At the dawn of the twentieth century, W.E.B. Du Bois made his famous prediction that the problem of the coming age was going to be ‘the problem of the colour line’ (Du Bois 1903: vii). Consequently, he spent his long lifetime thinking about race and racism, arguing vehemently against discriminatory practices that defined racial groups in order to privilege one against the other. For Du Bois, race was first and foremost a political category, yet with a strong emotional appeal. He was also well aware of the slipperiness of the concept, which made it irreducible to a clear-cut entity. Thus he argued in 1940 that race was not so much an ontological given or a concept as such, but rather was constantly made and remade through ‘a group of contradictory forces, facts and tendencies’ (Du Bois 1940: 133). Many of these contradictions lay in the simultaneity of the violence inherent in dominant regimes of racial classification and the emancipatory power of self-identification and solidarity among all those who ‘must ride “Jim Crow” in Georgia’ (Du Bois 1996 [1923]: 68). Moreover, ambiguity was inscribed in the classificatory practices themselves, which made up racialized bodies between biological taxonomies and other forms of dividing practices (see Foucault 1982).

Race was indeed a major issue throughout the twentieth century – and not only in the United States, where Martin Luther King would speak about his dream of equality a day after Du Bois’ death in Ghanaian exile in 1963. The end of apartheid in 1994 marked the official demise of legitimate state racism, announcing formal equality under the roof of common citizenship. The iconic imagery of the rainbow nation that was meant to replace the old racial regime in South Africa stands exemplarily for a new discourse of cultural diversity that has gained global currency. As Steve Vertovec indicates in his article on diversity and the social imaginary, there is little doubt that ‘we are living in the age of diversity’ (Vertovec 2012: 2). Does that mean that race has simply vanished? Has it become less of a central problem, but rather a policy issue of how to deal with right-wing extremists and die-hard racists? Or has it even been turned from a negative and vicious discriminatory category into a positive label of difference and playful consumption? And what has happened to the entanglement of nature/culture that was constitutive of race from the beginning? What about the oppressive regimes of hierarchical difference associated with it?

The political move from race to diversity had its predecessor in the development of the life-sciences post-World War Two. After the experience of Nazi eugenics and racial genocide, the
paradigm of racial typology, which had been the obsessive preoccupation of a large number of
scientists from the nineteenth century onwards, was declared obsolete and marked down as
scientific racism, from which proper science would seek its distance (Reardon 2005; UNESCO
1969). From the 1960s onwards, scientific interest turned more and more to the investigation
of diversity within as well as gradual variation (instead of clear-cut boundaries) between populations
(cf. Lewontin 1972). In many respects, race became an anathema.3

And yet race has not disappeared completely – neither from the epistemological practices
of the life sciences nor from the political realm. In genomics, there has even been what
some authors have called a race revival, i.e. a growing preoccupation with genetic differences at
group level. In this expanding field of medical and basic genomic research, ethnicity and
racial proxies often feature as influential factors that are called upon to mark biological
diversity (see Duster 2003; Koenig et al. 2008; Schramm et al. 2011). Here, as in other cases, race
needs not to be explicitly referenced in order for racial effects to manifest. To take an example
from politics: an emphasis on colour-blindness in political debates may rest on normative
(though invisible) assumptions about whiteness and thus contribute to a racializing effect
(see Bonilla-Silva 2003).4

In my contribution I seek to develop an analytical framework with which to grasp this
ongoing and troubling presence of race and the methodological and theoretical challenges that
go along with it. This calls for a critical theoretical questioning of race itself. In an essay on
critical race theory, Patricia H. Collins (2011) calls for a theoretical engagement with race that is
cognizant of its own location. I share this dialectical approach to knowledge and knowledge
production that also informs feminist science and technology studies and anthropology
(e.g. Haraway 1988; Strathern 2004). Collins, however, goes a step further by calling for
academic projects to be politically transformative in order to be considered critical. My work is
not activist in that immediate sense – rather I seek to draw attention to some common
lapses in the discourse about race. As I will argue in this chapter, it is not sufficient to announce
that race does not exist as a biological reality, i.e. that it would be a social construction
instead – in order to undermine its effects. Rather, race needs to be analyzed as an intricate phenomenon
that cannot be meaningfully assigned to either the realm of ‘biology’ or of ‘society’, but is
constantly coproduced between them. I therefore suggest a topological approach that pays
attention to the performance and articulation of race as a relational object.5

Towards a topological understanding of race

Topology is a concept that is helpful when thinking about the amorphous and slippery
character of race (and other complex matters, see Mol and Law 1994). It provides a spatial model
with which we can conceive of fluidity and concreteness concurrently.6 Against the linearity of
time (or a teleological take on history) and the fixity of coordinates in Euclidean space, it offers
a dynamic understanding of relational ontologies. A narrative of progress would suggest that
race, as a false and dangerous concept, would gradually disappear the more we know and
understand about biological diversity on the one hand, and the more we act against social
inequality on the other. Obviously, this is not quite the case: race disappears and reappears in
ever-changing and surprising constellations. Race cannot be pinpointed to one thing that is
already known in advance. It is therefore important to pay attention to the nodes, holes and
fissures through which the multiple connections between different sectors and their racializing
effects become visible. We should thus make an effort to investigate the epistemic genealogies
and multiple references through which race is ‘gaining in reality’ (Latour quoted in Hartigan
2008: 166) in concrete practices.
This topological view goes along with an understanding of diversity that is non-descriptive and not normatively loaded as ‘good’ (or even ‘neutral’) in itself. The topological approach allows us to pay critical attention to political and scientific projects that aim to monitor, manage or explore diversity – often understood in terms of ‘natural’ groups (of ‘cultures’, ‘minorities’, ‘migrants’, ‘ethnicities’, ‘populations’ or the like). The diversity that is the subject of such projects is ‘not a given but made’ (M’charek 2009: 422) – like race, it is the product of a specific and contingent configuration of social, material, technical and political elements. Talking about race in the singular (that is, not races), but racial effects in the plural, enables me to pay attention to the multiplicity of components that situationally and relationally produce race. If the concept of diversity connotes this fluidity, it can be turned into a useful methodological tool to think about race in the twenty-first century.

In the remainder of this essay, I will attempt to set a possible direction for this debate. I will mainly focus on recent debates on race in the life-sciences, and genomics in particular. It is here that diversity has featured prominently, also as a way of disproving the biological reality of race, while at the same time race has emerged as a matter of concern in and through the associated scientific practices, material base and political reverberations.

**Race and the limits of social construction**

As John Hartigan Jr. has put it bluntly and poignantly ‘saying “socially constructed” is not enough’ (Hartigan 2006, 2008; my emphasis) if we want to understand how race is being made and unmade in our post-genomic times. The issue that is at stake here is the common proclamation of race as a social construct that is put in opposition to claims of it to constitute a natural reality. This line of argumentation is sometimes accompanied by references to scientific evidence to verify the non-existence of race as natural kind. Once this fact has been established, our role as social scientists would be to deal with the realities of racial oppression in society. This assertion, however, reproduces a problematic dichotomy of biology (as nature) and society (as culture and politics) – as if these were independent and self-contained categories. It also simplifies the ways in which race is actually performed. Increasingly, racialization occurs without an explicit reference to biology. A sole focus on the production and naturalization of biological differences fails to acknowledge the various intersections and overlaps of biological references with class, citizenship, religion, morality, lifestyle, etc. In certain constellations these seemingly unrelated aspects, which in themselves do not signify race, come together and produce racial effects. In a similar vein, it is also important to note that contemporary biological research on human differences does not automatically re/produce race science or race for that matter (Abu El-Haj 2012). In order to understand how racialization occurs in these settings, one has to go beyond mere analogies. As Michael Montoya (2007) has argued, it is through subtle processes of bioethnic conscription, a mix of descriptive and ascriptive practices, that race may come to the fore in contemporary genetic studies that investigate genetic dispositions for diseases in ethnically or racially defined populations.

A topological analysis of race goes further than that, however. It not only considers the nature/culture of biological fact-making between observation and ascription of meaning (Marks 2013: 250), but also necessarily pays attention to extra-scientific, or seemingly unrelated, aspects that play a role in the performance of race – without falling into the trap of reducing the discussion to these. The debate about BiDil, which became the first ‘racial drug’, marketed exclusively to African Americans, is a good case in point (see Kahn 2013). As African Americans suffer disproportionately from heart failure and other cardiovascular diseases, and BiDil apparently ‘works better’ in African Americans, the suggestion was that the susceptibility to heart failure, as well as
African Americanness and the correlation between the two were mere biological, i.e. genetic, facts that could be targeted by a pharmaceutical solution. However, other factors, such as the effects of racism on African American bodies, as well as the specific conditions under which the data of the medical trial were produced or the patenting interests of the company which is marketing BiDil, were largely ignored in the reasoning behind the licensing of the drug by the Food and Drug Administration (FDA). These latter arguments focused solely on efficacy. Issues of racism and inequality found their way back into the debate through the enthusiastic embrace of BiDil by the National Association for the Advancement of Colored People (NAACP) who saw it as a positive step towards the improvement of the general health of African Americans. It is thus not sufficient to criticize BiDil for being ‘racial’. We rather need to ask how exactly race is brought about in this specific configuration – not as an objective fact among others (as the licensing seems to suggest), nor as a mirror of the race science of old (as some critics have argued), but instead as a result of the specific material-semiotic configuration called BiDil.

Race and the politics of science

With regard to a discussion of race it is also important to recognize that the strict separation of science and politics was upheld during the high-time of race science – even if it is evident now that the scientific practice was largely informed by ideological assumptions. This is not to say that race scientists were simply trapped in the politics of the day – surely, there were also contemporaneous critics who articulated their stance against scientific racism. Nevertheless, the majority of the involved scientists declared unanimously that they had no explicit interest in politics, or that their work had been ‘abused’ by politicians (see Lipphardt 2008). The official goal of race science was to prove that race, and white supremacy for that matter, were a biological reality that could be objectively assessed – through meticulous practices of measurement, association and comparison. Even if they hardly reached a consensus about the exact qualities of the various racial types, the degree of variation within or the correct distinction between them, race science and eugenics were widely regarded as serious work. And it was precisely through its claim to independence and objectivity that race science could serve as a powerful legitimation of regimes of racial oppression.

With the unravelling of the eugenic perversions in Nazi Germany and the demise of the typological paradigm, the scientific practices that were employed in the determination of racial difference were shown to be tainted by racist suppositions; moreover, they were unmasked as bad science (Gould 1981). In his seminal work *The Mismeasure of Man*, Stephen Jay Gould clearly argued against ‘the myth that science itself is an objective enterprise, done properly only when scientists can shuck the constraints of their culture and view the world as it really is’ (Gould 1981: 21). While Gould’s argument refers to scientific practice in general, the association of race science or scientific racism is often that of a pseudoscience. This connotation also has a side-effect, especially for the popular understanding of the social construction of race. It produces the image of a complete break with the past, leaving the claim to scientific objectivity and the underlying distinction of politics, nature and science largely untouched.

In many anti-racist fora, the proclamation that race is a fiction or a myth, yet with profound repercussions in the lives and experiences of real people, is one of the basic assumptions in the struggle for transformation. It partly relies on the scientific disproof of the biological value of conventional racial groupings. Likewise, population geneticists, most prominently perhaps Luigi Luca Cavalli-Sforza, have not ceased to announce publically that their research on human diversity has contributed fundamentally to the dismissal of race as a relevant factor in human evolution and thus to the demise of racism. This has been willingly taken up, for example in
post-apartheid South Africa, where the scientific evidence of common human origins and the accompanying rhetoric of unity in diversity have been marketed as important steps towards a post-racial society (see Bystrom 2009; Schramm 2014b). During a symposium on ‘The Human Genome and Africa’, which took place in 2003 on the initiative of the South African Genome Education Institute, Cavalli-Sforza was celebrated as ‘the “honest man” who aims to eliminate racism’ (Morris 2003a). He is quoted as follows:

The real message that I want to put across is that difference, genetically between continents and races – which correspond – are really a small part of human variation. . . . It is ridiculous that we are racist because we are merely different for having adapted to different climates.

(Cavalli-Sforza quoted in Morris 2003b)

**Criticizing diversity and acknowledging the complexity of race**

So far, so good. But does this really help us to understand the ongoing significance of race-trouble? Cavalli-Sforza locates racism and the corresponding lay concepts of race solely in the overvaluation of somatic differences between people and groups. Once this misunderstanding is overcome, so goes the logic, racism will lose its foundation and an appreciation of diversity will take its place (see also Soodyall 2003). And yet Cavalli-Sforza’s own work has been not only utilized in anti-racist discourse (as in the quote just given), but also heavily criticized as racist practice in other contexts, most notably through the highly contested Human Genome Diversity Project (HGDP) (cf. M’charek 2005, 2009; Reardon 2005). How is that possible? The HGDP was meant to balance the apparent euro-centrism of the Human Genome Project – and to demonstrate the richness of human genomic variation. The main concern was the documentation of so-called indigenous groups that were thought of as biological (and cultural) isolates, whose genomes would provide valuable information on human evolution. Supporters argued for the urgency of the sampling, because with increasing globalization and the accompanying ‘interbreeding’ and ‘admixture’, indigenous people were about to vanish – they were conceived of as being on the edge of extinction.

The critics of this project, of which there were many, including indigenous activists, lawyers, historians of science, anthropologists, etc., have highlighted the problematic linkages of the HGDP to colonial practices of science and governance, and to the racial effects that went along with it. These connections were by no means straightforward – the HGDP did not simply mirror the assumptions of scientific racism – on the contrary, it aimed in an opposite direction. Race did not come to the fore in genetic sequences or through a biological hierarchy of difference. Neither was it simply a matter of old-fashioned nomenclature. Instead, it was produced via a combination of strands: the conceptualization of indigeneity outside of historical and political circumstances (including colonial violence and contemporary struggles, cf. Gordon 2009; TallBear 2013); the juxtaposition of stasis and mobility for different people (‘traditional’/indigenous vs. ‘modern’); the rhetoric of salvage anthropology, reminiscent of the large-scale sampling efforts of the early twentieth century; the connected reverberations of colonial violence in the gathering of scientific data (cf. Hoffmann 2009); ethical concerns about benefit sharing and informed consent; the political histories inscribed in the materiality of samples (cf. Schramm 2014a), etc. Consequently, the critique of the HGDP and its successors concentrated on the analysis of concrete practices of sampling, comparison and meaning-making as well as the interactions between scientists, subjects, materialities (such as blood samples and other specimens), representations and technologies as well as economic and legal issues.
Concluding remarks

‘Staying with the trouble’, Donna Haraway’s (2010) catchy phrase for addressing the role of companion species in contemporary (posthumanist) biopolitics, helps me to summarize the approach that I have laid out in this essay. The trouble with race, indeed, is manifold. First of all, race-trouble connotes the violence that went along with racial classification and the accompanying regimes of oppression. It reverberates through various channels, whenever race is referenced – though not always in the same way. This brings me to the second point, which also links up to the topological approach that I have suggested: the contemporary trouble with race cannot always be anticipated – since race is not this one fixed entity that can be easily known or dismissed. Staying with the trouble means precisely to pay attention to the intersections and relations through which race becomes articulated. Thirdly, race, as a troubling object, calls into question the very possibility of neutral description or analysis. It shows how closely nature, culture and politics are entwined. The trouble cannot be fully resolved; it can only be transformed.

Notes

1 Kwame Anthony Appiah (1992) has argued that Du Bois was nevertheless ‘trapped’ in biological notions of race. I disagree with Appiah on two grounds. First, Du Bois always analyzes race in a political framework; even if he speaks about the black body and soul this is never detached from social relations and historical circumstances. Second, as I will demonstrate, Appiah’s implicit suggestion that one could neatly distinguish between biological (denoting racism) and social (denoting emancipation) notions of race is misleading – even if it is still widespread and was sometimes followed by Du Bois himself.

2 In the political realm, this is, of course, a qualified diversity; see the onslaught on so-called multiculturalism (which both German and British politicians have declared to be ‘dead’ or ‘have utterly failed’) plus the ever more restrictive, even deadly, politics of European border regimes designed to keep the undesired ‘other’ at bay (see M’charek et al. 2013).

3 This narrative, of course, is a simplification – debates on race and human variation in the field of biology took many turns; for a brief discussion, which also pays attention to the co-constitution of race as a social formation, always combining ‘biological’ and ‘social’ categories, see Outlaw (1990).

4 Obviously, the ‘racial state’ as a complex social formation has not vanished either, even if its particular forms of articulation have changed. For a careful analysis of such re-articulations of race, the United States post-civil rights and Black Power, see Omil and Winant (1994).

5 My thinking around this issue has evolved through joint conversations with Amade M’charek and David Skinner (M’charek et al. 2013); see also M’charek (2014).

6 In mathematics, topology describes the consistency of an object under conditions of constant plasticity and transformation.

7 The division between these realms also reflects distinct (and often fiercely opposed) disciplinary debates, especially between biological and social/cultural anthropology. For attempts at bridging these gaps, see Mukhopadhyay and Moses (1997), Goodman and Leatherman (2001) and recently Ingold and Palsson (2013).

8 In the meantime, with increasing sequencing and computational capacity, there has been a large proliferation of such projects – from the HapMap to the Genographic Project to various national genome projects, for example the Mexican IMMIGEN or the South African Human Genome Project (SAHGP). I will stick to the HGDP because it has been so iconic and therefore helps to illustrate the dynamic relationship between concepts of race and diversity.

References


