

diameter should be regarded as equal to 100. Then by multiplying the conjugate diameter by 100 and dividing by the transverse diameter, the proportion which the conjugate diameter bore to 100, or in other words the pelvic or brim index was obtained. When these diameters bore to each other the relation of 100 to 90 or under, then he regarded the pelvic inlet as round. But when the conjugate was greater in relation to the transverse, he called it longish oval. About the same time Carl Martin published an account of his measurements of the female pelvis in Europeans, Negresses, Mulattos, Bushwomen, Malays, Melanesians, and one Australian woman. As a result of his measurements he grouped these female pelves into *a*, those with a round inlet, in which the conjugate was almost as large as the transverse diameter, or at the most one-tenth smaller; and in this group he placed the aboriginal Americans, Australians, Malays, and Pacific Islanders: and *b*, those with a transversely oval inlet, in which the conjugate was more than one-tenth smaller than the transverse diameter, and in this group he placed the pelves of European and African women, though the Europeans had the widest pelvic inlet.

The mode of estimating the brim or pelvic index after the formula of Professor Zaaier has been adopted by the majority of anthropologists, though some would have preferred to have reversed his formula and to have taken the conjugate diameter as equal to 100.<sup>1</sup> This, indeed, was at one time the opinion of M. Topinard, though subsequently in his *Éléments d' Anthropologie générale*, he has conformed to the usual practice.

The attempts which were made by Zaaier and Martin to frame a classification of the pelvis, either in the same or in different races, on modifications in the relative proportions of the conjugate and transverse diameters of the brim, were not successful and did not find much favour amongst anthropologists, so that one meets with but little reference to them in current literature. This failure is, I think, in a great measure to be accounted for partly by the paucity of the observations, but mainly because they based their calculations largely if not exclusively on the study of female pelves, in which, for sexual reasons, there is to a considerable extent an approximation in form in different races, so that one does not meet in them with such striking variations in shape as when one compares the male pelves in different races with each other. In the males, therefore, the form characteristic of the race is more fixed, and from their study it is, I think, possible to frame a classification of the pelvis.

There are two groups of measurements which, from their importance, might serve as a basis for such a classification, viz., *a*, the breadth and height of the entire pelvis, from which a breadth-height index, such as has been discussed in an earlier part of this chapter, can be computed; and *b*, the conjugate and transverse diameters of the pelvic brim, from which the pelvic or brim index can be calculated. There can, I think, be little doubt

<sup>1</sup> See for example Carl Martin's paper in *Corresp. Blatt. der deutsch. Gesellsch. f. Anthropol. Ethn. u. Urgesch.*, März, 1881.