

## Commentary

# A few more grains of melanin

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The color of human skin is mainly determined by melanin synthesis, which takes place inside melanosomes of melanocytes, and the subsequent transfer of these pigment granules to keratinocytes. There is no difference between the races in the number of melanocytes in the epidermis,<sup>1</sup> but the rate of melanin synthesis may be different. The ratio between eumelanin and pheomelanin synthesis is higher in black than in white people,<sup>2</sup> but the most striking differences between black and white skin are the size of the melanosomes and the distribution pattern of melanosomes inside the keratinocytes. In black-skinned people, the large melanosomes are each surrounded by the membrane, whereas in brown- and white-skinned people, the smaller melanosomes are grouped together in a single membrane.<sup>3</sup> This phenomenon is probably caused by only one gene. We described an autosomal-dominant syndrome with white and dark macules, together with other symptoms, occurring in three generations of people with skin type V, which became known as the Westerhof syndrome. In each member, the dark and white macular skin resembled, at ultrastructural level, negroid and caucasoid skin, whereas the normal asiatic skin had features in between.<sup>4</sup>

Apart from the physiognomy, the stature and the hair, the human skin color is one of the most important external features which distinguishes between races. Because of its simplicity and visibility, the discriminatory power of skin color is absolute and used by scientists and laymen.

### Historical background

Skin color has obtained a dubious connotation in the social context.<sup>5</sup> This has not always been the case. About 2500 years BCE, when most of Europe was still in prehistoric times, the image of black people was not negative in Pharaonic Egypt. Archeologic remains demonstrate that

black Africans were integrated in the Egyptian society. The black color was also valued as the symbol of fertility. The black mud from the Nile fertilized the land and brought prosperity. The Greek historian Herodotus (484–424 BCE) and the philosopher Aristotle (384–322 BCE) described the empires of the Nubians and the Egyptians with respect, although they thought the remainder of Africa was inhabited by savages and monsters. During the expansion of the Roman Empire, the black people of northern Africa were incorporated into the Roman army to fight in South East Asia and Africa, which gave them a positive reputation. Also, the church fathers of the early Middle Ages joined forces with the Ethiopian people, who were Christians and Jews, to fight Islam. The change in the image of black people came during the Middle Ages, before and during the Crusades, when the Islamites became the enemy of the Christians. In our language, black got a negative meaning. Black was the color of the devil, sin, and the enemy. This image persisted during the discovery of sea routes to the Far East and the Americas. The discovery of the "New World" not only led to a world commerce, but also to political and economic hegemony of whites in those parts of the world. Together with this went the spread of the western culture and religion. Slave trade and slavery existed officially until late in the nineteenth century. To justify the exploitation and exclusion of blacks, the dominant white group misused the bible by referring to Cham as the forefather of all blacks, as this son of Noah was responsible for the slave destination of himself and his descendants by not respecting the sexual rites of his tribe. Over time, being a slave and having a black skin became synonymous. This categorization of people by skin color has led to sinister political implications culminating in apartheid and Nazism.

Although slavery and military and political colonialism belong to history, white racist superiority ideas, which supported these systems, are still present. The emphasis of

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this thinking is expressed in terms of skin color as well as in terms of culture. It is generally assumed that western culture is superior to other cultures. Not surprisingly, this cultural schism parallels more or less the division according to skin color.

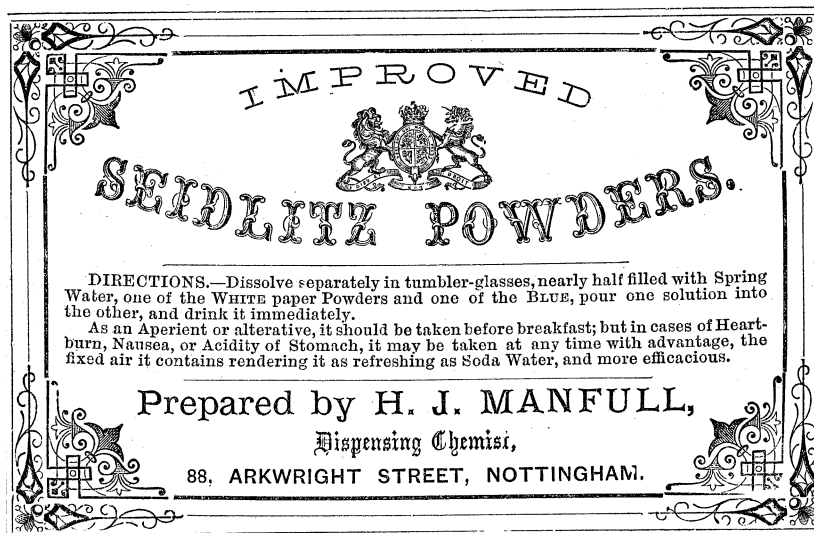
Not only in the western world, but also in India and in countries under its influence, a dark skin has an inferior social meaning. Although not related to the caste system, the scale of the social groups from high to low parallels the skin color from light to dark.

### Conclusions

In our capitalistic system, richness, power, and socio-economic status are distributed according to selection criteria made by the dominant white group. One of the most important selection criteria is skin color. To impress as culturally adapted and attractive, many black people resort to the use of bleaching creams.<sup>6</sup> This has often led to complications, such as exogenous ochronosis<sup>7</sup> and confetti-like leukoderma.<sup>8</sup> If the fear and mistrust of people of another race remains hidden, the terrible division between blacks and whites will grow deeper with tragic consequences for society.<sup>9</sup> Dalton<sup>9</sup> offers concrete examples of what blacks and whites can do to bring about racial healing.

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