the position of the occiput. This can be recognized by three different methods which are, however, of unequal uniformity and exactness in practice. (1) Lesbre's method of the *cheek-crista line*, for the clearer expression of which I would make a suggestion later. (2) The Frank-Nehring method—distance from *foramen occipitale* to *vomer palatinum*. (3) The *inclination of the occipital plane* mentioned by Dugès, for the determination of which I would also propose a new method.

Besides this there are other, mostly less regularly marked, features which can be traced to the action of the ear-musculature; the lateral edges of the *occipitalia lateralia* are drawn more strongly towards the *meatus auditorius externus*; the funnel of the *meatus auditorius externus* is more erect, etc. But, as was said before, there is here much room for the play of individual variation.

It may occur in practice that one has only a skull of an equid without cheek-bones or *maxillæ*; in this case, to determine the inclination of the occiput, use a tangent, B, on the *facies-surface* of the *frontales* and *nasales*. If, on the other hand, the *maxillary* is present, draw first Lesbre's line; on this (A) or on the facial tangent (B) erect a perpendicular which touches the highest or most aboral point of the *crista occipitalis*, and draw a tangent from this same point, first, on the upper edge of the *foramen magnum*, and second, on the most aboral point of the condyli; we find, according to my measurements of these angles to date, on thirty-two skulls:

	A 1.	A 2.	B 1.	B 2.
Horses.....	14-25°	10-24°	15-30°	10-25°
Asses.....	35-50°	30-35°	35-50°	30-45°

As is clear in this table, as great as is the difference between the ass and horse, the difference between the two relations A and B is small, and we can therefore use either the line A or B, according to the state of preservation of the material. I call this angle *ear-load index (Ohrbelastungsindex)* to indicate its dependence on the ear-musculature.

In order to express the Lesbre line numerically in an index I have applied the following method: draw the Lesbre line and then a connecting line between the *crista occipitalis* and the intersection of the Lesbre line with the *articular*