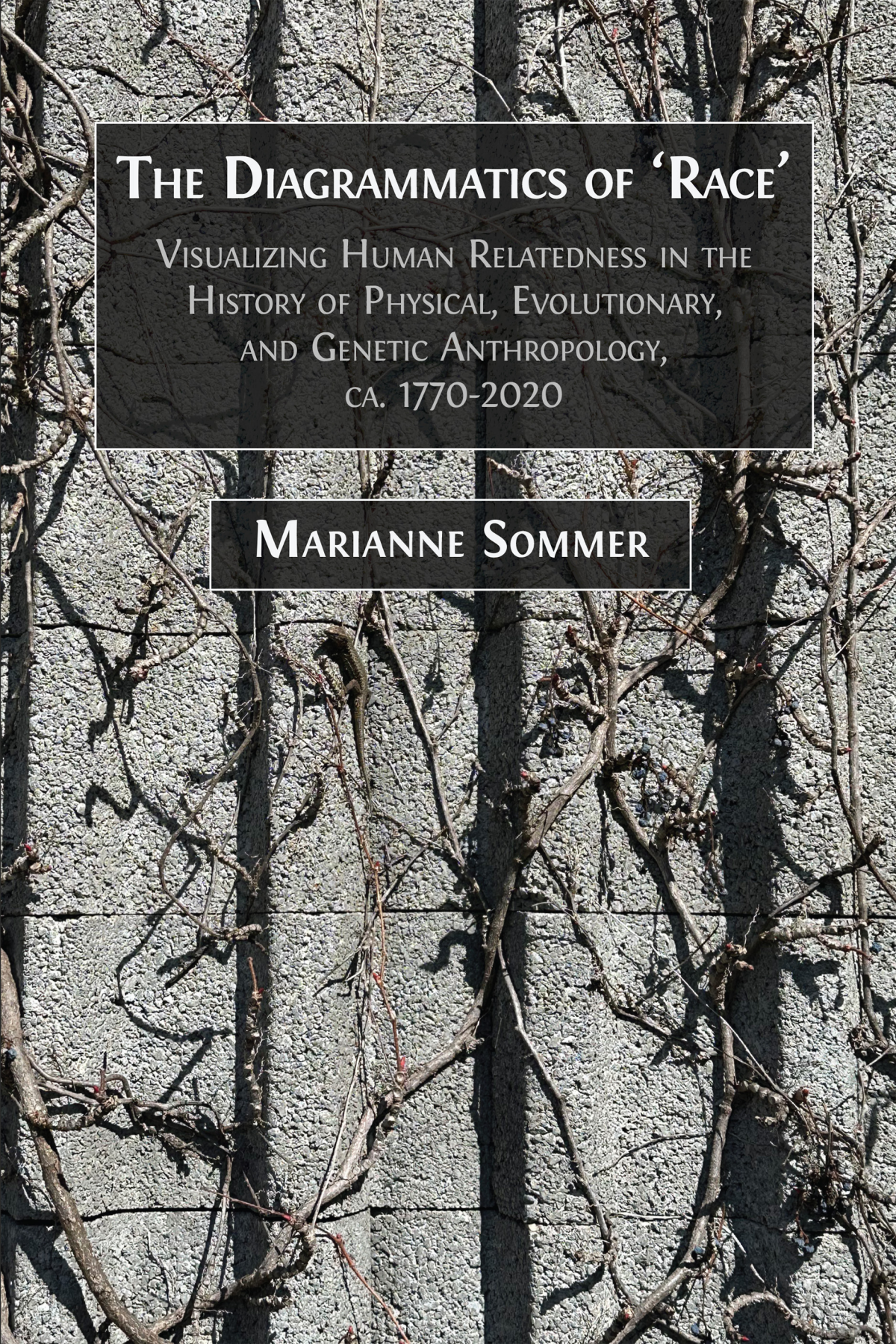

The Diagrammatics of 'Race'

Visualizing Human Relatedness in the History of Physical, Evolutionary, and Genetic Anthropology, ca. 1770-2020

Marianne Sommer

https://www.openbookpublishers.com

Marianne Sommer, *The Diagrammatics of 'Race': Visualizing Human Relatedness in the History of Physical, Evolutionary, and Genetic Anthropology, ca. 1770–2020*. Cambridge, UK: Open Book Publishers, 2024, https://doi.org/10.11647/OBP.0396

ISBN Paperback: 978-1-80511-260-0
ISBN Hardback: 978-1-80511-261-7
ISBN Digital (PDF): 978-1-80511-262-4
ISBN Digital eBook (EPUB): 978-1-80511-263-1
ISBN HTML: 978-1-80511-265-5

DOI: 10.11647/OBP.0396

Cover image: Photo by Marc Bloch, 2023, CC-BY
Cover design: Jeevanjot Kaur Nagpal.

14. Cable or Tangled Skein?

Despite the fact that contrary to Gates and Keith, Coon thought of the different 'racial' lines as part of a single evolutionary development connected through gene flow, even if with different temporalities, Coon's *The Origin of Races* (1962) incited some of those who stood for the newer cultural approach in anthropology or the synthetic approach even more than Gates' *Human Ancestry* of fourteen years ago. And politically, Coon's treatise once again entered the armory of segregationists in the south and beyond, now in the fight against the civil rights movement's demands (Jackson 2001). In a line leading from the 'physical anthropologist of the first hour', Morton, up to the 'last polygenists', the diagrammatics of 'race' as it was developed in anthropology found its way onto the streets. However, within academia, Coon's book was understood differently by diverse readers. From within academia, it was especially the co-drafters of the UNESCO Statement on Race, Montagu and Dobzhansky, who attacked Coon, as they had previously attacked Gates for his *Human Ancestry*.

The fact that there were different understandings of Coon's meaning, even among allies like Mayr, Dobzhansky, and Simpson, is evidenced in the volume *Classification and Human Evolution* (1963) that was edited by the American physical anthropologist, pioneer primatologist, and synthesist Sherwood Washburn. In the volume, Mayr, Simpson, and Dobzhansky restated their synthetic views of hominid classification and evolution, and they made reference to Coon's *The Origin of Races* (1962). Mayr called Coon the authority regarding the solution to the problem of one polytypic species evolving into another by considering that 'races' may have exhibited different rates of evolution and could have coexisted at different evolutionary stages: it was possible that the *sapiens* grade was first reached by 'Heidelberg Man' (a Neanderthal-like fossil found near Heidelberg in 1907) as *Homo sapiens heidelbergensis* in Europe, while

 https://doi.org/10.11647/OBP.0396.17

the other 'racial' lines lagged behind at the stage of *Homo erectus* (Mayr 1963, 337). Dobzhansky (1963b) was the only one of the three to engage critically with Coon's *The Origin of Races* in the volume. Coon's book appeared after Dobzhansky had sent his contribution to *Classification and Human Evolution* to the publisher. He therefore included an addendum to say that he agreed with Coon that a polytypic *Homo sapiens* arose in the mid-Pleistocene from a polytypic *Homo erectus*. However, he objected to Coon's notion that this transition had happened five times in different places and at different points in time, which for Dobzhansky would only make sense (and, even then, seemed very improbable) if no gene flow between the 'racial' lines was assumed (which Coon however did). This made Coon's work "attractive to racist pamphleteers" (Dobzhansky 1963b, 361).

To the contrary, Mayr observed that in a typological framework, within which one type is the ancestor of another, the coexistence of lower and higher types must indicate that they cannot be linked by direct descent. This is exactly what the typological diagram of the family tree furthers: those fossils that are of the same time range cannot be placed on the same branch if they differ in stage; the more primitive form must be put on a diverging branch. However, Mayr reasoned that with the understanding of species as polytypic, it was conceivable that one or more 'advanced races' of a given species reach a higher grade while 'more conservative races' of the same species are absorbed in the process, remain stagnant in isolation, or die out (Mayr 1963, 337–39; see also Simpson's diagrammatic experimenting on these issues in the same volume, 1963a, 13).

As we have seen, different readings of the same author were not uncommon. Thus, in the same text in which Mayr embraced Coon's model, he also claimed that it was an improvement on Weidenreich's, because Weidenreich did not consider distribution in space and time but only morphology (Mayr 1963, 337). This last observation is contradicted by the fact that already in an article of 1940, Weidenreich had actually identified exactly the problem of the contemporaneity of 'more and less advanced' specimens and resolved it in a similar way Mayr did more than twenty years later: the term "ancestor" was not to be understood in the sense of individuals giving rise to each other in a genealogical tree, or in the sense of species descending from each other in a typological tree.

It did not necessarily mean "direct consanguinity" between two fossils, but rather that some specimens of a species gave rise to specimens of the subsequent species (Weidenreich 1940, 380).

Dobzhansky's synthesist allies, Mayr and Simpson, not only were in friendly exchange with Coon but also reviewed *The Origin of Races* favorably.[1] Simpson (1963b) interpreted Coon's tenets sympathetically and he defended the book against the critique of racism. Both Simpson (1963b) and Mayr (1963) in their reviews continued the widespread derision of the so-called 'egalitarians' as committing the folly of denying that races even exist. In his review of Coon's *The Origin of Races*, Dobzhansky showed himself in agreement with Coon so far as he considered the latter's views extensions on Weidenreich's interpretations. He criticized Coon for the (implicit) assumption that *Homo erectus* and *Homo sapiens* had overlapped, and that these two different (and thus by inference genetically isolated) species gave rise to the present single species of *Homo sapiens*. Where Dobzhansky understood Coon to radically diverge from Weidenreich, even though Coon dedicated his book to him and positioned himself in line with the great anatomist, was when Coon claimed that *Homo sapiens* evolved from *Homo erectus* not once but in five local transformations at different times (Dobzhansky in Dobzhansky, Montagu, and Coon 1963, 360 and 364–66).

Coon seems not to have been aware of the significant differences of his views either to those of Weidenreich or to those of Dobzhansky. After reading Dobzhansky's *Mankind Evolving* (1962), Coon had written to the author that he was in the process of publishing very similar views in *The Origin of Races* of the same year.[2] But Dobzhansky also expressed these differences diagrammatically. In terms of a diagrammatics of relatedness, rather than in Coon's table of parallel columns, for Dobzhansky human evolution and kinship had to be conceptualized as "a cable consisting of many strands; the strands – populations, tribes and races – may in the course of time subdivide, branch or fuse; some of them may fade away and others become more vigorous and multiply. It is, however, the

1 For an in-depth treatment that arrives at the conclusion that this seeming paradox of disagreement between the synthesists is rather a symptom of larger differences, see Jackson and Depew 2017, 181–85.

2 Coon to Dobzhansky, 26 May 1962, American Philosophical Society Library, Dobzhansky Papers Mss.B.D65, Series I: Correspondence, Coon, Carlton S.

whole species that is eventually transformed into a new species." And the political effect of these (diagrammatic) differences was that Coon's contrary interpretation in *The Origin of Races* was used by organizations resisting the desegregation decision of the Supreme Court by claiming that Black people lagged behind White people some 200,000 years in their development (Dobzhansky in Dobzhansky, Montagu, and Coon 1963, 360 and 364–66, quote on 365; Dobzhansky's review also appeared in the *Scientific American*: Dobzhansky 1963c; see further 1963a, 138, 146–48).

Montagu added that Coon's scenario of five *Homo-erectus* subspecies evolving independently into *Homo sapiens* demanded "the most remarkable example of parallel or convergent evolution in the history of animate nature" (Montagu in Dobzhansky, Montagu, and Coon 1963, 361–63, quote on 361). In similar terms as Dobzhansky, Montagu set a "tangled skein of man's biological history" (ibid.) against Coon's independent "evolutionary scale[s]" (Coon 1962, vii), taking explicit issue with this anachronistic diagrammatic thinking in evolutionary ladders (Montagu in Dobzhansky, Montagu, and Coon 1963, 361–63, 362). The accusation was that Coon's understanding of 'racial' relations was stuck deep in the nineteenth century. Washburn (1964), too, proceeded diagrammatically when critically discussing Coon's alignment with Weidenreich. He reproduced Weidenreich's network of human evolution under genetic exchange (see Figure III.8) to elucidate his comparison of Coon's and Weidenreich's opinions. Washburn emphasized that, although *Gigantopithecus* and *Meganthropus* might no longer be viewed as close to 'early man' as Weidenreich had interpreted them, Weidenreich's unilinear model was very different from Coon's but close to those of Dobzhansky and the American anthropologist and single-species proponent C. Loring Brace (see Brace et al. 1964; on these issues, see also Hawks and Wolpoff 2003).

In concluding, we might state that, like Coon's, Weidenreich's model did not fit the traditional anthropological tree that stood for a common origin at one center, at which ever higher stages of hominids evolved that subsequently spread geographically, replacing the forms that were encountered. He suggested a relating network (Weidenreich 1940, 381–82). At the same time, Weidenreich's humanist frame in *Apes, Giants, and Man* differed from Coon's tone that was seen by many as racist,

and he did not propose separate origins for the living human 'races'. Nonetheless, it seems that the difference to Gates' theory of independent 'racial' evolution (up until the more recent historical times), with 'racial' groups as actually having species status, was more marked. Of course, Coon was a much more renowned anthropologist than Gates, and his anthropological treatise was published close to fifteen years later than Gates'. These are some of the reasons why it was his book, especially, that escalated the dispute with Dobzhansky. Some of the issues involved in the relation of these scientific models to particular political stances may be further enlightened by inquiring into Gates' eugenics, which will also reveal another area of treeing.