Pernicious diversity, neutrality, and right values*

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Hicks (2011) presented a *problem of pernicious diversity*: Longino's account of objectivity appears to require actively cultivating racist and sexist scientists, with the example of Nazi race scientists. Hereditarianism in psychology and behavior genetics presents us with a concrete version of the problem. I argue that the most common response to the problem — appealing to Longino's uptake criterion — fails to adequately express what is objectionable about racist and sexist science. Instead, the problem with Nazis is that they are Nazis. They hold odious moral views, and this is sufficient grounds to marginalize them. I develop this argument through discussion of two conceptions of equality, and then consider an objection that marginalizing racist and sexist science would infringe on freedom of inquiry. I use this discussion to highlight the issue of value-*neutrality* in science, and close with a defense of "right values" approaches to values in science.

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1 Introduction

Hicks (2011) presents a kind of pernicious diversity as an abstract puzzle for Helen Longino's influential conception of objectivity (Longino 1990, 2002).[1] On Longino's account, objectivity is a characteristic of a scientific community, and requires four features that enable critical scrutiny from a variety of perspectives. Longino argues these features are violated by "The exclusion, whether overt or more subtle, of women and members of certain racial minorities from

*[acknowledgments redacted]

[1] Hicks' (2011) term is the "Nazi problem." For the current paper, at least one reviewer strongly felt that it was inappropriate to associate this term with Longino, an early and committed advocate for women and other underrepresented groups in both science and philosophy of science. Following one reviewer's suggestion, I've relabeled the problem as "pernicious diversity." While other authors attribute the problem directly to Hicks (2011), Hicks themselves emphasizes that credit should be given to Natalia Baeza and Janet Kourany (Hicks 2011, 349n3). Intemann (2011, 120ff) independently offers a version of the pernicious diversity problem.

scientific education and the scientific professions" (Longino 1990, 78) and that communities "must … take active steps to ensure that alternative points of view are developed enough to be a source of criticism and new perspectives. Not only must potentially dissenting voices not be discounted; they must be cultivated" (Longino 2002, 132). Longino's account of objectivity has frequently been interpreted as a compelling — though perhaps not entirely sufficient (Fehr 2011) — epistemic argument for active efforts to promote diversity and inclusion of historically marginalized groups within scientific communities (De Melo-Martín and Intemann 2011, 80, 84; Fehr 2011; Rolin 2017; 2019, 166; Oreskes 2021 ch. 1; Fehr and Jones 2022; Jeong 2024; Okruhlik 2025).

However, Hicks (2011) points out that Longino's criteria and argument do not appear to be specific to historically marginalized groups, and seem to apply equally well to racists and sexists. Thus, it seems, Longino's account of objectivity appears to require actively cultivating racist and sexist scientists, with the example of Nazi race scientists. And so the *problem of pernicious diversity* is to modify or clarify Longino's account such that this conclusion is blocked. Or, indeed, reversed: how to justify actively *marginalizing* Nazis and other racists and sexists from the scientific community?[2]

Hicks (2011) generally treats pernicious diversity as an abstract philosophical puzzle. Their only concrete example is a historical case study of German science under the Nazi regime, and they never seem to consider the possibility that contemporary scientific communities might be wrestling with the issue of whether to embrace or marginalize racist and sexist science.

In 2014, science writer Nicholas Wade published *A Troublesome Inheritance: Genes, Race*

[2]For the most part, I am assuming the reader, like me, views these goals as desirable: that Longino's account of objectivity would be deficient if it required actively cultivating racist and sexist scientists; and would be praiseworthy if it could justify actively marginalizing these scientists. I regard these anti-racist and anti-sexist assumptions as what Rawls called "considered judgments or considered convictions," "judgments given under conditions in which our capacity for judgment is most likely to have been fully exercised and not affected by distorting influences" (Rawls 2001, 29); "For example, we are confident that religious intolerance and racial discrimination are unjust" (Rawls 1999, 17). Considered convictions provide the "provisional fixed points" for Rawls' method of reflective equilibrium (Rawls 1999, 18). At the end of this paper I argue that such considered convictions should be defended with argument and evidence, in contexts where they cannot be readily assumed. But that is not a task I undertake in the current paper.

Some readers may share these convictions, but view them as inappropriate desiderata for an account of objectivity: that inclusion in or exclusion from the scientific community on non-epistemic grounds should be handled by concepts such as justice rather than the concept of objectivity. But this objection seems to me to apply to Longino's account itself, insofar as that account supports an argument for actively promoting diversity and inclusion of historically marginalized groups. That is, if and insofar as we are to praise Longino's account because it actively promotes some anti-racist and anti-sexist goals, then we should also object to Longino's account if it actively frustrates other, closely related anti-racist and anti-sexist goals — especially if the latter is accomplished by exactly the same features of the account as the former.

I thank an anonymous reviewer for encouraging me to make these assumptions explicit.

and Human History, which revitalized the public controversy over *hereditarianism*, which I define as the attempt to explain (and thereby justify) racial disparities, both intra- and internationally, in terms of innate genetic or otherwise biological differences.[3] Wade's book was strongly criticized by a number of anthropologists and human geneticists, on both technical grounds — that Wade had misinterpreted certain lines of research, for instance — and ethical ones — that his book would promote harmful racial stereotypes and discrimination (Fuentes 2014; Raff 2014; Roseman 2014).

Wade is a journalist, rather than a scientist, but in the context of the revitalized hereditarianism controversy a number of researchers have turned their attention to the scientific community more narrowly construed. Wills (2017) argues that a highly cited genomic clustering study was "presented with subtle linguistic and visual ambiguities that potentially predispose a reader toward" a racialized interpretation of the clusters, despite the authors explicitly rejecting such an interpretation. Saini (2019), Samorodnitsky et al. (2024), and Hicks and Lobato (2025) trace the persistence of race science within mainstream and marginal scientific communities from the mid-twentieth century to the present. With various collaborators, Carlson (Carlson and Harris 2020; Carlson 2022) and Panofsky (Panofsky and Donovan 2019; Panofsky, Dasgupta, and Iturriaga 2021) have shown how human genetics research has been used to purportedly justify white supremacist violence, including the 2022 mass shooting in Buffalo, New York.

In the US context, hereditarianism also enjoys a symbiotic relationship with the ethnonationalist right, and is likely to be bolstered as long as this strain of conservatism remains politically powerful. Slobodian (2025) argues that, in the late twentieth century, a far-right strain of US conservatism (variously known as "paleolibertarianism" and "paleoconservatism," among others) began to move away from "religious traditionalism in the style of William F. Buckley" (10) and instead "turned to nature in matters of race, intelligence, territory, and money" (9), making arguments purportedly based on cutting-edge research in "psychology … genetics, genomics, and biological anthropology" (10). This movement provided material support to hereditarian "researchers" such as Charles Murray and Richard Lynn (Slobodian 2025 ch. 4), and had a significant influence on the developing alt right movement during the first Trump administration (59-64).

Since 2017, hereditarian ideas have become widely adopted among US conservatives (Breland 2024; Beauchamp 2025), and Trump himself uses hereditarian rhetoric. For example, in

[3] In line with the view that I defend here — that racist and sexist science should be marginalized — I do not directly cite Wade's book, or any other examples of racist and sexist research. I do provide citations to criticisms of such work.

October 2024, ranting about immigration in an interview with conservative talk show host Hugh Hewitt, Trump stated that "You know, now a murderer, I believe this, it's in their genes. And we got a lot of bad genes in our country right now" (quoted by Martschenko 2024). After the election, on March 27, 2025, the Trump White House released an executive order, "Restoring Truth and Sanity to American History." This executive order opens with an ethnonationalist conspiracy theory (compare Paxton 1998, 6–7) that there has been "a concerted and widespread effort to rewrite our Nation's history, replacing objective facts with a distorted narrative driven by ideology rather than truth," and offered as an example an exhibit at the Smithsonian American Art Museum that claims that "sculpture has been a powerful tool in promoting scientific racism" (quotation attributed to the exhibit) and "promotes the view that race is not a biological reality but a social construct."

While professional societies in fields such as anthropology and human genetics have issued strong condemnations of racist and sexist research (Fuentes et al. 2019; C. S. Jackson et al. 2023), behavior genetics and cognitive psychology continue to operate under a narrow conception of academic freedom that denies any sense of societal responsibility (Panofsky 2014). For the latter scientific communities — and, for science in the United States more generally under the Trump administration — pernicious diversity is an urgent practical issue, not merely an abstract philosophical puzzle.

In this paper, I argue that racist and sexist scientists — and racist and sexist values more generally — should be marginalized from the scientific community. In a slogan, the problem with Nazis is that they are Nazis. They hold morally odious and socially destructive views, and for this reason it is appropriate to marginalize them.

I also use the problem of pernicious diversity as a way to introduce some broader issues in science and values. The paper proceeds as follows. In the next section, I consider a common response to the problem, namely, the norm of uptake of criticism. I argue that this response is inadequate for dealing with hereditarianism, and more importantly misses the point of opposition to racist and sexist science. Next, I claim that a more apt rejection of hereditarianism appeals to political and social egalitarianism. Drawing on work in political philosophy, I examine a common distinction between two kinds of egalitarianism. Resolving the problem of pernicious diversity, I argue, requires an appeal to a substantive conception of political and social equality. However, this is an appeal to controversial values, violating an ideal of value-*neutral* science. I then consider an objection that marginalizing racist and sexist research would violate freedom of inquiry. I reply by drawing on John Stuart Mill's *On Liberty*. Finally, I connect value-neutrality to recent criticisms of "right values" approaches to

values in science, offer a defense of such approaches, and encourage philosophers of science to take positions in significant social controversies.

All of this is, one might say, slightly ambitious for a single journal article. While I defend my views and spend some time on a substantial objection, my primary aim here is to draw out key threads in this complex tangle of issues, and thereby prompt further discussion, rather than engage in comprehensive debate surrounding one particular claim.

2 Uptake misses the point

A common response to the problem of pernicious diversity has been to appeal to Longino's "uptake" criterion. Longino characterises this criterion in this way:

> There must be uptake of criticism. The community must not merely tolerate dissent, but its beliefs and theories must change over time in response to … critical discourse …. [And] not only must the community be responsive, but the claims of advocates of a line of criticism must take account of those responses. (Longino 2002, 130)

That is, members of the scientific community must not be "dogmatic"[4] or closed-minded in response to criticism. Longino criticizes creationism on these grounds (Longino 2002, 159). Applied to the pernicious diversity problem, the argument is that racist and sexist scientists have failed to address salient critiques of their work, and so it's appropriate to marginalize them (instances of this response include Borgerson 2011, 447; 2020, 86; Rolin 2017, 123–24; Bueter 2022, 272; H. E. Douglas 2023, 136; ChoGlueck and Lloyd 2023, 18; see also Clough and Loges 2008).

One challenge to applying the uptake criterion to actual scientific controversies is empirical. There are substantial literatures surrounding "Lewontin's fallacy" and the Flynn effect, two empirical-technical challenges to hereditarianism (Roseman 2021; Trahan et al. 2014). It would require significant time and specialist knowledge to determine whether hereditarians have satisfied the uptake criterion with respect to these specific debates. And it's easy to imagine hereditarians challenging the methods used to determine that they've failed to satisfy uptake: which studies were included, how uptake was operationalized, and so on (compare Intemann and Melo-Martín 2014, 2756).

[4] I dislike this term because, etymologically, it's entangled with anti-Catholicism.

Hereditarians have also claimed for decades that there is a "taboo" against their research in mainstream venues, and that "equalitarians" are the ones who have failed to respond to criticism. Hereditarian research is often defended on grounds that publishing it promotes critical scrutiny; "that sunlight, not censorship, is the best disinfectant for malevolent interpretations of research data that are cherry-picked to support a political ideology" as Richard Haier, then-editor-in-chief of *Intelligence*, put it in a 2020 editorial. The "taboo" claim appears to be false, since hereditarian research has appeared regularly in mainstream journals, some of which have had hereditarians on their editorial boards as recently as 2018 — including *Intelligence* (Saini 2019; J. P. Jackson Jr. and Winston 2020; Samorodnitsky et al. 2024; Hicks and Lobato 2025). But, again, it's easy to imagine hereditarians challenging the methods used in the papers I just cited, turning the "uptake" response into an esoteric technical debate.[5]

In any case, I'm dissatisfied with the appeal to uptake for a different reason: uptake misses the point. In her first book, Elizabeth Anderson developed an "expressivist" theory of value and action, on which a key function of giving reasons for (or against) taking an action is to express our thick evaluative attitudes towards the action, its consequences, and its cultural context (Anderson 1993). In this light, an appeal to uptake communicates (expresses) that our primary concern with racist and sexist values in science is epistemic: the problem with racist and sexist values is that they interfere with knowledge production. But I take it that this is incorrect, and that our primary concern with racist and sexist values in science is ethical. Racist and sexist scientists — especially but not just Nazis — are objectionable independent of whatever epistemic consequence their inclusion might have. Giving uptake as the reason to marginalize racist and sexist scientists falls short, because it fails to accurately express the content and depth of our opposition towards racist and sexist values.

3 The problem with Nazis

The problem with Nazi scientists *as such* is not that they're closed-minded. The problem with Nazis is that they are Nazis. They hold morally odious views and engage in violent movements to defend white supremacy and patriarchy and undermine democratic governance (Paxton 1998). Contemporary hereditarian scientists often deny that they hold these views

[5] Indeed, Noah Carl and Michael Woodley give exactly this kind of reply to J. P. Jackson Jr. and Winston (2020) in the January-February 2024 issue of *Intelligence*. At least part of the disagreement is over how "taboo" should be operationalized. Jackson and Winston emphasize whether hereditarian research is published in mainstream venues (6), while Carl and Woodley emphasize the volume of social controversy surrounding hereditarianism.

themselves or participate in these movements — though, for instance, the influential intelligence researcher Raymond Cattell openly supported the Nazi movement and Hitler by name (Mehler 1997), and John Loehlin was director of the American Eugenics Society from 1968-1972 before becoming president of the Behavior Genetics Association in 1980. But, even if contemporary hereditarians do not personally endorse violent racism and sexism, their research provides ideological cover and recruiting materials for such movements (Pronczuk and Ryckewaert 2022; Carlson and Harris 2020; Carlson 2022; Panofsky and Donovan 2019; Panofsky, Dasgupta, and Iturriaga 2021). And this — independent of whether they're responsive to criticism — is why their research is objectionable.

I take it that the critique of the previous paragraph more accurately expresses the content and depth of our opposition towards racist and sexist values, compared to applications of the uptake criterion, and thus is functionally more appropriate from the perspective of Anderson's expressivism. I further propose that this critique provides sufficient grounds to marginalize racist and sexist research from the scientific community. There may also be technical shortcomings with this work, and its proponents might also fail to be responsive to criticism. But these defects overdetermine the verdict. Racism and sexism, on their own, provide sufficient grounds for marginalization. In this section, I develop this response, connect it to the extant debate over pernicious diversity in Longino's account, and connect positions in that debate to a distinction in political philosophy.

Specifically, I argue that racism and sexism in the scientific community are antithetical to *relational equality*, both within the broader social context but also within the scientific community itself. The idea of relational equality also comes from Elizabeth Anderson: "Egalitarians aim to replace social hierarchies with relations of social equality on the ground that individuals are fundamentally moral equals" (Anderson 2013, 2). Schroeder (2022b) does not use the label, but appeals to relational equality when he argues that there is broad social agreement that misogyny and racism are "issues that shouldn't be put up for public debate" because they are "fundamentally at odds with democracy's normative foundation," namely, "treat[ing] its citizens as equals, or promot[ing] social equality among its citizens, or mak[ing] possible egalitarian relationships" (Schroeder 2022b, 1039–40).

Hereditarianism has frequently been challenged on the grounds that it undermines the moral, social, and political equality of different racial groups. Lewontin (1970–2017) argued that hereditarianism and biological determinism provide ideological cover for relational inequality under capitalism by entailing that "our society has produced about as much equality as is humanly possible and that the remaining differences in status and wealth and power are

the inevitable manifestations of natural inequalities in individual abilities." In other words, hereditarianism and biological determinism attempt to justify social hierarchy as the inevitable consequence of meritocracy.[6]

Some existing responses to the pernicious diversity problem do include appeals to relational equality. For example, Rolin argues that Longino's "tempered equality criterion does not tolerate racist and sexist ideologies because … racist and sexist ideologies undermine someone's intellectual authority on the basis of social identity prejudice" (Rolin 2017, 124). That is, racist and sexist values are incompatible with the egalitarianism that underwrites and motivates Longino's account, specifically the criterion of tempered equality of intellectual authority.

Hicks (2011) reads the tempered equality criterion, and its associated idea of equality, very differently from Rolin. Hicks calls it "formal egalitarianism": "All members of the community enjoy the same formal standing; no individual or subgroup is, as such, given greater privileges or advantages than others" (Hicks 2011, 342). Specifically, Hicks might be reading the criterion in terms of equality of opportunity: everyone should have the same opportunity to join the scientific community — feminist, racist, or centrist — and their standing in the community will rise or fall with the merits of their research.

Hicks' terminology of "formal egalitarianism" refers to a distinction within political philosophy between formal and substantive accounts of equality (Arneson 2013, sec. 3; Gosepath 2021, sec. 2.1; relational equality is a specific version of substantive equality). Formal equality is associated with equality of opportunity in contrast to equality of outcomes, and with moral and legal reasoning that is insensitive to differences in circumstance across social groups (Francis and Smith 2021). Anatole France famously satirized formal equality in his 1894 novel *Le Lys rouge*: "In its majestic equality, the law forbids rich and poor alike to sleep under bridges, beg in the streets, and steal loaves of bread."

Egalitarian social movements and thinkers, both liberal and leftist, have generally considered formal equality to be deficient, and advocated for more substantive versions of equality. The second part of the socialist slogan "From each according to their ability, to each according to their needs" expresses a substantive equality of outcomes, and is echoed today in the arguments of the liberal capabilities approach (Nussbaum 2000; Sen 2011). In the late twentieth century, egalitarians became preoccupied with debates over the "currency of justice," that is,

[6] *(This footnote contains quotes that invoke offensive racial stereotypes.)* Note that hereditarian claims often go well beyond "intelligence," asserting that there are innate racial differences in things like "criminality," parenting skills, or work ethic. For example, on February 5, 2024, hereditarian philosopher Nathan Cofnas published a Substack post in which, among other claims, he attributed "a culture of doing homework" to population mean IQ and being "genetically adapted to the arduous demands of the rice paddy."

whether equality of outcomes should be measured in terms of wealth, welfare (meaning utility or preference-satisfaction), or something else (Cohen 1993). Anderson's account of relational equality was developed as a critique of this exclusive focus on distribution (Anderson 1999; see also Young 1990; Fraser 1995; Schlosberg 2007).

Rolin (2017) and Hicks (2011) offer divergent readings of Longino's tempered equality criterion, as relational (substantive) and formal egalitarianism, respectively. Which reading is more accurate to Longino's intentions? Rolin's reading is bolstered by Longino's characterization of the criterion in *Science as Social Knowledge*: "This Habermasian criterion is intended to disqualify a community in which a set of assumptions dominates by virtue of the political power of its adherents" (Longino 1990, 78). But a relational egalitarian reading sits less easily with the meritocratic characterization of the criterion in *The Fate of Knowledge*. Here Longino introduces the qualifier "tempered," rejecting "equality *simpliciter*" because "members of our communities differ in intellectual capacity," due to differences of both "innate endowment" and "opportunit[y]" (Longino 2002, 131). She does refer again to Habermas and non-domination (131-2), and contrasts her account to equality of opportunity (131n15). At the least, I think there is some tension between the meritocratic revision of the criterion and the relational egalitarianism of the original.

Whatever Longino's intentions, I believe Rolin and I would agree that an appeal to relational egalitarianism resolves the pernicious diversity problem. And I, at least, would go further: an appeal to relational egalitarianism is *necessary* to adequately express the content and depth of our condemnation of racist and sexist science, in line with Anderson's expressivism.

4 Controversy and value-neutrality

One of the major themes of US history is heated controversy between formal and substantive versions of egalitarianism. This controversy was on full display in the joint decision in Students for Fair Admissions v. University of North Carolina and Students for Fair Admissions v. Harvard (2023), in which the US Supreme Court banned affirmative action in US higher education. The majority argument (against affirmative action) was based on a formal equality reading of the equal protection clause of the 14th Amendment to the US Constitution. Chief Justice Roberts' majority opinion quoted the decision in Regents of the University of California v. Bakke (1978): "The guarantee of equal protection cannot mean one thing when applied to one individual and something else when applied to a person of another color" (Students for Fair Admissions v. Harvard 2023, 600:206). In her dissent, Justice Jackson made a substantive

egalitarian argument from distributive justice, pointing to persistent racial inequalities in wealth and income (393), attendance at "state flagship higher education institutions" (394), student debt, careers in law and business, small business failure rates, and health (395-6), arguing that "requiring colleges to ignore the initial race-linked opportunity gap between applicants … will inevitably widen that gap, not narrow it" (Students for Fair Admissions v. Harvard 2023, 600:403).

An appeal to controversial values contrasts with value-neutrality. In this section, I identify value-neutrality in the science and values literature, and use it to re-characterize the problem of pernicious diversity as forcing a choice between value-neutrality and substantive egalitarianism.

In her presentation of the pernicious diversity problem, Intemann (2011) frames her discussion generally as a critique of "Millian Science," with Longino's and Miriam Solomon's accounts as exemplars. For Intemann, a "central" but often "implicit" feature of Millian accounts is value-neutrality: these accounts "do[] not endorse or privilege any particular ethical, political, or social values in virtue of their content" (Intemann 2011, 119). Whether or not this is an accurate characterization of Longino's own view, at least some responses to the pernicious diversity problem do seem to endorse neutrality. For example, Borgerson (2020) bites the bullet on a (rather diluted) version of the problem: "yes, feminist empiricist theories will allow the expression and consideration of all perspectives including non-feminist perspectives," and indeed including those of "bigots" (Borgerson 2020, 86; see also Borgerson 2011, 447–48).

Havstad and Brown (2017) give a more developed characterization of neutrality, as eschewing controversy:

> When making value judgments, parties who are objective in the sense of value-neutrality remain as neutral as possible where values are controversial, either by avoiding value judgments in that specific instance or by seeking balanced or conciliatory positions within the range of values. (Havstad and Brown 2017, 316; see also H. E. Douglas 2004, 460)

Value-neutrality is not the same as value-freedom.[7] Value-laden science can be neutral, so long as the values in question are not controversial. For instance, Hicks (2022) points out that environmentalist and public health values are widely held among the public — even most political conservatives — and are not, as such, controversial. Obversely, value-free science can be controversial if the epistemic values involved are controversial (Kuhn 1977; Rooney 1992; Longino 1996; Hicks 2022).

[7]Notwithstanding some philosophers using these terms interchangeably, e.g., Harding (1991) 10.

Longino's account of objectivity explicitly rejects value-freedom. But what about neutrality? Longino's criteria and the arguments for them are at least prima facie neutral. Despite their disagreements, Hicks (2011), Intemann (2011), and Borgerson (2011) agree in reading the criteria and arguments as value-neutral. I suggest that part of the aporia of the pernicious diversity problem — the way it feels like a problem that needs to be solved — comes from this prima facie neutrality. Insofar as Longino's account of objectivity is value-neutral, it applies equally well to sexists and racists as to feminists and antiracists.

On the other hand, most if not all of the participants in this debate are self-identified feminist philosophers, and so I suspect that most if not all of them also share a strong commitment to relational egalitarianism. And relational egalitarianism — as a substantive version of equality and as illustrated by the affirmative action debate — is controversial. I suggest that the aporia of the pernicious diversity problem *also* comes from the controversial, substantive egalitarian commitments shared by many philosophers of science, including but not limited to feminists.

Put together, what we might call the "aporetic core" of the pernicious diversity problem is that it forces us to choose between latent commitments to both value-neutrality and substantive egalitarianism. We cannot have both. Appeals to uptake and Borgerson (2020) resolve this tension by choosing value-neutrality, while Rolin (2017) and I resolve it by choosing substantive egalitarianism.[8]

5 Censorship and freedom of inquiry

Some readers might object that, in calling for the marginalization of racist and sexist research, I'm calling for censorship and the infringement of freedom of speech, thought, or inquiry.[9] As

[8] So, is my solution to the pernicious diversity problem compatible with Longino's account of objectivity, or not? I think this depends on how one reads that account. Insofar as Longino's account is committed to value-neutrality — as per the readings of Hicks (2011), Intemann (2011), and Borgerson (2011) — then it's not compatible with my solution. But insofar as Longino's account is committed instead to substantive egalitarianism — as per Rolin (2017) — it is compatible. I think Longino's text is ambiguous between these two readings, and only she could tell us what her actual intentions were. I thank a reviewer for encouraging me to clarify this point.

[9] Dea (2021) and Kronfeldner (2023), among others, distinguish freedom of speech from academic freedom. For example, the ultimate purpose of academic freedom is to promote social rather than individual goods (Dea 2021, 212), academic freedom is a right held by academics as a group rather individuals as such (212-213), and academic freedom carries much more substantial epistemic responsibilities (Kronfeldner n.d.). However, this distinction is not always honored, including by advocates for academic freedom or freedom of speech. For example, the Foundation for Individual Rights and Expression (FIRE) — from 1999 to 2022 the Foundation for Individual Rights in Education — does not appear to distinguish the two:

> Academic freedom encompasses both the freedom of expression and the freedom of inquiry, empowering individuals to pursue truth and advance knowledge. The First Amendment gives

noted above, hereditarians have long claimed that there is a "taboo" against their research, and defend their research by appealing to ideas of academic freedom and freedom of inquiry. In this section, I first consider one bad reply to this objection. I explain the problem with this reply by drawing on John Stuart Mill. This discussion leads to the second and third replies, which I think are much more compelling.

First, the bad reply is that "censorship" can only be done by state actors, and so marginalizing racist and sexist scientists *by the scientific community* does not count as "censorship." I am not aware of examples of this kind of argument in the published scholarly literature. But it is inspired by arguments I've encountered that banning users or topics from social media sites is not censorship because these private companies are not subject to the First Amendment to the US Constitution. Besides being excessively US-centric, this argument also works with an excessively narrow conception of censorship. Here — in part as a matter of charity to my objectors, some of whom I expect self-identify as "classical liberals" — I prefer the broader conception found in John Stuart Mill's *On Liberty*. On Mill's conception, liberty can be threatened not only by the state, but also "society itself can be the tyrant—society collectively tyrannizing over individuals within it":

> So protection against the tyranny of government isn't enough; there needs to be protection also against the tyranny of prevailing opinion and feeling; against the tendency of society to turn its own ideas and practices into rules of conduct, and impose them—by means other than legal penalties—on those who dissent from them; to hamper the development and if possible to prevent the formation of any individuality that isn't in harmony with its ways …. There is a limit to how far collective opinion can legitimately interfere with individual independence …. (Mill 1859–2017, 3)

However, *On Liberty* does not defend an unconditional or unlimited freedom of speech, thought, or inquiry. This is explicit in the paragraph immediately after the block quotation above:

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scholars, researchers, and students the right to express their ideas, engage in open debate, and explore controversial or unpopular topics without fear of censorship or retribution. (Foundation for Individual Rights and Expression 2025)

In this section, I generally use the term "freedom of inquiry." This term directs our attention to inquiry rather than speech, and here I'm primarily interested in the former. "Freedom of inquiry" can also cover individuals such as Michael Woodley, Noah Carl, Colin Wright, and Emil Kierkgaard, all prominent contemporary hereditarian "researchers" who do not have academic affiliations.

> Everything that makes life worth living for anyone depends on restraints being put on the actions of other people. So some rules of conduct must be imposed—in the first place by law, and secondarily by [public] opinion on many things that aren't fit subjects for law to work on. (Mill 1859–2017, 3, editor's brackets)

To identify these appropriate limits on freedom, Mill puts forward the harm principle:

> The only end for which people are entitled, individually or collectively, to interfere with the liberty of action of any of their number is self-protection. The only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. (Mill 1859–2017, 6)

Note that the harm principle provides not only a necessary condition for justified restrictions of liberty, but also a sufficient one. Thus, a Millian account of freedom of inquiry should recognize both the value and the risks associated with this freedom. Freedom of inquiry enjoys a "default" status: it should be respected unless and until we have compelling reasons to restrict it. But it should be restricted when and insofar as it threatens to harm others. Specifically, "even opinions lose their immunity, when the circumstances in which they are expressed are such as to constitute their expression a positive instigation to some mischievous act" (Mill 1859–2017, 36; for similar readings of Mill see Sumner 2000; Brink 2001; Bell 2021; Shaw 2025, 27n7; and [redacted]; Okruhlik 2025 is skeptical that "Mill might morally proscribe the investigation of truth claims" (15), but seems to have missed this application of the harm principle).[10]

This brings us to the second reply to the "censorship" objection: freedom of inquiry requires social responsibility. In line with the harm principle, these social responsibilities include at least anticipating and taking reasonable steps to prevent or mitigate harm to others.[11] Emerick (2021) identifies four kinds of harms that someone might suffer as a result of others' speech:

[10] A reviewer suggests a reply to the pernicious diversity problem along similar lines. As the reviewer reads Longino, she is not offering an account of "what scientists must or ought to do, all things considered," but instead is only giving an account of what they must or ought to do to be objective. But, the reviewer continues, "Perhaps it is correct to be *less* objective in order to prevent certain kinds of harms" (emphasis in original). That is, we can retain Longino's account of *objectivity*, but appropriately restrict the pursuit of objectivity, for example, when it conflicts with the harm principle. As a reply to the pernicious diversity problem, this requires a premise that including racist and sexist scientists would cause harm; while this isn't the way I framed the argument in §3, I do develop my argument in terms of harm below. As I go on to note, this requires a controversial appeal to relational equality; and so the reviewer's reply to the problem does not avoid the need to reject value-neutrality.

[11] Kronfeldner (n.d.) argues that freedom of inquiry requires epistemic responsibility, understood as compliance with a set of "basic epistemic norms," where "basic" means roughly "universal." One of the innovations of Douglas's (2000) version of the argument from inductive risk was to present it as a moral argument —

reputation or social status harm (136); "harms of moral offense," such as "the … fundamental type of moral disregard one displays for another by questioning, for instance, whether they are fully rational, naturally disposed towards criminal behavior, or have less moral value than others" (136-137); activating stereotype threat (137); and epistemic injustice (137). Note that the example of a harm of moral offense is a violation of relational equality.[12]

Emerick (2021, 137–38) illustrates all four kinds of harms with a (hypothetical, I'm sure) hereditarian speaker named "Charles" giving an invited public lecture on a college campus. I would add a fifth potential kind of harm to Emerick's list: literal, physical assault. Speech can be used to stoke animosity and incite violence, and as discussed above, hereditarianism specifically has been used by white nationalists as a recruiting tool and in attempts to justify at least one recent mass shooting.[13] So, between harms of moral offense and harms of physical assault, the critiques of hereditarianism that I offered in Section 3 count as harms.

However, Emerick (2021) is discussing harms as a result of speech, and my primary focus here is on inquiry. A defender of hereditarian research might try to separate these two: the researchers engaged in inquiry should not be held responsible for the harmful speech of white nationalists who (mis)appropriate their research. (Compare Bridgman's (1947) argument that physicists should not be held responsible for nuclear weapons.)

But speech is essential to inquiry. Research findings require dissemination, throughout the intellectual community and, sometimes, to the broader public (Franco 2017). A "taboo" against *publishing* hereditarianism research could not count as an infringement on *inquiry* otherwise. Even more, on social accounts of inquiry and knowledge (Hankinson Nelson 1990; Longino 2002 ch. 6), claims cannot count as knowledge until they circulate within and are taken up by the intellectual community. So inquiry aimed at knowledge is incomplete until after findings have been disseminated. Hereditarian researchers may be more causally distant from the harms of racial violence than vocal white nationalists; but these harms are still reasonably foreseeable effects of the researchers' inquiry.

Due to the risks of these five kinds of harms posed by racist and sexist science, Mill's harm

"scientists have the same moral responsibilities as the rest of us" — which we might rephrase as "scientists must comply with basic *moral* norms." Specifically, scientists must comply with the basic moral norm to "consider the predictable [harmful] consequences of error" (H. Douglas 2000, 563, my brackets; see also Havstad 2021, sec. 5, esp. 11, 15-16n37). Where Kronfeldner (n.d.) sees freedom of inquiry as appropriately constrained by basic epistemic norms, following Douglas I would add that freedom of inquiry is also appropriately constrained by basic moral norms; compare [redacted] .

[12] Sumner (2000, 142–43) argues that Mill was committed to something like relational equality with respect to both gender and race; though Sumner does not discuss how this might square with Mill's role as an administrator of British imperialism in South Asia.

[13] Sumner (2000, 145–46) considers the case of then-contemporary online white nationalism in light of Mill's explicit statements in *On Liberty*.

principle at least suggests that restrictions on freedom of inquiry in these areas would be appropriate.[14]

But what kinds of restrictions? The harm principle does not give us much guidance here. The objection that I am considering in this section assumes I am advocating "censorship," something like a complete and total legal ban. However, until this section, the word "censorship" had appeared only once in this paper, in Haier's version of the objection. Instead of "censorship," I deliberately used the word "marginalization." My third response to the objection is that marginalization can be a much weaker and proportionate (comp. Kronfeldner 2023, 259) restriction on freedom of inquiry than "censorship" in its strongest sense.

To develop this response, consider the anticipated benefits of research on the genetics of intelligence and educational outcomes. Proponents of this research argue that, in the future, it might help identify — and develop personalized interventions for — students at elevated risk of poor educational outcomes (Meyer et al. 2023 box 3 and §5). In philosophy of science jargon, this is a claim about the *pursuitworthiness* of genetics of intelligence research, and it can be supported by evidence and argumentation like any other kind of claim. On the other hand, the actual and potential harms that have resulted from such research provide arguments for the opposite conclusion, that is, that genetics of intelligence research is not pursuitworthy.

The scientific community — understood broadly to include research funding agencies like the US National Institutes of Health and National Science Foundation as well as privately-owned journals, academic presses, and organizations — provides material support for research in a number of ways: funding, space at conferences and in journals, awards, leadership positions of professional societies. The decision by, say, a funding agency to award a grant involves an overall judgment of the pursuitworthiness of the proposed research. Specifically, in the case of socially risky research like genetics of intelligence, this judgment requires implicitly or explicitly placing a burden of proof somewhere between the two sides (proponents and critics).[15]

[14] Kronfeldner (2023) offers three individually necessary conditions for a critique, "intervention," or "limitation" on academic activity to count as infringing academic freedom. The third condition is that the critique or limitation is not academically justified (258). Kronfeldner emphasizes that "The justified critique needs to be academic (objective, open, observing the relevant academic and ethical standards)" (259, parentheses in original), which might seem to imply that my value-based critique of hereditarianism is not "academic," and therefore it is possible that marginalizing hereditarianism would infringe on academic freedom. However, Kronfeldner recognizes that "Critique can also relate to ethical standards of producing academic knowledge (e.g., regarding experiments with humans), without failing to be academic critique" (248, parentheses in original). Just as researchers are appropriately restrained from foreseeably harming their subjects, they are appropriately restrained from foreseeably harming the general public. Both ethical standards are academic, in Kronfeldner's sense; thus Kronfeldner's third condition is not satisfied, and so the "restrictions" I propose do not infringe academic freedom.

[15] This can be understood as an instance of inductive risk and Douglas' "indirect role" (H. E. Douglas 2009,

Similarly, conference and journal submissions describing such research could be subjected to elevated critical scrutiny, raising the burden of proof required to show that such research is "disseminateworthy." And professional societies might require very strong independent reasons for lauding scientists who have conducted such research. For the sake the brevity (and avoiding terms like "laudworthy") I'll group all of these kinds of assessments under the heading of "supportworthy."

I propose that a line of research can be marginalized without being completely censored by raising the burden of proof for arguments that it's supportworthy. Raising this burden of proof does not completely ban such research — "censor" it, in the strongest sense — but does make it more difficult for researchers to engage in such research. And because the burden of proof can be understood more-or-less as a continuous variable, it can be raised or lowered commensurate with the foreseeable harms of such research (including both harms of moral offense and harms of physical assault).[16]

Compare my approach with that of Meyer et al. (2023), a consensus report on the responsible conduct of "sociobehavioral genomics research" written by a group that includes both proponents and critics of behavioral genetics. Meyer et al. (2023) distinguish two tiers of risk, "research of heightened concern" and the more serious "research of greatest concern." Research has "heightened concern" when it "involves sensitive phenotypes," that is, traits that are "very consequential to social status"; "are or have historically been part of harmful stereotypes about minoritized groups"; and/or are "central to a minoritized group's identity" (Meyer et al. 2023, S30). Meyer et al. (2023) consider heightened concern research "acceptable" so long as it follows some methodological and communication guidelines that are modestly more stringent than usual. So Meyer et al. (2023) do not raise the burden of proof for the supportworthiness of heightened concern research, except perhaps for the dissemination of research findings.

87ff): Proponents are predicting that the realized social benefits of research will be greater than the social harms, and opponents are predicting that the harms will be greater than the benefits. Both predictions are empirical claims that go beyond the available evidence and therefore are susceptible to inductive risk. The "indirect role" here is played by any considerations that are used to set the threshold of evidence to accept one prediction rather than the other for the purposes of the funding decision.

[16] Defending "sociobiological" cognitive differences research in response to Kitcher (2001), Okruhlik (2025) suggests Mill would call for "*more* research," specifically, "oppositional research" that would "develop and promote antiracist and anti-sexist theories with testable hypotheses" (16). We could read this as identifying another anticipated benefit of such research, namely, empirical evidence against racist and sexist claims and values. Note that my approach does not require us to treat Okruhlik's oppositional research the same as hereditarian research. Oppositional research is not free of risk — there's the possibility that any evidence of differences could be (mis)interpreted in ways that favor hierarchy (Kitcher 1997) — but its risk profile is very different from hereditarian research. Consequently, after consideration of the anticipated risks and benefits, the burden of proof for the pursuitworthiness of opposition research might be much lower than that of hereditarian research.

Research is of "greatest concern" when it "compares two or more groups defined by race, ethnicity, or genetic ancestry" with respect to "sensitive phenotypes." Simplifying a bit, the distinction between heightened concern and greatest concern is the distinction between within-groups and between-groups comparisons (Meyer et al. 2023, S31). The authors all agree that greatest concern research requires "a compelling justification," including at least an epistemic justification that the study design can produce "sufficiently unconfounded results" (Meyer et al. 2023, S32). They are explicit that this requirement goes beyond the researchers themselves: "We all recommend that, absent a compelling justification—a criterion that some of us think will never be met—researchers not conduct, funders not fund, and journals not publish such research" (Meyer et al. 2023, S32). In my terminology, greatest concern / between-groups research must meet a higher burden of proof across the range of supportworthiness judgments; and greatest concern research that does not meet this higher burden of proof should be marginalized.

However, Meyer et al. (2023) disagree among themselves about the exact content of this "compelling justification," and thus how much higher the supportworthiness bar has been set. They "all agree that group-comparison research must employ methods that allow researchers to arrive at scientifically valid conclusions and that such methods are currently unavailable for complex SBG phenotypes" (Meyer et al. 2023, S32). Some of the authors — Meyer et al. (2023) do not disclose an exact number, much less name them — take this (modestly heightened) epistemic justification to be sufficient (along with the same methodological and communication guidelines as heightened concern research). For other authors, "While acknowledging the importance of scientific knowledge and freedom, … emphasize that these are not absolute values but must be balanced with others, including welfare and justice" (Meyer et al. 2023, S32). Specifically, the "compelling justification" for between-groups research must "demonstrate that the study has a sufficiently favorable risk-benefit profile" (Meyer et al. 2023, S32).

At least some of the advocates of the first position — requiring only an epistemic justification for between-groups research — justify this position based on a "view [of] the pursuit of scientific knowledge as an absolute freedom" (Meyer et al. 2023, S32). As we've seen, this absolutist view is incompatible with Mill's approach to freedom of inquiry. But more importantly for my purposes, these freedom of inquiry absolutists view this freedom as compatible with raising the burden of proof for the supportworthiness of certain lines of research, and specifically for raising this burden of proof based on the social risks posed by that research. In short, even self-described freedom of inquiry absolutists accept some forms of what I'm calling "marginalization."

6 Neutrality and "right values"

Returning to the pernicious diversity problem, I have argued that an acceptable resolution — one that adequately expresses the content and depth of our rejection of sexist and racist science — requires a controversial commitment to relational egalitarianism, and thus a rejection of value-neutrality. This means that it requires what is sometimes called a "right values" approach to values in science (H. E. Douglas 2015; Elliott 2022; Bueter 2024, 50–52, 55). Such approaches have been criticized, in part, in terms of controversy: "Perhaps the most significant problem [for a 'right values' approach] is that ethical reasoning is notoriously difficult and contested" (Elliott 2022, 39; see also Bueter 2024, 51).[17] That is, a "right values" approach violates neutrality, and this is taken to be a problem.[18]

In reply, in this final section I offer a tu quoque. Admittedly, this is not a particularly compelling type of reply. But I do hope it can provoke further discussion.

Specifically, I argue that neutrality itself is a controversial position, and so rejecting "right values" approaches because of violations of neutrality is itself a "right values" approach.

As a preliminary point, neutrality may be valued intrinsically (as good in itself, independently of other values) and/or instrumentally (because it promotes other goods) (Hicks 2022, sec. 4.1). For example, a prohibition on the use of controversial values in evaluating hypotheses might (be thought to) promote political consensus (compare Ward and Creel 2024, 995) and, thereby, speedy and orderly public policy. Or it might be thought to express the formal equality of citizens, giving no one's values priority over anyone else's (compare Ward and Creel 2024, 997). For convenience, I refer to both neutrality itself (regarded as intrinsically valuable) and the goods that it promotes as *the goods of neutrality*.

When we appeal to neutrality to challenge or reject an appeal to, say, relational egalitarianism, we are prioritizing the goods of neutrality over relational egalitarianism. We are saying that things like efficient public policy or formal equality are more important than egalitarian

[17] On the next page Elliott raises the possibility "that some populations might accept values that are ethically repugnant" (Elliott 2022, 40) as a potential concern for Schroeder's (2021, 2022a, 2022b) pluralist version of "right values." Elliott (2022) is intended to be an introduction to the "values in science" literature for students, encouraging them to debate the strengths and weaknesses of various views, rather than arguing for a single consistent view. So I don't read any of the quotations from Elliott (2022) as necessarily expressing his own views.

[18] I do not take up here another objection to "right values" approaches, namely, who gets to decide which values are the "right" ones. To my mind, ethical inquiry is not that different from scientific inquiry (Anderson 2004; Brown 2020; Clough 2020) and both involve a range of different kinds of actors — theoreticians, empirical researchers, educators, practitioners, the broader public — who interact in a variety of ways. No one group of actors has an unambiguously privileged position in the practice of inquiry, but when things are going well a knowledge-based consensus can form (Miller 2013). Adequately developing these ideas is too far beyond the scope of the current paper.

social relations. But this kind of prioritization is controversial. Requirements that regulators hold public meetings and solicit and respond to public comment before rules are adopted make the policy process significantly slower; but are taken to be important for promoting democratic accountability (albeit *very* imperfectly: National Research Council 2008, 36–37; Fung 2005, 414; Wagner 1995, 1654ff; Costa, Desmarais, and Hird 2019). In the affirmative action cases, the Supreme Court majority controversially prioritized formal equality over a substantive egalitarian distributive justice.

In a controversy, an appeal to neutrality can be — or become — a controversial position, and so itself a violation of neutrality. Supporting a controversial position by appealing to the value of avoiding controversy can simply create a new level of controversy, over the value of avoiding controversy. Thus the choice between neutrality and a "right values" approach is a false one. When we appeal to neutrality, we are accepting the goods of neutrality as the "right values." Consider yet again the affirmative action case. In prioritizing formal equality over substantive, the majority endorsed formal equality as the "right value," the one correct understanding of the 14th Amendment and racial equality.

If I am right, then value-neutrality — avoiding controversial values — is as impossible as value-freedom. So I suggest an alternative approach: explicitly appealing to controversial values, acknowledging that they're controversial, and supporting them with the strongest evidence and arguments that we can muster.

Anthropologists and human geneticists have taken this approach in their rejection of hereditarianism, and racism and sexism more generally. Writing on behalf of the American Association of Physical Anthropologists, Fuentes et al. (2019) assert that "the Western concept of race must be understood as a classification system that emerged from, and in support of, European colonialism, oppression, and discrimination" (Fuentes et al. 2019, 400). In research ethics guidelines adopted in 2022, the editors of *Nature Human Behavior* explicitly rejected biological race realism, introduced requirements that researchers justify race/ethnicity variables, and reserved the right to modify or reject "Content that undermines — or could reasonably be perceived to undermine — the rights and dignities of an individual or human group on the basis of socially constructed or socially relevant human groupings" ("Science Must Respect the Dignity and Rights of All Humans" 2022, 1030), with similar provisions for sex, gender, and sexual orientation. A committee of the American Society of Human Genetics (ASHG) acknowledged connections between the Society and the eugenics movement and the use of "human genetics [to] frequently and erroneously … provide false foundations for discrimination or perpetuate racism," including hereditarianism (C. S. Jackson et al. 2023, 378). Notably, the

ASHG committee extended their criticism to value-neutrality: ASHG created a Social Issues Committee in 1967, but "this committee failed to publicly address key issues of the time as a result of its stance to not issue statements or directives surrounding controversial topics" (C. S. Jackson et al. 2023, 378). By contrast, as a consensus report, the behavior genetics committee (Meyer et al. 2023) maintain neutrality by presenting both sides of the controversy; but as a result can only offer marginally more stringent guidelines for socially risky research.

Philosophers of science who have challenged hereditarianism have also explicitly appealed to controversial values. Kitcher (1997) gives a consequentialist argument against hereditarian research, with an explicit prioritarian decision rule[19] that one should "Pursue research if and only if the expected utility for the underprivileged is positive" (Kitcher 1997, 285; compare Kitcher's argument to Block and Dworkin 1974, 81–99). Kitcher (1997) considers at least two alternative ethical frameworks, rights-based libertarianism and an appeal to human flourishing, and argues that his argument can be translated into those frameworks. For example, against the libertarian he argues that "Respecting rights comes at a price, and it is important that that price be distributed fairly. In situations where free inquiry further disadvantages those who are already disadvantaged, there can be no right to free inquiry" (Kitcher 1997, 292). Kourany (2016) defends "tighter restrictions on race- and gender-related cognitive differences research" (779) using a casuistic, rights-based argument: Research ethics review requirements, mandates for including women and minority men in clinical trials, and restrictions on gain-of-function research are all restrictions on research freedom that are justified to protect human rights. And so restrictions on race- and gender-related cognitive differences research are also justified to protect human rights.

The Millian argument that I deployed in the previous section — to address concerns about freedom of inquiry — also relies on controversial premises (expressing controversial values), namely, the variety of harms that can result from speech. I noted that Emerick's (2021) example of a "harm of moral offense" is a violation of relational equality, and thus would be rejected as a harm by someone who rejected relational equality. Stereotype threat has been challenged by some psychologists — including a challenge by hereditarian cognitive psychologist Arthur Jensen in his 1998 book *The g Factor*. Reputational harms and epistemic injustice might be discounted as not "real" harms; and hereditarians have deflected responsibility for racialized violence by arguing that (only) the direct perpetrators of that violence are responsible.

Brown (2020, 101ff) argues that many philosophers of science implicitly assume metaeth-

[19] In rational choice theory, *prioritarian* decision rules base decisions on the interests or well-being of the worst-off group. Rawls' difference principle is a standard example of prioritarianism.

ical noncognitivism, on which value judgments do not have "meaning, warrant, credibility, [or] truth" and therefore "are necessarily biasing, subjective, [and] arbitrary" (20; see also van Roojen 2024).[20] Given noncognitivism, appeals to controversial values might seem undemocratic[21], a combination of emotional manipulation and the arbitrary exercise of power. But Brown (2020), Anderson (2004), and other pragmatist philosophers (Hankinson Nelson 1990; Clough 2006, 2020; Clough and Loges 2008) have defended metaethical views with continuity between "facts" and "values," where value judgments can be supported or challenged by empirical evidence (and vice versa). More prosaically, ethics and its numerous subfields comprise arguments for and against value judgments. In the face of controversy, we do not need to assert (or, rather, emote) an arational, noncognitive taste for relational egalitarianism; we can and should put forward arguments and evidence in support of it, and objections and counterevidence to antiegalitarian views.

Fifteen years after H. E. Douglas (2009), many if not most philosophers of science reject the value-free ideal. And there are signs that practicing scientists are beginning to take up the criticisms that we philosophers of science have developed (for example, Rooij 2024). But value-neutrality has had much less scrutiny. Perhaps due to noncognitivism, many philosophers of science — with notable exceptions such as Kitcher (1997) and Kourany (2016) — seem to be hesitant to take a strong position in significant social controversies. In this regard, the statements made by anthropologists and human geneticists are not just examples worth studying, but also exemplars worth following.

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[20] A reviewer points out that, somewhere in the last few paragraphs, I've slid from challenging value-neutrality in *science* to challenging value-neutrality in *philosophy*. One might think that different norms are appropriate for different disciplines or kinds of inquiry; for example, one might argue that philosophy is often explicitly action-guiding or normative, while science is often purely descriptive, so that science should remain value-neutral but philosophy shouldn't. While one might maintain this narrowly epistemic view of the aims of some areas of inquiry (Hicks 2022), I do not think it applies to cognitive differences research, which is often explicitly pursued to inform things like education policy.

[21] Or rather, antirepublican, in the sense of republican political philosophy (Pettit 1997).

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