

Du Bois' Democratic Defence of the Value Free Ideal*

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1 Introduction

Philosophers of science debate the proper role of non-epistemic value judgements in scientific reasoning. Many authors, such as Douglas (2009) or Kitcher (2011), argue that scientists can quite properly make non-epistemic value judgements in the course of inquiry. These authors oppose what is called ‘the value free ideal’, claiming that we should not even try to get scientists to eliminate all such non-epistemic value judgements from their reasoning. W.E.B. Du Bois, on the other hand, has a defence of value free ideals in science that is rooted in a conception of the proper place of science in a democracy. In particular, Du Bois argues that value freedom must be maintained in order to, first, retain public trust in science and, second, ensure that those best placed to make use of scientifically acquired information are able to do so. This latter argument turns out to relate Du Bois’ position on value free ideals in science to his epistemic defence of democracy. This essay will elaborate upon and motivate Du Bois’ arguments concerning

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the value free ideal in science.

To facilitate appreciation of Du Bois' arguments I shall relate his work to the modern debate, I begin with a brief recap of influential lines of argument that have been deployed against value freedom in science. With these positions on the table, I develop Du Bois' position by both expanding on his arguments and by comparison with modern opponents of the value free ideal. Once Du Bois' position is itself fleshed out, I consider points of similarity between his view and some modern proponents of value free ideals, as well as points of convergence between Du Bois' position and that of Heather Douglas.

2 The Debate As It Stands

The value free ideal for science may be understood as the belief that “social, ethical, and political values should have no influence over the reasoning of scientists” (Douglas 2009, 1). As shall be seen, this can be disambiguated in a number of ways, and perhaps more properly it should be thought of as a set of interrelated ideals rather than one value free ideal. Before discussing Du Bois' elaboration upon, and advocacy of, particular specifications of the value free ideal, I therefore consider some arguments that have been offered against value free ideals as a way of disambiguating claims in this area. First, consider (Rudner 1953). In this piece Richard Rudner claims that “the scientist must make the decision that the evidence is sufficiently strong or that the probability is sufficiently high to warrant the acceptance of the hypothesis. ... our decision regarding the evidence and respecting how strong is “strong enough”, is going to be a function of the importance, in the typically ethical sense, of making a mistake in accepting or rejecting the hypothesis” (Rudner 1953, 2). Rudner further argued that even if one did not believe accepting or rejecting hypotheses was a proper part of science, but that instead scientists should only indicate the strength with which available evidence supports the hypothesis, this too involves considerations of essentially the same sort.

This is merely “the acceptance by the scientist of the hypothesis that the degree of confidence is p or that the strength of the evidence is such and such” (Rudner 1953, 4), and is subject to the same considerations as would be accepting any other hypotheses. Hence, whether because scientists must accept / reject hypotheses or because they must offer judgements concerning degree of evidential support, Rudner maintained that the scientist qua scientist must make value judgements ‘in the typical ethical sense’.

A second line of attack on the value free ideal focuses on what are called ‘underdetermination arguments’. I will use Longino’s development of such an argument as an example. Longino begins by establishing that ‘that no amount of empirical data can uniquely determine theory choice’ (Longino 1996, 29). Then, with this established as a premise, she proceeds to argue that scientists should, or must, decide upon a favoured theory by means of invoking considerations that are typically seen as ethical or political. This argument is more general than the classic Rudner argument. It does not involve any appeal to premises concerning scientists evaluating the consequences of error. Underdetermination arguments do not commit one to any particular picture about how value judgements are or should be used by scientists to decide for one hypotheses over another in those cases where the evidence under-determines the matter.

Despite that difference, however, both of these lines of argument rely upon the premise that in the process of carrying out scientific research one must make decisions about what hypotheses to accept or assert. Such decisions will inevitably involve making value judgements, whether about the consequences of error, or invoking some other value; and whatever judgements are made in deciding what to assert will not themselves be related to the truth or falsity of the hypothesis but rather involve evaluation of the social, ethical, political, or personal, consequences of one’s decision. Essentially similar arguments have been offered in (Hempel 1965, 96), (Douglas 2009), and, at least as applied to situations where scientists are serving as policy makers, (Steele 2012, 897-900), and were recently

critically discussed in (de Melo-Martín and Intemann 2016). Hence, this argument form remains popular, and as shall be seen Du Bois' has a common point of contention with all such arguments. I therefore elide the difference between these types of argument in what follows. Any argument that claims that scientists must make decisions about what to accept that cannot be exclusively guided by epistemic considerations is an instance of what I shall call *choice based dissent* from the value free ideal.

A third line of argument against a specification of the value free ideal in science concerns the epistemic desirability of the value free ideal. According to these arguments, even if we could somehow manage to ensure scientists never appealed to any social, ethical, political, or personal values in their reasoning about science, we should not do so. Truth for the scientist, according to these opponents of the value free ideal, is something like happiness for the ethicist: it is best obtained by striving for something else. For examples of such opponents, see (Kitcher 1990), (Harding 1995), (Longino 2004). These arguments share a common structure, in that they all argue that the scientific community may be set up appropriately to exploit individual scientists' idiosyncratic biases or value judgements. These authors argue that rather than having the research community be composed of pure truth seekers, we would be better able to reach the truth about matters under investigation if the scientific community contained a sufficient variety of non-epistemic value judgements guiding scientists' research decisions, providing the research community is appropriately set up to facilitate the exchange of ideas. A research community driven by social, political, ethical, or personal values could, these authors argue, actually do better at achieving various epistemic goals than a research community composed entirely of pure truth seekers. I will call arguments which claim that the value free ideal would hinder the scientific search for truth examples of *efficiency based dissent* from the value free ideal.

The two forms of argument discussed above were both disputed by Du Bois, corresponding to two forms of value free ideal he wished to uphold. On the one hand Du Bois, contrary to the choice based dissenters, believed that scientists must only rely on non-epistemic values when deciding what may be justifiably be asserted as the conclusion of their inquiry. I shall refer to this as the ‘justificatory value free ideal’. On the other hand, contrary to the efficiency based dissenters, Du Bois maintained the normative psychological thesis that scientists, when engaged in their work, should only be motivated by curiosity, a pure desire to seek the truth. I shall refer to this as the ‘normative-psychological value free ideal’. These are not the only forms of value free ideal, and indeed Du Bois would not necessarily have agreed to other forms; for instance, contrary to authors such as Weber (1946) and Hempel (1965), Du Bois sometimes suggested that social scientists can, through their work, empirically discover or confirm moral facts (e.g. Du Bois 2000, 43). However, in the remainder of this essay, I discuss these two forms of value free ideal that Du Bois argued ought to be upheld.

3 The Mediate Aim of Science

To understand why Du Bois would have rejected such arguments, it is important to understand his conception of the place of science in a democracy. As shall be seen, all of Du Bois’ arguments for value free ideals revolved around this conception. His belief about the proper role of scientific investigation in a democratic polity is stated most clearly in his methodological essay *The Study of Negro Problems*:

The right to enter this field undisturbed and untrammled will depend largely on the attitude of science itself. Students must be careful to insist that science as such – be it physics, chemistry, psychology, or sociology – has but one simple aim: the discovery of truth. Its results lie open for the use of all men – merchants, physicians, men of letters, and philanthropists, but

the aim of science itself is simple truth. Any attempt to give it a double aim, to make social reform the immediate instead of the mediate object of a search for truth, will inevitably tend to defeat both objects. ... Only by such rigid adherence to the truth object of the scholar, can statesman and philanthropists of all shades of belief be put into possession of a reliable body of truth which may guide their efforts to the best and largest success. (Du Bois 1898, 16-17)

As I shall show in later sections, Du Bois argues that the reason the immediate aim of science is pure truth seeking is that this will best serve the mediate aim of social reform. In this section I shall concentrate on explicating the distinction upon which Du Bois' arguments are based. Henceforth I adopt the terminology of *The Study of Negro Problems*, distinguishing between the 'mediate' and 'immediate' aims of science.

The mediate aim of science can be understood as the purpose for which society should devote persons and resources to science. More particularly, it is the overarching guiding principle for science policy, the goal which should guide the construction of scientific institutions, and which can be invoked when suggesting reform of scientific practice. There does not need to be only one such goal, but Du Bois focussed on one in particular. For Du Bois claimed throughout his career that the mediate aim of science, thus understood, was to provide information that can fruitfully be used to guide policy in democratic states.

In evidence of this, I note, first, the quote above where Du Bois directly says as much. *The Study of Negro Problems* was a methodological companion piece to *The Philadelphia Negro*, which likewise opened with the claim: "The final design of the work is to lay before the public such a body of information as may be a safe guide for all efforts toward the solution of the many Negro problems of a great American city" (Du Bois and Eaton 1899, 1). Here Du Bois substitutes 'mediate' for 'final' aim, but the point is the same.

Second, Du Bois once claimed that the American Statistical Association had a ‘duty’ as an organisation to comment when unwise policies were being adopted in the southern United States (Du Bois 1912, 80). Third, there is the statement of aims the reports from Du Bois’ own sociological laboratory would carry:

This study is a further carrying out of a plan of social study by means of recurring decennial inquiries into the same general set of human problems. The object of these studies is primarily scientific – a careful search for truth conducted as thoroughly, broadly, and honestly as the material resources and mental equipment at command will allow; but this is not our sole object; we wish not only to make the Truth clear but to present it in such shape as will encourage and help social reform (Du Bois 2007, 63-64).

Note that, as before, there is clearly distinguished in this practice the ‘scientific’ purpose, which is a search for truth, and the separate purpose of helping social reform. Note further, that the social aim is taken to be a proper guide for the arrangement of materials issued by Du Bois’ institution. These are instances which could be multiplied: the mediate aim of science is, according to Du Bois, to do service to the common weal by providing policy relevant information to guide democratic decision making.

The immediate aims of science, on the other hand, are the goals that should properly motivate working scientists as they go about their research. Where the mediate aim concerns the social decisions of policy makers, the immediate aim concerns the principles that should guide the working scientist. For Du Bois there is only one such goal that was appropriate, and this, as is stated in the quote from *The Study of Negro Problems*, was the desire to discover and disseminate the truth about whatever matter is under investigation. Why he thought this and what such a norm amounted to in practice is the subject of the next three sections. Before moving on, however, two interpretive points deserve comment.

First, note that in the quote from *The Study of Negro Problems* Du Bois first says that science concerns the pursuit of truth, then later talks about the importance of people being put in a possession of a ‘reliable body of truth’. No comment is made about having slipped from one to the other, they are treated as if the same thing is being discussed throughout. Yet the first of these sounds like Du Bois was concerned with scientists promoting true beliefs, the latter of these sounds more like a concern that scientists promote knowledge. My interpretation of this and other passages is that Du Bois was not careful to distinguish ‘true belief’ and ‘knowledge’, perhaps implicitly endorsing an analysis of knowledge akin to the weak sense of ‘knowledge’ used throughout (Goldman 1999). Throughout this essay I therefore assume that his version of the value free ideal involved scientists seeking and disseminating true beliefs, rather than knowledge in any more demanding sense.

Second, I have interpreted a number of Du Bois claims about both mediate and immediate aims of science in a psychologistic fashion: they concern the aims or motives that should properly guide, respectively, science policy makers on the one hand, and individual working scientists on the other. However, consistent with some of Du Bois’ remarks one could instead interpret him as claiming that there is a constitutive goal of science qua science. Du Bois could, in particular, be claiming that although the science policy maker should consider the common weal, the working scientist is engaged in an activity with just one constitutive aim to advance, which is truth seeking. This interpretation would sit uneasily with the sort of methodological individualism Du Bois defended in (Du Bois 2000). In that essay he signals wariness of attributing properties to group or aggregate phenomena, as science plausibly is, and explicitly rejects attributing any ‘eternal, teleological purpose’ to history or sociology (Du Bois 2000, 39). Nonetheless, he does not explicitly rule out the idea that groups, or group activities, could have constitutive aims, and this psychologistic reading was hence an unforced interpretive choice. My interpretive decisions being explicit, I will presume they are accepted in what follows.

4 Retaining Public Trust

Starting with Du Bois' arguments against the normative-psychological value free ideal, Du Bois at various points argued that the public do not trust science which has been carried out by scientists who were not motivated by a pure desire to discover and disseminate the truth. To this argument it can be added that for science to fulfill its mediate aim in a democracy it must be trusted by the public. As such, given the mediate aim of science, Du Bois argues that it must be insisted upon that scientists be motivated by as pure a desire to discover and disseminate the truth as can reasonably be expected. If this is achieved we can earn and retain the public's trust in science as a source of policy relevant information, and enable or facilitate the production of scientifically informed policy.

What this insistence that scientists be motivated only by the desire for truth amounts to will be best uncovered after examining Du Bois argument in more detail. First, here is the completed quote excerpted above:

The frequent alliance of sociological research with various panaceas and particular schemes of reform, has resulted in closely connecting social investigation with a good deal of groundless assumption and humbug in the popular mind. There will be at first some difficulty in bringing the Southern people, both black and white, to conceive of an earnest, careful study of the Negro problem which has not back of it some scheme of race amalgamation, political jobbery, or deportation to Africa. The new study of the American Negro must avoid such misapprehensions from the outset, by insisting that historical and statistical research has but one object, the ascertainment of the facts as to the social forces and conditions of one eighth of the inhabitants of the land. (Du Bois 1898, 16-17)

Two arguments can be extracted from this passage for the insistence that scholars be

motivated only by a desire to ascertain the truth. First, there is the claim that for research to be carried out the wider community must be willing to allow the scientists to do their work. The public will be unwilling to support scientific research if they suspect that the scientist hopes to advance some political programme they may not agree with. Further, the public are aware that very often social research has been carried out with just such aims. As such Du Bois argues that scientists should adopt (and, presumably, publicly make it clear that they have adopted) a pure pursuit of truth as their immediate aim to assuage the worries of the public and allow research.

The second argument revolved around the fact that too closely pairing scientific argument with reform efforts in the past has resulted in ‘closely connecting social investigation with a good deal of groundless assumption and humbug in the popular mind.’ This can be seen as raising the worry that ‘philanthropists and statesman’ must be willing and able, in light of public opinion, to make use of scientifically acquired knowledge. They cannot do this in a democracy if the public think their results untrustworthy or are for whatever reason unwilling to act (or vote in those who would have them act) upon it.

To summarise, Du Bois’ arguments follow if one grants the premise that the public will withhold support from research carried out by people with motives other than that of pure truth seeking. In such an environment, if one’s mediate aim for science is to guide democratic policy making, one will have reason to insist that scientists’ immediate aim be pure truth seeking. This results from the dual facts that in a democracy public support is necessary to carry research out, and also necessary to put the results of research into action.

Du Bois himself seems to have thought that the reason the public believe non-pure-truth-seeking scientists are unreliable is because such scientists really are disposed to greater amounts of fraud or lies of omission. His most extended case for this is found in

chapter 7 of *Black Reconstruction in America*, wherein his diagnosis of the US historical profession's widespread inaccuracies concerning the Civil War and Reconstruction was that it was carried out by scholars who sought things besides the discovery and dissemination of the truth. As he summarises his own argument:

It is propaganda like this that has led men in the past to insist that history is "lies agreed upon"; and to point out the danger in such misinformation. It is indeed extremely doubtful if any permanent benefit comes to the world through such action. Nations reel and stagger on their way. They make hideous mistakes; they commit frightful wrongs; they do great and beautiful things. And shall we not best guide humanity by telling the truth about all this, so far as the truth is ascertainable? (Du Bois 1935, 714)

Once again, note, first, that the worry is ultimately phrased in terms of how best to guide humanity. Second, the solution is found in insisting upon 'telling the truth... so far as the truth is ascertainable.' In these two regards the point being made is similar to that which was found in *The Study of Negro Problems*. But note that in this passage Du Bois makes an additional claim. For, here he says that '[i]t is... extremely doubtful' that pertinent information has been gathered in the way he believes that US historians of the Civil War and its aftermath have been carrying out their investigations. And the contrast he has just made, giving context to this claim, is between a history which is 'scientific' and therefore does not involve itself in 'denying Truth', compared with a history that is allowed to serve all sorts of other purposes, such as 'inflating the national ego' and 'influenc[ing] and educat[ing] the new generation along the way we wish' (Du Bois 1935, 714). Hence for Du Bois it is not just that the public mistrusts science which has been carried out for non-truth seeking means, but also that such motivation is actually likely to cause scientists to do worse research.

Despite Du Bois' arguments, there has subsequently been a lot of work arguing that scientists who make decisions about what to believe and what to report based on value commitments besides truth seeking may actually promote the goal of truth seeking better than pure truth seekers. This is just what the efficiency based dissent about the value free ideal have argued at length. What is more, specific arguments against his claims regarding the relationship between fraud and non-truth-seeking motives are offered by Bright (2017). The reader familiar with developments in philosophy of science since Du Bois was writing, therefore, is unlikely to find convincing his defence of the claim that pure truth seeking promotes efficient arrival at true beliefs.

However, none of this directly challenges Du Bois' point about the public's refusal to trust scientists who are not (at least striving to be) pure truth seekers, and if you share Du Bois' opinion about the proper mediate aim of science this second point must be addressed. Take Longino's argument for efficiency based dissent, for instance. Longino argues that a full account of justification in science must show that justification resides "not just in testing hypotheses against data, but also in subjecting hypotheses, data, reasoning, and background assumptions to criticism from a variety of perspectives" (Longino 2004, 133). Call this 'broad justification', where a theory has broader justification in case it survives criticism from a wider range of background perspectives. She considers the possibility that either monism or non-monism is true regarding some phenomenon, where monism is the claim that "[f]or any natural process there is one (and only one) correct account (model, theory) of the process", and non-monism is the claim that "[f]or any natural process there can be more than one correct account (model, theory) of the process" (Longino 2004, 130). She then argues that, first, encouraging a variety of value judgements in science will lead to theories having broader justification (Longino 2004, 137). And, second, that regardless of whether monism or non-monism is true of some phenomenon having broader justification increases one's chances of settling upon true accounts of that phenomenon (Longino 2004, 137-138). This argument

directly challenges Du Bois arguments that non pure truth seekers are worse scientists. Note, however, that all this is consistent with Du Bois' claim that the public will not support non-truth-seeking scientists. And if the public will not believe or trust accounts that have been arrived at by scientists with non-truth focussed motivations, then the greater accuracy Longino argues will follow from fostering value pluralism will be of little help in advancing the mediate aim of science.

Turning to Kitcher's argument for efficiency based dissent, he explicitly embraces the idea that science must be at the service of the democratic state. He is in this respect occupying a similar dialectical space to Du Bois. Kitcher therefore faces exactly the same worry that Du Bois did concerning retaining public trust in science in the face of both scandal and the unpopularity of non-pure-truth-seeking. However, Kitcher argues that non-pure-truth-seekers should be part of the scientific enterprise. To square this circle, Kitcher supports far reaching reform of the institutional structure of science, advocating turning the governance of science over to panels of citizens doing a sort of scientific-governance jury-service, so that the public can see it is their value judgements guiding scientific inquiry and be reassured this is not leading to undesirable bias (Kitcher 2011, chs.5-6). Whether or not some scheme like Kitcher's could be successful remains to be seen and it would carry the essay too far afield to evaluate his arguments here. But Kitcher's work represents an attempt to grapple with the same issue Du Bois did. Du Bois himself acknowledged that there serious difficulties with making scientists into pure truth seekers, see, e.g., (Du Bois and Eaton 1899, 3); (Du Bois 1990, 44). I shall discuss the feasibility of his ideal below.

Neither Du Bois nor Kitcher adequately justify the premise that the public do not presently trust scientists moved by motives other than pure truth seeking. Longino, therefore, is in no worse a position than them if she implicitly assumes that the public will have no such problems. After all, Kitcher and Du Bois' assumption about public

trust may justly be doubted, as recent work on this aspect of the value free ideal shows, e.g. (Almassi 2012) (Carrier 2013, §8). My point here, however, is not to defend Du Bois' conclusion. I simply note that Kitcher and Longino's work nicely demonstrates an advantage of Du Bois' treatment of this subject. Du Bois' work shows that in so far as one takes the mediate aim of science seriously, there is an argumentative gap in moving from having established reasons for efficiency based dissent to the conclusion that we may or should therefore advocate abandoning the normative-psychological value free ideal in practice. Such arguments are enthymemic in a potentially troubling way. We must either be reassured that this would not require difficult cultural change, or be given an account of how to carry the public throughout such cultural change,.

5 Telling the Whole Truth

Du Bois' position is that, in order to retain or acquire the public trust necessary to have scientific investigation guide democratic decision making, scientists must be (and must let it known that they are) motivated by pure desire to ascertain the truth. This is because, Du Bois claims, the public distrust scientists who have non truth-seeking motives, and he calls attention to ways that distrust arises from the alleged-fact that such scientists are more prone to fraud and lies of omission. There is reason to doubt the claim that motivations other than pure-truth-seeking make science or scientists more unreliable or untrustworthy. However, that the public believe scientists ought to be motivated only by a desire to pursue the truth, and that public support for science is necessary if science is to guide decision making in a democracy, are both themselves independently plausible premises. If one shares Du Bois' democratic mediate aim for science they are all that is needed to motivate the value free ideal.

Some questions remain about Du Bois' argument, however. I shall address two of them in what follows. First, note that asking scientists to take discovering and disseminating

the truth as their (only) immediate aim in carrying out scientific work is a nebulous request. What exactly did Du Bois intend for scientists to do or not to do? As I shall make clear, Du Bois' answer to this first question introduces his endorsement of the justificatory value free ideal, the contention that scientists should not take into account non-epistemic values in deciding what conclusions have been justified by their research. Further, Du Bois' position on this matter ends up raising concerns about whether scientists following the value free ideal may end up undermining the mediate aim of science. The question of how he responds to this second concern is discussed in the next section.

In answer to this first question, Du Bois seems primarily to be concerned that scholars should decide what to report as their conclusions based only on strictly epistemic considerations, in particular based only upon considerations about what would ensure the truth comes to be known. For present purposes, it is especially significant to note that Du Bois believed that it is inappropriate to hold claims to different evidential standards depending on what one thinks the effects of uttering them would be. The pure-truth-seeking scientist is one who does not allow their political, personal, or generally non-truth-regarding goals to influence the results they report as following from their investigation.

This interpretation is supported from the numerous passages in which Du Bois expressed the fear that scientists would tailor their results to suit their audience. This tailoring could take the form of either attempting to flatter the audience and win their support, or trying to sway the audience towards certain policy ends. For instance, as mentioned, a large part of his complaint concerning American historians dealing with the US Civil War and Reconstruction era was that they had let considerations of promoting social harmony and guiding policy shape what information they presented. Here are Du Bois' own words concerning why previous historians had gone so wrong:

Because in a day when the human mind aspired to a science of human action, a history and psychology of the mighty effort of the mightiest century, we fell under the leadership of those who would compromise with truth in the past in order to make peace in the present and guide policy in the future. (Du Bois 1935, 727)

Likewise, it was part of Du Bois' critique of Booker T. Washington that 'The South ought to be led, by candid and honest criticism, to assert her better self and do her full duty to the race she has cruelly wronged and is still wronging' (Du Bois 1994, 46). Du Bois feared that Washington, in promoting compromise with white racism, would lead those scholars that fell under his influence to refrain from telling the full truth about Jim Crow society and its historical antecedents.

Note, further, that Du Bois was willing to make this argument against even people whose political projects he agreed with. For instance, in his address to the American Negro Academy, he cautioned the assembled scholars that

... they [members of the academy] MUST be honest, fearlessly criticising their own faults, zealously correcting them; they must be EARNEST. ... The Academy should be impartial in conduct; while it aims to exalt the people it should aim to do so by truth not by lies, by honesty not by flattery... In the field of Sociology an appalling work lies before us. First, we must unflinchingly and bravely face the truth, not with apologies, but with solemn earnestness. (Du Bois 1996)

Likewise, while expressing some sympathy for Negro historians who had responded in their own defence to the biased history of the Civil War and Reconstruction era that he had exposed, he still says that their work "suffers of course from natural partisanship and a desire to prove a case in the face of a chorus of unfair attacks" (Du Bois 1935, 724). It was not just that Du Bois did not like it when those who did not share his

political goals let their political motives shape their reports, he also objected when those he agreed with did the same.

Finally, the manner in which, later in his life, Du Bois expressed some regret about having endorsed the pure-truth-seeking ideal gives evidence as to how he interpreted that ideal. In a retrospective on his scientific career Du Bois noted that the nature of the problems he had been studying made it impossible to strictly adhere to the pure-truth-seeking ideal (Du Bois 1990, 46-47). To explicate why he changed his attitude, he described how decisions often needed to be made as to what hypotheses should be supported before sufficient evidence could be gathered to decide for or against them. In his own words:

If, of course, [Du Bois' investigations] had had time to grow in breadth and accuracy, this difficulty would have been met, or at least approached. Now in contrast I suddenly saw life, full and face to face; I began to know the problem of Negroes in the United States as a present startling reality; and moreover (and this was most upsetting) I faced situations that called—shrieked—for action, even before any detailed, scientific study could possibly be prepared. It was as though, as a bridge-builder, I was compelled to throw a bridge across a stream without waiting for the careful mathematical testing of materials. Such testing was indispensable, but it had to be done so often in the midst of building or even after construction, and not in the calm and leisure long before. I saw before me a problem that could not and would not await the last word of science, but demanded immediate action to prevent social death. I was continually the surgeon probing blindly, yet with what knowledge and skill I could muster, for unknown ill, bound to be fatal if I hesitated, but possibly effective, if I persisted (Du Bois 1990, 47).

Du Bois' concern in this passage is that the problems to which policy must be addressed

are so urgent that some compromise must be made with the pure truth seeking ideal. Why urgency prompts dalliance with the pure truth seeking ideal can be made sense of if one interprets Du Bois as later in his life endorsing something like Longino's argument for choice based dissent. The situation Du Bois apparently envisions is one in which some phenomenon has been identified, multiple mutually inconsistent hypotheses are available which would explain the phenomenon, and what policy one should adopt depends on which hypothesis is true. One faces a kind of local under-determination of theory choice by evidence. Were one to obey the pure truth seeking ideal, one is not permitted to favour any one of these hypotheses left open at this point, and so one would have to spend time gathering and analysing data, or producing and evaluating novel arguments, to decide between them. However, action is required in a shorter time frame than this permits. It is here that Du Bois accepts that one may decide for or against relevant hypotheses before one has had carried out the scholarly work necessary to meet scientific standards of evidence. In other words, in such a scenario one may accept a hypothesis on the basis of less evidence than one would otherwise require, on the basis of considerations about non-epistemic consequences of accepting or rejecting the hypothesis. This interpretation of Du Bois' autobiographic remarks would both explain his regret about having endorsed the truth seeking ideal, and also support my interpretation of that ideal as forbidding one from letting non-truth directed considerations change what level of evidence is required before one endorses or rejects hypotheses.

Du Bois' interpretation of the pure truth-seeking ideal can thus be seen to constitute a direct disagreement with choice based dissent, and endorsement of the justificatory value free ideal. The choice based dissenter is one who thinks that the scientist must make choices about what to report that take into account the social, political, ethical, or personal consequences of making assertions. Du Bois wished to stop scientists from doing just that. In particular, at least in his younger years, Du Bois thought scientists can and should avoid letting their choice of what to assert be influenced by their estimation

of the consequences of asserting or failing to assert. Du Bois was thus insisting that scientists avoid as far as possible making the kind of value laden decisions that choice based dissenters insist must be made.

6 Diffusing Decision Making

This interpretation of how Du Bois understood the requirement of pure truth seeking gives rise to the second question. When considered from the point of view of the individual scientist, Du Bois seems to create a strange incentive structure. The individual scientist is engaged in a large social project whose ultimate or final purpose is the benefit of the public. But suppose that a scientist believes that if they publicise their results, or fail to indicate preference for one hypothesis over another even though the evidence does not strictly decide between them, there will be disastrous consequences. The choice based dissenter would use such cases as examples of where the scientist must make value judgements as to whether the hypothesis in question can be ethically asserted in light of the evidence they gathered. Further, according to the choice based dissenter, the scientist may permissibly decide against assertion even in those cases where if they had a similar amount of evidence for a less controversial proposition they would be willing to assert it.

However, to the contrary, Du Bois' answer to the first question entails that the scientist in this scenario should nonetheless publish their work to ensure truths come to be known, and refuse to decide between hypothesis where the evidence does not favour one option over another. As we have seen, Du Bois protested against historians precisely because, he claimed, they made decisions about what to assert based on their beliefs about what would promote positive social consequences. But doesn't that mean Du Bois is asking scientists to directly thwart the mediate aim of science in the service of fulfilling their immediate aim? This seems to be precisely the opposite priority ordering from what one

would expect given the division between mediate and immediate aims of science; if the worry is about public trust, why not just insist that the scientist tell a ‘noble lie’, and represent themselves as pure truth seekers even while they make value laden judgements about what to report or affirm?

Du Bois had two points to make in response to this. First, and most directly, Du Bois argued that it was fruitless to try and tailor the information you present, or hypotheses you support, to suit policy or personal goals. He thought that ultimately the truth will out, exposing what you had done, and you will thereby have undermined public trust in science in just the way that initially motivated advocating the pure truth seeking ideal. For example:

I have great sympathy with those amiable souls, who, knowing this to be true, believe that present policy demands silence or even glossing over the plain facts. I say I have sympathy with such folk, but I am compelled to remember that in the great past the inexorable decrees of truth have held as strongly against the flatterer and the so-called optimist as against the pessimist and the liar.(Du Bois 1912, 81)

This argument, however, relies on the idea that by making such choices one will have said false or misleading things. This, then, is a reiteration of the aforementioned disputed claim that by making such decisions one will inevitably produce less accurate work.

A second response to the question concerning forcing scientists to undermine the mediate aim of science can be derived from his work. Du Bois’ often insisted on a separation of the proper roles of the technical or scientific expert from the policy maker or even policy advisor. For instance, when discussing educational policy Du Bois says the following “Now the training of men is a difficult and intricate task. Its technique is a matter for educational experts, but its object is for the vision of seers” (Du Bois 1903,

33). Likewise in *Black Reconstruction* Du Bois argues:

In the first place, somebody in each era must make clear the facts with utter disregard to his own wish and desire and belief. What we have got to know, so far as possible, are the things that actually happened in the world. Then with that much clear and open to every reader, the philosopher and prophet has a chance to interpret these facts; but the historian has no right, posing as scientist, to conceal or distort facts; and until we distinguish between these two functions of the chronicler of human action, we are going to render it easy for a muddled world out of sheer ignorance to make the same mistake ten times over. (Du Bois 1935, 722)

From such arguments it seems that Du Bois' objection to choice based dissent would be that they are confusing the proper sphere of the scientist by advocating that the scientist make decisions about what is or is not dangerous or beneficial knowledge, when it is not the scientist's place to do so.

This immediately raises the question of why Du Bois thought as much. One answer might be that, as with others involved in this debate, Du Bois thinks it is immoral or unjust for unelected officials like scientists to make important decisions about what information shall be available to the polity when deciding what policies to adopt. This point has been raised in this context by others – e.g. (Steele 2012, 895), (Betz 2013); indeed, Betz even advocates a position somewhat similar to that which I shall claim is Du Bois', with Betz arguing that scientists should appropriately hedge their judgements to ensure policy makers are aware of the various positions consistent with available evidence. Further, Du Bois did write about problems that result from letting decisions be made by undemocratically accountable technocratic elites, e.g. (Du Bois 2007, 291-292). However, in light of the total corpus of Du Bois' work it is likely that the argument he had in mind here was epistemic rather than so directly moral. As already argued, the mediate

aim of science, according to Du Bois, is to facilitate sound decision making concerning policy. My claim is that Du Bois thought that scientifically acquired information better serves this goal if it is presented *en masse* rather than filtered via the preferences of scientists.

This interpretation of Du Bois, first, falls out of the quotes above. There he says that decision making is properly left to ‘seers’ or ‘philosophers’; people who are plausibly experts in moral decision making, who have training or wisdom which is not typically considered part of the scientific skill set. Second, and in a somewhat different direction, it falls out of the many occasions in his work when he defends democratic governance on epistemic grounds. For instance, Du Bois defended extending the franchise to women by arguing that “With the best will and knowledge, no man can know women’s wants as well as women themselves. To disenfranchise women is deliberately to turn from knowledge and grope in ignorance” (Du Bois 1920, 84). Likewise in another defence of democracy Du Bois says “life, as any man has lived it, is part of that great national reservoir of knowledge without use of which no government can do justice” (Du Bois 1973, 154). Du Bois’ defence of democracy was hence an epistemic defence, and relied crucially on the premise that decisions made by consulting many people with more knowledge will be better decisions than decisions which consult fewer people with less knowledge.

That this depended not just on many members of the public being consulted but also on the public being well informed can be seen explicitly from the following quote, where Du Bois apparently echoes the Condorcet Jury Theorem:

Democracy is not merely a distribution of power among a vast number of individuals. It is not merely majority rule based on the fact that the majority has the physical force to prevail. It is something far more fundamental than this: it rests upon the fact that when we have proven knowledge, interpreted through the experience of a large number of individuals, it is possible through

this pooled knowledge and experience to come to decisions much more fundamental and much more far reaching that can be had in any other way. This is so clear and logical that it needs no proof, but rests on certain fundamental assumptions. The people participating in this pool of democracy must be alive and well, they must know the world which they are interpreting and they must know themselves. (Du Bois 1945, 7-8)

Note the requirement that proven knowledge be ‘interpreted through the experience of a large number of individuals’, and the requirement that the people ‘know the world... and they must know themselves’. In short, Du Bois thought democratic decisions are made best when they are made by as many people as possible, with access to as much knowledge as possible.

The above rationale for Du Bois’ interpretation of the justificatory value free ideal also provides a basis for his charge against choice based dissent. A scientist who acts in line with the arguments for choice based dissent decides which hypothesis to assert in part based on their judgements about the relative costs of different sorts of error, or the relative costs and benefits of people coming to believe each of the varying hypotheses consistent with the evidence. They would be, in effect, just one individual interpreting their data and situation through their own experience. The Du Boisian scientist, on the other hand, tries to put as many people as possible in the position to make such judgements for themselves. Whether it is because scientists are not the relevant class of experts, or because it is better to have as many people with access to as much information as possible, Du Bois’ arguments imply that the mediate aim of science is best served by the latter sort of behaviour. Contrary to the choice based dissent, a scientist who wishes to best serve the democratic mediate aim of science should try to put as much information as possible, and as many hypothesis as may be consistent with the data, in the hands of the public.

It is worth considering how the choice based dissent would respond to the above arguments. A choice based dissenter could point out that it is consistent with their argument that one ought to minimise the role of value laden choices about what information one presents. The choice based dissenter is concerned only to show that some such value laden decisions must be made. Against this I note that, for one thing, this is not how choice based dissenters have in fact tended to respond to their own arguments. They have tended to call for greater systematicity in a way that emphasises the role that value laden decisions will play in future science. For instance, Rudner ends his piece with the claim that “a science of ethics is a necessary requirement if science’s progress toward objectivity is to be continuous” (Rudner 1953, 6). (Longino 2004) is simultaneously an example of choice and efficiency based dissent and so certainly does not involve any call to minimise the role of value judgements. And, with some qualifications given below, Douglas likewise says that a problem with the value free ideal is that it “is too restrictive on the needed role for social and ethical values for scientific reasoning” (Douglas 2009, 115) and that her position “accepts a pervasive role for social and ethical values in scientific reasoning” (Douglas 2009, 1). I take these examples to be representative: choice based dissenters do not tend to call for trying to minimise the number of value laden decisions that go into scientific reasoning. What is more, it is for the best that these authors have responded to their own arguments as such. If choice based dissenters simply maintained that the value free ideal shall never be perfectly fulfilled theirs would be almost trivial as a position. That the ideal will never be perfectly met is, after all, an argument that vice can make against all virtue, and this is hardly considered the end of ethics.

7 Related Views

Before concluding I note various similarities between Du Bois’ position as it emerges here and three other more recent authors working on topics related to value free ideals. First,

consider Douglas' attack on the justificatory value free ideal. Douglas, like Du Bois, frames her position as emerging out of a concern for the role of scientific information in shaping democratic policy making. As she puts it "the value free ideal must be rejected precisely because of the importance of science in policymaking" (Douglas 2009, 1). She goes on to argue that the necessity of accepting and asserting some hypotheses for fulfilling this goal, and the necessity of making value judgements when doing so, means the value free ideal must be rejected. But she also does insist on as much openness as possible regarding the role of values in science, doing her best to quarantine the role of such value laden judgements to limited places in scientific reasoning (Douglas 2009, 156), and considering ways the public may have greater say in what values guide scientific practice (Douglas 2009, ch.8).

However Douglas, unlike Du Bois, nonetheless thinks it is necessary that in a large class of cases scientists must decide what to assert on the basis of their own expert judgements about the consequences of error. This is because Douglas takes it that "[s]cientists are best qualified" to make the necessary value judgements (Douglas 2009, 75). Whereas, as noted above, Du Bois either suggests that there is some other qualified group of experts who should make these judgements, or in his more democratic moments he "made the assumption, long disputed, that out of the downtrodden mass of people, ability and character, sufficient to do this task effectively, could and would be found" (Du Bois 2007, 284-285). Hence, Du Bois' and Douglas' positions can be fruitfully understood as modifications of the other. The small difference between them, which ends up making a significant difference to their attitude to the justificatory value free ideal, turns on their beliefs about whether scientists are qualified to make value laden judgements that shall effectively decide what information should be available to policy makers, or whether policy makers are able to sift through and evaluate relevant information for themselves.

Second, consider the relationship between Du Bois' position and two other defenders of value free ideals. There is some similarity between Du Bois' position and a response made to Rudner by Jeffrey (1956). There Jeffrey argues that the scientist qua scientist can avoid asserting claims, limiting themselves to offering probability assignments that represent their beliefs. The value free ideal is thus maintained by avoiding the decision points where authors like Rudner or Jeffrey argue that social, political, ethical, or personal value judgements must inform one's choices. While Du Bois did not insist on scientists offering probability judgements, he was careful to insist that scholars indicate the degree to which evidence supports propositions under investigation, saying "the best available methods of sociological research are at present so liable to inaccuracies that the careful student discloses the results of individual research with diffidence" (Du Bois and Eaton 1899, 2). One could read this as Du Bois saying that as far as possible the scientist should avoid directly asserting propositions, but should rather limit themselves to indicating the degree to which propositions are supported by the evidence that has been gathered.

A more striking resemblance, however, is found in the third comparison; between Du Bois' position and that of Levi (1960). In that text Levi accepts that the scientist must make assertions in light of their evidence, but argues that they can do so in a way that avoids making the sort of socio-political value judgements that would constitute a violation of either the justificatory or normative-psychological value free ideals. Levi concedes that to do this one needs to have set minimal standards of evidential support that are necessary to meet before one may permissibly assert or accept a hypothesis. Levi raises two possibilities as to how these minimal standards are set without violating value free ideals. The first possibility is that there is some specifications of minimal degrees of evidential support that could warrant assertions that are 'functions of syntactical or semantical features of the hypotheses themselves'. The second possibility is that there might be some set of value judgements inherent in role performing as a scientist, and

being committed to some minimum degree of evidential support necessary to assert hypotheses may be part of the commitment one takes up when one decides to be a scientist (Levi 1960, 356). It is this latter possibility that seems strikingly similar to Du Bois' own position. As noted, Du Bois' argument is founded on an understanding of the proper role, or mediate aim, of science in a democracy. This role, Du Bois thinks, carries with it a commitment to setting aside the kind of social, political, personal, or ethical values that opponents of the value free ideal claim should be consulted before one decides what to assert. Du Bois' position can thus be understood as a more specific version of the possibility outlined in (Levi 1960); the scientist performs this role by serving democratic governance. Implicitly, then, Du Bois can be seen as committed to the position that the ideal of democratic governance contains within it evidential rules for those providing its citizens with pertinent information.

8 Conclusion

To summarise, Du Bois defends value free ideals for science on the basis of his understanding of the role of science in a democracy. The mediate aim of science is to support decision making in democracies by providing policy relevant information. This entails, Du Bois argues, the normative-psychological thesis that scientists should have as an immediate aim in carrying out their work pure truth seeking. This in turn, according to Du Bois, means that the justificatory value free ideal must be upheld, and scientists should not let any social, moral, personal, or generally non-epistemic goals, involve themselves when deciding what hypotheses to report, support, or affirm. Du Bois argued for this by claiming that the public do not trust science produced by scientists who make value judgements, and that science carried out by non-pure-truth seekers risks undermining the trust necessary for science to have an effect on democratic policy. Further, when writing in defence of democratic governance, Du Bois insisted that democratic decision making, i.e. the decision making which it is the mediate aim of science to support, goes

best when as many people were allowed to contribute, and those people had as much information available to them as possible. This too is facilitated by scientists, as far as is feasible, presenting as viable candidates for belief all hypotheses that are equally well supported by their data, whatever the scientists' personal thoughts about which the public ought to support. Hence, ultimately, it is on the basis of an epistemic understanding of the nature of democracy, that Du Bois argues that scientists should be pure truth seekers.

Du Bois' defence of the normative-psychological and justificatory value free ideals leaves many questions open. For example, note that I have not attempted to settle the question of under precisely what circumstances Du Bois thought it permissible for a scientist to assert or accept a hypothesis. The arguments developed here only suggest that he did not think the acceptance or assertion rule could change with the scientist's changing estimation of the effects of asserting or accepting various hypotheses. Further, it would seem that his arguments would be best supplemented with a fairly stringent acceptance/assertion rule, so as to avoid precluding public debate and democratic decision making about which hypotheses should be best trusted as the basis of policy. Future work exploring connections between Du Bois' arguments and epistemology of, first, assertion and, second, acceptance, could therefore shed new light on Du Bois' philosophy of science.

Not all of Du Bois' arguments have stood the test of time. For instance, his argument that scientists who are not pure-truth-seekers are more likely to do shoddy, fraudulent, or otherwise dishonest work, has not withstood scrutiny. However, even here, Du Bois' defence of this claim was based on an analysis of the actual behaviour of scientists and historians who it is now widely believed were making egregiously false claims, for instance that slavery played little to no role in the Confederacy's decision to secede (Du Bois 1935, 713-714). It would be an interesting problem for opponents of value free ideals, most

especially those who are efficiency based dissenters, to go back and reanalyse Du Bois' case studies to diagnose where both Du Bois and the historians he was critiquing went wrong.

Whether or not Du Bois' arguments are ultimately to be accepted, there is value to considering them in the modern context. For, one perhaps under-appreciated point that Du Bois' account makes clear is that value freedom might still be worth advocating even if it could not be fully achieved. That is to say, a conspicuous fact about Du Bois' arguments is that they generally do not ever require that his ideal can be fully attained in order to retain their plausibility. All he needs to do is argue that it is better that the public be presented with as much information as possible, and that the scientist should therefore as far as possible avoid making any kind of value laden judgements about what to accept or reject that might limit the public's ability to make their own informed judgements. The value free ideal, in light of Du Bois' arguments, may be seen as just that: an ideal, which though we cannot perfectly adhere to it, should nevertheless be held as an aspiration, rather than dismissed as impossible simply because it will never be fully realised.

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