

To mark the 112th Annual Meeting of the German Zoological Society in Jena, the Institute for Zoology and Evolutionary Research of Friedrich Schiller University Jena is organising an evening event on the subject of 'Jena, Haeckel and the question of human races, or racism creates races'.

The joint declaration below provides information on this topic and was approved by the German Zoological Society and the President of Friedrich Schiller University Jena, who support the authors in their effort to act against scientific legitimations of racism.

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Jena Declaration

The concept of race is the result of racism, not its prerequisite

From the beginning, the idea of human races and their existence has been linked to an evaluation of these supposed races. Indeed, the notion that different groups of people differ in value preceded supposedly scientific work on the subject. The primarily biological justification for defining groups of humans as races – for example based on the colour of their skin or eyes, or the shape of their skulls – has led to the persecution, enslavement and slaughter of millions of people. Even today, the term ‘race’ is still frequently used in connection with human groups. However, there is no biological basis for races, and there has never been one. The concept of race is the result of racism, not its prerequisite.

On 9 August 2019, we marked the 100th anniversary of the death of Ernst Haeckel, former professor in Jena, dubbed the ‘German Darwin’ and probably the best-known German zoologist and evolutionary biologist. With his supposedly scientific classification of human ‘races’ into a ‘family tree’, Ernst Haeckel, the founder of phylogenetics, made a fateful contribution to a form of racism that was seemingly based on science. The position of human groups in his tree of life was based on arbitrarily selected characteristics such as skin colour or hair structure, presented from a phylogenetic point of view. This resulted in these people being viewed in a particular sequence, which implied that some groups had higher or lower status on biological grounds than others.

Karl Astel, a leading researcher on race, member of the National Socialist party and president of the Thuringian State Office for Racial Science in Weimar, was a university professor from 1933 and, from 1939, wartime rector of Friedrich Schiller University in Jena. He was convinced “that since the departure of Ernst Haeckel, zoology – and thus also biology – in Jena has no longer been pursued at the University in the same spirit and with the same intensity that Haeckel established and that was of great importance for National Socialism”.

During the period of National Socialism, the University of Jena was to be expanded “into an SS university with a uniform racial orientation”. The ‘racial development work’ and appointment policy repeatedly emphasised by Astel had produced a unique academic and political science-related configuration with four successive professorships in racial studies. In addition, Jena’s Phyletic Museum, founded by Ernst Haeckel in 1907, was to become, with reference to its founder, the ‘Thuringian State and National Museum for Life Science, Race and Phylogeny’. For this reason, too,

Friedrich Schiller University has a particular responsibility to address the issue of defining human races based on biological data.

Despite, or maybe precisely because of the close connection between racism and the supposed existence of races, it is the duty of science and thus also of a scientific society such as the German Zoological Society to evaluate the possibility of human races being a reality. The question is whether races in general, and races of humans in particular, are a biological reality, or whether they are pure constructs of the human mind. For the influential taxonomist Ernst Mayr, the existence of human races was a 'biological fact' (Mayr 2002), at least before the colonial age. The justification for his view is still reflected in the common concept that human races correspond to 'geographical types' that we also find in other species and that are based on many criteria. An alternative to geographical types of humans that correspond to races did not seem possible to Mayr, although he came out clearly against any kind of racism.

For geographical races (or subspecies), Mayr generally emphasised the necessary 'taxonomic difference' between geographically separated populations of a species. This places the concept of 'race' somewhere between the concept of population (which due to its existence as a reproductive community, actually corresponds to an individual in the philosophy of science) and that of species. Today, this taxonomic difference is predominantly determined through genetic distances. However, determining which taxonomic difference or genetic differentiation would be sufficient to distinguish races or subspecies is completely arbitrary and thus also makes the concept of races/subspecies in biology purely a construct of the human mind. This does not mean that there is no genetic differentiation along a geographical gradient. However, the taxonomic evaluation of this differentiation (as race or subspecies, or not) is arbitrary. This is even more strongly the case for humans, where the greatest genetic differences are found within a population and not between populations.

'Races' of domestic animals are a totally different case, as can be seen from the lack of a geographical structure among them. Domestic animals are exclusively the result of breeding by humans, rather than of a natural, biological process. Only in the case of domestic animals is the genetic similarity (homogeneity) within a 'race' actually greater than that between 'races'. The English language does not use the term 'race' here, but rather 'breed', which is much closer to the actual situation. In German, the term 'Züchtung' would be more appropriate.

Thought patterns of biologically based racism, such as the analogy to domestic animal breeds, have tempted people to assume that we have the same right to speak of 'human races'. This was often associated with the assumption that the similarity within a supposed human race was significantly greater than that between races, which made segregation possible – a regrettable fallacy in the case of human beings.

The division of people into races was and is first and foremost a social and political classification, followed and supported by an anthropological construct based on arbitrarily chosen characteristics such as hair and skin colour. This construct served –

and still serves – to justify open and latent racism using supposed natural circumstances and thus to create a moral justification.

It was mostly through scientific research on genetic variation among and between human populations that the concept of race was finally exposed as a typological construct. Among humans, by far the largest share of genetic differences exists not between geographical populations, but within such groups. The greatest genetic variation is still in people on the African continent, where the roots and most of the branches of the human family tree are located. The people of East Africa and all non-Africans are gathered together on one of its branches. Therefore, people outside Africa are more closely related to people from East Africa, such as the Hadza, than the Hadza or Non-Africans are to people from South Africa, for example the Khoisan. From a phylogenetic point of view, all people are therefore Africans. In consequence, it is positively paradoxical to talk of 'the Africans' or 'the black Africans'. This is a relic of colonial ways of speaking and thinking, and, once again, it is a case of racism creating races. The skin colour of a Khoisan from South Africa is lighter than that of people who live in South-East Asia or South America along the equator. Skin colour mainly reflects a biological adaptation to the level of solar radiation and consequently varies continuously in line with the intensity of UV-radiation on Earth.

The supposed human races also do not go back to separate evolutionary lines (in line with another concept of the reality of races – the so-called cladistic races). Modern humans originated in Africa more than 250,000 years ago. From there, humans spread in small groups over the rest of the globe. The non-Africans split off from the people of East Africa around 60,000 years ago and populated a large part of the world.

Non-Africans differ from people who live south of the Sahara mainly in genetic traces left by genetic admixture with Neanderthals and Denisovans. Interestingly, it is precisely this genetic contribution from our nearest extinct relatives, who not so long ago were characterised as dim-witted, club-wielding cousins, that 'White Supremacists' in the United States use to define a superior white race, separate from others. However, the proportion of Neanderthal and Denisovan genes in East Asian people and groups in Oceania and Australia is measurably higher than in Europeans. In consequence, this feature is extremely unsuitable for defining some 'superior white race' on the basis of Neanderthal genes. Moreover, numerous and recurrent human migrations have always led to links between geographically distant populations, long before the great voyages of discovery and conquest by Europeans.

Instead of definable boundaries, genetic gradients run between human groups. Among the 3.2 billion base pairs in the human genome, there is no fixed difference that separates, for example, Africans from non-Africans. To be explicit, not only is there no single gene that underpins 'racial' differences, but there is not even a single base pair.

External features such as skin colour, which are used to classify types of people, are an extremely superficial and changeable biological adaptation to existing local conditions. Skin colour alone has frequently changed in the course of human migrations and has become darker and lighter according to local solar radiation or diet.

For example, up to 8000 years ago, the inhabitants of Central Europe were strongly pigmented and it was only with the beginnings of agriculture that people with lighter skin arrived, bringing this new phenotype from Anatolia. The primarily plant-based diet of early farmers favoured individuals with paler skin, which made it easier to produce sufficient vitamin D in the skin during Europe's dark winters. The light skin colour of modern-day northern Europeans goes back less than 5000 years.

The linking of features such as skin colour with characteristics or even supposedly genetically fixed personality traits and behaviours, as was done in the heyday of anthropological racism, has now been soundly refuted. To use such arguments today as seemingly scientific is both wrong and malicious. There is also no scientifically proven connection between intelligence and geographical origin, but there is a clear connection with social background. Here too, racism in the form of exclusion and discrimination creates supposed races.

However, racism continues to exist among people. In the 20th century, racial research, racial science and racial hygiene or eugenics, as seemingly scientific disciplines, were only some of the excesses of racist thinking and action.

Simply removing the word 'race' from our daily language will not prevent racism and intolerance. A feature of current forms of racism is precisely the tendency in far-right and xenophobic circles to avoid the term 'race'. Racist thinking is perpetuated through terms such as selection, maintaining purity or ethnopluralism. However, the term ethnopluralism is nothing more than a new formulation of the ideas of apartheid. Designating 'the Africans' as a supposed threat to Europe and attributing certain biological characteristics are also in the direct tradition of the worst racism of our past. So, let us ensure that people are never again discriminated against on specious biological grounds and remind ourselves and others that it is racism that has created races and that zoology/anthropology has played an inglorious part in producing supposedly biological justifications. Today and in the future, not using the term race should be part of scientific decency.