## Slanted evidence

## The tortuous path from skull measurements to theories of racial superiority.

## **Martin Kemp**

when have inherited a notably persistent image of 'primitive man'. 'He' is characteristically hairy, raw boned, mighty in hand and foot and endowed with a prognathous jaw. The basics of this stereotype were laid down with the 'wild' or 'savage' races believed by the ancients to inhabit regions remote in place or time. The new factor in the nineteenth century was the simian nature of his cranium and face. Most specifically, primitive character was signalled by a facial angle that ran obliquely backwards from protruding jaw to receding forehead.

Such an ape-like physiognomy can most obviously be recognized as an outcome of Darwin's theories of human evolution. However, facial angle had been established as a measure of beauty towards the end of the preceding century, above all in the widely read publications of Petrus Camper, the learned Amsterdam doctor. In his Dissertation sur les Variétés Naturelles qui Caractériser la Phyisionomie des Hommes, published in 1791, and translated in *The Works of the Late* Professor Camper, on the connection between the science of anatomy and the arts of drawing, painting, statuary &c in 1794, he noted that "it is amusing to contemplate an arrangement ... in a regular succession: apes, orangs, negroes, the skull of a Hottentot, Madagascar, Celebese, Chinese, Moguller, Calmuk and diverse Europeans". This was precisely how he had arranged his own collection of crania "on a shelf in my cabinet".

Using an elaborate measuring frame of his own devising, Camper tabulated and illustrated progression of facial angles: the skull of a tailed monkey measured 42°; that of a small orang-outang (on which Camper had written a monograph) was 58°; a young negro exhibited a 70° inclination; a Calmuk ("deemed the ugliest of all the inhabitants of the earth") weighed in at the same angle, whereas the typical European profile attained the near-vertical with 80°. This peak could be surpassed "by the rules of art alone", as in the lauded ancient sculpture of the Apollo Belvedere which stands at the head of Camper's sequence.

In retrospect, it is all too easy to see how this succession could be used to align apes and human races in a moral order which placed the 'negroes' at the baser animal end of the scale. In conjunction with the voguish physiognomics of Johann Kaspar Lavater, this diagnostic move was readily made, not least in Charles White's *An Account of the Regular Gradations in Man and in Different* 

Kinds of Animals and Vegetables of 1799, in which profile drawings of heads were arranged in ascending succession from a long-beaked bird (literally bird-brained) to the noble profile of an exemplary Caucasian. However, Camper himself was not prepared to make this move.

Camper rejected the "extravagant" notion that "that the race of blacks originated from the commerce of the whites with orangs and pongos; or that these monsters, by gradual improvements, finally become men". The morphological differences between quadruped apes and upright men "seem to mark the boundaries which the creator has placed between the various animals". The "divergences" persuaded the anatomist that "the whole human race as it is now spread over the face of the earth" was originally "descended from a single pair, that were formed by the immediate hand of God, long after the world itself had been created and had passed through numberless changes". While Special Creation or a sequence of Spe-

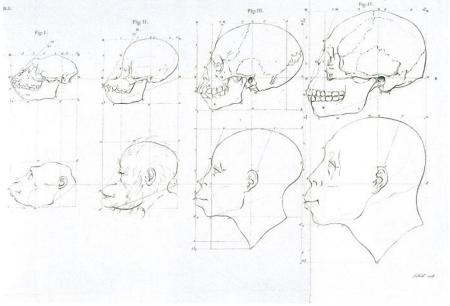
eads were arranged in ascending succession from a long-beaked bird to a noble Caucasian.

cial Creations remained the norm, there was a limit to the conclusions that could be drawn from any supposed similarities between the skulls of 'negroes' and apes.

One consequence of the Darwinian revolution for craniometry was to arrange the Camperian sequence of angles in a temporal succession. Once the steps represented by God's discrete creation of separate species had been replaced by the transformation of one species into another — or monkeys into men, as was popularly said — the kind of fallacious ranking effected by White was granted a new scientific licence. Camper's 'negro' could be stigmatized as evolutionarily more primitive. The nineteenth-century campaigns of craniological measurement and ethnographic photography, together with huge collections of skull types, provided great banks of data that could be exploited to detect those races that stood closest to the animal origins of man.

The progressive misuse of Camper's non-racist characterizations is a salutary reminder of what can happen to apparently 'neutral' results when a climate of belief is radically transformed. Place his observations together with Lavater's diagnostic physiognomics and Darwin's *Descent of Man* in the same social cooking-pot, and we can see how an ugly dish can result.

Martin Kemp is in the Department of the History of Art, University of Oxford, 59 George Street, Oxford OX1 2BE, UK.



Class of the head: Petrus Camper's "amusing" succession of skulls from apes to man.