

New Aspects of the Concept of Racial Classification: An Examination of Cavalli-Sforza and Cavalli-Sforza – *The Great Human Diaspora*

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Abstract

The perception of Humankind being divided into a number of distinct races, some of them even thought of superior/inferior to others, unfortunately still dominates around the world, and it appears as if human right abuses and discrimination under a 'racist' point of view are still committed today, although after the official abolition of slavery beginning with the Era of the Enlightenment and the recognition of the horrors of the Transatlantic Slave Trade we should know better. Still until very recently 'races' were defined by even serious scholars by their physical marks only, while less serious though highly acclaimed writers even ascribed cultural values to them. Cavalli-Sforza has now presented data based on his own genetic research and those of his colleagues which give a much more refined picture of various groups of the species *Homo sapiens sapiens*. The physical marks of the various human races are apparently due to genetic mutations to help groups to adapt to the climate of their habitat. Thus we should rather speak of one race only: that of *Homo sapiens sapiens*.

The Concept of 'Race'

In MILA, Vol. 3, 1998 I published an article on the *Alien, Slavery, Race and Racism*, in which I pointed out that the racial discrimination, in particular against melanid races originated with the Transatlantic slave trade. I also referred briefly to the classification of the races of Mankind presented by *Egon von Eickstedt*, which was published in the early 1930's and has – compared to other contemporary and earlier classifications – the advantage of referring to external and visible traits only. I will later on point out that according to recent scientific findings by Luca Cavalli-Sforza and his colleagues these external traits depend on certain genes which regulate the adaptation to climatic conditions and are very likely due to genetic mutations that have occurred some tens of thousands of years ago. Von Eickstedt does not ascribe to the various races cultural and/or character values, nor is any one race referred to as 'superior' or 'inferior'. In this von Eickstedt differs markedly and favourably from other authors of the 19th century and early 20th centuries (Gobineau, Chamberlain, and – in particular – Rosenberg). Based on the externally visible physical criteria of the

various groups of modern man only, von Eickstedt developed in the early 1930s a model for the classification of the human races, which – at least among the general laity – is used to this day the very same way it was used during the Hitler Era in Germany. Yet, they are the superficially visible criteria only (skin, and eye colour, hair structure and colour, shapes of nose and mouth: and, therefore, we are inclined to consider these to be rather questionable should we aim at a precise classification of races of man based on valid data. Body size and hair colour, once considered indicators of race, have proved already unreliable, since body size and growth, and hair colour may often depend on the intake of appropriate or deficient nutrients, on exposure to sunlight or on a stimulative/non-stimulative environment. (The phenomenon of descendants of European immigrants to America being taller than their immigrant parents, or pale hair colour among African infants suffering from protein deficiency are often quoted as examples.)

The term "race" as applied to Man has, unfortunately, been largely misunderstood and misused. In addition, it is conceived as a rather rigid delineation between those groups of modern *Homo sapiens* which we have been inclined for a long time to see as separate races. I do not have to mention here that in view of

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recent archeological and palaeontological findings scholars of human civilisations have distanced themselves from the theories about the classification and hierarchy of the races of man maintained in the 1930s and 1940s. (Kühn)

Perceptions of Race

The Latin root of the term *race* may be the *ratio, rationis*, which can be understood as 'reason (rationality), yet also as 'part of' or 'division of' ('ration'). The Ancients did not have a perception or concept of a race in our modern understanding. In members of the other ethnic groups or nations, they saw either the *Us* – a member of their own group (Roman citizen or of a Greek polis or the *Non-Us*, a non-Roman or a barbarian, that is a non Greek: a free man with full civil rights who was to take an active or at least a passive part in the affairs of the community (polis/res publica) or a non-free man, a freed man, serf or a slave who was denied such rights and who depended on his master only. Physical differences between the members of various nations though recognized (Egypt) did not play a decisive role in normal human interactions. It is only, when man began to distinguish certain classes of allegedly superior from those of allegedly inferior ranks within his community that the descent from certain 'noble' families' or groups was considered significant. We find such type of distinction being made already among the ancient Germanic tribes, among the Romans and among others. 19th century Europe, where aristocratic (high aristocracy and gentry) family members had to prove of having ancestry of eight noble families on the sides of either parent, the famous sixteen ancestors, offers a good example, which then caused tragedies like the one of Mayerling¹ or the mésalliance of Archduke Franz Ferdinand of Austria, the assassination of whom in Sarajewo in 1914 triggered WWI. The notion that the white (European) race was the master-race *per se* came up by the mid-19th century,

when Europeans living as colonial overlords in other parts of the globe stopped writing home that they had taken a local woman as their lawful Christian wife. This implied that a white woman only would qualify as a lawful and socially acceptable wife. As of that time a more or less rigid segregation of the 'master' race from 'inferior' ones was observed.

The perception and concept of race and races was totally different once it came to the races of domestic animals. Depending on the purpose such races were to serve, breeders tried to raise 'thoroughbreds' or crossbreeds: thus we have among the modern genus equidae races like *Arabs*, *Lipizzaner Hanoverians*, *Iceland ponies* and the various crossbreeds with donkies, also of the genus equidae. These races may be used for the riding, racing, for heavy farmwork or as animals of traction: cattle may be bred for good milk² or good meat production, but also for heavy farmwork; in East Africa, European settlers crossbred European cattle races with the Ethiopian Boran in order to obtain a race which was more resistant to East African cattle diseases. In view of the modern trends towards a lesser fat intake in our diet, pigs are bred nowadays which have less fat yet give more meat: the same applies to geese, which however, because of the consumers' growing demand of goose breasts are bred to have enormous breasts; and we know of the interest in thoroughbred dogs of various races (Doberman, Dalmatian, Dachshund, Danish Dog, Alsatian, Poodle, Pekinese, - which have to serve as watchdogs, police dogs or as hunters) or – like certain cats – (*Siamese* and others) are to be kept within the house as pets. Then there are the wild species of the same families – wild horses; *dingo* dogs; wild cats; lynx; lion and tigers; buffaloes; wild boars, of which Man rarely ever thought of breeding thoroughbreds or crossbreeds.

Breeding experiments with humans were hardly ever made; yet we do know of the ill-famous *Lebensborn* ('Fountain of Life')

¹ 1858 the then crown prince of Austria, Archduke Rudolf, committed suicide with his mistress, Comtesse Vetsera, at Mayerling Castle. The archduke belonged to high aristocracy, the comtesse to the gentry only.

² Such special breeds with their long heavy udders almost touching the ground are a frightening sight. (My own observation at an experimental outpost of an agricultural research farm in Bonn/Germany.)

project¹ in Germany under Hitler. Hitler wanted to 'upgrade' the race of the German populace by 'adding Nordic blood' (from Norway and Poland) – with tragic consequences for the individuals involved².

Cavalli-Sforza rarely uses the terms for human races developed by von Eickstedt, although we find occasionally terms like Mongolian, European, Northeast Asian among others. Instead he presents a 'genetic tree of Mankind' (Cavalli-Sforza 1995: 119 & 198) based on 110 genes, all of which are blood groups, proteins, enzymes, etc. Yet, when discussing the language groups of Mankind based on Greenberg's and Ruhlen's classifications, Cavalli-Sforza (1995: 119 & 198) presents a map of a 'tree which combines genetic and linguistic classifications, which, in our view is debatable.

To us this combination appears to be debatable since it comes dangerously close to the mix up of the language groups and races in Hitler Germany, i.e. 'Semitic' for the Semitic language family as well as for a 'Jewish race'; 'Indo-Germanic' (today Indo-European) for a language family as well as for a racial group (Europeans and North Europeans or Caucasians). Such combinations have always been questionable. Spengler pointed out already in 1922 (op cit p. 170) that the great

nation of the ancient Persians, who became the most powerful nation and the arch-enemy of the ancient Greeks – obtained their name from a small region in the Middle-East, called *Persis* (Spengler 1922: 756, 767). Their language, Iranian, ranks among the 'Indo-Germanic or Indo-European language family. Yet of what 'race' were they? And when Alexander the Great with his Macedonians marched into Persia were the people he met there still identical with those of Persia? Cavalli-Sforza mentions similar problems when he refers to the traces the invasion of the Germanic Longobards during the Era of the Peoples Migration into northern Italy must have left there; a few personal and place names only remind of these invaders; the same applies to parts of Sicily and Southern Italy which in Ancient times with their Greek colonies had been part of *Magna Graecia* and where – at least in some areas – Greek was still spoken until only a few hundred years ago (Cavalli-Sforza 1995: 231). The references to the Longobard invasion into Italy reminds unfortunately – though certainly not intended by the author – of the theory maintained in Hitler Germany about the superiority of the Germanic ('Nordic') race. This theory ascribed the intellectual and cultural explosion of the *Renaissance* to the influx of 'Nordic blood' in Italy some centuries earlier during the Era of the Peoples' Migration.

The Perception of 'Race' from the point of view of Genetics.

In this section I largely depend on the data presented by Luca Cavalli-Sforza (see Bibliography) and the research data by other scientists quoted therein. Modern Man (*Homo sapiens sapiens*), the successor of *Homo Neanderthalensis* originated probably some 100 000 years ago either in Africa³ or in the

¹ In view of the heavy blood toll Germany suffered during WW11, polish children, who by their size, height, hair and eye colour qualified as 'racially Nordic'. Were taken away from their families and given to German families for adoption. I have seen some years ago a German documentary film about the 'Lebensborn project and about the polish mothers' efforts to be reunited with their children, but I am unable to give precise information about the film nor the date of its transmission.

Norwegian women (of 'Nordic' race) were encouraged to conceive children with German soldiers, which had disastrous consequences for the children since very often after infancy nobody took care of their education. I read such a report about this story in a Saturday supplement of the *Times*, the *Times Magazine*, yet again I am unable to give precise data about the number of the issue nor the year of publication.

² While the article was in the press, we learnt of the Graham sperm bank in America, where sperms from outstanding donors (Nobel laureates and others) were kept and could be obtained upon demand. This bank is now closed.

³ Prof. Tim White, Berkeley, discovered remains of 'modern man' in east Ethiopia, which date back ca. 160,000 years, Vide: Guinness Book of Records 2005, p.168.

On October 27, 2004, BBC in the 1800 GMT news reported that the fossils of an up to now unknown species of hominids had been found in a cave on Flores Island, Indonesia, the skeleton of a woman of ca. 30 years of age. The woman must have been 1 meter tall

Middle East, and from there spread all over the globe. Cavalli-Sforza feels Africa to be more likely, since earlier species of hominids and homines had already originated in Africa. Neanderthal man lived in large parts of the world and – at least in the earlier periods of his existence – must have lived during the warm period of the last inter-glacial. In Europe *Homo sapiens sapiens* turns up about 40 000 years BC. We know him under the name 'Cro Magnon' after a cave in southern France where the first traces of him had been found. It was he who left behind the wonders of European ice age cave paintings, like the ones of Altamira, Lascaux, or the Trois Frères in Spain and France (Kühn 1955). Living at the fringe of receding glaciers at the end of the glacial period under some harsh climatic conditions, must have been a challenge for his survival. His larger brain capacity may have enabled him to do so.

About 70 000 years ago Man shed off his furry body cover (Comp. Wade, op cit) and was from then on naked the way we know him today, although there appear to be have been some exceptions¹.

Earlier civilisations apparently still had the notion of Man once having had a furry body hair cover. Thus we find in the Gilgamesh epos (the oldest parts of which go back to the 3rd millennium, BC, the story that Gilgamesh met the First man, *Enkidu*, a man whose body was covered with dense hair (Kühn 1955). *Gilgamesh* counts as the founder of the city of Uruk in Mesopotamia, the fertile Crescent, and *Enkidu* became *Gilgamesh's* close friend.

We have to assume that it was from then on that the species *Homo* had to adjust to the climatic conditions of the various habitats.

Such an adjustment must have required mutations in those genes which are responsible for a reaction to climate. Genetic mutations, which must have taken place over a long period of time, may have helped such an adjustment; and thus today we have short Arctic people

and had a very small head. The skeleton was said to have been 18000 years old. Because of the small size, she was called 'hobbit' (after Tolkien).

¹ Anton Chekov, in *Sakhalin*, mentions that the Ainu of the Kuriles Islands had unusually dense body hair.

with thick layers of fat under their skin to protect them against the cold; light-skinned and fair-haired northern Europeans, whose lack of *melanin* enables them to live in a climate with little sunshine only; and dark-skinned Africans who because of their high level of *melanin* are able to cope with strong tropical sunshine. It is interesting to note that similar theories were already expressed in the early 19th century (Neueste Länderkunde, 1808).

"It is because that they are external that these racial difference strike us so forcibly, that we automatically assume that differences of similar magnitude exist below the surface in the rest of our genetic makeup. This is simply not so; our genetic makeup hardly differs at all" (Cavalli-Sforza 1995: 124).

The Molecular Clock

Cavalli-Sforza (1995: 66f) elaborates at length Alan Wilson's work on the *Molecular Clock*. This involved a single, not very long section of mitochondrial² DNA, comprising six to seven hundred nucleotides³. This is a limited example

² Mitochondria are small organs found in the cells of all higher organisms. They use oxygen introduced by breathing to produce energy and act a little bit like a power station. They are not the cell's only way of producing energy, but they are the most efficient ones. Mitochondria are found outside the cell's nucleus, within the liquid between nucleus and the outer membrane. There may be thousands in any one cell. They resemble a small bacterium in shape and most probably originate from a bacterium that over a billion years ago adapted to live in symbiosis with the cell and became extremely important as a power station. The mitochondria are passed through the mother only. (Cavalli-Sforza, 1995. p.62 after Allan Wilson)

³ *Nucleotides*: DNA, composed of very long strands, forms the chromosomes which are present within the nucleus of every cell. A chromosome is made up of a huge number of units of which, however there are only four types: A, G, C and T. (the chemical compounds of *adenine*, *guanine*, *cytosine* and *thymine*), A and G belong to the purine group of substances; C and T are pyrimidine. Chemically they all behave like alkalies or bases. Each base is attached to a sugar molecule, the sugar being *deoxyribose*. The structure of a DNA strand is formed by a regular alteration of phosphoric acid P and a deoxyribose D (-P-D-P-D etc.)

Each sugar molecule D is attached to a base A, C, G, and T in a sequence, which then may look like this:

-P - D - P - D - P - D - P - D - P - D - P - D
T A A C T G

but varied enough to render the discovery of two identical individuals extremely unlikely, unless they are related on the mother's side. The differences observed can be used to draw a diagram or family tree, since individuals with only one different nucleotide have a more recent ancestor than those with two or more different ones.

Genetic Geography

To elaborate this point, Cavalli-Sforza (1995: pp. 135 ff) presents as examples several charts about the migration of some genetically related groups from a core center into Europe. These groups were often the transmitters of certain cultural and technical innovations and skills (agriculture, pottery etc.) or language (Greek or Celtic). As a good example he mentions the *Genetic Geography of Italy* (p.230, 231), which had been prepared by Alberto Piazza and his team. The map shows what regions had been exposed to Greek, Celtic, Ancient Etruscan or Oscio-Umbro-Sabellian influence. We have to assume that each of these ethnic, cultural and linguistic groups have their own specific gene pool. In the end, we find quite a number of genetically related groups within anyone region, which would then result in a much more refined classification than the one developed by von Eickstedt.

A mass of migration of people with a distinct gene pool to another region will have an impact on the gene pools of the indigenous population there, i.e. Ancient Greeks in southern France and southern Italy, or Europeans in America, where their own gene pools replaced eventually the ones of the indigenous Amerind¹ population.

In view of the fact that the 'striking' difference which seem to separate various groups of humans from each other are due to genes of minor significance only, that is those

which determine the adaptation to climate, we have to ask whether the term 'race'(s)' to mark a sharp distinction between groups of humans should be used at all. The ignorance about the function and the over-emphasis of external features of humans have caused for centuries more than bearable ideologies and sufferings.

Also: Up to very recently terms like 'primitive' cultures/civilisations vs. 'high/advanced' ones were in use, and we find a similar terminology in numerous publications even by serious writers today. The suggestion may be made here that the terms which for some decades have been used in Anthropology for a hierarchical scaling of human civilisations between 'Peoples of Nature' (Naturvölker) and 'Peoples of Culture' (Kulturvölker) or even 'High Culture' (Hochkulturvölker) be given up.

There are no peoples without culture. Man is a cultural being *per se*. We rather should speak of one race only: That of *Homo sapiens sapiens* (Prof. Marilyn Heldman, Pers. Comm.).

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DNA can be divided into sections each of which contains a D and a P molecule plus one base (A, C, G, and T.) Those are called *nucleotides*, and there are four types because there are four bases.

¹ The term *Amerind* for Native Americans (American Indians) and their languages was widely used by North American scholars (though not by all) at least up to the 1930s 40s and 50s. It became never popular in Central Europe, Vide: Eva Lips: *Ojibwa-Indianer*, Berlin 1956.

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