 RESEARCH ARTICLE

# The Perils of Polysemy: Racial Realism in the Real World

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This paper critiques the biological race realism of Quayshawn Spencer. Spencer's recent embrace of "radical race pluralism" (RRP) is welcome but incomplete, because it needs methods that distinguish different communicative contexts for how American English speakers use "race" and related terms. I offer a pragmatic approach to identifying such contexts that combines pragmatic argumentation theory, rhetorical polysemy, and a pragmatic approach to definition. One consequence of embracing RRP is that Spencer's theory of "OMB race talk" is unsupportable because it collapses three distinct communicative contexts: genomic research, legal and regulatory governance, and ordinary talk. By so doing, OMB race talk blocks attempts to fight racism and violates ethical standards that should allow people the agency to define their own identities.

**Keywords**

race • population • ancestry • pragmatism • polysemy • definition

"'Must a name mean something?' Alice asked doubtfully."
–Lewis Carroll, *Through the Looking Glass and What Alice Found There*

"Don't first define, ask for the point."
–Ian Hacking, *The Social Construction of What?*

## 1 Introduction

In his autobiography, Rudolf Carnap rather wistfully recounted his time at the Institute of Advanced Study and his conversations with physicists: "I had expected that in the conversations with the physicists on these problems we would reach, if not an agreement, then at least a clear mutual understanding." Alas, "we did not succeed, in spite of our serious efforts .... I recognized the fundamental difference between our methodological positions when one of the physicists said, 'Physics is not like geometry; in physics there are no definitions and no axioms'" (Carnap 1963, 37). In retrospect, it is clear why communication between Carnap and the physicists

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failed. The "rational reconstruction" of the logical empiricists was never meant to mirror the actual practice of physicists. Rational reconstruction was, in the words of Hans Reichenbach, a "fictive construction" that was "a better way of thinking than actual thinking" (Reichenbach 1938, 6).

I invoke these philosophical ancestors because some philosophers of science have constructed similar fictions regarding the relationship between philosophy and racial research that Carnap created between his philosophy and physics. Specifically, I will critique the work of Quayshawn Spencer (2011, 2013, 2014, 2015, 2016, 2018a, 2018b, 2019c, 2019a, 2019b, 2019c), the most productive and thorough of biological race realists. Spencer claims he is concerned with "U.S. race talk" which "consists of all of the dominant ways that 'race' and race terms are used to classify people in contemporary, ordinary American English" (Spencer 2019c, 25). Here, I focus on two parts of this ambitious project: "OMB race talk" and "Radical Racial Pluralism" (RRP). In what is an ironic twist, I argue that Spencer's race realism fails because it is disconnected from the real world. Specifically, to make his argument regarding OMB race talk, Spencer must strip such talk from the context in which it occurs, the stated purposes such talk has for the social agents using it, and its complicated and troubling history. Since Spencer is committed to a form of "racial realism," a minimum expectation should be that its "reality" actually exist and function in the world. Spencer's notion of "OMB race talk" does not describe any actual talk in the world, because it is a fictive construction that is disconnected from how people, scientists, and institutions actually talk about race. OMB race talk fails as a normative guide to evaluate racial discourse because if it were actually put into practice it would undercut the purposes people have for talking about race.

Here is how my argument develops: In Section 2, I identify methods to distinguish social contexts for race talk. I show how we can identify such contexts by attending to the purposes social actors have in their communication. Here I draw upon argumentation scholars who argue for such perspectives. In Section 3, I sketch two aspects of Spencer's thought: first, Spencer's notion of "OMB race talk," and second, Spencer's framing of "radical racial pluralism" (RRP). In Sections 4, 5, and 6 I separate Spencer's "OMB race talk" into the three contexts I believe it mistakenly combines: genomics research, governmental and legal actors who use OMB's racial categories, and the "ordinary talk" of people in everyday contexts in the US. I show how my pragmatic perspective, by respecting the different purposes these different social actors have for their "race talk," provides a way to understand the different contexts needed for RRP to succeed.

## 2 Purposes, Polysemy, Pragmatism

I need to make an important distinction. Spencer writes of "linguistic" contexts; I will write of "communicative" contexts. Spencer's use of "linguistic" invites us to think of theories of language. As is well known, the logical empiricists made a parallel move: they tried to reduce problems of philosophy to problems of language. The result was that their "rational reconstructions" were completely disconnected from the actual practice of science. My ideas stem from a related, but distinctive, disciplinary tradition: the study of human communication. The study of communication is much broader than the study of language, and it is always tied to actual communicative practices as they exist in the world (Craig 1999; Simonson, Garcia-Jimenez, Siebers, and Craig 2012). In this section I will outline three important theoretical concepts that provide a guide to my evaluation of Spencer's OMB race talk.

### *2.1 Purposes*

The pragmatic argumentation theory developed by informal logician Douglas Walton is one possible way to identify communicative contexts relevant for RRP:

> In the pragmatic approach to the evaluation of argumentation, arguments are judged on how they are used in a particular case to contribute to the goal of the dialogue in which the argument is embedded. That is, the pragmatic presumption is that for every argument used in a given case, the argument was used by one party as part of a goal-directed dialogue with another party. In other words, every argument used in a particular case has a context of use. That context of use is called a dialogue (or conversation), and the argument needs to be evaluated with respect to how it was used in the context of dialogue it was (supposedly) a part of in the given case. (Walton 2002, 163)

For Walton, argumentative contexts are distinguished by the purposes (or goals) arguers have for engaging with one another. These purposes not only provide a way to recognize such contexts but also provide a guide to how a critic can evaluate the arguments made: Did a given argument aid or detract from achieving the purposes the arguers have? This allows normative judgments to be tied to actual argumentative exchanges but not reducible to a simple description of the empirical success of an argument in persuading an audience.

Walton provides several types of dialogues for argument evaluation. A dialogue type is "a normative model that represents a logical idealization of the properties such a system ought to have if it is to achieve its goals in an efficient way that makes good use of argumentation, is logically consistent, and that avoids fallacies and other logical difficulties …. It is a kind of abstraction that may be taken to represent some features of realistic … argumentation in particular respects, but will deviate from the argumentation used in real cases in other respects …. On the other hand, the model is tied to reality" (Walton 2002, 161). Two of Walton's dialogue types are relevant for my purposes here: inquiry and persuasion.

Genomic science is obviously science. In Walton's normative model, science is best described as an *inquiry* dialogue: "The goal of the inquiry is to prove that a particular proposition is true or false, or that there is insufficient evidence to prove that this proposition is either true or false" (Walton 1998, 70). In inquiry, arguers collaborate in order to find out what is true or false and thus accumulate knowledge. Walton acknowledges that this is an idealized picture of the behavior of scientists, in contrast to the actual behavior that sociologists or historians might recount.[1] However, he argues that the norm of cumulative knowledge is the proper standard for judging science because it is norm that scientists themselves profess in their publications and pedagogy (Walton 1998, 71, 80–1). It is this norm that makes a retraction of a scientific paper a "serious step" in science (Walton 1998, 70; also see Krosnick 2019). And it is this very issue that Walton says provides "a very sharp and definite contrast between the inquiry and persuasion dialogue as normative models of argumentation" (Walton 1998, 70).

In contrast to science, the United States Office of Management and Budget (OMB) is a governmental office that provides guidance for varied legal and regulatory affairs. As such, the racial categories it provides are used in *persuasion* dialogues wherein "the goal … is to test the comparative strength or plausibility of arguments on both sides of a controversial or contentious issue" (Walton 1998, 37). As in inquiry, actual argumentative practices in persuasion are more

[1]Walton may have been underestimating the extent to which sociologists and historians agree with him, for they will readily admit that, while the actual behavior of scientists can be political or petty, the professed norm of scientists remains the accumulation of objective knowledge (Collins and Evans, 2009, 125–6).

complicated than Walton's idealized model, as he readily admits: "In the persuasion dialogue, there are only two participants, a proponent and a respondent. In a trial, there are other participants who need to be considered. In a criminal trial for example, the main protagonists in the argumentation are the prosecution and defense attorneys. But then there is an important third party, the trier. In the case of a jury trial, the trier is a group of persons who may disagree and will generally engage in prolonged argumentation as a sequestered group" (Walton 2002, 168–9). And opposing attorneys are obviously not trying to persuade each other; they are simply trying to win. Nonetheless, the goal of the lawyers is not the goal of the legal system; Walton explains that "in argumentation theory, what is most vital to a model of dialogue is not just the goals of the arguers, but the goal of the dialogue as a collaborative goal-directed structure. The goal of the trial as a legal institution is to provide a forum not just for disputing, but for providing a forum in which the dispute can be resolved fairly by due process" (Walton 2002, 170).

The result of these goal-driven distinctions is that the process of argument differs, and thus our standards of judgment must differ, from context to context. Consider the forums in which argument occurs and how arguments are closed in scientific and legal disputes. If the goal of the legal process were simply the discovery of objective truth, it is hardly possible to think of a worse system than to have the decision rest in the hands of everyday people who, by definition, have no knowledge of the case before the trial. Or to have evidence that could have probative value excluded from the decision-making process by a Byzantine set of rules specifically designed to exclude such evidence (Walton 2003, 268–272). Such strictures, however, make perfect sense in a persuasion dialogue because the legal process values fairness and due process more than the discovery of "objective truth." The contrary is also the case: scientific decisions are not decided by two sets of advocates trying every trick allowed in order to win. Nor are scientific disputes decided by an uninformed and (presumably) neutral third party. Scientific arguments are settled through consensus-building among the disputants in the scientific community itself (Oreskes 2019, 127–132). Because it is sensitive to such differences, Walton's pragmatic approach is a good candidate for filling the gap in RRP by providing a normative model of argumentative contexts that attends to actual communicative practices.

An implication of this approach is that, in order to judge Spencer's notion of OMB race talk, we need to attend to the purposes speakers have in race talk more generally. Why do laypeople talk about race? Why does the OMB? Or geneticists? How do these different ways of talking about race change the referents they have for using such race terms? Does accepting Spencer's OMB race talk help those social actors achieve such purposes or interfere with that achievement? As I will develop below, OMB race talk actively interferes with the purposes these social actors have for speaking about race. To help fill out Walton's approach, we need an understanding of polysemy.

### *2.2 Polysemy*

Leah Ceccarelli identified polysemy as when a text has "determinate but nonsingular denotational meanings" (Ceccarelli 1998, 399). That polysemy is endemic in all human communication, including science, appears to be an ineluctable, empirical fact. "Despite calls for precision," McMahan and Evans write, "ambiguity remains a feature of discourse in all domains of social life, including contemporary science and scholarship. Some fields of science have been particularly resistant to efforts that would subdue ambiguity with imposed precision, especially those engaged in field or observational research where fluid comparisons of complex and dynamic systems fuel high rates of conceptual innovation" (McMahan and Evans 2018, 862). Polysemy is especially prevalent in the scientific study of race after World War II (Selcer 2012).

The source of polysemy can be found in at least three separate places. Polysemy can be a function of authorial intent (what Ceccarelli labels "strategic ambiguity"), audience receptions of the text ("resistive reading"), or "when the critic conducts a close reading of the text and a close reading of the reception of that text" (which Ceccarelli calls "hermeneutic depth"). Polysemy can be a useful in science, particularly in evolutionary biology (Beatty 1985; Beer 2009; Ceccarelli 2001; Jackson and Depew 2017, 15–17, 198; McMahan and Evans, 2018). An understanding of, and even welcoming, polysemy will have to be a key feature of RRP as it develops. At the same time, polysemy, when it slips into an equivocation, is what should disallow Spencer's OMB race talk from RRP.

We can distinguish a productive polysemous text from an equivocating text by noting when ambiguity interferes with the collaborative goals of arguers. Such an interference can occur when a specialized term is used in one way in the context of a type of dialogue and another way in a different context of dialogue without noting the associated change in meaning. Walton wrote that the "key element of … the fallacy of equivocation is not (a) whether the perpetrator deliberately deceives the victim, or (b) whether the victim is confused, not knowing which way to interpret the ambiguous term." Rather, the "key element is the capability of the argument, as put forward in context, to mislead any potential recipient in the dialogue, by using an ambiguous term that is plausible in one sentence when interpreted one way, and then because of a contextual shift, plausible in another sentence when interpreted in another way" (Walton 1996, 66). Below, I argue that Spencer equivocates on several important terms such as "continental race" and "ancestry" by collapsing the communicative contexts in which those term occur. These terms are defined and refer in different ways in different communities because those communities have different purposes for employing them.[2] Spencer equivocates, for example, when he shifts "race" between the contexts of everyday talk, the scientific context of genomics, and the governmental situation of the OMB and claims they all share the same referent.

Spencer (2014) recognizes polysemy in how the OMB uses race terms: "The "OMB is *notoriously* ambiguous about what they mean by 'racial groups'" (107, emphasis added). The value judgment of "notorious" is telling. One way to read Spencer's work on OMB race talk is as a quest to eliminate what he sees as philosophically-objectionable ambiguity in OMB's racial categorization. As I will show below, however, the OMB has made abundantly clear that such ambiguity is a necessary component of their work. Eliminating it, as Spencer does by forcing it to conform to geneticists' "continental populations," entails fixing OMB's reference to a concept they explicitly and repeatedly have rejected, for decades. The equivocation hampers, if not eliminates, the purposes the the OMB has for their racial categories.

"Race" is not the only polysemous term we need to attend to. What philosophers mean by "real" can vary quite widely, and Spencer has his own ideas about what "realism" means in the race debate. Here, I do not intend to delve into what Spencer means by "real," and still less the myriad ways philosophers have discussed the idea. I do, however, want to call attention to the idea that "real" and its related terms, "reality," "realism," etc., are value-laden terms. We normally think of "real" as an ontological matter of existence: what is or is not. The Western philosophical tradition and ordinary talk, however, often speak of the "real" as a matter of value: reality is *preferable* to appearance. Perelman and Olbrechts-Tyteca make this point when they argue that dissociation between appearance and reality as "the prototype of all conceptual dissociations because of its widespread use and its basic importance in philosophy … [A]ppearance in the strict sense of the word, is merely illusion and error …. [T]he preference

[2]For example, in the 1950s geneticists faced a certain amount of grumbling from demographers for their use of the term "population." In demography, "population" exclusively meant a group of human beings, not animals or plants, and geneticists were shifting the meaning entirely by applying it to non-human organisms (Cole 1957).

for what is real appears not only in philosophical discussions but is also expressed in everyday thinking in a wide variety of circumstances" (Perelman and Olbrechts-Tyteca 1969, 415–416). The point is that Spencer's race realism is not merely making ontological claims; it is making, implicitly or explicitly, value judgments. Spencer may acknowledge polysemy in RRP, but he sees no place for it in OMB race talk, which is why he labels OMB's ambiguity "notorious." By contrast, Spencer argues that the unfortunate ambiguity can be eliminated by his rigorous, philosophical examination. OMB race talk is made "real," and thus coherent and stable, and therefore preferable to the confusion Spencer sees as rising from OMB's ambiguity. Preferring "reality" to "appearance" is a value judgment. The idea that value judgments pervade any kind of race talk leads me to the next section.

### *2.3 Pragmatism*

A recent book on the philosophical race debate by four leading philosophers of science is entitled *What is Race?* (Glasgow, Haslanger, Jeffers, and Spencer 2019). One reason the race debate in philosophy seems to be at an impasse is that philosophers persist in trying to answer this question, and it is the wrong question to ask. Here, I will draw on the work of Edward Schiappa (2003) to distinguish between a "definitional gap" and a "definitional rupture" (5–10). In the former case, a term might be disputed but the means for resolving the definitional dispute are agreed upon. In a definitional rupture, no such agreement exists and the process of defining itself is in dispute. In definitional ruptures questions like the following need to be answered: Who should have the power to define the term? What are the criteria would they use to do so? On whom is the definition binding?

Schiappa argues that during times of definitional rupture, it is not appropriate to try to answer questions of the form "What is $X$?" Such questions hide the fact that most definitions have social consequences that are at stake in the dispute. Answering the question "What is $X$" hides these social consequences. We should ask the question "How should we use the term $X$ in this context?" This question invites the arguer into give reasons for using a term in a particular way and making explicit the social consequences of the definitional act:

> Accordingly, the "What is $X$?" question needs to be replaced with such questions as, "How ought we use the word $X$ given our needs and interests?," "What is the purpose of defining $X$?," and "What should count as $X$ in context $C$?" In taking such a pragmatic approach to definition, we can reverse the age-old definitional practice that can be described as "valorization of essence" and replace it with the pragmatic essentializing of values. Instead of presuming to be able to identify metaphysical "essences" in definitions, we should acknowledge that definitions emphasize aspects of social realities that serve particular interests. (Schiappa 2003, 168–9)

Turning these pragmatic questions to Spencer's work is telling. What are Spencer's purposes for pronouncing that the OMB and geneticists are pointing to identical referents? What are the contexts in which OMB race talk should be used in his RRP, and when should it not be used? What would happen if the OMB were to specify that their racial categories referred to genetic continental populations, just as Spencer says they do? The idea here is to explore what the consequences are of accepting his account. The question is *not* "What is race?" The question is: "Should we use racial terms in the way Spencer advocates?" My central argument is that we should not. I will address these pragmatic questions in Sections 4, 5, and 6, where I will explain how the OMB and geneticists have already adopted this pragmatic approach in their work.

Ultimately, the decision rule to apply to Spencer's project is an ethical one. Geneticists have long recognized that their work has a problematic history and can only be justified by the

social good that arises from their research. Discovering "truth" (whatever that is) about genetic variation in humans is not, in and of itself, a worthwhile goal. To ask the question "How do humans vary genetically?" is to take on a well-established set of probative obligations to show that answering the question will do some good in the world. The Committee on Human Genetic Diversity of the National Research Council (NRC) issued guidelines to just that effect in 1997:

> For projects that are not able to specify goals in sufficient detail to quantify risks and benefits reasonably, the worst-case scenario should be assumed: the benefits will be at the lowest anticipated level, and the risks at the highest. That means that the burden of proof for any DNA-sampling project that does not have a well-defined hypothesis will be high. It also underlines the most basic starting point for all ethical analyses of genetic-variation research, regardless of which model is pursued: defining a hypothesis and determining the benefit of knowing whether it is true. (National Research Council 1997, 59–60)

The NRC guidelines clearly show that the ethical responsibility of those, like Spencer, wishing to explore genetic variation research must show that asking the question of human variation has some kind of promised benefit. Spencer argues that the importance of his realism is epistemological; by "scientific progress I mean *epistemic* progress in science, such as improving our ability to predict known phenomena, or accurately predicting novel phenomena" (Spencer 2011, 6). Spencer avoids what the NRC identified as a prior question, which is "determining the benefits of knowing whether it is true." In other words, epistemic progress, as Spencer defines it, does not justify asking a question regarding race's reality in the first place. If Spencer merely shows that OMB race talk somehow "works" or is not shown to be strictly "false," that should be largely irrelevant to our judgment of it. What are the benefits that would flow from accepting it? What good does it do in the world? Spencer has done little to address these questions which geneticists themselves confront every day; given the social and political dangers inherent in studying human variation, why should we study it? The fundamental flaw in Spencer's OMB race talk is not that it is false (although I will show that it is in important respects); it is that its promised benefits are scant, and the "worst case scenario" is that it is very dangerous.

This section has sketched a way to address serious gaps in RRP by identifying a coherent way to distinguish the different contexts in which the word "race" is used: Walton's types of dialogues, Ceccarelli's framework for polysemy, and Schiappa's pragmatic approach to definition. I have not done more than give brief outline of how this pragmatic approach could fill out RRP. But I believe I have done enough to show that this approach is a viable candidate for developing RRP in future work. I have also issued a promissory note to show how Spencer's OMB race talk cannot fit into RRP. The central argument both for my pragmatic approach and against OMB race talk is that the pragmatic approach to defining "race" fits most closely with the actual practices of genomic researchers, OMB bureaucrats, and the lay public. Before taking on that task, I will fill out Spencer's position on OMB race talk and Radical Racial Pluralism.

## 3 OMB Race Talk and Radical Racial Pluralism

### *3.1 OMB Race Talk*

Spencer's "OMB race talk" grows out of his biological racial realism. Spencer first lays out what he calls a "genuine kind" in biology. For Spencer, "a genuine kind is a valid kind in a well-ordered" Scientific Research Program (SRP) (Spencer 2011, 13). Spencer is clear that the only criterion a genuine kind need meet is that it makes an epistemic contribution to an SRP, like

genomics research presumably is. Spencer next argues for $K$ population theory, wherein a "$K$ population" is "roughly a biological population whose members are united by common genomic ancestry and whose members can have graded membership" (Spencer 2016, 793). According to Spencer, genomic researchers can divide humankind into any number of $K$ populations, usually labeled as $K{=}N$. Of possible divisions, one of them, $K{=}5$, represents populations Spencer claims correspond to continental divisions, which Spencer names human continental populations.

With the understanding that human continental populations are genuine biological kinds we can proceed to Spencer's of *OMB race talk*: "OMB race talk is any race talk that uses the meaning of 'race' that's currently adopted by the Office of Management and Budget (OMB)" (Spencer 2019a, 82).[3] This idea can be summarized as follows:

> OMB 1: "The human continental populations are the five biological populations in humans that, according to contemporary population genetics, constitute a unique human population subdivision. They're Africans, East Asians, Eurasians, Native Americans, and Oceanians" (Spencer 2018c, 13).
>
> OMB 2: Any OMB racial classification is nothing but "rigidly designating proper name for a biologically real entity, specifically for the partition at the $K{=}5$ level of human population structure" as geneticists have defined them in OMB 1 (Spencer 2014, 1025–6).
>
> OMB 3: "OMB race talk usually occurs in formal communication among Americans and usually involves one or more persons self-reporting their race(s) to another party. For example, it is not uncommon for Americans to engage in OMB race talk when applying to college, applying for a job, applying for a mortgage loan, applying for a birth certificate, filling out a health provider survey, filling out a child-care registration request form, or so forth" (Spencer 2019a, 79).
>
> OMB 4: "American English speakers intend 'race' and race terms to refer in OMB race talk" (Spencer 2019a, 83)

In other words: when lay people (in some contexts) use the word "race," they mean to refer to the categories established by the OMB. The OMB racial categories are "nothing but" proper names for human continental populations as specified by modern genetic research which identifies the $K{=}5$ level of population structure as human continental populations. The $K{=}5$ cluster is a real biological entity. Since the OMB and geneticists are both pointing a real biological entity and because lay people defer to the OMB racial categories, when lay people talk about their race in formal communication they are talking about a real biological entity.

### *3.2 Radical Racial Pluralism*

Spencer's goal of capturing all the different ways "race talk" manifests in the US has led him to develop "radical racial pluralism":

> (2.1) Radical racial pluralism is true for US race talk if the correct US race theory is radically pluralist.
>
> (2.2) The correct US race theory is radically pluralist if more than one distinct meaning of 'race' is used in US race talk.

[3] Throughout this paper, when I use the phrase "OMB race talk" I am referring to Spencer's definition, not the actual "race talk" used by the OMB. I will show that the actual talk the OMB uses to refer to race is much different from Spencer's portrayal of it.

(2.3) One meaning of 'race' used in US race talk is the OMB's meaning of 'race'.

(2.4) The OMB's meaning of 'race' is the set of human continental populations, and the OMB's meanings for 'American Indian', 'Asian', 'Black', 'Pacific Islander' and 'White' are Native American, East Asian, African, Oceanian and Caucasian, respectively.

(2.5) The OMB's meaning of 'race' is not the only meaning of 'race' used in US race talk.

(2.6) So radical racial pluralism is true for US race talk. (Spencer 2019b, 28)

Spencer's RRP is not a theory *per se* but "a position on the syntactic structure and semantic content of the correct race theory. For one, the correct race theory is a long conjunction. But also, the content of each conjunct is a statement about what race is and whether it's real in a specific context of US race talk" (Spencer 2019a, 27). I believe RRP is a hopeful development as it recognizes that US race talk is polysemous and demands not just one race theory but many of them. It will be interesting and illuminating to see Spencer develop this idea.

Spencer holds that "Radical racial pluralism is the view that there's a plurality of natures and realities for race in the relevant linguistic context …. And in the US race debate, the relevant linguistic context is US race talk." (Spencer 2019a, 27). But US race talk is not a singular context for communication; there are many such contexts within the US. The context in which race talk appears is relevant for a normative judgment about how "race" is used in that context. Spencer provides no guidance about how to identify what he calls a "linguistic context," nor how our normative judgments about race's reality should be adjusted to fit that context. This is a serious gap in RRP; it needs some way to define and evaluate relevant contexts for race talk. The pragmatic theory of argument and definition, together with an understanding of polysemy, provide a better way to describe actual race talk in the world, as well as a clear set of standards by which to evaluate it in comparison with Spencer's idea of OMB race talk.

## 4 Pragmatic Definitions in Genetics

### *4.1 To What Do Population Geneticists Refer?*

A key idea in Spencer's OMB race talk is that "'race', in its current US meaning, is a rigidly designating proper name for a biologically real entity, specifically for the partition at the $K{=}5$ level of human population structure" (Spencer 2014, 1025–6). It is the $K{=}5$ clustering that "challenged biological racial anti-realism" (Spencer, 2015, 48). Just why the $K{=}5$ clustering should be a particular challenge to racial anti-realism is not clear. Just as modern geneticists can find any number of clusters they ask the computer to find, nineteenth and twentieth century race theorists could find any number of races. There was never anything close to a consensus that Blumenbach's divison of five races was correct. Far more common were complaints from biologists and anthropologists, from Darwin forward, that no one knew how many races there were, and writers had found anywhere between one and sixty races (Darwin 1871, 226; Keane 1896, 164; Dorsey 1928, 254; Dobzhansky 1944, 254). Earl Count's 1950 anthology of race theories gathered sixty essays from 1764 to 1944, and among them only Blumenbach and Griffith Taylor argued for five races. Renato Biasutti also found five, but at the same time claimed it was just as likely that the correct number was three. In short, there is nothing special or telling about $K{=}5$ "matching" the five "traditional" races because there was no scientific tradition of only five races. Spencer's argument could conceivably hold for any number at all. The significance of five

races is completely contingent on American and European racist ideology, an argument I will develop more fully in section 5 below.

Spencer holds that both the OMB and population genetics refer to the same entities in world, namely human population clusters. Biological racial realists, like Spencer, often face the "mismatch objection": that the entities referred to by biologists do not match ordinary definitions of "race" (Mallon 2006; Glasgow 2019; Haslanger 2019b; also see Spencer's extensive discussion on this point in Spencer 2018a, 1019c). The pragmatic approach is somewhat different; it asks: Do the terms help the arguers meet their goals employing them in the context of use? What do the OMB and population geneticists actually point to in the world when they use race terms? I will address the OMB categories in further depth in Section 5, but here it is enough to simply point out the uncontroversial and trivial truth that the OMB is interested in counting and categorizing people who reside in the United States in a given time period. Geneticists are not interested in that set of people, as such, at all.

Spencer cites ten studies in which the $K{=}5$ division appears and five in which it did not. That is hardly evidence that the $K{=}5$ division holds any special significance for population geneticists (Spencer 2015, 48; 2019a, 98). The objects these studies use are clearly not identical to the US population that the OMB counts. In the first study cited by Spencer, Rosenberg, et al. explained "We studied human population structure using genotypes at 377 autosomal microsatellite loci in 1056 individuals from 52 populations" (Rosenberg et al. 2002, 2381). Three of the other ten studies used the same sample (Ramachandran et al. 2004; Rosenberg et al. 2005; Bastos-Rodrigues et al. 2006). The other six studies rely on similar samples; for example, Conrad et al. report that they studied "haplotype structure across 12 Mb of DNA sequence in 927 individuals representing 52 populations" (Conrad 2006, 1251). These genetic samples come from around the world, not from the United States alone. Such a sample is necessary given their need to identify the global human population structure—something that cannot be accomplished by using the US citizens who answer the Census. Hence, it is simply false to claim that the OMB categories are identical to those of population geneticists, because the contents of those categories cannot be interchanged with each other.

A second issue is that the OMB is interested in people, and population geneticists are not. People, or indeed organisms, are only of interest to population genetics because they are where the genes are. The actual objects studied by Rosenberg et al. and the studies using their samples were "377 autosomal microsatellite loci" (Rosenberg 2002,2381), not individual people. For Conrad et al., it was haplotypes (Conrad 2006). For Wang et al. it was "678 autosomal microsatellite markers" (Wang et al. 2007, e185). Li et al. examined "642,690 autosomal SNPs" (Li et al. 2008, 1100). To confuse an individual person with specific genetic markers is to make a basic category mistake.

One possible objection to my argument is that Spencer is not actually claiming that the empirical content of the OMB categories and population genetics are actually the same; he means that the *extension* of these categories is the same. The OMB categories are merely fixing a reference, they are simply proper names for the $K{=}5$ clusters: "US racial discourse is just an alias for a unique Blumenbachian population, similarly to how 'Snoop Dogg' is an alias for Calvin Broadus Jr." (Spencer 2014, 1031). "The set of 1997 OMB races is identical with the set of human continental populations," he wrote in 2018 (Spencer 2018a, 1031). The next year, however, Spencer retreated from this strong form of his claim of identity to a more probabalistic relationship. He later claimed that one "property of reference-fixers is that, in the actual world, they work relatively well to pick out the intended referent or extension of the term" (Spencer 2019b, 34). Spencer believes "the extensional overlap between current extensions of US race terms and Blumenbachian population terms is statistically significant and high" (Spencer 2014, 1031).

His position now is more akin to saying that "Snoop Dogg" is only 90% of "Calvin Broadus Jr." This means that OMB race categories cannot be "rigidly designating proper name[s]" for $K{=}5$ unless that rigidity is relaxed into a much more amorphous idea.

Spencer does not explain what it means for a reference fixer to "work" in picking out an intended referent. The pragmatic perspective asks: "Work" to do what? For whom? The answers obviously are that the extensional overlap must work to help population geneticists achieve the goals they have for their research, and help the OMB count the people of the US. The supposed extensional overlap Spencer identifies does not exist because the classification systems of both the OMB and geneticists only gain meaning within the contexts of their use.

The OMB is interested in data for the administration of federal programs; therefore, its categories designate only people living in the United States. The US Census, for example, was authorized by Article I, Section 2 of the US Constitution, which authorizes the taxation and representation "apportioned among the several States which may be included within this Union, according to their respective Numbers." The First United States Congress passed An Act Providing for the Enumeration of the Inhabitants of the United States (First Congress, 1790). It seems clear that the federal government's designation cannot be extended beyond the borders of the United States without rendering any data they gather useless for their purposes. Clearly, whatever categories the federal government employs would not "work" to fix the proper reference if it is taken to refer to entities outside the political borders of the United States and its territories. The US Census sits at the top of what Deborah Stone called a "bureaucratic data chain" (2020, 51), or embedded within what Bowker and Star called an "informational infrastructure" (1999, 5). To remove those categories from the social structures in which they grew is to render them meaningless. The categories of the OMB are designed for specific purposes and simply cannot be extended in the way Spencer claims they can. I return to the point in Section 6.1 below.

On the other side of the extension, Spencer must show that geneticists need not bother with all those difficult-to-find genetic markers and simply use racial self-identification in its place. The data collected in the Human Genome Diversity Project, upon which these studies rely, could be replaced by using American citizens' racial self-identifications. This is clearly not the case. The Race, Ethnicity, and Genetics Working Group of the American Genetics Association makes this point very clear: "Use of such broad labels without careful definitions can impair scientific understanding and imply that distinctions between socially defined populations are genetically well established. Genetics researchers often rely on the categories specified in the US Census—encouraged by regulations that urge diversity of study populations—but these categories are used today mainly for administrative and social purposes and were not designed for genetics research" (Race, Ethnicity, and Genetics Working Group 2005, 526). Bringing Spencer's race realism into real scientific practices shows it unrealistic indeed; OMB racial categories cannot "work fairly well" to pick out geneticists continental populations at all because "Genetic ancestry should not be used as a surrogate for sociopolitical race. Sociopolitical race should not be used as a surrogate for genetic ancestry" (Brothers et al. 2021, 3). It follows that OMB racial categories are not rigidly designating, proper names for $K{=}5$ genetic clusters, and using them as such would mean the study of human population genetics would grind to a halt. In the next section, I compare Spencer's race realism to real scientific practice in another way.

### *4.2 Populations as Tools*

A case can be made that modern genomics has followed Blumenbach, just not in the way Spencer thinks it has; Blumenbach, like modern genomics, defined "race" pragmatically. Blumenbach was quite clear that his five-part division of mankind was merely a way of making the jumble of

human variety understandable for the human mind. Spencer writes that Blumenbach was the "first person to (roughly) discover this partition of human populations" (Spencer 2014, 1030). Blumenbach would probably reject the success word "discover" in favor of "create." Spencer acknowledges that Blumenbach found that the varieties of humans merged into one another but argues that Blumenbach took "continuous variation as evidence that human races were groups that diverged from one another as opposed to evidence that human races are arbitrary divisions" (Spencer 2013, 247). Blumenbach, however, made clear that he only "constituted certain classes into which the men of our planet may be divided" that might be "serviceable to the memory" (Blumenbach 1775/1865, 100). In his third edition, he told the reader that "five principal varieties of mankind may be reckoned," but "these [are] arbitrary kinds of division" (Blumenbach 1795/1865, 264). He even offered the reader ten other authors who found ten different racial categorizations, "so the reader may compare them more easily together, and weigh them, and choose which of them he likes best" (Blumenbach 1794/1865, 266). Spencer is almost alone among scholars in his view that Blumenbach was doing anything other than offering a useful tool, rather than a "real" categorization (Bernasconi 2010, 501; Hannaford 1996, 206–212; Montagu 1942, 369). Spencer is correct, however, in that modern genomics research is "Blumenbachian." But that is not because it has "discovered" the number of races to be five, but rather because geneticists' definitions of "population" are thoroughly pragmatic and flexible tools.

One of the most dramatic changes of the Modern Evolutionary Synthesis involved defining "race." Before the Synthesis, in the work of someone like Harvard's Earnest Hooton, the point of physical anthropology was to establish a classification of human races based on non-adaptive, morphological characteristics (Hooton 1926). Theodosius Dobzhansky stood Hooton's notion on its head: rather than morphology the focus was on genes; rather than non-adaptive stability, Dobzhansky sought adaptive responses to environment; rather than classification being the end, classification became a tool for investigating the process of evolution (Farber 2011; Gannett 2013; Jackson and Depew 2017, 97–136). Sherwood Washburn, who brought Dobzhansky's ideas to anthropology, fashioned those ideas into the "New Physical Anthropology," declaring that population genetics was "concerned primarily with process and with the mechanism of evolutionary change, whereas the older point of view was chiefly concerned with sorting the results of evolution" (Washburn 1951, 298). While he might have called genetic populations "races," Dobzhansky was clear that population was only a useful "tool" and had no reality beyond its utility to reveal the evolutionary process (Dobzhansky and Epling 1944, 49, 138; Dobzhansky 1950, 162).

When it came to categorization, Washburn made clear that racial "classifications are not objective orderings of pure knowledge but are made by men for some purpose" (Washburn 1944, 66). The idea that human diversity is of limited interest in and of itself and only useful if it serves specified ends continues in the twenty-first century. On 12 February 2001, the director of the Human Genome Project (HGP), Francis Collins, announced that the "Book of Life," by which he meant the human genome, had been read "from cover to cover." When he explained the monumental breakthrough, he told the gathered officials and press representatives:

> This Book of Life is actually at least three books. It's a history book: a narrative of the journey of our species through time. It's a shop manual: an incredibly detailed blueprint for building every human cell. And it's a transformative textbook of medicine: with insights that will give health care providers immense new powers to treat, prevent and cure disease. (Collins 2001)

Collins was quite clear that the purposes of the HGP did not include discovering which human

races were "real." Those purposes are quite evident in the studies Spencer cites. Those studies that present the $K=5$ division also present other divisions ranging from $K=2$ to $K=7$, as Spencer acknowledges. Of those studies that use the $K=5$ division, dividing people up into groups for its own sake, or declaring any particular cluster "real," are not listed among the results at all. Like Dobzhansky and Washburn, modern geneticists see populations as tools to meet the specific goals of tracing evolutionary history and informing epidemiology. The studies cited by Spencer as using the $K=5$ clusters (Spencer 2015, 48; 2019a, 98) provide compelling evidence for this:

- "The structure of human populations is relevant in various epidemiological contexts …. The challenge of genetic studies of human history is to use the small amount of genetic differentiation among populations to infer the history of human migrations …. Patterns of modern human population structure discussed here can be used to guide construction of historical models of migration and admixture that will he useful in inferential studies of human genetic history." (Rosenberg et al. 2002, 2383, 2384)

- "The ultimate goal of genetic research is to identify those specific genes and gene variants that influence the risk of disease." (Risch et al. 2002, 2).

- "The distribution of genetic variation within and among human populations has long been an *important tool* for inferring the evolutionary history of modern humans …. Special attention has been paid to polymorphisms of short tandemly repeated DNA (i.e., STRs, or microsatellites) …. This has led to the development of *statistical tools*, based on population genetics, that treat the number of repeats as a quantitative variable." (Zhivotovsky et al. 2003, 1171, my emphasis).

- "In general, representations of human genetic diversity are evaluated based on their ability to facilitate further research into such topics as human evolutionary history and the identification of medically important genotypes that vary in frequency across populations." (Rosenberg et al. 2005, 9)

- "Our study is designed to suggest initial answers to several questions. How useful are current SNP databases for studying haplotype variation in diverse human populations? To what extent are patterns of haplotype variation similar—or different—across diverse populations, and what do they imply about human history and patterns of recombination? To what extent do the HapMap populations predict patterns of haplotype diversity found in a worldwide set of populations?" (Conrad et al. 2006, 1251)

- "Patterns of genetic diversity and population structure in human populations constitute an important foundation for many areas of research in human genetics. Most noticeably, they provide an invaluable source of data for inferences about human evolutionary history. In addition, the distribution of genetic variation informs the design and interpretation of studies that search for genes that confer an increased susceptibility to disease." (Wang et al. 2007, e185)

- "Human genetic diversity is shaped by both demographic and biological factors and has fundamental implications for understanding the genetic basis of diseases." (Li et al. 2008, 1100)

- "Advances in genotyping technology allow variation along the entire genome to be simultaneously interrogated and have revolutionized the study of human genetic diversity,

providing new insights into population history and facilitating gene discovery by genome-wide association studies (GWASs)" (McEvoy 2010, 297)

- "In this study, we integrated nuclear and mitochondrial genomic data from Native Hawaiians with HGDP data to provide the first comprehensive survey of the three components of their demography–patterns of population structure, genetic origins, and population expansion over time." (Kim et al. 2011, 3)

- "Standardized genome-wide marker panels originally designed for linkage analysis … have provided insights into such topics as the worldwide spread of anatomically modern humans (Zhivotovsky et al. 2003; Prugnolle et al. 2005a; Ray et al. 2005; Liu et al. 2006; Schroeder et al. 2007; DeGiorgio et al. 2009; Deshpande et al. 2009; Hunley et al. 2009; Amos and Hoffman 2010; Ray et al. 2010), the relationship of genetic and linguistic variation (Hunley et al. 2008, 2012; Lewis 2010; Jay et al. 2011; de Filippo et al. 2012), and the mechanisms of microsatellite mutation itself (Amos et al. 2008; Pemberton et al. 2009; Sun et al. 2009; Amos 2011). They have been used in host-pathogen evolutionary studies (Prugnolle et al. 2005b; Linz et al. 2007; Ettinger et al. 2009; Ramalho et al. 2010), comparisons with anthropometric data (Relethford 2004; Roseman 2004; Manica et al. 2007; Nievergelt et al. 2007; Weaver et al. 2007), and assessments of natural selection (Bamshad and Wooding 2003; Storz et al. 2004; Rockman et al. 2005; Foll and Gaggiotti 2008; Excoffier et al. 2009; Hofer et al. 2009), and even in distant fields such as economics (Jellema 2008; Ashraf and Galor 2013)." (Pemberton et al. 2013, 891–2)[4]

None of these studies declare clusters "real" and, with the exception of Risch et al. (2002), none use the word "race." If geneticists view populations as tools, and the evidence seems quite clear that they do, then discussing whether such classification systems *refer* to real entities may not be the proper way to discuss such systems. Genetic clusters are merely pragmatically defined entities that only "exist" to the extent they can help researchers meet their expressed goals. Spencer's view that the $K=5$ clusters *pick out* referents assumes that there is something out there in the world waiting for us to pick out. Such a view does not seem to align with the expressed views and practices of genetic research. We should view genetic clusters as "mental tools, rather than mental representations," as Staffan Müller-Wille has argued; "this corresponds to a continental understanding of propositions as judgments, that is, essentially social and political actions, rather than descriptions of states of affairs as the majority of analytic philosophers would have it. A concept in this understanding does not somehow mirror its object, but rather serves as an anchoring point for evaluations and judgments" (Müller-Wille 2014, 599). To take them away from that context is to confuse a tool for the object it manipulates, and "tools do not need to bear any kind of similarity with the object they are supposed to affect" (Müller-Wille 2014, 600). Observing the idea of genetic clusters as tools has two important consequences for Spencer's view that such clusters successfully "pick out" their intended referents.

First, Müller-Wille's argument draws attention to classification systems as parts of an "informational infrastructure," as described by Bowker and Star (1999). Bowker and Star (1999) argued that any classification system is embedded in webs of other social systems, the "built information environment" that allowed the classifications to function (we hope) as intended.

[4]Of the ten publications, only Bastos-Rodrigues et al. (2006) does not clearly designate health and evolutionary history as its goals. This study is from Brazilian researchers, and Brazilian politics of racial identification are much different than in the US. Interestingly, Bastos-Rodrigues found in other work that genetic identification does not match Brazilian racial ideas very well (Santos et al. 2009).

As such, "each standard and each category valorizes some point of view and silences another … it is an ethical choice" (5). To pull a classification out of the context of its production, and the functions it was intended to fulfill is to make an epistemological and ethical error. Though "it is possible," they write, " to pull out a single classification scheme or standard for reference purposes, in reality none of them stand alone" (Bowker and Star 1999, 38). The failure to take this lesson to heart explains, at least in part, why debates about the reality of race continued after the Modern Synthesis (Morning 2011, 2014; Yudell 2014). It is only by placing the Blumenbachian division in the contexts which birthed it that we can we fully understand what it does and the possible dangers of its use. As Peter Pels concluded:

> Once we realize that what a classification of human kind is meant to describe may differ from the meanings governing its construction and social intervention—that the same classification may do quite different things in the course of its social life—we begin to formulate a methodology of studying classifications that may aspire to transcend some of the epistemic conditions bequeathed to anthropology by European colonialism. (Pels 2022, 80)

Second, Spencer's idea of "picking out" an intended referent points us toward the assumption that the referent, whatever it is, precedes the act of picking out. But theories of "Constitutive rhetoric" argue that discursive objects can be brought into being by the communicative practices that summon them (Charland 1987; Chow-White 2009; Putman and Cole 2020; Rodriguez and Opel 2020). The idea of a referrer "picking out" its referent collapses in this view. The "referent" only exists within the communicative practices that induced its very existence. Given how geneticists discuss clusters as tools for specific uses, avoid discussing those clusters as "real" in any sense, and easily move among any number of them, the idea that those clusters are constituted by the very tools of investigation seems a more reasonable starting place than the idea that clusters "pick out" some pre-existing entity in the world. Spencer seems open to this idea when he argues that "objective reality might be an appropriate way to understand the reality of entities in chemistry and physics, it is entirely inappropriate for biology," because human groupings are often the product of human agency in a way that the entities of physics and chemistry are not (Spencer 2014, 1036). This is a take on what Ian Hacking (1999) called "the looping effect of human kinds" (34). Human categories are products of human decisions, and people react and change behavior when categorized. Spencer understands that but has not fully analyzed the ethical responsibilities that accompany it. Declaring race "real" has effects in the world and will thus change the world. This is why the NRC demands that any epistemological question asked about genetic variation should first be judged on the costs and benefits that flow from answering it. I will return to this issue in my conclusion.[5]

A possible objection to the centrality of these goals to genomics research might be that these goals might be central, but they are hardly the only ones in genomics. There are two problems with this argument. First, I have relied on the very same publications Spencer does, and they clearly and repeatedly state that the point of studying human genetic variation is medical and evolutionary. If there is evidence that a goal of population genetics is to merely classify human populations for the sake of discovering "real" populations, Spencer has yet to produce it. Second, if his argument relies on the mere possibility that some genetics research *might* have a goal of discovering "real" populations, then Spencer's realism would become attenuated indeed. Such a move would not relieve him of his responsibility to show that geneticists' work could still

[5]The idea of objects being constituted by communication is not unknown even within traditions of hard-nosed analytic philosophy. Müller-Wille points to philosophers influenced by Nelson Goodman, collected in the volume edited by Douglas and Hull (1992; see also Hacking 1999).

function if his argument were correct. The pragmatic perspective on RRP that I am advocating would then ask how Spencer's view of continental races as genuine biological kinds measures up to the expressed goals of genomics research. Following the NRC, it would also ask what benefits arise from such a view—a question I will take up next.

### *4.3 Importance of Racial Divisions*

In 1963, Sherwood Washburn declared: "We should require people who propose a classification of races to state in the first place why they wish to divide the human species and detail the *important reasons* for subdividing our whole species" (Washburn 1963, 524, my emphasis). Washburn's question is in line with the pragmatic theory of definition since it explicitly asks what our interests are in making such a division. It is also reflected in the best practices of genetic and medical research: if a scientist is going to use the word "race," they must explain why they are doing so and clearly define the term. As one group of epidemiologists put it, "At a minimum, researchers should clearly state the context in which these valuable epidemiologic and public health study variables [of race and ethnicity] are being used, describe the method used to assess and categorize these variables, and discuss all significant findings" (Comstock et al. 2004, 69; also see Bokor-Billman et al. 2020; *Nature Genetics* 2000; Lee 2009; Liu et al. 2020; Winker 2009).

Schiappa's formulation "What should count as $X$ in context $C$?"[6] is answered directly by the foundational work of Noah Rosenberg and his colleagues:

> Our evidence for clustering should not be taken as evidence of our support of any particular concept of 'biological race.' In general, representations of human genetic diversity are evaluated based on their ability to facilitate further research into such topics as human evolutionary history and the identification of medically important genotypes that vary in frequency across populations …. The arguments about the existence or non-existence of 'biological races' *in the absence of a specific context* are largely orthogonal to the question of scientific utility, and they should not obscure the fact that, ultimately, the primary goals for studies of genetic variation in humans are to make inferences about human evolutionary history, human biology, and the genetic causes of disease. (Rosenberg et al. 2005, 9,10; my emphasis; also see the evidence I present in Section 5.2 below)

At one point, Spencer seemed to acknowledge that he should be obliged to justify his use of the Blumenbachian division as an important one that aligns with the purposes geneticists have avowed: "in order to defend biological racial realism, the kind offered up as race should be, in some sense, important in doing respectable biology" (Spencer 2011, 17). But he later retreated from this position. Spencer admits that "Blumenbachian populations are not fundamental to population genetics, are not subspecies, and are not very genetically different. … I reject that an entity needs to be very important to science in order to be scientifically real." He argues that the Blumenbachian partition is analogous to element 117, a "not a very important kind in modern chemistry" (Spencer 2014, 1035). Spencer thus acknowledges that the Blumenbachian division's epistemological contribution to modern genetics is an unimportant one. Spencer maintains that the Blumenbachian division makes an epistemic contribution to science because "population geneticists need to posit the Blumenbach partition in order to best causally explain the 1.53% of among-part human genetic variation that arises at $K=5$ that is

[6] Schiappa's formulation obviously owes much to Searle's (1995) description of "social reality," yet their views do not exactly correspond. See Schiappa (2003, xii).

not accounted for by geographic distance alone" (Spencer 2014, 1035). Spencer offers no evidence that genomic researchers have any "need" for such an explanation given their goals. The pragmatic perspective would stress the relevance of the argument for moving genomics toward its goals. Walton notes that "to be relevant, an argument must have a function in moving the inquiry forward in a cumulative buildup of evidence" (Walton 2003, 146–7). Even if we grant to Spencer that the Blumenbach partition explains 1.53% of variance in the $K{=}5$ division that explanation does nothing to help genomics reach its stated goals of tracing human evolutionary history or bettering human health.

There is a further problem. Let us assume that population geneticists themselves see clusters as tools, not entities in the world. If that is the case, and I believe that it is, then they can explain this 1.53% of variance without needing to grant those clusters any kind of "reality" at all. Such statistical groups are easily accommodated in something like Pierre Bourdieu's sociology, wherein he maintains that "we have to affirm that the classes which can be carved out of the social space (for instance of statistical analysis, which is the sole means of demonstrating the structure of the social space) do not exist as real groups" (Bourdieu 1991, 232). Spencer must explain why we should grant the title "real" to the $K{=}5$ cluster when geneticists have no need to do so. Viewing clusters as tools that only exist within a given research program, which itself is embedded in much larger social and informational systems allowing geneticists to explain the variance and the "reality" of such clusters, is simply unnecessary. The question is not "Does Spencer prove the Blumenbach division is 'real'?" Rather it is "Should we use the word 'real' to describe the Blumenbach division in the context of genomics research?" Geneticists have been nearly unanimous in answering we should not.[7]

### *4.4 The Blumenbachian Division and Geneticists' Race Talk*

If we take "talk" to mean communication practices broadly conceived, there are many scholarly fields that study it: discourse analysis, rhetoric, sociolinguistics, media studies, ethnography, and communication studies, to name but a few. If we turn to those scholars, we find that it is doubtful that geneticists talk about the Blumenbach division at all; indeed, what they have found that geneticists and medical professionals talk about race in confused and inconsistent ways.

Content analyses of published literature in the relevant fields reveals nothing but confusion in how scientists write about race. In major genetics journals, race is best characterized as a "floating signifier" as researchers struggle to deal with the fluidity of the concept (Best and Byrd 2015; Chow-White and Green 2013). Scholars have found similar results in social scientific papers dealing with genetics (Byrd and Best 2015; Shostek and Beckfield 2015), pharmacology (Zhang and Finkelstein 2019) and forensic science (Maier 2021). In medical genetics, content analyses of thousands of articles reveal no consistent use of "race" (Bliss 2011, 2012; Bokor-Billmann, Langan, and Billmann 2020; Comstock, Castillo, and Lindsay 2004; Hunt and Truesdell 2013; Ioannidis, Powe, and Yancy 2021; Lee 2009; Liu et al. 2020). As an illustration of this inconsistency, an editor of the *Journal of the American Medical Association* presented the myriad ways race and ethnicity were presented in just two months of her journal:

[7]Sally Haslanger writes that "The heart of Spencer's project lies in asking whether there are biological races that might be relevant for medical research" (Haslanger 2019a, 153). I disagree with her. Spencer has consistently demurred in making medical care central to his account of biological realism (Spencer 2018a). Even in the essay Haslanger refers to, Spencer suggests his OMB race theory may only "inch us closer" to a resolution about race in medical research (Spencer 2019a, 103). Nonetheless, some of my discussion in Sections 5 and 6 may serve to inform debates about the relevance for the Blumenbachian division in health care.

> Fifteen of the sixteen studies reporting race/ethnicity stated how race/ethnicity was determined. Race was self-defined in twelve, categorized by the investigator in one, and determined from chart review in two. Of the fifteen studies that defined race/ethnicity categories, one used one category (listing percent white only; this was also the one study that did not define how race was categorized); three used two categories (black/white; white/Ashkenazi in a study of BRCA markers, mixing race and ancestry; and black/non-black); three used three categories (Hispanic/non-Hispanic/unknown; white/black/Asian; and Hispanic/non-Hispanic black/non-Hispanic white or other); three used four categories white/Asian/African-American/Hispanic; non-Hispanic white/non-Hispanic black/Hispanic/other; and black/Hispanic/white/other); two used five categories (both using white/black/Asian-Pacific Islander/Hispanic/other); two used six categories (non-Hispanic black/non-Hispanic white/Hispanic/Asian/other/unknown and white/black/Hispanic/Asian-Pacific Islander/American Indian/unknown), and one used seven categories (white/black/Native American/Asian-Pacific Islander/mixed race/other/Hispanic). (Winker 2006, 523)

Things get no better if we leave the written word and turn to actual oral communication. Ethnographic studies of how geneticists or clinicians speak find similar conflicting and shifting racial classifications. Two researchers were struck by:

> the ambiguous and unsystematic way racial/ethnic classifications arc being handled by genetics scientists. The researchers we interviewed used common racial/ethnic labels most often to describe their samples. In the context of scientific research design, it is impressive to consider how strikingly diverse these common categories are. They mix and combine an impressive array of unrelated classification types, such as skin color, language, geographic or continental regions, and religious or linguistic heritage …. Considering these labels in this light, their arbitrariness is unmistakable. (Hunt and Truesdell 2013 90)

Other ethnographies, conducted in other laboratories found their classification systems in similar disarray (Bliss 2011, 2012; Fujimora and Rajagopalan 2011; Hunt and Megyesi 2008; Hunt, Truesdell, and Kreiner 2013; Shim et al. 2014). All this empirical evidence suggests that the Blumenbachian division is not part of the race talk of geneticists and associated researchers. At best, it is mentioned in passing and given no special status, such as that of a "genuine kind."

A possible objection is that Spencer does not require the use of the Blumenbachian division to be widespread in genomic research or assume that such racial partitions are the only racial classifications in genomics or even that geneticists use racial terms consistently. This response reduces Spencer's argument for race realism almost to the vanishing point. He has cited ten publications that use the $K=5$ division, only one of which endorses his claim that those clusters are "races," and that one stops short of declaring those races "real." He has acknowledged that researchers have used other divisions of $K$ as well. He has acknowledged that the $K=5$ division is unimportant in biology. If he further acknowledges that biologists' use of "race" is confused and never really corresponds to the $K=5$ division, what is actually left of Spencer's race realism? If it does not exist in the talk and practices of biology, where does it exist?

## 5 Racial Classifications in the Federal Government

### *5.1 Whither Blumenbach?*

Spencer claims that the $K=5$ clustering matches both Blumenbach and the OMB: "Blumenbach's (2000, pp. 27–29) racial division was Caucasians, Mongolians, Ethiopians, Americans, and Malays. These groups roughly correspond to current U.S. Census races" (Spencer 2013, 247n6). Spencer is referring to the racial categories established by the OMB in 1997 for collection and presentation of racial and ethnic data for all relevant government information requests. Among the uses of those categories was the 2000 US Census and following Censuses. One reason Spencer believes Blumenbach's categories and Census categories "roughly correspond" is that he thinks the step was authorized by Kenneth Prewitt, the director of the US Census in 2000. As Spencer recounts:

> Here's some additional evidence that the OMB intended to pick out the set of human continental populations with 'race' in 1997. In 2013, the director of the US Census Bureau from 1998 to 2000, Kenneth Prewitt, came out and said that the OMB's 1997 racial classification was a deliberate attempt to mimic 'Blumenbach's racial taxonomy' (Prewitt 2013, 17). In Prewitt's (2013, 17) words, 'An extraordinary thing happened two hundred years after Blumenbach announced that the world's population should be divided into five racial groups distinguished by skin color. The United States government agreed.' Prewitt (2013, 18) even calls the OMB's races 'Blumenbachian races.' Furthermore, Prewitt should know what the OMB's true intentions were in 1997 because he worked closely with the OMB demographers who revised the OMB's race talk in 1997. It was Prewitt's responsibility to figure out how to best incorporate the OMB's new racial scheme into the 2000 decennial census. (Spencer 2019a, 217–8)[8]

We have a very detailed account of the information the OMB had when developing the Census racial categories. There were major surveys of the US population, there were extensive reviews of at least thirty federal agencies, there were wide-ranging opportunities for the public to comment, and there were countless interviews of members of the public and specialists (Wallman 2021; Wallman, Evinger and Schechter 2000), as well as lengthy hearings in Congress (e.g., Subcommittee on Government Management 1997). Katherine Wallman, a high-level statistician who was deeply involved in the development of the OMB racial categories, describes the herculean work that went into their development:

> Our work was grounded in research and testing by US statistical agencies (Census Bureau, National Center for Education Statistics, National Center for Health Statistics, et al) of various proposals that were put forward by some thirty federal government agencies and hundreds of individuals and organizations via public hearings and other public comment opportunities. Moreover, this work in the 1990's extended the government's initial issuance of similar standards in the 1970's that

[8] In the passages cited by Spencer, Prewitt says nothing about "deliberate" at all. In fact, Prewitt writes that he "did not know there was a Blumenbach or the five races of mankind until I decided to write my book, several years after I left the Bureau." Further, Prewitt did "not join the Bureau until the fall of 1998, well after the 2000 form was adopted" (Kenneth Prewitt, personal communication, April 1, 2021). Wallman confirms that "Blumenbach's work never to my knowledge played a role in OMB's 1994–1997 development and issuance of categories and definitions for reporting data on race and ethnicity" (Katherine K. Wallman, personal communication, April 1, 2021). There is no evidence that Blumenbach's work played any direct role in any deliberations about the US Census at any time in the country's history (Graham 2002; James 2008; Leeman 2004; Schor 2017; Snipp 2003; R. Spencer 1999).

> was based on agency proposals and experience using various formulations. In that case, the formulation that was adopted (with some modest amendments, I believe) was based on categories then being used by the Office of Education in the (then) Department of Health, Education, and Welfare. (Katherine K. Wallman, personal communication, April 1, 2021; also see Wallman and Hodgdon 1977; Walman, Evinger, and Schechter 2000)

Note that among the dozens of agencies and hearings to determine OMB categories, geneticists are notable by their absence because their input was irrelevant to establishing these categories. All of this hard work was not to try to align the OMB categories with genetic information, but to discover if the racist assumption of "continental races" was still in operation in racial discrimination, such that the categories would still be useful for federal purposes. Blumenbach's work reflected and was also constitutive of the racial order that arose from European colonialism. The rise of the nation-state and the administration of an empire required fixed boundaries and names, and the "scientific systemization [of Linnaeus and Blumenbach] paralleled that of the political-administrative program" (Braude 2011, 45). Fixing different races onto these continental divisions was seen as justification for European dominance of those regions. By the nineteenth century, a stunning circularity emerged: the different races of humanity were taken as evidence of natural continental divisions. Those continental divisions were then pointed to as evidence for the natural division of the races (Morris-Suzuki 2020, 41). Naturalizing continental divisions and then locating different races within them simply repeats the political and social ideology that gave rise to modern racism in the first place. "The continental division of the world," write geographers Martin Lewis and Karen Wigen, "commonsensical though it may appear, obscures rather than clarifies the essential patterns of global geography. It represents a parochial conception of the world … elaborated by a European culture that was as proud of its conquests as of its cultural accomplishments" (Martin and Wigen 1997, 45–6). Prewitt wrote: "Eighteenth-century biological essentialism and its associated rank-ordering had become deeply entrenched in America's racialized political order in ways that follow and haunt us into the twenty-first century" (Prewitt 2013, 18; see also Graham 2002). His remark shows how the invisible informational infrastructure (Bowker and Star 1999, 33–37) gave birth to the five-fold division used by the OMB. In other words, the OMB had to use those racial categories that were deeply ingrained in American culture when the OMB announced their racial categorization in 1997 (Office of Management and Budget 1997). As a result, Spencer unknowingly has dubbed "real" the racial categories that have been defined by the country's racist history. This is a worrying idea to which I will return in Sections 6 and 7.

### *5.2 Spencer's OMB Race Talk and Expertise*

As Schiappa makes clear, during periods of definitional rupture, answering the question "Who should have the power to define?" is vital. Spencer is quite clear on whom he grants this power to: geneticists. For Spencer, in OMB's racial categories "each race is described as an ancestry group whose members descend from the original people to inhabit a specific geographic location" (Spencer 2019b, 30). Elsewhere he writes: "the OMB intends to pick out ancestry groups with its race terms" (Spencer 2019a, 92). Referring to affirmative action, Spencer argues that "what matters in this context is ancestry" (Spencer 2019b, 44). Further, he believes that "the correct term to use here is 'genomic ancestry'" (Spencer 2019a, 84). We should leave "the task of articulating the nature of each race in OMB race talk to the experts on ancestry: geneticists" (Spencer 2019a, 92). But Spencer is wrong that the OMB meant to pick out only genetic ancestry groups.

First, geneticists clearly do not want the power to identify races or connect their research to racial identification. We have already seen that Rosenberg, a pioneer of the kind of work Spencer relies upon, rejects the idea that his research identifies human races. I have yet to find a geneticist who advocates that their work does or should underwrite any legal racial categories; Spencer cites none. The American Society of Human Genetics states quite clearly that "Genetics demonstrates that humans cannot be divided into biologically distinct subcategories … race itself is a social construct" (American Society of Human Genetics 2018, 636). Geneticists reject Spencer's idea that the OMB racial categories are proper names for geneticists' continental populations. When the 2000 Census allowed respondents, for the first time, to choose more than one racial category for their identification, the editors of *Nature Genetics* wrote:

> The increasing diversity of the nation's population is the reason cited by the US Office of Management and Budget (OMB) for these changes. It will be interesting to see whether this will be reflected in the results and how people categorize themselves. That race in this context is not a scientific term is generally agreed upon by scientists and a message that cannot be repeated often enough …. Census 2000, in which US residents will be asked to state their race and ethnicity, provides an ideal opportunity for geneticists to reiterate that their research does not support the concept of race as a biological entity. (*Nature Genetics* 2000, 96–7)

This leaves Spencer in an awkward position: if geneticists are the "experts" on ancestry, but those selfsame experts deny that their populations can simply be renamed races or have any relevance for the OMB racial categories, why does Spencer then reject their expert judgment on the very argument he is offering? In Section 4, I outlined reasons why OMB racial categories are not proper names for genetic populations and my argument, in large part, was closely tied to the actual practices of working geneticists. Spencer's race realist argument claims to be grounded in modern genetics, but it only gains realism by severing itself from the real practices and expertise of modern genetics.

Second, there are many disciplines that study human ancestry. That Spencer immediately identifies genetics as the relevant discipline is a form of question begging; it assumes that geneticists are the experts by smuggling in the idea that genes tell us "real" ancestry. There are other disciplines, such as genealogy, anthropology, and sociology, that have conceptualized ancestry and its related concepts like "family" or "kinship" in ways that do not straightforwardly map onto genetics (Desalle and Tattersall 2018; Marks 2013, 2017; Reich 2018). Spencer cannot immediately name geneticists rather than genealogists (for example) as *the* experts on ancestry without showing why they are, indeed, *the* experts. Given that the OMB has said early and often that they specifically do *not* intend to pick out genetic ancestry with their categories, Spencer needs something beyond an assertion that geneticists are *the* experts.

Third, Spencer focuses on what the OMB "intends" to pick out with its racial categories:

- "What this means is that 'race', in US racial discourse, means whatever the OMB *intends* to pick out with 'race.'" (Spencer 2014, 1028, my emphasis)
- "What matters for determining 1997 OMB racial membership isn't what the folk US concept of race says, if there is such a thing. Rather, it's what the OMB *intends* racial membership to be in its racial scheme." (Spencer 2018a, 1021, my emphasis)
- "Finally, the H-P evidence does not fully establish any identities, because it doesn't address what 'race' and the race terms are intended to designate *necessarily* in the OMB's racial scheme …. Next, lots of clues about what the OMB was trying to designate with 'race'

> and its race terms can be found in the reasons the OMB gave or endorsed for rejecting certain revisions and accepting others." (Spencer 2019b, 35, 37, emphasis in original)

- Furthermore, I will judge whether 'race' and race terms refer in OMB race talk and how well the identifying conditions and referents (if there are any) for 'race' and race terms serve as truth-conditional meanings by appealing to what the OMB presently *intends to pick out with 'race'* and its race terms, both in the actual world and in non-actual, accessible possible worlds …. What OMB intends to pick out with its race terms …." (Spencer 2019a, 89, my emphasis)

In the "actual world" Spencer refers to in that final quotation, if we are interested in what someone intends to mean in their speech, we do not need to resort to philosophy of language; we can ask them to clarify their intent. In the case of the OMB racial categories, the OMB has explicitly and repeatedly declared that genetics is not an important part of their definition. The very first principle that OMB has used in developing their racial categories is that "The racial and ethnic categories set forth in the standards should not be interpreted as being primarily biological or genetic in reference. Race and ethnicity may be thought of in terms of social and cultural characteristics as well as ancestry" (Office of Management and Budget 1997, 58782). A possible response to this clear denial is that the OMB refers to geneticists' $K{=}5$ division regardless of their intentions to do so. Such a position seems impossible to defend given Spencer's repeated claims about what the OMB *intends* to pick out with it definitions. It would be a complete reversal of his position to claim that their clearly expressed intent is somehow irrelevant to his argument.

Fourth, expertise is not all-or-nothing. Sociological and historical work about expertise has shown that lay people can learn to read primary sources and interact successfully with specialists who do the actual production of knowledge. They can become "interactional experts" who can communicate clearly with those who conduct the actual research (Collins and Evans 2007; Oreskes 2019, 61–2). A perfect example of this is provided by Spencer himself when he recounts how his own research showed him that a medical procedure recommended by a physician was unnecessary (Spencer 2019a, 73–5). Similarly, when a lay person uses "ancestry" or "race," we should not automatically assume that their definitions are incorrect and that what they really mean is what a geneticist or genealogist or anyone else means by those terms. Indeed, the OMB explicitly declared that a person's race is what they self-identify as their race. A polysemous approach to definition would suggest that they all can be correct, given the contexts in which the words are being used.

The pragmatic perspective asks: *Should* we accept Spencer's position? What consequences would follow if the OMB *really were to* treat their racial categories as proper names for the $K{=}5$ division? Would it help them achieve the goals they have? Given that the first principle OMB uses is the denial that they mean genetic divisions, that the principle "appears as early as the revised Exhibit F of 1977, and such language has been retained in all subsequent iterations of the policy" (R. Spencer 1999, 74), there must be a good reason for it. And "although this disclaimer is sometimes taken as *de facto* proof of the policy's lack of structural integrity, such a view misses the point of the categories and of the policy itself" (R. Spencer 1999, 74). The point of the policy is to be polysemous—to affirm a flexible meaning for racial categories that can change depending on the context in which those categories are deployed. If Spencer were correct about an OMB category being a "rigidly designating proper name for a biologically real entity" it would destroy this polysemy and thus the effectiveness of the policies the categories are meant to support.

### *5.3 Legal and Regulatory Race Talk as Pragmatic and Polysemous*

If we imagine a world where Spencer's views were put into operation, they would seriously undermine the government's ability to enforce civil rights. Spencer notes that the OMB chose the five-part division because it was comprehensive; it covers everyone. Of course, given the plethora of pre-genetic racial categories and the similar plethora of genetic $K$ divisions, other categorizations could cover everyone as well. In reality the current OMB categories do not cover everyone—a fact that Spencer acknowledges but dismisses as unimportant. (This is unlike the US Census Bureau's categories; see Section 6.1 below.) But there is a prior question: Why does the OMB need racial categories in the first place? Not counting by race at all could certainly be comprehensive and would be less confusing and simpler for everyone. Counting by race is necessary in certain contexts if the country is to repair the damage of its racist past. Since the 1960s, the US Census has shifted from "counting to dominate" to "counting in the name of multiculturalism" (Prewitt 2018, 11; Simon, Piché, and Gagnon 2015, 3; Strmic-Pawl, Jackson, and Gardner 2018). The OMB sets common standards for the collection of data for, among many other things, the administration of anti-discrimination efforts by the federal government—efforts which are distributed across nearly a dozen federal agencies. Among these efforts are "to assess fairness in employment practices, meet legislative redistricting requirements by knowing the racial make-up of the voting age population, learn who may not be receiving medical services, determine disparities in health and environmental risks" and "city planning, transportation policy, and related government tasks and commercial uses" (Prewitt 2018, 10). Because the OMB needs to serve so many purposes for so many agencies the OMB racial categories are best understood as "a statistical policy in support of monitoring antidiscrimination efforts, not a biological taxonomy" (R. Spencer 1999, 74). To accomplish its goals, the OMB adopts a type of polysemy Ceccarelli (1998) labels "strategic ambiguity," that in which the author deliberately leaves a definition vague. If this definition is vague, it is important to realize that making it more precise—specifically if OMB race talk were to work the way Spencer claims it does—would severely hamper any usefulness the OMB's racial categories might have.

While the OMB racial classification system is limited to five racial classifications, the agencies that use the system can produce more detailed categories if they have a need to do so. On the Census, respondents can choose more than one racial classification, meaning that there are 63 possible, unique, racial combinations. Combining these 63 with the ethnicity categories of "Hispanic/non-Hispanic" yields 126 unique categories (Snipp 2003, 579–80), creating a possible classificatory nightmare for the enforcement of civil rights law. To avoid such complications, the OMB issued guidance on how to use the Census data for monitoring civil rights compliance which included the instructions that "Responses that combine one minority race and white are allocated to the minority race" (Office of Management and Budget 2000, 3). This rule not only ignores the racial self-identification of respondents, but also, as some commentators have noted, recapitulates US notions of hypodescent, the notorious "one-drop" rule (Graham 2002). Why? Because the five racial categories are "specific population groups that historically had suffered discrimination and differential treatment on the basis of their race or ethnicity" (Office of Management and Budget 1997, 44675). What matters in the some contexts of governance and the law is not what "race" really is—genetic ancestry, or even how an individual self-identifies; what matters is "the perceptions and actions of the racist" (R. Spencer 1999, 76). The OMB racial categories gain salience only because they reflect the racist history of the US: "What is important here is not that the categories be scientifically logical … but rather that they accurately reflect the categorizations people make when they engage in racially discriminatory behavior" (R. Spencer 1999, 75). Two examples should illustrate why this is the case.

First, the United States Equal Employment Opportunity Commission (EEOC), using the polysemous OMB definition of race, rejects that ancestry is the sole basis for racial discrimination. For the EEOC, any of the following can be the basis for racial discrimination: ancestry, physical characteristics, race-linked illness, culture, perception, association, and sub-group (Dominguez 2006, 3–6). The EEOC is quite specific that the "reality" of race is not the key to anti-discrimination law: "Discrimination against an individual based on a perception of his or her race violates Title VII [of the 1964 Civil Rights Act] even if that perception is wrong" (Dominguez 2006, 5). What matters in employment discrimination is the category the discriminator ascribes to the victim of discrimination, and this need not be attached to how the victim self-identifies—and certainly not to any geneticist's notion of the $K=5$ clusters. If it were tied to genetics, as Spencer maintains it actually is, then racists would be free of charges of racial discrimination, were a genetic test to prove the racist mistaken in their racial identification.

A second example is supplied by Spencer himself when he gives of the example of a Melanesian American who experiences anti-Black racism because he was considered Black by a racist: "In that case, Melanesian Americans are just as Black as African Americans in this context" (Spencer 2019b, 44). But it is not at all clear that Spencer has this analysis as an option, given his views of OMB race talk in which he collapses the relevant contexts of science and law. Let us put this individual squarely in Spencer's OMB race talk. Let us suppose this person's "genomic ancestry" is Pacific Islander. This person self-identifies as a Pacific Islander both on the US Census and in everyday talk. This person is then discriminated against by a racist for being Black. If all social actors really did accept Spencer's OMB race talk, the person's "genomic ancestry," as defined by a geneticist and affirmed by self-identification, must mean that they did not experience anti-Black racism. I see no way for Spencer to escape this conclusion, since the Melanesian American's race is "really" Pacific Islander. In my pragmatic perspective, and the perspective endorsed by the current US legal system, the person's "real" genomic ancestry and self-identification are irrelevant to determining whether racial discrimination took place. The only relevant categorization here, as in the employment example, is the race ascribed to the Melanesian American by the racist.

My points are both empirical and normative. The empirical point is that Spencer errs in claiming that the OMB race categories are genetic populations. Not only does his reading, resistive or not, cut against the clearly expressed intent of the OMB, but also such a reading makes no sense given the polysemous ways the categories are empirically used by governmental officials. The normative point is that Spencer's ideas, if they were adopted by the federal government by an act of philosophical fiat, would make enforcement of civil rights law nearly impossible. This is because they limit OMB race talk to genetic ancestry alone, and that would interfere with enforcement of civil rights law. As two legal scholars concluded, "While DNA test results may increasingly be a constitutive aspect of some people's personal identities, DNA ancestry test results alone should not be conflated with sociopolitical conceptions of race. In other words, DNA ancestry test results are not race" in legal contexts (Jones and Roberts 2020, 1994). Since Spencer's OMB race talk works against the purposes of both genetic research and the OMB, it is nothing more than a carefully constructed equivocation. Matters do not improve when we move to ordinary race talk.

## 6 Ordinary Race Talk

### *6.1 The Linguistic Division of Labor*

Rather than providing empirical evidence for how "race" is defined in ordinary race talk, Spencer attempts an end-run around the empirical question by invoking a "linguistic division of labor." Spencer holds we should not assume that "ordinary people are the correct people to consult to find out the meaning of the terms they are using …. Rather, we should define ordinary race talk as race talk used in ordinary discourse and pay attention to 'how ordinary people conceive of race' in an ordinary race talk only after ruling out the possibility that 'race' is involved in a division of linguistic labor … OMB race talk is … involved in a division of linguistic labor" (Spencer 2019a, 82, 83). Using Putnam's notion of "a semantic division of labor," Spencer argues that ordinary people using the word "race" in ordinary discourse quite literally do not know what they are talking about: the linguistic division of labor identifies "specialists" (by which Spencer means geneticists) as the ones who really know what technical terms mean.

Spencer claims we must first "rule out" that a linguistic division of labor is involved in race talk. Applying this presumption to his own work would mean that he must first "rule out" the possibility that the linguistic division of labor applies to the race terms he uses such as "continental races" or "ancestry." Applying Spencer's argument on the linguistic division of labor means he must justify substituting his own judgments for the very experts he defers to *as* experts elsewhere in his writings. He must explain why he ignores the clear statements of his chosen experts that they are doing the things he claims they do. Given that geneticists and the OMB clearly deny Spencer's use of race terms, applying the linguistic division of labor to Spencer work would mean his project fails before it even begins.

Spencer's own evidence for a linguistic division of labor in OMB race talk is limited. Spencer cites a few studies conducted by the Census Bureau designed on increased response rates to the racial categories on the US Census (Spencer 2019a, 86–7). He notes that respondents in the study used a variety of ways to define "race," and therefore "the respondents are basically saying, 'We are trying to racially self-report in the way the OMB wants us to, but we need more guidance!'" He concludes that this is "solid evidence that 'race' and race terms are involved in a linguistic division of labor when used in OMB race talk" (Spencer 2019a, 87), because people were deferring to the experts to help them define their own races. This evidence is not informative about ordinary discourse about race terms because this focus-group study (Compton et al. 2013) was, like all focus groups, a particular communicative context that may or may not reflect how they use terms in everyday talk. After all, "Individuals have even been known to report different ethnic or racial identities in different contexts or at different points in their lives. These self-defined groupings can also have little correlation to genetic ancestry" (Rugnetta and Desai 2011, 6). The OMB acknowledges that "the mode of data collection can have an effect on how a person responds" in their interviews, surveys, and other social scientific methods (Office of Management and Budget 1997, 58783). While Spencer relies on a few studies for his argument, the OMB held dozens of public hearings and heard from hundreds of witnesses across them. They conducted countless surveys and interviews, from the 1970s onward, as described in Section 5.1. Spencer uses none of this evidence for his argument that lay people defer to the OMB categories. Spencer needs evidence beyond the official communicative contexts that he asserts reflect how lay people think and talk about race in the contexts of ordinary life. For reasons I will outline in the next section, there are serious reasons to doubt he can provide such evidence.

Spencer never moves beyond official governmental contexts when arguing for the existence of OMB race talk. For example, he argues that there is some "solid evidence that American

English speakers intend 'race' and race terms to refer in OMB race talk is that the overwhelming majority of Americans self-report one or more race when queried for their race in that race talk. For example, on the 2010 U.S. Census questionnaire … a whopping 93.8% self-reported one or more OMB race, while just 6.2% reported 'Some Other Race'" (Spencer 2019a, 83). Of course, this only proves that in the context of filling out the Census, people behave in this way, not that such talk is prevalent outside that context. More importantly, the Census Bureau itself is much less sanguine than Spencer about these numbers. Rather than thinking their categories adequately capture how people self-identify, they see these numbers as showing they need to change, because they defer to how people talk and think about race:

> Our research has found that over time, there have been a growing number of people who do not identify with any of the official OMB race categories, and this means that an increasing number of respondents have been racially classified as "Some Other Race." In fact, in 2000 and in 2010, the Some Other Race (SOR) population, which was intended to be a small residual category, was the third largest race group. This was primarily due to reporting by Hispanics, who make up the overwhelming majority of those classified as SOR, not identifying with any of the OMB race categories. In addition, segments of other populations, such as Afro-Caribbean and Middle Eastern or North African populations, did not identify with any of the OMB race categories and identified as SOR. (US Census Bureau 2021; for more evidence on Latino/Hispanic rejection of OMB racial categories see Martinez and Gonzales 2020; Stone 2020, 168–170)

If Spencer were right about the linguistic division of labor, the OMB would issue clear definitions about how people should self identify their race. They would see that citizens need such guidance and provide it, and perhaps even recommend that citizens take DNA tests to determine their genetic ancestry. The OMB would make sure that people identify themselves correctly, fitting into the proper names they have given to genetic continental populations. Instead, since 1977 the OMB has dealt with possible confusion about their categories in a manner opposite to what Spencer needs to support his argument. Their recommendations are, first, "Agencies should include in the instrument used to obtain racial and ethnic data a discussion of why the data are being collected, how they will be used. Agencies should include in the instrument used to obtain racial and ethnic data a discussion of why the data are being collected, how they will be used, and the steps which will be taken to prevent discrimination … [Second] Agencies should include in the instrument an indication that the report is *not attempting to develop an anthropologically precise description of the persons surveyed* (Wallman and Hodgdon 1977, 453, my emphasis; also see Wallman and Evinger 2000). Consistent with the pragmatic perspective I am advocating, the OMB stresses the purposes it has for racial categories. They tell respondents they should not concern themselves with scientific precision in their answers. To be sure, in some contexts, people might defer to the OMB census categories, but those categories were developed by the OMB going through extensive efforts to capture how people self-identify. "Being counted in the census isn't a passive process," wrote Deborah Stone; "The census is more like a fencing match between two sparring partners who influence each other's moves" (Stone 2020, 171).

The OMB has never provided such guidance because they are only interested in how people self-identify according to whatever criteria people chose. Katherine Wallman, OMB's chief statistician in the years the racial categories were being developed, and her colleagues explain:

> OMB decisions do not identify or designate certain population groups as "minority groups." The decisions continue the policy that the categories are not to be

> used for determining eligibility of population groups for participation in any federal programs. The standards do not contain criteria or qualifications (such as blood quantum levels) that are to be used in determining a particular individual's racial or ethnic classification. The standards do not tell an individual who he or she is or specify how an individual should classify himself or herself; self-identification continues to be the preferred means of obtaining data on an individual's race and ethnicity. (Wallman, Evinger and Schechter 1999, 1707)

The OMB categories can be interpreted as constituting the objects of its inquiry. It is not possible for a citizen to answer the race and ethnicity question on the Census incorrectly, because the Census seeks only to see how people answer the race and ethnicity question on the Census. Whatever answer is chosen is, *by definition*, the correct answer and has no more meaning beyond that. "Ticking a census box does not make anything about an individual 'official,'" Prewitt wrote, "it is just a tick on a form that is then aggregated with millions of other ticks to give an estimate [of the size of a statistical race] …. And in the arena of public policy, only statistical races are real" (Prewitt 2018, 14). The federal race categories "are a specific means for monitoring civil rights compliance, and they are expressly not a means for people to validate their personal identities" (R. Spencer 1999, 59). Not only are the OMB racial categories constitutive of their objects, but also if there is a linguistic division of labor in OMB race talk, it runs the opposite way from how Spencer claims it does: The OMB and Census Bureau, the "experts," try to amend their race talk to match ordinary people's race talk.

There is a further worry regarding Spencer's division of linguistic labor. It is a form of question-begging to assume that when ordinary speakers talk about their race or ancestry, and their meaning does not match modern genetics, we should defer to the "experts" who tell us what ancestry "really" is. Putnam, and Spencer following him, assume that "experts" are simply out there and ready to define terms for us. However, in times of definitional rupture, it is just that notion that is under dispute. Who decides who the experts are? How do we determine their authority to pronounce a definition in this area? How many geneticists do we consult? Spencer provides no guidance for these question beyond automatically deferring to an ill-defined group of geneticists—which is exactly the issue being contested. And, as the evidence I presented in section 4 shows, geneticists do not engage in the kind of talk Spencer needs them to, if they are to serve as these experts, and they often reject the very responsibility Spencer assigns them. Additionally, there are profound ethical, political, and legal questions raised by Spencer's argument.

### *6.2 The Ethics and Politics of the Linguistic Division of Labor*

Spencer's proposed use of a linguistic division of labor is ethically and politically troubling. Defining race is tied up with political and social power regarding whose voices are heard and whose voices "count" as important. The pragmatic perspective asks not *Can* we posit that Spencer's division of linguistic labor exists? but *Should* we? To argue that geneticists are "the experts" in defining DNA or race is to recreate systems of racial oppression, knowingly or unknowingly. Spencer gives the example where ordinary speakers of English who use the term "DNA" have an understanding of the term that does not match up with "biochemists, geneticists, and other DNA experts" to whom we should show deference (Spencer 2019a, 83). Spencer's choice of "DNA" is an unfortunate one. "To understand Native American DNA," writes Kimberly TallBear, "it is not enough to discuss simply what genetic scientists say they are looking for in their samples" (2013, 2). TallBear shows how the "DNA profile" needs to stretched "beyond its usual reference to 'New World' genetic ancestry traceable either through female mtDNA

and male Y-chromosome lines or through more complex tests that combine multiple markers across the genome to trace ancestry" (3). Geneticists "do not have a deep historical or practical understanding of the intricacies of tribal enrollment. Nor do they tend to understand the broader political frame circumscribing their work, how their disciplines have historically fed from marginalized bodies. Tribal folks know these politics and histories well" (4). She concludes, "Like many other Americans, we are transitioning in Indian Country away from blood talk to speaking in terms of what 'is coded in our DNA' or our 'genetic memory.' But we do it in a very particular social and historical context, one that entangles genetic information in a web of known family relations, reservation histories, and tribal and federal-government regulations." To merely cede to geneticists the very definition of "DNA" recreates entire systems of oppression that arose out of a tragic history.

Thus when we are confronted with facts such as this: "From 2010 to 2020, the American Indian and Alaska Native indentifying population increased by 160%" (Jones et al. 2021), we cannot, and should not, assume that such a change in self-identification was somehow informed by all these people taking commercial DNA tests. Ethnographic evidence indicates such changes are grounded in "ways that seem to defy common Euro-American notions of genealogical distance … native cultures have long encouraged such metaphorical and literal connections to ancient kin" (Sturm 2011, 41–42). None of this racial shifting could be understood if Spencer were correct about the linguistic division of labor. That division would stymie the need to interrogate changing definitions of "whiteness" that arose from the forced assimilation of American Indians (Sturm 2021), complex issues on tribal sovereignty (Tallbear 2013, 184–207), and how American Indian identity shifts and is perceived in ordinary talk under conditions of settler colonialism (Davis-Delano et al. 2021a; 2021b). None of these issues can be addressed if we assume, with Spencer, that geneticists' understanding of DNA and race should override deeply held personal choices or the political apparatus of tribal sovereignty.

One reason geneticists avoid describing genetic clusters as "races" is that they recognize the dangers of using a term that the public already uses in different ways. This is why official statements from journal editors and professional organization stress that their research does not inform us about social/political "race." Barry Barnes and John Dupré (2008) are clear on the ethical obligations of geneticists. They write of

> problems that arise from researchers sharing terms and partially overlapping their concepts with those used by quite different groups and subcultures. Where such sharing exists, other uses may justifiably take a critical interest in what specialists are doing with a term, indeed with 'race' there is case for others regarding specialists as secondary users of *their* term, who would do better to develop their own distinctive terminology. (147–8)

Spencer's notion of the linguistic division of labor runs roughshod over the actual practices of genetic researchers and the ethical problems of shearing terms from their histories of use.

The problems deepen when we search for the contexts in which ordinary race talk occurs. Consider the seemingly straightforward idea of where we should look to find how the "public" uses the term "race." The "public" is not something "out there" waiting to be discovered. It is created depending on what theory of "the public" you adopt. Sorting out what is "public" and what is not is an ongoing research program among rhetoricians and political philosophers (Rauchfleisch 2017). One theoretical outcome of struggling with the notion of "public" is that one quickly finds "counterpublics" which consist of communication excluded from mainstream public communication (Asen and Brouwer 2001; Kaiser and Rauchfleisch 2019; McCann 2011). Counterpublics are the social spaces created by subaltern groups to create their own meanings

free of the domination of political power structures. In her groundbreaking study of "everyday talk" in Black communities, Melissa Harris-Perry puts the matter this way:

> There are contemporary social sites carved out by African Americans in which African Americans create hidden transcripts by exploring ideological alternatives to dominant white discourses. These gathering places provide space for black people to engage in everyday talk. In the most contemporary formulation of the black counterpublic there are three areas of particular interest: black organizations, black public spaces, and black information networks. (Harris-Perry 2010, 7)

One way we have distinguished "race" from "ethnicity" is that the former is ascribed and fixed; the latter is a matter of individual choice of self-identity (Hollinger 1995). After centuries of racial ideology, the ability Americans have to change their racial identities is limited, but it is possible. Millions of people change their racial self-identifications, both on the Census form and in their daily lives (Cohn 2014; Haslanger 2019a, 155; Liebler et al. 2017; Saperstein and Penner 2012). In the 2020 census, "All of the race alone or in combination groups experienced increases. The Some Other Race alone or in combination group (49.9 million) increased 129% surpassing the Black or African American population (46.9 million) as the second-largest race alone or in combination group" (Jones et al. 2021). This fluidity in self-identification may well increase as we enter what Rogers Brubaker (2016) has dubbed "The Trans Moment," wherein racial and gender identities look to be further eroded. At a societal level, the process is achingly slow and clumsy. It requires that we recognize our racial categories as legacies of our racist past: myths we are ironically forced to accept if only to overcome them. If we were to adopt Spencer's notion "OMB race talk," this painstaking process would grind to a halt by fixing people into a "genuine biological kind" not defined by their choice but ascribed to them permanently by an outside "expert." Fortunately, we do not live in a world where this is the case.

## 7 Conclusion

Spencer is clear on his philosophical goals: "I *hope* that I convince some people that there are ways that we use the term *race* and race terms in this country to pick out biologically real groups. Getting philosophers and other scholars to realize this has been a huge part of my research so far. In particular, I hope that I've convinced some scholars that OMB races are biological groups and biologically real" (Tremain 2020). Adopting a pragmatic approach to definition and communicative contexts and accepting the usefulness of polysemy means the key question is "Should we use Spencer's 'OMB race talk' in the context of US race talk?" This question is in line with Spencer's own notion of RRP and the NRC's demand that we identify the costs and benefits of answering it. In his extensive work on OMB race talk, Spencer has claimed two benefits that flow from it. First, he claims that the epistemological benefit for genetics is that the $K{=}5$ division explains 1.53% genetic variance that is otherwise unexplainable. As I have argued above, however, Spencer has admitted that this explanation is unimportant for genetics researchers. Additionally, it is possible to explain this variance without committing to the view that genetic clusters are genuine biological kinds or "real" at all. Second, Spencer suggests that the OMB classification system may be useful for medical care. His advocacy of this position, however, is to merely suggest a possibility that this is the case, and he stops far short of suggesting that medical practitioners use his ideas: "None of that implies that medical researchers or clinicians should actually use this racial classification in clinical practice or medical research, nor does this fact guide us in how we should use this racial classification in medicine if we should use it at all" (Spencer 2018a, 1034). The benefits of Spencer's race realism are

meager: explaining some variance that even he admits is unimportant, and a possible medical classification that he stops short of endorsing fully. Against these benefits, we need to weigh the possible harms. My conclusion is that the dangers of Spencer's race realism far outweigh the scant benefits it offers.

First, by identifying geneticists' $K{=}5$ population division, the OMB's racial classification system, and ordinary people's use of the term "race" as identical, Spencer makes it impossible for people in each of those three contexts to reach the goals they have for using the terms "race" or "ancestry." Geneticists' goals in defining "population" are to explore our evolutionary history and aid human health. The $K{=}5$ division does not help them reach those goals, which is why they seldom, if ever, grant it the special status Spencer does. The OMB's goal in defining race is to help eliminate racial discrimination, which is why they offer racial definitions that are explicitly not tied to genetics and can be interpreted in many ways. Finally, people use "race" in multiple and fluid ways in ordinary talk for all kinds of purposes. It is an ethical and political error to substitute a questionable scientific judgment for their own agency in self-identification.

Second, Spencer's OMB race talk is inconsistent with his call for RRP. RRP depends on identifying different contexts in which race terms are used, but OMB race talk is as "fictive" as any "rational reconstruction" Carnap or Reichenbach ever built. *If* we take a few studies Spencer prefers from geneticists that list $K{=}5$ as a one possible way to divide human beings; *if* we grant the $K{=}5$ division some special status because it matches fictional "traditional" racial divisions; *if* we ignore geneticists' claims that the $K{=}5$ division does not refer to conventionally defined races; *if* we ignore the OMB's nearly half century of denials that they are dealing with biological categories; *if* we ignore the vast variety in how ordinary people talk about race in their lives and rely on a few answers on surveys that severely limit how they can express themselves; *then* we have "OMB race talk." That is a lot of work that severs OMB race talk from actual human communication for unimportant, promised benefits. If Spencer tries to fit OMB race talk into RRP by retreating to the fortress of "OMB race talk is but one way people talk about race," the retreat does nothing to rescue the concept because Spencer's OMB race talk only exists in a context of his own creation.

Third, Spencer's work is used in ways he absolutely opposes. Spencer knows that biological categories are often human creations. He should also acknowledge that those creations loop back to affect human beings themselves. Spencer's insistence that the OMB racial categories name genuine biological kinds that recapitulate Blumenbach's 18th century five-fold division puts him in ugly company. "I do worry that politically right-winged people—for example, Charles Murray—might try to misuse my research for their own purposes," he notes; "I'm also worried about the educational research that shows learning about human genetic differences in racial terms … increases racist attitudes among the learners" (Tremain 2020). Spencer's worries about the uses of his research, however, are not merely speculations about what *might* happen. It is currently being misused by those absolutely committed to maintaining a racist social order.

In his recent book, *Human Diversity* (2020), Charles Murray, America's best known defender of the racial inferiority of African-American intelligence, claims that continental races are a biological reality. The same can be said of Nicholas Wade's *Troublesome Inheritance* (2014). Both books were widely panned by geneticists and other scientists for their views about the reality of race (e.g., Desalle and Tattersall 2018; Fuentes 2021). Murray and Wade are, however, only the somewhat respectable tip of a racist iceberg. The so-called Alt Right of American politics, which is devoted to white nationalism and supremacy, often looks to race science to bolster their case. Steve Sailer, a noted white nationalist (Feldman 2016), has long held that "the 18th Century scientists who first thought hard about these [racial] questions more or less got them right." He was delighted that Kenneth Prewitt wrote that the Census used Blumenbach's di-

vison, because Sailer thought the "Census still uses Blumenbach's much-denounced five races …. Because they are good enough for government work" (Sailer 2013). Sailer has noted that Spencer's work on race realism "looks to be an important starting point" for moving forward with Sailer's own ideas (Sailer 2012). Spencer's work has also been discussed at unz.com (Thompson 2019), an antisemitic website that promotes Holocaust denial as well as scientific racism (*Media Bias Fact Check* 2021). And it has been cited favorably by John Fuerst (2015), long associated with the racist *Mankind Quarterly* and Pioneer Fund (Saini 2019, 68–9). These disreputable writers are delighted to seize upon any source they take as supporting their case for the reality of racial differences. My point in listing them is not to establish some kind of guilt by association argument suggesting that Spencer shares their views on a racial hierarchy and the politics that they believe flow from that hierarchy. I am not claiming that Spencer shares these noxious beliefs. My argument depends precisely on the opposite premise: that they enroll Spencer as a reluctant witness for their case. They use his work, and that of other serious scholars, to bolster their case as evidence that those who do not share their politics are nonetheless forced to accept their position on the reality of race. "Ideas have consequences," Richard Weaver (1948) wrote. The possible consequences of Spencer's ideas could be very dangerous indeed.

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