BOOK SYMPOSIUM

Considering the Role Marked Variation Plays in Classifying Humans: A Normative Approach

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The purpose of this paper is to contribute to the ongoing analyses that aim to confront the problem of marked variation. Negatively marked differences are those natural variations that are used to cleave human beings into different categories (e.g., of disablement, of medicalized pathology, of subnormalcy, or of deviance). The problem of marked variation is: Why are some rather than other variations marked as epistemically or culturally significant or as a diagnostic of pathology, and What is the epistemic background that makes these—rather than other variations—marked as subnormal? For Wilson (2018a), critical examination of the problem of marked variation is central to understanding the epistemology of medicalized pathology that made the history of eugenics possible. My aim is to explore the role marked variation plays in eugenic and other problematic classifications and the inferences they appear to license. I pay particular attention to the normative valuations of marked variations, how these valuations affect the inferences that are made by others about those possessing the variation, and how those possessing the variation perceive themselves. In the final sections, I illustrate this by critically discussing three putative kinship conceptions of race. I rely on these to extend the scope of the puzzle of marked variation from the context of historic and current markings of an individual's variation as disability in the eugenics movement to historic and current markings for assigning putative racial ascriptions to individuals and groups. Lastly, I suggest that the problem of marked variation is a problem that looms over any epistemic account that is dependent upon sorting or classifying.

Keywords

marked variation • classifying humans • philosophy of classification • critical race theory • values in science • eugenic thinking • normative classificatory practices

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1 The Normativity of Human Classificatory Practices

Eugenics emerged in the nineteenth century as a putative science of human improvement. Its aim was to use scientific knowledge and the techniques of selective breeding used by animal and plant breeders to restrict the reproduction of certain kinds of people and enhance the reproduction of others in an effort to improve humanity in each subsequent generation (Wilson 2018a). After their emergence, eugenic practices continued and were justified as powerful ameliorative tools used to sort the socially desirable from the socially undesirable (Wilson 2018a; Valles 2012; Caspari 2003).¹ How is it possible that eugenic practices have persisted for so long? An attempt to answer this question invites a further question: What do we need to do, and Who must we listen to in order to hear and understand the answers to the "How is it possible?" question? What is clear is that the continued subhumanization of those thought to possess traits deemed undesirable and/or pathological demands careful investigation. Careful investigation means asking why eugenic practices have persisted as well as what effects these have on individuals whose mental variation was marked as defective and used to justify subhumanizing practices such as forced or coercive sterilization and institutionalization. Understanding the history of eugenics and its persistence requires a critical historical, sociological, and philosophical investigation that includes the narratives of those harmed. However, to understand how those harms were even conceivable also requires an exploration of the very classificatory activities that were used to discriminate between those deemed "mental defectives"² and those who were not.

Robert Wilson (2018a) carefully and critically explores these and related problems in *The Eugenic Mind Project (TEMP* hereafter). Wilson begins to address the first set of questions in Parts I and III. Part II examines how certain variations are marked as defective and used to justify the mistreatment of those possessing the pathologized variation. Wilson examines the various classifications of disablement and medicalized pathology that aim to describe people that are "regarded as being, in some medically significant way, subnormal" (Wilson 2018a, 104). Their "subnormalcy" refers to "forms of human variation that tend to be viewed as falling below the normal" (Wilson 2018a, 104). These definitions may seem vague, but by defining "subnormalcy" in this way, Wilson avoids problematic descriptions of human variation as negative except insofar as they have been socially or historically defined as such. While he addresses the history of eugenics, Wilson's explicit aim in *TEMP* is to investigate how "eugenic thinking" has operated and uncover the reasons why the practice of sorting humans is epistemically as well as socially problematic (Wilson 2018c, *this volume*).

The purpose of this paper is to contribute to the ongoing analyses that aim to confront the problem of marked variation. To do this, I begin by critically engaging with Wilson's account in Part II of *TEMP*.³ I then explore the normative valuations of these marked variations, how the valuations affect the inferences that are made by others about those possessing the variation, and how those possessing the variation perceive themselves. I will go on to suggest that Wil-

¹For instance, the Sterilization Act of Alberta, Canada was still in force in 1972 (see Grekul, Krahn, and Odynak 2004; Wilson 2018a; The Eugenics Archive at http://eugenicsarchive/discover/world; and Muir v. Alberta (1996) *Dominion Law Reports* 132 (4th Series) 695–762. Canada LII 7287).

²Sean Valles's (2012) work on the history of eugenics is a particularly useful resource for those seeking further articulation of the way in which marked variations were used to classify "mental defectives." Valles pays particular attention to how variations in IQ were used to pathologize some and normalize others. He does this by drawing on Lionel Penrose's (1933) distinction between the classification of "subcultural mental defects" and that of "pathological mental defects."

³It is because of the potentially significant and long-ranging impact that his argument might have on classificatory practices in a wide range of fields, that I have chosen to focus on chapters five and six: "Where do ideas of human variation come from?" and "A socio-cognitive framework for marked variation" within Part II.

son's inquiry within Part II involves asking questions that not only help reveal the problematic practices of classifying humans in the context of eugenics and disability, but also may shed light on the normative aspects of many other classificatory practices. In doing so, my aim will be to show that the problem of marked variation is a problem that looms over any epistemic account that is dependent upon sorting. In the final section, I illustrate this by critically discussing three putative kinship conceptions of race. I rely on these to extend the scope of the puzzle of marked variation from the context of historic and current markings of an individual's variation as disability in the eugenics movement to historic and current markings for assigning putative racial ascriptions to individuals and groups.

Variation is ubiquitous. This is true of humans as much as it is of the rest of the living world. We compare ourselves as the same or as different to others by relying on cues to identify what we may consider to be a particularly helpful or informative grouping. We may consider these resultant groupings to be either natural or artificial. For instance, we may assume that the groupings we consider to be natural are simply those that can be discovered, read off the structure of reality, or can be known self-evidently. That we distinguish natural from artificial groupings is indisputable. But asking how we do so, whether we should, and what harms come by sorting in this way, allows us to better understand the meaning attached to these groupings, the motivation for the categorization, the purposes they have been used for, and their historical origins. Considering the role these and other normative considerations play in our classifications of the world may provide insight into how and why we sort individuals into groups.

The history of biological classification exemplifies the different ways in which organisms are sorted into groups. Shared essential features, family resemblances, continuous phylogenetic lineages, the possession of shared homeostatic properties or mechanisms, genetic markers, and the coordination of symbionts have all been used to determine membership within different biological categories. Biological categories, such as species, may refer simply to taxonomic units (Dupré 1999, 18). But they may also be used in a way that suggests the category is in some sense "natural," because it is a discoverable grouping of individuals who share a common property or relationship (e.g., descended from the same lineage).⁴

Assuming that a group is natural implies that there are certain ways in which it is delimitable. As such, it leads to certain practices of delimitation that rely on specific understandings of the causes of its naturalness and tracks these in terms of certain kinds of processes, products, events, and relationships which are taken to be causally significant in defining any group or lineage (Kendig 2014, 157). Doing so constrains membership within the category. For instance, if a lineage conception is used to define the category, it is the series of actual reproductive events of interbreeding individuals that is the focus of attention. Reliance on lineages may (but does not necessarily) also rely on a presumption that what makes lineages evolutionary natural units is that there is an exchange of genetic material between organisms. Many classifications and sortings rely on deploying concepts that signal difference. Organisms, including humans, are distinguished from one another and classified in terms of certain variations. These putative difference makers may furnish investigators with the grounds on which to make inferences over the categories. In this way, the classification of organisms seems to involve an epistemic valuing of certain variations over others. When considering the classification of non-human organisms, we might consider the reliance on these variations to be relatively uncontroversial even if we might disagree about which variations are the best to identify in order to make good inferences over the category and admit that there may be no value-free way of identifying which variations

⁴Membership in the species category, for example, has been linked to over 27 different conceptions of species which rely on genetic, ecological, phylogenetic, morphological, and a host of other characteristics, processes, and relationships (Wilkins 2011).

to select. However, when considering the sorting of humans, the reliance on variation and difference appears much more problematic.

Wilson distinguishes the relatively unproblematic reliance on what might be called "mere variation" from the problematic use which is "marked variation" (see Wilson 2018a, 103–104). In distinguishing the former from the latter, Wilson also tackles the assumption that the status of a group's naturalness is self-evident. Relying on the history and narrative records of individuals affected by the eugenics movement, he describes what has happened and what continues to happen when certain forms of human cognitive and physical variation are identified as putative pathological markers for an individual to be considered to have a eugenic mind. These were treated as diagnostic variations which marked the individual in possession of them as being of eugenic interest. Detection of these eugenic-marked variations meant the individual was considered a candidate for confinement, institutionalization, sterilization, or any other intervention that was justified by the goal of human improvement. She was someone who belonged within the category for whom eugenic practices were appropriate, e.g., detention within institutions devoted to the isolation and medical intervention of those pathologized as possessing a disability of eugenic interest.

2 The Puzzle of Marked Variation

Carefully articulating the recent and distant history of the eugenic movement and the harms it meted out to those marked makes it clear that there is a difference between mere and negatively marked variation. Negatively marked differences were (and continue to be) treated as those natural variations that cleave human beings into different categories (e.g., of disablement, of medicalized pathology, of subnormalcy, or of deviance).⁵ But what exactly is the nature of this difference, and how is it that some variations are marked and others are not? Considering why certain human variations are negatively marked (e.g., race, disability, sexual orientation) seems to issue in a puzzle when considered in terms of why some rather than other variations are marked as epistemically or culturally significant or as a diagnostic of pathology. Wilson sets out this puzzle succinctly in the form of a question that leads his later investigation: "What is it that provides the basis for our registration of disablement and medicalized pathology as forms of marked, subnormal variation?" (Wilson 2018a, 104). That is, what is the epistemic background that makes these—rather than other variations—marked as subnormal? This question concerns the epistemology of medicalized pathology that made the history of eugenics possible. It is a question that Wilson positions within feminist epistemology, disability studies, standpoint theory, the extended mind thesis, philosophy of biology, and phenomenology. Doing so, he articulates the site(s) of marked variation in a relationship in terms of the phenomenological state of the individual. This a two (or more) person relationship. It includes both what-it'slike to be the person whose variation is marked as a form of disablement and the marking of that difference by another as disabled for the purpose of sorting them from others considered to belong to the privative category of non-disabled. But this relationship is contained within a wider context. As such, it is not simply one's individual variations that are marked as subnormal. Variation is coded as disability only if the social context that the person lives within provides inadequate accommodation for the negative effects of the variation. The marking is not of the person but of the limitations within the person's social environment which fails to compensate for one's variability (Wilson 2018a, 106-110). How we self-identify as differently-abled and self-adjust in virtue of our variation is frustrated when our attempts to make adjustments are

⁵The focus here is on negatively marked variation. But marked variation may not always have negative connotations. It is also how we may choose to identify ourselves and about how we see ourselves as relating to others.

thwarted by (or limited) by our environment or if our self-identification is misread or intentionally contravened. This is not to say that disability is socially constructed.⁶ It is both real in the phenomenal experiences of those whose attempts are thwarted, and in the harmful assessments of them (as a result of negatively marking their variation) as subnormal. If saying disability is socially constructed means it is unreal or made by others then doing so ignores the very phenomenal nature of lived experience—within a body that is ours and the pursuit of a life that we value as well as one that is valued by others. Wilson suggests reality is located in the choice of cognitive resources we use, whether these choices are aided or frustrated by our social structure, the normative impact our marked variation makes on us, and the cognitive resources available to us. These may include individual cognition as well as group level cognition, shared intentionality, or other situated or extended forms of cognition that we may be afforded in our environment.

3 Shared Intentionality and the Use of "Like Us" Detectors

Shared intentionality is what makes normative assessments of variation possible according to Wilson. It is the intentionality we don't have on our own but as the result of our sociality and in virtue of our shared cognitively-mediated normativity (Wilson 2018a, 128–130). This normativity affects how we sort people into categories and by what criteria. People sort themselves and each other into categories based on morphological, physiological, neurological, and phylogenetic criteria. But they also sort on the basis of vocations, avocations, or where they go on holiday. When meeting new people, we might find sociability in learning that we both are runners or gastronomists.

One way we sort human beings into groups is deciding whether they are "like us" or "not like us" in some important way. Doing so, we refer to ourselves in terms of being a member of a certain sort of group and decide whether someone else is or not part of that same group (see Wilson 2018a, 132). What counts as being "like us" in some important way may differ depending on context, interest at the moment, or the way in which we are in the world at that time. We consider whether someone is "like us" by considering who we are, how we are living, where, and for what purpose. We reflect on our self-identity and what we take to be the identifying features of ourselves as members in that group of which we feel we are a part. If someone shares those features we might count them as "one of us." Of course, this marking may or may not track how the individual marked by us as "like us" actually self-identifies herself. In contrast, she may perceive me to have a variation that marks me in a category separate to her. She may deem that I am not like her in a way important to her and that she uses to mark herself by and therefore she marks my variation as different from hers. I would therefore be marked as "not like us" for her and because of that, I may also be considered "subnormal" for those, like her, who self-identify as "normal."

Wilson regards "like us" detectors as a set of "underlying cognitive mechanisms [that] operate on normatively meaningful social categories, some of which (such as kinship) are key to our prosocial life, others of which operate on marked variation in other domains" (Wilson 2018a, 137). Like Naomi Zack (1993, 2001), Shelley Tremain (2001), and Linda Martín Alcoff (1995), Wilson sees the kind of knowledge generated by these classifications as deploying not just a form of knowledge about oneself and how one thinks of those like her, but about how others communicate with her based on who they think she is. Whereas Zack and Alcoff focus on issues

⁶Individuals self-described as neurological, physiological, or morphologically atypical may perceive and mark themselves and their variation *as atypical* in order to disclose their variation and signal their difficulties accommodating to certain environments.

of self-identification and classification of humans in terms of race, ethnicity, sex and gender, Wilson follows Tremain in focusing on the classifications of ablement and disablement.

4 Externally Mediated, Cognitively Driven Normativity

The sorting of people into those "like us" and those "not like us" has been widely discussed within the study of the history, philosophy and social studies of disability studies and critical race theory. But the way in which Wilson investigates the cognitive faculties that make marked variation possible in the context of the eugenics movement may prove additionally useful in considering the puzzle of negatively marked variation within these and in other areas. A general version of the problem of marked variation seems to be Wilson's target: "[If cognitive function relies on a sort of "like us" mechanism], then all it would take for us to end up with the kind of difference between people being marked as subnormal is for the norms that make someone not like me, that is, not a member of my group, to be ones that class as subnormal those people who have (or even simply are perceived to have) disabilities or impaired parts as subnormal" (Wilson 2018a, 208). In positing first-person plural knowledge such as "like-us" detectors, Wilson tries to capture the phenomenology of marked variation by focusing on the cognitive mechanisms that make it possible in very different social and cultural circumstances. His significant contribution in *TEMP* is that he focuses on the cognitive processes that make these sortings manifest rather than simply focusing on the sortings themselves.

That is, he asks, what is going on cognitively when one sorts people into groups? This process is not merely located in the inner thoughts of the classifier. Sorting, like many other cognitive activities is something that can only be satisfactorily described as an extended process rather than one accommodated by a purely internalist conception of mind. For those familiar with his work in philosophy of mind, Chapters 5 and 6 will seem philosophically contiguous with his previous research. But in *TEMP*, external mindedness takes on an ineluctably normative dimension: "So we have a kind of externally mediated, cognitively driven normativity, and it constitutes an important feature of human social life. One thing that this cognitively mediated normativity does is allow us to distinguish not simply between individual people but between kinds or sorts of people ..." (Wilson 2018a, 130).

One of the most conceptually provocative aims of *TEMP* is to investigate how people categorize other people and what impact that has on those categorized, the categorizers, and the communities that have sustained these activities of sorting people. I am particularly sympathetic to this aim, as elsewhere I've discussed the importance of focusing on classificatory activities such as sortings or "kindings" rather than simply the products of those activities (Kendig 2016, 5–6). I suggested that finding out how people sort and categorize might reveal normative aspects of the practices employed in classifying that could not be known by simply investigating the resultant categories. Knowing the route by which people sorted subjects of interest into categories may affect our valuation of the category and whether we take it to be a credible category. Rather than relying on folk conceptions, biological conceptions, or even sociological conceptions that have been used to classify and sort people, we must also focus on how people classify people. What are people thinking and doing when they distinguish between individuals? Or when they ascribe some people to one kind or sort, and other people to another sort?⁷

⁷Wilson points out that this is not a discussion of finding some sort of natural kind for humans, nor is the project one that aims to find some common property or set of properties all people share. Neither is the project one which aims to find some social or biological notion that exists irrespective of our way of thinking about the world.

In the remainder of this paper, my aim will be twofold. First, I explore Wilson's suggestion that we can investigate normativity via shared intentionality in discussions of classification by what he calls an "externally mediated, cognitively driven normativity." Secondly, I consider the role marked variation plays in classifying humans and how "like us" detectors might apply in other areas of research. To do this, I will briefly sketch and evaluate three ways people have sorted others into putative kinship groupings using "like us" and "not like us."

5 Sorting with "Like Us" Detectors

I agree with Wilson's diagnosis: some recognized variations don't hold much epistemic weight (for instance: what day of the week someone was born on; whether they have two middle names, or one, or none; or whether they wear their hair up or down), whereas others are both recognized and thought to hold some or much epistemic weight. Possession of these variations are thought to license certain inferences based on knowing that the individual possesses them. But although Wilson points to the connection between possession of variations and how this affects the inferences made on the basis of these, I think much more could be made of this. I suggest that the problem of marked variation is a problem that looms over any epistemic account that is dependent upon sorting. To do this I will consider an application that Wilson does not address in *TEMP*: conceptions of race.

Elsewhere (Kendig 2011, 200–202), I've examined how some putative kinship notions of race rely on coding certain perceived variations as diagnostic markers that can be used to determine whether an individual belongs to a particular racial classification or not.⁸ Concentrating on another form of marked variation, Ron Amundson (2000) critically discusses the problematic nature of the concept of normal function in a way that is particularly helpful in elucidating the more global nature of the problem of marked variation I have in mind. It also serves to justify my focus on conceptions of race in order to extend the scope of the problem. Amundson writes:

I consider the concept of normal function to be similar to the traditional concept of race. Like the concept of race, the concept of biological normality is invoked to explain certain socially significant differences, such as unemployment and segregation. Like the concept of race, the concept of normality is a biological error. The partitioning of human variation into the normal versus the abnormal has no firmer biological footing than the partitioning into races. Diversity of function is a fact of biology. (Amundson 2000, 34)

In the remaining sections of this paper, I discuss three putative kinship conceptions of race. I rely on these to extend the scope of the puzzle of marked variation from the context of historic and current markings of an individual's variation as disability in the eugenics movement to historic and current markings for assigning putative racial ascriptions to individuals and groups. The first of these are the widely used "one-drop rules" in the United States.

5.1 One-drop rules

"One-drop rules" refers to a number of laws first enacted during slavery and were common in the southern United States. The original rule was set into law in North Carolina in 1802 (Gobu

⁸For a critical survey and analysis of the kinship conceptions of race as well as the morphological, biomedical, subspecies, population, and social constructionist conceptions of race see Kendig 2011.

v. Gobu, 1 NC 188). The last was upheld in 1982 (Omi and Winant 1994). These were laws for assessing the purity or impurity of an individual's ancestral lineage. They were widely used to determine whether an individual was "like us" or "not like us" when the diagnostic markers used to negatively mark variation failed. Ancestry was used as the back-up litmus test for ensuring purity of someone's race and was used as an additional mechanism for the detection of marked variations. In providing a means of detecting the presence of a non-white ancestor, their aim was to protect and regulate white privilege against the perceived threat of its gradual dilution by multiracial individuals. Their continued use is evident in the widespread use of a dichotomous racial division in ascribing an individual's race by selectively ignoring part of their ancestral history; that is, "black" used to refer to individuals of multiple racial backgrounds, and "white" was reserved for someone who had very distant ancestors identified as black. In practice, one-drop rules often took the form of witch-hunt-like searches for any distant black ancestors of individuals living as, and accepted as, white. Although originally aimed at black and white races, the absolute intolerance to those of "mixed race" was not limited to those of black and white ancestry (Kendig 2011, 201–202).

The use of one-drop rules persists (cf. Omi and Winant 2000), but it often relies on folk genetics of racial inheritance: individuals inherit all of their genes from their parents, genes code for traits, and so all of their racial traits are encoded in the genes they inherit from their parents. Individuals have the same traits, same genes, same talents, same diseases, and same behaviours as their ancestors because these are all reliably inherited through a pure, unbroken lineage of ancestors. Its use has played into the growing interest in genetic testing kits as diagnostic for discovering one's "true" ancestry. Not only does this view overestimate the role of genes in development, it mistakenly assumes the identity of genes across generations. The genes we inherit from our parents are not the same, they are neither materially nor structurally identical with our own. Not only are the genes not identical across generations, they are also non-identical within the trillions of cells of one's body throughout one's ontogeny (Kendig 2011, 207–209).

5.2 You-know-one-when-you-see-one

The second putative kinship grouping that uses "like us" and "not like us" detectors is one of the most prolific kinship notions of race. It is a sort of you-know-one-when-you-see-one conception of race that I refer to as the "naïve-recognition concept of race" (Kendig 2011, 204–208). Although not labelled as such, it is a view widely discussed and criticized (Zack 2001; Piper 1992). The naïve-recognition concept of race is a folk social-scientific notion that assumes that race is exactly how "we" judge it, assuming that "we" all perceive race in the same way. This kinship notion is often justified with genealogical evidence that is sociologically determined. For instance, it groups human beings into racial kinds based on whether they are part of the same family tree. But the significance of these biological relationships and their use in constructing family trees is biologically given but ritually determined by sociological and cultural interests, e.g., paternal inheritance of the family name, maternal inheritance, or the lineage of the mother's brother. Family trees are never produced without heavy pruning. Without systematic pruning of certain branches, one would end up with a never-ending tree (Müller-Wille and Rheinberger 2009). According to this widely adopted kinship conception, an individual is the same race as her parents if her parents both belong to the same race as each other (Gelman and Wellman 1991; Carey and Spelke 1994). The naïve-recognition concept of kinship is similar to what is often taken to be a "common-sense biological notion" used by Mayr (2002, 90-92). In framing his subspecies conception of race, Mayr suggests that although many characteristics are just quantitative or descriptive, others-the Diego blood group for individuals of Native

American ancestry and Tay-Sachs disease for those of Jewish descent—are "virtually diagnostic" (May 2002, 92). And later, relying on the assumption that there are folk biological races, he suggests, "if I introduce you to an Eskimo and a Kalahari Bushman I won't have much trouble convincing you that they belong to different races" (Mayr 2002, 90). This naïve realism assumes the judgement of another's race is given—unmediated—to "us." This requires the further assumption that the "us" is taken to be a generic perceiver. In privileging this generic perceiver, the possibility of other perceivers holding different positions is ignored.

5.3 Common blood

Looking at the ways in which both the naïve recognition concept and the one-drop rules were used to categorize people according to a putative conception of kinship reveals the negative marking of variation and its negative use in regulating the inheritance of white privilege. The process by which individuals used these "like us" or "not like us" detectors can be contrasted with W. E. B. Du Bois's positive notion of race in terms of "common blood":

a vast family of human beings, generally of common blood and language, always of common history, traditions and impulses, who are both voluntarily and involuntarily striving together for the accomplishment of certain more or less vividly conceived ideals of life. (Du Bois 1897/2000, 110)

Du Bois seeks a more explicitly social-scientific notion of kinship than the seemingly biologicallytied kinship account of the one-drop rules or the naïve recognition conception. He does so by referring to a "vast family" sharing a "common history." The notion of "blood quantum" used in some Native American tribes may initially appear to function in a similar social-familial way as Du Bois's common blood, since it is used to determine one's belonging to a particular tribe.⁹ Du Bois's notion of common blood emphasizes at once the physical, psychological, and sociological continuity among individuals of the same race. Together with common history and vast family it frames his sociohistorical conception of race, one that emphasizes multiple routes by which race is passed on. I would suggest that Du Bois's sociohistorical conception provides a clear way to understand Wilson's account of cognitively-mediated normativity through engaged community knowledge exchanges.

Du Bois calls the ability to recognize this value-based community knowledge "cultural recognition." A similar notion is described by Susan Wolf as "self-recognition" and Kyle Powys Whyte discusses something similar in terms of different interpretations of "traditional ecological knowledge." What is counted as community knowledge and what role it plays within the community is dependent upon the traditions, values, and origin stories of that community (Whyte 2013). They shape the environmental, moral, and governance relationships that are part of indigenous communities and are reciprocally co-constructed by them. The relationships between individuals—human, animal, plant, soil, weather, and spiritual elements are often intertwined. It is in the activities of making and maintaining relationships that is the focus. For instance,

⁹However, whereas Du Bois's common blood was intended to positively unify a "vast family" in a way that expressed an understanding of their common history, the practical uses of blood quantum make the comparison more complicated. Blood quantum has been used to unify. But it has also been used as enrollment criteria to negatively police tribal membership. Membership in some tribes is an official claim as it is within the remit of the US Bureau of Indian Affairs to control what is called a "Certificates of Degree of Indian or Alaska Native Blood" (CDIB). With a CDIB, one gains eligibility to a host of federal benefits that are exclusively held for Native Americans. It also provides proof that one is a member of a tribal nation. (For a detailed account see Spruhan 2018).

in discussing knowledge exchange between indigenous and non-indigenous institutions of environmental governance, native scholars Raymond Pierotti and Daniel Wildcat suggest that there is community self-knowledge that is

based in the knowledge that native societies existed under conditions of constant pressure on the resources upon which they depended, and that a means had to be found to convince communities and families to economize with regard to their use of natural resources ... The connections that are a crucial aspect of traditional ecological knowledge (TEK) are based on a mixture of extraction, e.g. animals are taken as prey, combined with recognition of the inherent value and good of nonhuman lives. Traditional knowledge is based on the premise that humans should not view themselves as responsible for nature, i.e., we are not stewards of the nature world, but instead that we are a part of that world, no greater than any other part. In this way TEK deals largely with motivating humans to show respect for nonhumans. (Pierotti and Wildcat 2000, 1336, as quoted in Whyte 2013, 4)

These appear to be views complementary to what Wilson refers to as a shared intentionality the conditions that make normative assessments of variation possible. For Wilson, this seems to come from the nature of our socio-ecologically-embedded and cognitively extended experience: human beings experience the world through their bodies. That experience is always of a body situated in a certain place at a certain time and in relation to others' bodies is not a new view. But the focus of these diverse accounts of shared intentionality, cultural and self-recognition seems to be on the underlying causal reciprocity between an individual's experiences of herself within her environments, her interactions with others, and the knowledge exchange within a community. I would suggest that relying on these accounts and the extensive work in disability studies, critical race theory, and feminist epistemology provides us with necessary tools of investigation. These may help reveal the connection between how we see ourselves and how we see others as like or unlike us. Doing so could further our attempts to understand why these "like us" comparisons have led to violence against those marked as "not like us" in some cases, while in others they have been employed intentionally by a community as a way of self-marking that allows for affirmation within a community.

6 How Might We Know when the Sorter Gets It Wrong?

How can we eliminate the problematic nature of marked variation but keep the ability of individuals to self-identify, preserve culture-framing narratives, and attribute felt differences as markers to belonging to a particular group culture? Because these manifest in such different ways (the former in potential harm and violence, the latter in recognition and affirmation), we require a way of understanding the processes by which people mark, how they mark, and for what purpose.

This is especially true if how one is perceived by others as well as how one perceives oneself and their own self-identification—in terms of sex, gender, sexual orientation, or race—is liminal. Racial categorization may change throughout a person's life depending on where they live, what they experience, and how these are perceived by others as well as themselves (Kendig 2011, 212–217). This change may be due to the categorizations available to them. For instance, a young woman living in the US might be classified in 1920 as "Hindu," in 1940 be considered "White," in 1960 become "Other," and in 1980 be "Asian" according to the categorizes used in US Census data collection (Nobles 2000). Racial categorization may also be dependent upon an interaction between them and others, for example, how an individual is perceived by others or is seeking to be perceived by others. In either case, an individual's perceived identity relies on, is thwarted by, or is in some way influenced by stereotypes that underpin those categories (cf. Zack 2010; Hom 2018).¹⁰

Human classificatory practices do not occur randomly. In order to sort a person (including ourselves) into a category, we rely on stereotypes that underpin those categories. The stereotypes underpinning those categories may be damaging. Our use of them may serve to perpetuate these stereotypes both in ourselves and in our ascriptions of others we believe belong to that category. Sociologists, Aliya Saperstein and Andrew M. Penner (2012) performed a longitudinal study focusing on how racial ascription by others affects one's own racial self-identification and leads to internalized racist stereotypes. They found that people who have been unemployed, incarcerated or on welfare for a sustained period of time are significantly less likely to be classified by others and identify themselves as "White" despite being classified as "White" in the previous year. And they are more likely to be identified as "Black" and self-identify as "Black" (Saperstein and Penner 2012, 698–701).

Wilson's approach to the problem of marked variation in the context of his exploration of new eugenics, provides a further set of considerations that promises to be beneficial to the ongoing discussion. But what seems to be missing is a response to the following questions: How might we know when the sorter gets it wrong? And: To what or to whom do we defer as arbiter of the correctness or incorrectness of the categories to which a sorter ascribes an individual? We surely want to say that there is a way of getting it wrong. That it isn't the case that the sorter can just sort like with like and in any way that is profitable for the sorter. As Wilson's *TEMP* has shown, at least sometimes the sorting goes horribly wrong, and at most, it often does.

For instance, we might consider the identification of someone as being lesbian, gay, straight, bisexual, or queer as something that, in sorting people, we can get wrong. Of course, we can get it wrong regardless of whether we are of the same sexual orientation as the individual or of a different one. But I think the more interesting question is: What are the truth-makers for the correspondence of our putative categories of sorts of people and the "real" identity of the individual as belonging to a group? It seems obvious that someone's own self-identification should be a truth-maker in this case. But, are these truth-makers all we need? For instance, can someone be harmed on the basis of a hate crime directed to them as the object of hate on the basis of being perceived as gay even if the person self-identifies as straight? Most would say that there is still harm that outstrips that harm done to the individual; there is also violence committed against the community. There might be harm to the community if the perpetrator of the hate crime relied upon detection of a marked difference he or she believed was shared by the members of the target community. In committing the hate crime, the perpetrator marked the difference as deviant or pathological, and one, when detected in another was license for mistreatment and harm. Harm to the community would then still be done even if the victim of the hate crime was not a member of the targeted community.

Attempting to understand the conditions under which we can decide whether a particular categorization is correct or incorrect connects us back to the larger puzzle of marked variation. My suspicion is that we might not find a general solution to the problem of marked variation in all cases, (e.g., disability studies, critical race theory, or gender and sexuality studies), as there are significant differences which might may make this impossible (see, for instance, Hom 2018). But even if we might not find a general solution that would reveal the conditions under which we can decide whether a categorization is correct or incorrect as well as what are the truth-makers

¹⁰Asking how (and why) a sorter misidentifies the category to which someone belongs seems to require careful understanding of the notion of "passing" and the multiple historical and current contexts within which it is used (see Spencer 2000; Sexton 2008; Zack 2010).

required in determining this, I would still suggest that seeking the grounds by which we might know when the sorter gets it wrong surely should be part of our investigation.

7 Disability as an Epistemic Resource

TEMP begins with an explicit premise: knowledge is always culturally, historically, and socially situated. This seems to me to pose an insurmountable problem. That is, how might we resolve the puzzle of marked variation if the social ascription of our categorization seems to always supervene on the properties of the individuals for whom the categorization is intended to include? If the groupings one relies upon to make sense of the variation in the world rely on first-person plural perspectives which are informed by our conceptual, historical, cultural, social, and environmental conditions, how can we avoid negative marked variation? Wilson's solution is to treat disability as an epistemic resource. Doing so, Wilson positions himself at the interdisciplinary nexus of standpoint theory, philosophy of mind, philosophy of biology, and disability studies. In doing so he follows Kafer (2013), Harding (1991, 2004), Garland-Thompson (2012), and Wylie (2004, 2012). But, I suggest, the approach he takes is also consistent with those interested in philosophy of science in practice, who take on the activities of science in addition to its products as the focus of investigation. This is an approach which emphasizes the need to consider the knower(s) and not just what is known (cf. Grene 1966).¹¹

The use of disability as epistemic resource means that when we consider the phenomenal experience of someone experiencing a disability and hear their first-person narrative, we may "discover alternative ways of being in the world ... [and] recognize and value interdependence" (Kafer 2013, 83). The use of disability and narrative as epistemic resources is not limited to the first-person plural perspective. The what-it's-like for an individual to have knowledge of themselves and the world around them may also include extended forms of cognition. Their narrative may also include joint intentionality, novel tool use, prosthetics, and alternative ways of maneuvering or thinking in the world. In this way, narrative is intended to be a site of engagement that allows us to focus on how people talk about their lives, their sense of place, how they sustain their ways of living and stories that they use to talk about themselves. This awareness is gained by attending to how someone who may be initially perceived as not-like-us attains her knowledge, how she uses this knowledge, and how we might understand the conditions that make her knowledge possible.

8 Concluding Thoughts

Biological classification and the classification of people in particular is a topic long discussed within philosophy of biology, disability studies, gender and sexuality studies, and critical race theory. Within philosophy of biology, the processes of classifying—and not just the classifications or the classificatory practices or protocols of classification—are now more widely being discussed. Recent discussions surrounding the nature of natural groupings have shifted to focus on the natural kinds and processes of kinding within different contexts (see Kendig 2016). Although this shift has highlighted the interest-relativity of discovering and constructing kinds that are relevant in investigating certain research questions, values in classification have also been shown to play a significant role in determining what (as well as how) we consider a sort or kind to be relevant, useful, natural, and/or constructed. With new light being shed on this

¹¹Although this is now a widespread approach, many attribute its origins to Marjorie Grene's influential text, *The Knower and the Known* 1966, and her later work (see also Grene 1985).

role, I would suggest that there is a secondary set of questions arises with regard to scientific practice. That is, how can we preserve valuable scientific inference-supporting biological classification whilst acknowledging their normativity? And how can we block the sinister eugenic classifications in a way that acknowledges their epistemic, methodological, and evaluative errors? Targeting these questions, Wilson (2018a) offers a critical account of the sorting processes used in classifying humans and shows not only how they are context sensitive, but also liable to cause harm. My focus in this paper has been to explore the role marked variation has and continues to play within the philosophy of classifications. Acknowledging how marked variation may lead to problematic and at times vicious classifications and inferences requires understanding the concepts used, by whom, for what purpose, and how these classifications affect those classified. As such, I suggest that the normative epistemological methods Wilson employs in *TEMP* will be valuable to those pursuing a rigorously engaged philosophical approach to the problem of negatively marked variation in a variety of different disciplines.

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Literature cited

- Alcoff, L. (1995) 2000. "Mestizo Identity." In *The Idea of Race*, edited by R. Bernasconi and T. Lott, 139–160. Indianapolis: Hackett.
- Amundson, R. 2000. "Against Normal Function." Studies in the History and Philosophy of Biological and Biomedical Sciences 31 (1): 33–53.
- Caspari, R. 2003. "From Types to Populations: A Century of Race, Physical Anthropology, and the American Anthropological Association." *American Anthropologist* 105 (1): 65–76.
- Du Bois, W. E. B. (1897) 2000. "The Conservation of Races." In *The Idea of Race*, edited by R. Bernasconi and T. Lott, 108–117. Indianapolis: Hackett.
- Dupré, J. 1999. "On the Impossibility of a Monistic Account of Species." In Species: New Interdisciplinary Essays, edited by Robert Wilson. Cambridge: MIT Press.
- Garland-Thompson, R. 2012. "The Case for Conserving Disability." *Journal of Bioethical Inquiry* 9 (3): 339–355.
- Gelman S., and H. Wellman. 1991. "Insides and Essences: Early Understandings of the Non-Obvious." *Cognition* 38: 213.
- Grekul, J., H. Krahn, and D. Odynak. 2004. "Sterilizing the 'Feeble-Minded': Eugenics in Alberta, Canada, 1929–1972." *Journal of Historical Sociology* 17 (4): 358–384.
- Grene, M. 1966. The Knower and the Known. Berkeley: University of California Press.
- Grene, M. 1985. "Perception, Interpretation, and the Sciences: Toward a New Philosophy of Science." In *Evolution at a Crossroads*, edited by D. J. Depew and B. H. Weber, 1–20. Cambridge, MA: MIT Press.

- Hom, S. L. 2018. "(Dis)Engaging with Race Theory: Feminist Philosophy's Debate on "Transracialism" as a Case Study." *Philosophy Today* 62 (1): 31–50.
- Harding, S. 1991. Whose Science? Whose Knowledge? Thinking from Women's Lives. Ithaca: Cornell University Press.
- Harding, S. 2004. The Feminist Standpoint Theory Reader: Intellectual and Political Controversies. New York: Routledge.
- Kafer, A. 2013. Feminist, Queer, Crip. Bloomington: Indiana University Press.
- Kendig, C. 2011. "Race as a Physiosocial Phenomenon." *History and Philosophy of the Life Sciences* 33 (2): 191–222.
- Kendig, C. 2014. "Towards a Multidimensional Metaconception of Species." Ratio 27 (2): 155-172.
- Kendig, C. 2016. "Activities of Kinding in Scientific Practice." In Natural Kinds and Classification in Scientific Practice, edited by C. Kendig, 1–13. Abingdon and New York: Routledge.
- Love, Alan C. 2018. "Philosophy in the Trenches: Reflections on *The Eugenic Mind Project*". *Philosophy, Theory, and Practice in Biology* 10 (14). http://dx.doi.org/10.3998/ptpbio.16039257.0010.014.
- Mayr, E., 2002. "The Biology of Race and the Concept of Equality." Daedalus 131 (1): 89–94.
- Müller-Wille, S., and H.-J. Rheinberger. 2009. "Vererbung." Geschichte und Kultur eines biologischen Konzepts. Frankfurt: S. Fischer.
- Nobles, M. 2000. Shades of Citizenship: Race and the Census in Modern Politics. Stanford: Stanford University Press.
- Omi, O., and H. Winant. (1994) 2000. "Racial Formation in the United States." In *The Idea of Race*, edited by R. Bernasconi and T. Lott, 181–212. Indianapolis: Hackett.
- Penrose, L. 1933. Mental Defect. London: Sidgwick and Jackson.
- Pierotti, R, and D. Wildcat. 2000. "Traditional Ecological Knowledge: The Third Alternative." *Ecological Applications* 10 (5): 1333–1340.
- Piper, A. 1992. "Passing for White, Passing for Black." Transitions 58: 4-58.
- Root, M. 1994. "Mixed-Race Women." In *Women of Color: Integrating Ethnic and Gender Identities in Psychotherapy*, edited by L. Comas-Diaz and B. Greene, 455–478. New York: Guilford Press.
- Saperstein, A., and A. Penner. 2012. "Racial Fluidity and Inequality in the United States." *American Journal of Sociology* 118 (3): 676–727.
- Sexton, J. 2008. *Amalgamation Schemes: Antiblackness and the Critique of Multiracialism*. Minneapolis: University of Minnesota Press.
- Spencer, J. 2000. *The New Colored People: The Mixed-Race Movement in America*. New York: New York University Press.
- Spruhan, P. 2018. "CDIB: The Role of the Certificate of Degree of Indian Blood in Defining Native American Legal Identity." *American Indian Law Journal* 6 (2:4): 169–196.
- Tremain, S. 2001. "On the Government of Disability." Social Theory and Practice 27 (4): 617-636.
- Valles, S. 2012. "Lionel Penrose and the Concept of Normal Variation in Human Intelligence." *Studies in History and Philosophy of Biological and Biomedical Sciences* 43: 281–289.
- Wilkins, J. S. 2011. "Philosophically Speaking, How Many Species Concepts Are There?" Zootaxa 2765: 58–60.
- Wilson, R. 2018a. *The Eugenic Mind Project*. Cambridge, MA: MIT Press.

- Wilson, R. 2018b. "Eugenics Never Went Away." Aeon Magazine. https://aeon.co/essays/ eugenics-today-where-eugenic-sterilisation-continues-now. June 5, 2018.
- Wilson, R. 2018c. "Eugenic Thinking." *Philosophy, Theory, and Practice in Biology* 10 (12). http://dx. doi.org/10.3998/ptpbio.16039257.0010.012.
- Wylie, A. 2004. "Why Standpoint Matters." In *The Feminist Standpoint Theory Reader*, edited by S. Harding, 339–351. New York: Routledge.
- Wylie, A. 2012. "Feminist Philosophy of Science: Standpoint Matters." *Proceedings and Addresses of the American Philosophical Association* 86 (2): 47–76.
- Whyte, K. P. 2013. "On the Role of Traditional Ecological Knowledge as a Collaborative Concept: A Philosophical Study." *Ecological Processes* 2 (7): 1–12.

Zack, N. 1993. Race and Mixed Race. Philadelphia: Temple University Press.

- Zack, N. 2001. "Race and Philosophic Meaning." In *Race and Racism*, edited by B. Boxill. Oxford: Oxford University Press.
- Zack, N. 2010. "The Fluid Symbol of Mixed Race." Hypatia 25 (4): 875-890.

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