

**ALEXANDRA SZEMERE**

**Contemporary Interpretations of the Concept of Race**

Pro&Contra 6

No. 2 (2022) 5–24



## Abstract

In my paper, I examine the changes that have taken place in different approaches to race through an analysis of race-related concepts in the international literature. I therefore set out to describe the definitions of race that have emerged in the academic world and the debate surrounding the concept. A deeper study of this problem is essential if we are to understand what motivates the persistence of race, that is, what is at stake in the application and use of the concept. The growing sociological and anthropological literature on the geneticisation and molecularisation of race indicates that a kind of biological realism or essentialism is being revived. This is why I think it is important to explain, through a few examples, the arguments of contemporary European constructivist critical race theorists who take an anti-essentialist stance and maintain a contextualised understanding of race.

**Keywords:** race, racism, biological essentialism, constructivism, critical race theory

## Introduction

When Ann Morning conducted research on the nature of race, many of the scientists interviewed said, “Everyone knows race is a social construct!”<sup>1</sup> These researchers also expressed disbelief that Morning would find any diversity regarding the definition of race in the scientific community. But the idea that the definition of race, and how we think about it, is very divisive and fraught with tension among scholars is a good starting point:<sup>2</sup> as there is no consensus among researchers on what constitutes a race.<sup>3</sup> Some scholars believe that there is a disciplinary divide between social scientists, who share a more constructivist view, and biologists and physical anthropologists, who largely maintain an essentialist approach.<sup>4</sup> These differences however are not only between disciplines, but also within disciplines.<sup>5</sup>

In the field of science studies, a discipline that uses social science methods and concepts to analyze the issues and problems of *science*, many scholars examine “the changes in fundamental cultural categories that have occurred as nature has become increasingly manufactured, commodified, digitized, and, in general, socially shaped by new research

---

<sup>1</sup> Morning 2011, 7.

<sup>2</sup> Cartmill 1999, 651–660.

<sup>3</sup> Cooper 2003, 23–25; Ossorio - Duster 2005, 115–128; Sankar - Cho 2002, 1337–1338; Wadman 2004, 1026

<sup>4</sup> Cartmill 1999, 651–660; Duster 2003, 258–277; Keita - Kittles 1997, 534–544; Krieger - Bassett 1993, 161–169; Lee -Mountain - Koenig 2001, 33–75; Odocha 2000, 96–97.

<sup>5</sup> Morning 2011, 1–22.

fields and associated technologies.”<sup>6</sup> Science studies scholars also research and monitor changes in the way scientists and the man in the street conceptualize the human body, the determinants of health, the emergence of racism, and the new biological essentialism.<sup>7</sup>

In my paper, I examine the changes that have taken place in different approaches to race, through an analysis of race-related concepts in the literature. I will therefore attempt to describe the definitions of race that have emerged in academia. In order to describe the debate surrounding the concept of race, a deeper exploration of this issue is essential if we are to understand the stakes involved in its application and use. The literature review shows that there is still no agreement, even within a given discipline, on how the concept of race should be interpreted. It is true that the growing sociological and anthropological literature on the geneticisation<sup>8</sup> and molecularisation of race indicates that a kind of biological realism or essentialism is being revived.<sup>9</sup> This is why it is important in this article to explain, through a few examples, the arguments along which contemporary European constructivist critical race theorists take an anti-essentialist stance.

### **Race: social construct or biological reality?**

According to Leonard Lieberman, essentialists are those researchers who think the human race is inherently divided into races.<sup>10</sup> Constructivists are scientists who do not believe in the racial division of the human race. However, this rigid and definite essentialist-constructivist dichotomy is perhaps a picture that is too simplistic to describe satisfactorily our ideas about our differences, yet it provides an appropriate framework for the international debate about the concept of race.

### ***An essentialist approach***

The central idea of the essentialists is that members of a given group share one or more defining qualities that are inherent, essential and innate, or otherwise fixed, to the group.<sup>11</sup> In defining race, the essentialist position implies an inherited, permanent physical or psychological difference between different racial groups, which are thought to be natural

---

<sup>6</sup> Hess 2007, 463.

<sup>7</sup> Martin 1998, 22–44.

<sup>8</sup> Lippmann 1993, 64–79.

<sup>9</sup> Fausto - Sterling 2004, 1-37; Fullwiley 2007, 221–237; Outram–Ellison 2006, 157–179; Pálsson 2007, 257–272.

<sup>10</sup> Lieberman 1968, 127–141.

<sup>11</sup> Morning 2011, 22–66.

kinds.<sup>12</sup> In many cases race (Mayr defines it even more narrowly as geographic race) and sub-species are treated as synonymous, where race means “an aggregate of phenotypically similar population of a species inhabiting a geographic subdivision of the range of that species and differing taxonomically from other populations of that species.”<sup>13</sup>

Race as a definition and category, as well as the essentialist conception of race, was born before and outside the advent of modern science.<sup>14</sup> The beginnings of ‘*race science*’ can be traced back to 18th century Europe, where the forerunners of today’s biologists and anthropologists sought to name, catalogue and describe the races of the world. Linné (1707-78) is perhaps the best known of the early taxonomists. It was he who initially established four categories within the human race: American, Asiatic, African and European. These were defined first by place of origin and later by skin colour. In addition to him, several other scientists developed human classification schemes, such as Francios Bernier, George-Louis Leclerc, Comte de Buffon and Johann Friedrich Blumenbach.<sup>15</sup> In addition to the various taxonomies, European scientists developed the first anthropometric measures of race-based differences. Petrus Camper worked on *facial angles*, Anders Retzius introduced the cranial index and Paul Broca invented various instruments to measure the skull and other human body parts.<sup>16</sup> Race played a prominent role in the theoretical and methodological development of the human sciences during this period. These essentialist ideas became intertwined with social hierarchies based on skin colour during this period, mostly under the influence of European colonisation in the Americas, Africa and Asia.<sup>17</sup> The end product was an essentialist and hierarchical concept of “black,” “white,” “yellow,” and “red” race, created by Linne and other taxonomists.<sup>18</sup>

This approach flourished in the 19th century. Empirical evidence was found by researchers of the time, such as Samuel Morton, Josiah Nott, George Gliddon and Louis Agassiz, that different races existed. Differences between races were thought to be found in skeletal structure, muscles, genitals, brain size, sweat, speech and intelligence.<sup>19</sup> These have been analyzed and studied in disciplines such as anthropology, craniometry and anthropometry.

---

<sup>12</sup> Tate–Audette 2001, 495–520.

<sup>13</sup> Mayr 2002, 90.

<sup>14</sup> Smedley–Smedley 2007, 11–35.

<sup>15</sup> Smedley–Smedley 2007, 227–251; Smith 2015, 252–267.

<sup>16</sup> Hannaford 1996, 235–274.

<sup>17</sup> Hannaford 1996, 235–274.

<sup>18</sup> Morning 2011, 22–66.

<sup>19</sup> Smedley–Smedley 2007, 227–251.

The late 19th and early years of the 20th century signaled that a new scientific definition was on the horizon.<sup>20</sup> The science of eugenics and its results had an impact on the evolution and change of the concept of race. According to the eugenic interpretation of Darwinian evolutionary theory, races are in constant competition with each other, meaning that the fittest survive (*survival of the fittest*) and the weakest are doomed to extinction.<sup>21</sup>

The eugenic discourse of the interwar period and the events of the Second World War contributed to the rejection of the concept of race that dominated in the 18th and 19th centuries. One of the most striking examples of this is the UNESCO resolution of 1950, in which, in an essay by Ashley Montague and other social scientists<sup>22</sup> the essentialist concept of race and the exclusionary, destructive racism based on it are condemned. By the mid-20th century, therefore, a kind of academic consensus had emerged against the harmful effects of the essentialist model.<sup>23</sup> A rethinking of the conceptual approach to race became necessary, most notably as scientists began to deny its scientific nature. We can sum up the essentialist position as follows:

“Race theory is the recurrently encountered folk belief that humans can be partitioned into distinct types on the basis of their concrete, observable constitution. The notion of observable constitution captures the following features of racial thinking: racial differences are thought to be embodied, natural, and enduring, and are thought to encompass nonobvious or inner qualities (including moral and mental ones) as well as outward physical ones.”<sup>24</sup>

In addition, scientific research has emerged that has used contemporary technology to demonstrate the biological impossibility of race. A classically cited example of this is Richard Lewontin’s research, who published an article in 1972 demonstrating through the tools of genetics that races cannot be distinguished genetically.<sup>25</sup> Despite this scientific result essentialist thinking has not disappeared. According to essentialists, biological races exist as a taxonomic unit of a subspecies, differing from a population only in a few gene frequencies. A good example of this approach is the work of Neven Sesardić, who believes that the differences in gene frequencies capture the biological reality of race.<sup>26</sup>

---

<sup>20</sup> Morning 2011, 22–66.

<sup>21</sup> Spencer 2006.

<sup>22</sup> Montague 1950.

<sup>23</sup> Smedley–Smedley 2007, 269–288.

<sup>24</sup> Hirschfeld 1996, 42.

<sup>25</sup> Feldman–Lewontin 2008.

<sup>26</sup> Sesardić 2010.

### *A constructivist approach*

If essentialists argue that race categories simply reflect natural, stable differences between human groups, then constructivists argue that such categories are “man-made” or in other words artificial “social constructs.”<sup>27</sup> Many critics see constructivism as a denial and rejection of important truths of biological “reality.” But it is also interpreted as an epistemological approach that undermines valuable scientific (basic) principles such as objectivity and positivism.<sup>28</sup> But constructivists do not see social groups as less real simply because they are not rooted in biology. Constructivists believe that race is the result of an ideology that emerged in the 18th century as part of European experimentation to comprehend other ethnic groups.<sup>29</sup>

As a result of the “events” discussed in the essentialist approach, the early years of the 20th century already indicated that a new scientific definition of race was on the horizon. And in the 1950s a new anti-essentialist view emerged, which Lieberman summarizes as (i) human biological differences cannot be neatly divided into separate categories, (ii) race-based traits are not inherited together, (iii) populations have always been mixed, so the emergence of different races is impossible, (iv) the boundaries of races are arbitrarily drawn by those who do the classifying.<sup>30</sup> This idea is a radical departure from the previous understanding, since it aims to directly refute the biological claims of the essentialists. Matt Cartmill’s research shows that the use of the concept of race in scientific articles in the field of physical anthropology showed a downward trend between the 1960s and the 1990s.<sup>31</sup> Similar to the anti-essentialist position, most constructivists see race as “a definition that expresses and symbolizes social conflicts, interests and concerns about different types of human bodies.”<sup>32</sup> Racial classification is thus a tool of power, designed to create social hierarchies and to elevate people – economically, socially and politically – at the expense of others.<sup>33</sup> Since, according to the constructivist view, race is a ‘social invention’, individuals do not carry their race with them, it is merely a label that is attached to them depending on the society they belong to.<sup>34</sup> Racial categorization is an intellectual product of cultural

---

<sup>27</sup> Fausto–Sterling 2004, 1–37; Fullwiley 2007, 221–237; Outram–Ellison 2006, 157–179; Pálsson 2007, 257–272; Barkan 1992, 13–66; Nobles 2000, 1–25; Reardon 2004, 38–65; Morning 2011, 1–22.

<sup>28</sup> Gergen 1998, 33–48; Sarich–Miele 2004, 59–103.

<sup>29</sup> Morning 2011, 22–66.

<sup>30</sup> Lieberman 1968, 127–141.

<sup>31</sup> Cartmill 1999, 651–660.

<sup>32</sup> Omi–Winant 1994, 55.

<sup>33</sup> Morning 2008, 106–137.

<sup>34</sup> Morning 2011, 18.

power, position and attitude, which continues to have an impact today.<sup>35</sup> The relationship between constructivists and essentialists can be summarized as follows:

“Specifically, I submit that race is a system for classifying human beings that is grounded in the belief that they embody inherited and fixed biological characteristics that identify them as members of racial groups. Where essentialists and constructionists would differ is on whether the belief in biological racial difference is accurate.”<sup>36</sup>

### Contemporary definitions of race

There is no consensus on the concept of race across disciplines or within disciplines, and the scientific definition of race is constantly changing. Despite well-established critiques in the social and natural sciences since the mid-20th century, the biological approach to race seems to be widely used by scholars working in various disciplines by peeling away ambiguous, and suspect meanings.<sup>37</sup> Below I will show how thinking about race has changed and explore the question of whether contemporary theories do indeed incorporate a biological model of race.

Contemporary views on the definition of race are rewritten by the concept of DNA.<sup>38</sup> Troy Duster argues that DNA’s prominent role in defining race suggests that there is continuity between contemporary scientific understandings of race and the essentialism of the past. He posits that earlier notions of race are simply ‘buried alive’ in contemporary scientific thought and practice.<sup>39</sup> However, research on the human genome has led some scientists to conclude that different categories of race do not significantly reflect biological differences.<sup>40</sup> The finding that 99.9% of human DNA is shared by groups of what we call races, and there are 85% differences in DNA variation within groups are widely argued to be reasons for a rethinking of racial categories.<sup>41</sup> The discovery through genetic research of one’s descent from multiple racial groups can be interpreted as a blow to the traditional biological notion of race. Other researchers, however, are of the opinion that human genetics and its research results can be interpreted as evidence for the existence of natural

---

<sup>35</sup> Omi–Winant 1994, 9–48; Hirschfeld 1996, 135–159; Morning 2011, 1–22.

<sup>36</sup> Morning 2011, 21.

<sup>37</sup> Fausto-Sterling 2004, 1–37; Fullwiley 2007, 221–237; Outram–Ellison 2006, 157–179; Pálsson 2007, 257–272.

<sup>38</sup> Abu El-Haj 2007.

<sup>39</sup> Duster 2003, 258–277.

<sup>40</sup> Marks 1995; Graves 2000, 155–173.

<sup>41</sup> Lewontin 1972, 381–398.



racess within the human species.<sup>42</sup> They argue, for example, that clustering algorithms applied to human DNA data objectively generate clusters that can be understood as races.<sup>43</sup> Furthermore, the “genetic family tree.” i. e., the racial heritage of an individual, can be unraveled from DNA analysis.<sup>44</sup> The aforementioned concept is also of great importance in medicine, as it can provide a basis for understanding differences in health conditions.<sup>45</sup> Many proponents of the essentialist model believe that it would be a shame to deny what members of historically oppressed minority groups, see as an important biological reality in their everyday life.<sup>46</sup> They believe that race-based identification contains information that can help more accurately identify health needs.<sup>47</sup>

It can be seen, however, that the geneticisation and molecularisation of race and the results of DNA analysis are used by both essentialists and constructivists to reinforce their views in the debate on the definition of race. Geneticists Morris W. Foster and Richard R. Sharp argue that “although a simplistic biological understanding of race and ethnicity, linked to the eugenics movement, may be dead, a more nuanced assumption, namely that race and ethnicity do capture ‘some’ meaningful biological differences, is alive and well.”<sup>48</sup> Evolutionary biologist Joseph Graves, on the other hand, finds that “[m]ost geneticists, evolutionary biologists and anthropologists agree that there are no biological races within the human species.”<sup>49</sup> Furthermore, several philosophers, biologists and social scientists have reached the same conclusion.<sup>50</sup> To get a more nuanced picture of the contemporary debate on the nature of race, it is important to note the work of Lundy Braun, who has examined the biologists’ views on race.<sup>51</sup>

“Multiple, frequently conflicting, and generally implicit understandings of the concepts of race and ethnicity circulate in biomedical circles, with some researchers proposing that race has no genetic meaning, others arguing that the estimated 5 to 6 percent genetic difference is sufficiently meaningful biologically to justify an intensive research program, and still others arguing that the whole controversy can be circumvented by substituting ethnicity for race.”<sup>52</sup>

---

<sup>42</sup> Mayr 2002, 89–94.

<sup>43</sup> Risch et al. 2002, 1–12.

<sup>44</sup> Bolnick et al. 2007, 399–400.

<sup>45</sup> Lee–Mountain–Koenig 2000, 33–75.

<sup>46</sup> Morning 2011, 219–249.

<sup>47</sup> Satel 2002, 56–58; Burchard et al. 2003, 1170–75.

<sup>48</sup> Foster–Sharp 2002, 844.

<sup>49</sup> Graves 2001, 5.

<sup>50</sup> Barkan 1992, 13–66; Marks 1995; Nobles 2000, 1–25; Reardon 2004, 38–65.

<sup>51</sup> Braun 2002, 159–174.

<sup>52</sup> Braun 2002, 165.

However, if the meaning does not change – i. e., ethnicity is used in the same sense as race – this does not mean that the same issues and problems will not arise in the future as with race.

Like Braun, Alan H. Goodman was curious about how members of the scientific community use the concept of race. He proposes to divide the scholars according to which type of epistemological approach do they subscribe to: at one end of his typology are the true believers, such as the psychologist Philippe J. Rushton, who believes in three categories of race (Mongoloid, Negroid and Caucasian).<sup>53</sup> He classified them according to intelligence and reproductive ability.<sup>54</sup> The other camp can be divided into two groups: both groups believe that race is just a myth, but they come to different conclusions. The politically conservative group argues that if race does not exist, socio-political decisions should not be based on race.<sup>55</sup> In the social constructivists' view, the way in which individuals experience their own race does not correspond to the way in which different disciplines biologize the concept.<sup>56</sup> Goodman calls the in-between group the “confused”<sup>57</sup> one. He includes in this group some people who do not understand why *race biology* is wrong, yet avoid its occurrence in any way in order to maintain the appearance of political correctness. Others use the concept of race as a quasi-biological, quasi-genetic category and do not understand what is wrong with the concept or the way it is used. Still others believe that the stance against race biology is political rather than scientific. The camp of those who fall in between is huge. It includes almost all public health professionals and doctors, biologists and most physical anthropologists.

Braun and Goodman's research suggests that it is far from clear, even in academia, how different disciplines think about race and how they interpret or define it. It can also be seen that thinking about race involves a great many social institutions, which makes it important to consider a social critical approach that aims to show the social embeddedness of the concept on a constructivist basis. In other words, it is worth examining how critical social science reflects on the structuring power of the concept.

---

<sup>53</sup> Goodman 1997, 20–25.

<sup>54</sup> Rushton–Jensen 2005, 235–294.

<sup>55</sup> Hannaford 1996, 369–396.

<sup>56</sup> Smedley–Smedley 2007, 289–307; Marks 1995; Reardon 2004, 38–65.

<sup>57</sup> Goodman 1997, 23.

### **Critical race theory and its European interpretations: the case of Roma racialization**

Critical race theory as an academic approach originated in the legal field in the United States of America. Researchers wanted to address the problem that, despite the fact that the classical biological concept of race was challenged by the second half of the 20th century, both the scientific discourse and people's everyday lives were still influenced by essentialist race-based thinking. This has made it necessary to develop a theoretical approach that can take account of biological (material) differences without denying the social construction of race. Researchers placed emphasis on three main ideas: (1) on being able to talk about the everyday reality of racism and (2) to be able to represent the perspectives of citizens who have experienced or are experiencing racism, and (3) to capture the changing process of racism in different social contexts.<sup>58</sup> These essentially legal-theoretical works serve as the foundation for scholars who then built upon these ideas working from very different social science fields. Their aim in addition to redefining race is to address the problem of institutionalized racism.

Although there have been many changes in the scientific discourse on race, along with the availability of exhaustive literature on the negative effects of racism both in a local and global context, we cannot talk about equal societies in the third decade of the 21st century. It is from this critical framework that Howard Winant draws attention to the need for researchers to focus on the articulation of race.<sup>59</sup> He argues that if we are to be serious about combating racism in our globalizing, multicultural world, we need a theory that can capture the typification and social structuration that race brings. According to Winant, there are three important elements to this: (1) a comparative/historical aspect; (2) the ability to link the structuring effects and identity-marking function of racialization within society at the micro and macro levels; (3) a rethinking of political discourse in the light of the ways in which the concept of race, race-based thinking, inhibits the achievement of social equality.

Following the atrocities committed by Nazi Germany and the UNESCO declarations after the Second World War, the concept of race was replaced in Europe (unlike in Britain and Ireland) by the category of ethnic identity. According to Mathias Möschel, the main argument against its use was based on the fact that, since there is no biological sense of race, the use of the concept of race would implicitly contribute to its legitimization and provide a breeding ground for racism.<sup>60</sup> However, the problem is that the concept of race

---

<sup>58</sup> Delgado–Stefancic 2000; 2001; Haney–López 2010.

<sup>59</sup> Winant 2000.

<sup>60</sup> Möschel 2011.

is in use, racism has not disappeared, and the narrow interpretation of continental scientific discourse does not allow for a grasp of the everyday reality of race and racism. To illustrate this, Möschel cites the French practice, where the dominant approach to racial equality is of colorblindness. In this example, the author discusses the need for statisticians to use the category of racial identity, without which they are unable to detect racism in society. Möschel places particular emphasis on institutions – prisons, police – where racial discrimination is well documented from a social science perspective, although there is no formal racial categorization of citizens. For these reasons, Möschel also argues that critical race theory (hereafter: CRT) provides a useful perspective in the European context, because similarly to the American, the European discourse is not capable of sensitively grasping how race functions in various social contexts. CRT's critical principles allow researchers to reflect on how race functions in different interactions, to grasp the structuring power of race, the everydayness of racism, and to point out the performativity of race.

Racial discrimination affects minority communities in Europe, and Roma communities are among the larger ethnic groups, and for this reason, there is a substantial scholarship (within the field of Critical Romani Studies) that deals with discrimination against these communities.<sup>61</sup> It is argued, that the inability to collect accurate data on the Roma population and thus the lack of accurate data about the negative discrimination they face in the workplace, housing, education, in healthcare or legal areas act as barriers in combating discrimination and hinder any solution to these inequalities. Ronnie Fay and Lynsey Kavanaugh for example, argue for statistical visibility of Roma communities in Ireland.<sup>62</sup> Fay and Kavanaugh argue for the need to capture ethnic identity in census data collection in order to produce effective evidence-based policy interventions to prevent discrimination. Similar problems are seen with the Sinti and Roma community in Germany by researchers Anja Reuss and Jonathan Mack.<sup>63</sup> The difference between Reuss and Mack's approach to that of Fay and Kavanaugh is that the former take the position that different forms of discrimination should be recorded without registering ethnic data. They argue that it is possible to combat racial discrimination without quantitative data collection by the state, but in order to make sense of the everyday reality of racism, it is important to have qualitative research where these experiences can be explored and linked to ethnic identity. All of this must be done in strict compliance with the ethical rules of scientific research, so that sensitive ethnic data cannot be linked to individuals and made public, thus preventing ethnic identity from being the basis for any misuse later on.

---

<sup>61</sup> Ryder–Cemlyn–Acton 2014; Cortés Gómez–End 2019; Van Baar–Kóczé 2020.

<sup>62</sup> Fay–Kavanaugh 2019.

<sup>63</sup> Reuss–Mack 2019.

Lázár argues for the application of critical race theory in Hungarian legal theory, and in his review, he emphasizes how the tools proposed by CRT could help reform the legal system, for example by taking into account the everyday experiences of victims of racial discrimination.<sup>64</sup> In this way, the notion of race in the legal framework would also make sense on the basis of local needs and experiences. Szamosi also draws attention to the application of critical race theory in the Hungarian health context.<sup>65</sup> In his work, he argues that in a society where ethnic inequalities have long determined the life quality of citizens, the use of ethnic identity can enable more equal access to health care. The health marginalization of Roma people and both the scientific documentation of this process and the incorporation of their experiences concerning ethnic discrimination into the reform of medical practice, can enable the improvement of health standards for Roma communities. However, he also considers it important that race and ethnic identity must be contextually defined and applied. There is a need for concepts to inform medical decision-making, and the use of identity categories makes health disparities statistically visible, but it must be recognized that the essentialist interpretations of these concepts can negatively impact equal access to health care.

## Conclusion

Views and definitions of race are constantly changing. We cannot therefore talk about a fixed, stable concept, which is timeless, the same in every age and in every discipline. There are ongoing debates about the nature of race, focusing on whether we can talk about a biologically based classification of race, or whether it is a category that is more socially understood and created in order to make it easier to classify and understand other ethnic groups. There is a debate between different disciplines and within disciplines about the definition of race. However, both constructivists and essentialists agree that race is a system for classifying people based on the assumption that they have permanent biological characteristics. The difference between the essentialist and constructivist conceptions is rooted in the question of whether race-based differences in biological terms can be accurately captured.<sup>66</sup> It can also be seen that, in the case of contemporary definitions, the geneticisation and molecularisation of race, as well as the results from DNA analysis, are used by both essentialists and constructivists to reinforce their views in the debate on the

---

<sup>64</sup> Lázár 2016.

<sup>65</sup> Szamosi 2013; 2019; 2022.

<sup>66</sup> Morning 2011, 219–249.

definition of race. However, these approaches are not sensitive enough as to how race is created in everyday experience. Critical race theory, building on the constructivist approach, proposes a concept of race that takes into account the material differences associated with the concept itself, while at the same time capturing the cultural embeddedness of race, thereby pointing to the variability of the concept's meanings, both historically, socially and geographically.

## References

Abu El-Haj, Nadia. 2007. "The Genetic Reinscription of Race." *Annual Review of Anthropology* 36: 283-300. <https://doi.org/10.1146/annurev.anthro.34.081804.120522>

Barkan, Elazar. 1992 *The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States between the World Wars*, Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511558351>

Bolnick, Deborah A. -Duana Fullwiley-Troy Duster-Richard S. Cooper-Joan H. Fujimura-Jonathan Kahn-Jay Kaufman-Jonathan Marks-Ann Morning-Alondra Nelson-Pilar Ossorio-Jenny Reardon-Susan M. Reverby-Kimberly TallBear. 2007. *Science* 318/5849: 399-400. <https://doi.org/10.1126/science.1150098>

Brown, Lundy. 2002. "Race, Ethnicity, and Health: Can Genetics Explain Disparities?" *Perspectives in Biology and Medicine* 45: 159-174. <https://doi.org/10.1353/pbm.2002.0023>

Burchard, Esteban-Elad Ziv-Natasha Coyle-Scarlett Lin Gomez-Hua Tang-Andrew J. Karter-Joanna L. Mountain-Eliseo J. Perez-Stable-Dean Sheppard-Neil Risch. 2003. "The Importance of Race and Ethnic Background in Biomedical Research and Clinical Practice." *New England Journal of Medicine* 348/12: 1170-1175. <https://doi.org/10.1056/NEJMs025007>

Cartmill, Matt. 1999. "The Status of the Race Concept in Physical Anthropology". *American Anthropologist* 100/3: 651-660. <https://doi.org/10.1525/aa.1998.100.3.651>

Cooper, Richard S. 2003. "Race, Genes, and Health - New Wine in Old Bottles?" *International Journal of Epidemiology* 32: 23-25. <https://doi.org/10.1093/ije/dyg036>

Cortés Gómez, Ismael-End, Markus. eds. 2019 *Dimensions of Antigypsyism in Europe*. Brussels: ENAR and the Central council of German Sinti and Roma.

Delgado, Richard-Stefancic, Jean. 2000 *Critical Race Theory: The Cutting Edge*. Philadelphia, PA: Temple University Press.

Delgado, Richard-Stefancic, Jean. 2001 *Critical Race Theory: An Introduction*, New York: New York University Press. <https://doi.org/10.1093/acref/9780195301731.013.51089>

Duster, Troy. 2003. "Buried Alive: The Concept of Race in Science." In *Genetic Nature/Culture: Anthropology and Science beyond the Two-Culture Divide*, edited by Alan Goodman-Deborah Heath-Susan Lindee, 258-277. <https://doi.org/10.1525/9780520929975-017>

Fausto-Sterling, Anne. 2004. "Refashioning Race: DNA and the Politics of Health Care." *Differences* 15/3: 1-37. <https://doi.org/10.1215/10407391-15-3-1>

Fay, Ronnie-Kavanaugh, Lynsey. 2019. "If We Are Not Counted, We Do Not Count: A Bottom-up Approach to Ethnic Equality Monitoring in Ireland." In *Dimensions of Antigypsyism in Europe*, edited by Ismael Cortés Gómez - Markus End, 231-245.

Feldman, Marcus W. -Lewontin, Richard C. 2008. "Race, Ancestry, and Medicine." In *Revisiting Race in a Genomic Age*, eds. Barbara A. Koenig-Lee Soo-Jin-Sarah S. Richardson, 89-101. New Brunswick, NJ: Rutgers University Press.

Foster, Morris W. -Richard R. Sharp. 2002. "Race, Ethnicity, and Genomics: Social Classifications as Proxies of Biological Heterogeneity." *Genome Research* 12: 844-850. <https://doi.org/10.1101/gr.99202>

Fullwiley, Duana. 2007. "Race and Genetics: Attempts to Define the Relationship." *Biosocieties* 2/2: 221-237. <https://doi.org/10.1017/S1745855207005625>

Gergen, Kenneth J. 1998. "Constructionist Dialogues and the Vicissitudes of the Political." In *The Politics of Constructionism*, eds. Irving Velody - Robin Williams, 33-48. London: SAGE. <https://doi.org/10.4135/9781446279014.n3>

Goodman, Alan H. 1997. "Bred in the Bone?" *The Sciences* 37/2: 20-25. <https://doi.org/10.1002/j.2326-1951.1997.tb03296.x>

Graves, Joseph L. 2001 *The Emperor's New Clothes: Biological Theories of Race at the Millennium*. New Brunswick, NJ: Rutgers University Press.

Haney López, Ian. 2010. "Is the Post in Post-Racial the Blind in Colorblind?" *Cardozo Law Review* 32: 807-831.

Hannaford, Ivan. 1996. *Race: The History of an Idea in the West*. Washington, DC: Woodrow Wilson Center Press.

Hess, David J. 2007. "Crosscurrents: social movements and the anthropology of science and technology." *American Anthropologist* 109/3: 463-472.  
<https://doi.org/10.1525/aa.2007.109.3.463>

Hirschfeld, Lawrence A. 1996. *Race in the Making: Cognition, Culture and the Child's Construction of Human Kinds*. Cambridge, MA: MIT Press.  
<https://doi.org/10.7551/mitpress/5734.001.0001>

Keita, S. O. Y. -Rick A. Kittles. 1997. "The Persistence of Racial Thinking and the Myth of Racial Divergence." *American Anthropologist* 99/3: 534-544.  
<https://doi.org/10.1525/aa.1997.99.3.534>

Krieger, Nancy-Mary Bassett. 1993. "The Health of Black Folk: Disease, Class, and Ideology in Science." In *The "Racial" Economy of Science: Toward a Democratic Future*, ed. Sandra Harding, 161-169. Bloomington and Indianapolis: Indiana University Press.

Lázár, Domokos. 2016. "Critical Race Theory-A magyar kritikai rasszelméleti mozgalom elméleti megalapozása." *Themis* 12/1: 92-115.

Lee, Sandra S. J. -Joanna Mountain - Barbara Koenig. 2001. "The Meanings of 'Race' in the New Genomics: Implications for Health Disparities Research." *Yale Journal of Health Policy, Law and Ethics* 1: 33-75.

Lewontin, Richard C. 1972. "The Apportionment of Human Diversity." *Evolutionary Biology* 6: 381-398. [https://doi.org/10.1007/978-1-4684-9063-3\\_14](https://doi.org/10.1007/978-1-4684-9063-3_14)

Lieberman, Leonard. 1968. "The Debate over Race: A Study in the Sociology of Knowledge." *Phylon* 29/2: 127-141. <https://doi.org/10.2307/273942>



Lippman, Abby. 1993. "Prenatal Genetic Testing and Geneticization: Mother Matters for All." *Reproductive Genetic Testing: Impact upon Women, Fetal Diagnosis and Therapy* 8: S64-S79. <https://doi.org/10.1159/000263886>

Marks, Jonathan. 1995. *Human Biodiversity: Genes, Race, and History*. New York: Aldine de Gruyter.

Martin, Emily. 1998. "Anthropology and the Cultural Study of Science." *Science, Technology, & Human Values* 23/1: 24-44. <https://doi.org/10.1177/016224399802300102>

Mayr, Ernst. 2002. "The Biology of Race and the Concept of Equality." *Daedalus* 131: 89-94.

Montagu, Ashley. 1950. "The race question." *Unescodoc. Digital Library*. <https://unesdoc.unesco.org/ark:/48223/pf0000128291>

Morning, Ann. 2008. "Reconstructing Race in Science and Society: Biology Textbooks, 1952-2002." *American Journal of Sociology* 114: S106-S137. <https://doi.org/10.1086/592206>

Morning, Ann. 2011. *The Nature of Race*. Los Angeles: University of California Press.

Möschel, Mathias. 2011. "Race in mainland European legal analysis: Towards a European critical race theory." *Ethnic and Racial Studies* 34/10: 1648-1664. <https://doi.org/10.1080/01419870.2011.566623>

Nobles, Melissa. 2000. *Shades of Citizenship: Race and the Census in Modern Politics*. Stanford, CA: Stanford University Press. <https://doi.org/10.1515/9780804780131>

Odocha, Okay. 2000. "Race and Racialism in Scientific Research and Publication in the Journal of the National Medical Association." *Journal of the National Medical Association* 92: 96-97.

Omi, Michael - Howard Winant. 1994. *Racial Formation in the United States: From the 1960s to the 1990s*. New York: Routledge.

Ossorio, Pilar N.-Troy Duster. 2005. "Race and Genetics: Controversies in Biomedical, Behavioral, and Forensic Sciences." *American Psychologist* 60/1: 115-128. <https://doi.org/10.1037/0003-066X.60.1.115>

Outram, Simon M. -Ellison, George T. H. 2006. "The Truth Will Out: Scientific Pragmatism and the Geneticization of Race and Ethnicity." In *The Nature of Difference: Science, Society and Human Biology*, ed. by George T. H. Ellison-Alan H. Goodman, 157-179. <https://doi.org/10.1201/9781420004175.pt3>

Pálsson, Gísli. 2007. "How Deep Is the Skin? The Geneticization of Race and Medicine." *Biosocieties* 2/2: 257-272. <https://doi.org/10.1017/S1745855207005728>

Reardon, Jenny. 2004. "Decoding Race and Human Difference in a Genomic Age." *Differences: A Journal of Feminist Cultural Studies* 15/3: 38-65. <https://doi.org/10.1215/10407391-15-3-38>

Reuss, Anja-Mack, Jonathan. 2019. "Data Collection on Equality, Discrimination and Antigypsyism." In *Dimensions of Antigypsyism in Europe*, edited by Ismael Cortés Gómez - Markus End, 231-245.

Risch, Neil-Esteban Burchard-Elad Ziv-Hua Tang. 2002. "Categorization of Humans in Biomedical Research: Genes, Race and Disease." *Genome Biology*, 3/7: 1-12. <https://doi.org/10.1186/gb-2002-3-7-comment2007>

Rushton, J. Philippe-Jensen, Arthur R. 2005. "Thirty Years of Research on Race Differences in Cognitive Ability." *Psychology, Public Policy, and Law* 11/2: 235-294. <https://doi.org/10.1037/1076-8971.11.2.235>

Ryder, Andrew-Cemlyn, Sarah-Acton, Thomas, eds. 2014 *Hearing the Voices of Gypsy, Roma and Traveller Communities*, Bristol: Policy Press University of Bristol. <https://doi.org/10.51952/9781447313588>

Sankar, Pamela-Mildred K. Cho. 2002. "Toward a New Vocabulary of Human Genetic Variation." *Science* 298: 1337-1338. <https://doi.org/10.1126/science.1074447>

Sarich, Vincent-Frank Miele. 2004. *Race: The reality of human differences*. Boulder, CO: Westview Press.

Satel, Sally. 2002. "I Am a Racially Profiling Doctor." *The New York Times Magazine*. May 5, 2002, 56-58. [<http://www.nytimes.com/2002/05/05/magazine/i-am-a-racially-profiling-doctor.html>] (2016. 11. 02.)

Sesardić, Neven. 2010. "Race: A social destruction of a biological concept." *Biology and Philosophy* 25/2: 143-162. <https://doi.org/10.1007/s10539-009-9193-7>

Smedley, Audrey-Smedly Brian D. 2007 *Race in North America: Origin and Evolution of a Worldview*, Boulder, CO: Westview Press.

Smith, Justin E. H. 2015. *Human Nature, and Human Difference: Race in Early Modern Philosophy*. Princeton: Princeton University Press.

<https://doi.org/10.23943/princeton/9780691153643.001.0001>

Spencer, Rainier. 2006. *Challenging Multiracial Identity*. Boulder, CO: Lynne Rienner.

<https://doi.org/10.1515/9781626372986>

Szamosi, Barna. 2013. "Roma as Research Subjects in the Hungarian Human Genetic Discourse." In *Studies in Biopolitics* edited by Judit Sándor, 113-126. Budapest: Center for Ethics and Law in Biomedicine.

Szamosi, Barna. 2019. "Public Health Concerns Regarding Reproduction Structured by Race/ Ethnicity and Class during State Socialism in Hungary." *Pro&Contra* 3/1: 47-66.

<https://doi.org/10.33033/pc.2019.1.47>

Szamosi, Barna. 2022. "Implications of Racial/Ethnic Classification in the Hungarian Post-Genomic Medical Discourse." *Treatises and Documents, Journal of Ethnic Studies* 88: 113-132. <https://doi.org/10.36144/rig88.jun22.113-132>

Tate, Chuck-Audette, Diego. 2001. "Theory and Research on 'Race' as a Natural Kind Variable in Psychology". *Theory Psychology* 11/ 4: 495-520.

<https://doi.org/10.1177/0959354301114005>

Van Baar, Huub.-Kóczé, Angéla. eds. 2020 *The Roma and Their Struggle for Identity in Contemporary Europe*, New York and Oxford: Berghahn.

<https://doi.org/10.3167/9781789206425>

Wadman, Meredith. 2004. "Geneticists Struggle toward Consensus on Place for 'Race.'" *Nature* 431: 1026. <https://doi.org/10.1038/4311026b>

Winant, Howard. 2000. "Race and Race Theory." *Annual Review of Sociology* 26: 169-185.  
<https://doi.org/10.1146/annurev.soc.26.1.169>