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## Beyond Value Sovereignty: The Problem with Absolutism in the Values and Science Discussion

*Más allá de la soberanía valórica: el problema con el absolutismo en la discusión sobre ciencia y valores*

### Abstract

The following paper argues that a common issue in paradigmatic proposals for solving the new demarcation problem stems from absolutist assumptions about judgments of value legitimacy. The problem of what I will call unformativeness, appearing in multiple forms throughout the literature, is explained by an absolutist pretension contained in one of the main aims of these proposals: providing criteria for differentiating legitimate from illegitimate uses of values, without qualification. After presenting the main aspects of the problem and showing how it stems from that common source, I outline a way forward inspired mainly by Joseph Rouse's *Beyond Epistemic Sovereignty* (1996b) and contemporary works in practice-oriented philosophy of science. In this way, we will advance routes that may allow philosophers of science to avoid these pitfalls and engage with scientific practice in a more productive way.

**Keywords:** Values in science, Absolutism, Relativism, Metaphilosophy, Ideal theory.

### Resumen

El presente artículo argumenta que un problema común en propuestas paradigmáticas para resolver el nuevo problema de la demarcación surge de supuestos absolutistas acerca de los juicios de legitimidad valórica. El problema de lo que llamaré *falta de informatividad*, que aparece bajo distintas formas en la literatura, se explica por una pretensión absolutista contenida en uno de los objetivos principales de estas propuestas: proporcionar criterios para diferenciar usos de valores legítimos e ilegítimos, sin salvedades. Después de presentar los aspectos principales del problema y de mostrar cómo estos se derivan de esa fuente común, esbozaremos un camino a seguir inspirado principalmente en *Beyond Epistemic Sovereignty* de Joseph Rouse (1996b) y trabajos contemporáneos en filosofía de la ciencia orientada hacia la práctica. De esta manera, avanzaremos rutas que pueden permitir a los filósofos de la ciencia evadir estos escollos e interactuar con la práctica científica de una manera más productiva.

**Palabras clave:** Valores en la ciencia, Absolutismo, Relativismo, Metafilosofía, Teoría ideal.

## 1. Introduction

The debate on the presence of values in different epistemic practices is a lively and productive area of discussion in today's philosophy of science. Despite the ever-present possibility of disagreement and the ongoing controversy on many issues relating to the role of values in science, many philosophers have taken for granted that the value-free ideal<sup>1</sup> does not adequately capture the realities and goals of science and that values can and do play different roles. Subsequently, that values do play a role is taken as an antecedent for further work (e.g., Fernández-Pinto and Hicks, 2019; for relevant dissenting voices see Betz, 2013 and Bright, 2018). Considering this scenario, some philosophers of science have identified a new mission: providing criteria for demarcating legitimate from illegitimate uses of values in science (Holman and Wilholt, 2022)<sup>2</sup>.

Many difficulties have been found in the proposals for solving the new demarcation problem, especially concerning their incapacity to properly legislate—or even to legislate at all—the presence of values in epistemic practices. Is central to this type of critique the inability of the proposals to inform particular instances of the presence of values in epistemic practices, and I argue that different instances of this type of critique are explained by how is conceived the task of demarcation itself. Such demarcation, although sometimes apparently circumscribed to the conditions of contemporary democracies (Douglas, 2021; Kitcher, 2011), is arguably interpreted as the search for a universal criterion, that is, a criterion that affords judgments of legitimacy that aim to be absolute without being indexed or circumscribed to a given audience or context. I will defend that this is the case with paradigmatic proposals in the literature, namely, Kitcher's Well-Ordered Science (WOS) (2001, 2011), Douglas's role distinction (2009, 2021), and Longino's social value management ideal (SVM) (1990, 2002) together with Holman and Wilholt statement of the new demarcation problem. Such a pretension, which I call the thesis of VALUE SOVEREIGNTY<sup>3</sup> LEGITIMATION, is the culprit behind this family of problems found in the literature. In turn, this family of problems will fall under the general label of the problem of uninformativity.

<sup>1</sup> The value-free ideal is a normative position *vis-a-vis* the role of values in science that defends that, ideally, values should play no role whatsoever in some parts of science. That is, although everyone would accept that values play a role in things like choosing a topic and the practical applications of scientific results, the value-free ideal defends that certain core stages of science (like the gathering of evidence, or the making of inferences) should not be influenced by values.

Due to matters of extension, we will not redo the main arguments against the value-free ideal, but it can be found in Douglas (2021).

<sup>2</sup> The new problem of demarcation refers to the search for a criterion or criteria that allows us to make principled and disciplined distinctions between influences of values in science that are legitimate (i.e., that are to be normatively sanctioned) and those that are illegitimate (i.e., the ones that should be revised). For example, most people would agree that suppressing scientific results due to their conflict with the private interests of corporations would be an illegitimate influence of values (in this case commercial values) in science. For another example, most people would agree that valuing the perspectives of women when considering, for example, research on divorce (Anderson 2004) can be a case of the legitimate influence of feminist values in research. Explaining judgments like this and extending them to more complex cases is the task that the new demarcation problem baptizes.

<sup>3</sup> We take this notation in uppercase as it has become common in literature discussing relativism in philosophy. See for example Kusch (2021) and Carter and McKenna (2021).

To defend an explanation of the problem in terms of a commitment to absolutism, I will begin by surveying different formulations of the problem of unformativeness in the proposals considered. I identify two main formulations that are particularly important:

- (i) The unknowability of the normative recommendations supposedly given by the accounts.
- (ii) The ambiguity of legitimacy judgments.

The formulation (i) relates to the impotence of normative proposals to inform the practice of demarcation due to their recommendations being unknowable. Instances of this formulation of the problem include: (1) Well-Ordered Science's (WOS) basic problem, as identified by Larroulet Philippi (2020). (2) A *prima facie* case for extending Larroulet Philippi's diagnosis to other proposals, but in particular to Longino's SVM, using Schramme's (2008) defense of the justificatory role of empirical evidence in normative proposals. And (3) Fernandez-Pinto's set of empirical critiques to normative accounts, which shows the systematic discrepancy between the conditions of normative proposals and contemporary scientific practice, occluding their capacity for making actual recommendations.

The second formulation of the problem, in terms of ambiguity, relates to the indeterminacy of legitimacy judgments when criteria come to bear on actual cases. Following Hicks (2014) and Intemann (2017), I will argue that criteria are ambiguous about how to judge specific instances, thus not solving the demarcation problem. After surveying those criticisms, I will outline what I deem to be the absolutist assumptions in the debate. First, I will define the assumption of VALUE SOVEREIGNTY, which relates to the assumed absoluteness of judgments of value legitimacy. Connecting that assumption with the new demarcation problem, I will outline the assumption of VALUE SOVEREIGNTY LEGITIMATION. Then I will provide textual evidence regarding to the explicit articulation of the new demarcation problem as presented by Holman and Wilholt (2022), and to Kitcher's (2001) and Douglas's (2009) stated aims to defend that such a commitment underpins their proposals. Following that conceptual demarcation, I will show how the problem stems from taking an absolutist stance on the issue of value legitimacy. The connection between absolutism and unformativeness will be defended through a common feature of theoretical accounts: the inherent tradeoff they face between generality and concreteness. Absolutist assumptions force proposals to look for maximal generality, thus making a substantive sacrifice of precision (and thus of informativeness).

In the final part, I will briefly sketch what could be left for philosophers of science to do considering these problems and what a way forward would look like. I will carry this out following Joseph Rouse's proposed alternative (1996b), in the light of his critique of absolutist assumptions in epistemological discussions in the philosophy of science. Moreover, with present examples of how the issue of values and the societal role of science can be tackled from a relative, situated, and non-absolutist perspective (Fernandez-Pinto 2019).

## 2. Unformativeness of normative proposals

The problem of unformativeness can be briefly stated as follows: normative proposals, although propounded to guide or norm actual epistemic practices, fail to provide such guidance or norming. In this section I will show why and how ideal proposals are uninformative: first, in relation to the role that empirical evidence should be playing and its lack thereof in the accounts critiqued, making them either unknowable or inapplicable to current relations between science and society. Second, through showing how some of them result in ambiguous judgments about actual cases.

### 2.1. Unknowability or inapplicability of normative accounts

What follows are a family of critiques to different paradigmatic proposals in the literature which point to the unknowability of normative responses and so their inapplicability.

#### 2.1.1. WOS's Basic Problem

Let's begin by characterizing the paradigmatic proposal under critique: Kitcher's Well-Ordered Science (WOS). Stated in the most simplified manner, WOS is a thought experiment whereby we imagine an ideal deliberation situation. In this ideal scenario, people deliberate about how science should be pursued under conditions such as "[...] convening representatives of the human population, engaging in elaborate tutoring, and then eliciting a mutually-concerned exchange of aspirations[...]" (Kitcher, 2004, p.55). This ideal situation then serves as the normative yardstick which we can use to measure up the actual workings of science: the presence or absence of values is legitimate or illegitimate according to how much it approaches to how values would be incorporated in this ideal situation.

Larroulet Philippi's critique has the following structure. First, he distinguishes between types of ideal theory, specifically between ideal process and ideal answer theories. Kitcher offers a normative theory that can be classified as an *ideal answer* to a given political problem. In brief, ideal answers provide end-states which serve as ideal points of comparison, that is, as something we can envision as a normatively good state of affairs with which we could compare our present situation. This implies that, for the ideal answer to be informative, I should be able to compare the actual state of affairs with that ideal one. Therefore, given that one cannot know how WOS would look like, and thus cannot use it as a point of comparison, it cannot work as a normative proposal. In what follows, we develop the argument in detail.

Larroulet Philippi sets out a distinction between ideal procedure theories and ideal answer theories. The first one names proposals that idealize a given process of deliberation, such that actual practices of deliberation should be organized to approximate that ideal procedure, independent of the outcome of the process (or at least without a detailed specification of the outcome. Ideal procedure accounts usually assume that, given certain processes, the outcome will be better). The second type, ideal answer theories, works in a way such that, despite the actual practice never looking like the ideal situation, the answer spelled out by the ideal theory serves as a yardstick for our world: we must approach the answer, even if by different procedures. Larroulet Philippi

considers Rawls's veil of ignorance thought experiment as an ideal answer theory<sup>4</sup>, given that the actual process of deliberation under the veil of ignorance is impossible to actualize. Nevertheless, the answer spelled out during the thought experiment (the basic principles of justice) can serve as a practical orientation in our world, even though we could not arrive there by the same process of deliberation. Larroulet Philippi points to the many critiques and polemics surrounding Rawls's basic principles, considering that other answers spelled out by the thought experiment are possible. This means that the results of ideal answer accounts may be ambiguous or problematic. This is so even in Rawls's case. Despite being arguably minimal and very well-defined, controversy still rages. Larroulet Philippi argues that WOS, being much more complex and involving many other stages than Rawls's veil of ignorance, is arguably unknowable, given that we cannot specify the outcome of such an idealized and complex situation. However, if one cannot know the answer spelled out by the procedure, then one has nothing to compare our world with. Therefore, WOS ends up being mute on the issue it was supposed to address, due to the inaccessible character of the counterfactual scenario. In brief, WOS fails in being informative because the counterfactual scenario that would serve as an ideal is unknowable (at least for us). In the following section I will argue why a similar problem is extendable to other accounts.

### ***2.1.2. Why WOS's basic problem is extendable to other accounts***

This section hinges on the connection between empirical evidence and normative theory. The main point is that the unknowability of WOS's ideal situation stems from its lack of empirical input. Therefore, if such is the case, more proposals would face the same problem.

Following Schramme's (2008) argument, I defend that empirical evidence plays a justificatory role. This role can be intuitively seen in the case of Rawls's veil of ignorance. As mentioned earlier, Rawls's ideal theory is a type of ideal answer account. Such an ideal answer's legitimacy is parasitic upon the situation that produced it. Rawls's basic principles of justice are not accepted because they are immediately seen as good, they are accepted because we deem it reasonable to think the situation that spells them out would produce good answers. That is, we accept that a decision under the veil of ignorance would produce impartial and fair principles of justice. Consequently, we accept the principles of justice supposedly spelled out by the thought experiment. If the answer's legitimacy is parasitic upon the process that produces it, then the connection between the two would have to be argued for; it cannot be made by fiat. As Schramme argues, the response, if lacking empirical input, results in either "unfounded idealisations, wishful thinking, or untestable assertions" (Schramme, 2008, p.620). A mirror situation, I will argue, befits ideal procedure accounts. If some ideal procedure is posited because it might produce good outcomes, it is reasonable to expect that the person must argue for the reasonableness of expecting good outcomes beyond our immediate intuitions.

In the case of ideal answers, Schramme notes that Rawls's derivation of the basic principles of justice rests on assumptions of 'what people would say' in such situations. But what we deem reasonable that would happen is influenced by all sorts of things. For example, Rawls's proposed

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<sup>4</sup> A more throughout exposition of Rawls's ideas and their relation to what concern us here is given in the following subsection.

principles decided under the veil of ignorance might have been loaded with assumptions about risk-aversion and egalitarianism (Shapiro, 2016, p.10). That gives place to posit other possible outcomes from the ideal scenario. As stated, all possible answers are on equal grounds, differentiated by certain intuitions that one may have about the counterfactual reasonableness of some outcomes over others. However, intuitive counterfactual reasoning involves all sorts of systematic errors and pitfalls, providing a *prima facie* ground for being skeptical about its evidential force (Olson et al., 1997). As was shown, the counterfactual situation posited may be loaded with the presuppositions of the person proposing it. Larroulet Philippi and Schramme also show this last point, as both note the raging controversies on what exactly would be the principles of justice decided behind the veil of ignorance. If normative responses are to avoid begging the question about the desirability of their proposed account, then it seems that empirically informed answers about ‘what people would say’ are necessary for a disciplined specification of the ideal situation.

In the case of WOS the problem is way worse, though. In Rawls’s veil of ignorance and the resulting theories of justice there might be a finite or relevantly narrowed set of possible outcomes of the ideal situation. In WOS’s case, given its overall complexity, number of steps and the complete lack of empirically informed judgements about what is reasonable to expect in those situations, the outcome of the thought experiment is completely opaque<sup>5</sup>. This situation not only affects WOS, but also Longino’s social value management ideal.

Fernandez-Pinto (2014, 2015) has noted the lack of empirical fit both in the case of Longino’s and Kitcher’s<sup>6</sup>. Due to the assumptions of both accounts and the fact that contemporary science, as argued by Fernandez-Pinto, has taken the form of globalized, privatized, increasingly commercialized research, it is hard or impossible for such accounts to guide current practice, arriving at the same place that I proposed before through joining Larroulet’s together with Schramme’s critique. Fernandez-Pinto’s work shows more precisely what is the nature of the lack of empirical input we have been discussing: there is a systematic divergence between the conditions posited by the models and actual conditions on the ground. Bringing together Fernandez-Pinto’s critiques and Schramme’s defense of the justificatory role of empirical evidence, we have a case for arguing that normative proposals fail to be knowable. Therefore, they are uninformative and do not contribute to solve the new demarcation problem.

<sup>5</sup> One could argue that the problem of Kitcher’s account is not only that it is not empirically informed but that it is indeterminate to an extent such that no amount of empirical input could make it informative. It is hard to provide a counterfactual argument to the effect that *no* amount of empirical results of, for example, participatory research, citizen science, joint deliberation and coproduction on scientific enterprises, etc., could allow us to make informed judgments about what the actual outcome of the thought experiment could be (its ideality is no argument against that possibility since Rawls’s ideal situation is also unactualizable but its outcome can be informed by empirical results, if we are following Schramme). For now, it is sufficient for us that with *our* evidence and in *our* situation WOS is unknowable and uninformative.

<sup>6</sup> One common assumption between Longino and Kitcher regards the *public* character of scientific procedures. Such assumption, given its discrepancy with the increasingly privatized nature of scientific knowledge, is one of the main issues that explains the lack of empirical attunement that Fernandez-Pinto denounces. It is also the case that Douglas (2009, p. 135) takes democratic accountability and the linkage between scientific knowledge and the public spheres as one of the main pillars of her account, which makes a case for extending Fernandez-Pinto’s critique to Douglas’s ideal, given that such assumptions could be seen as taking for granted the public character of scientific practices.



## 2.2. The ambiguity of case judgments: troubles of descriptions, permissiveness, and stringency

Another way in which uninformative shows itself is through ambiguous judgments based on a given criterion. This means that, when a criterion is applied to actual cases, the judgment based on the criterion could be positive or negative depending on how one describes the case at hand or on changing background assumptions (for example, with respect to the mental states of people considered in the case). That is, the criterion for demarcation could make us judge the case as both legitimate and illegitimate, thus failing to answer the issue it was supposed to address. The symptom of ambiguity can also include cases where we have answers that are undoubtedly problematic, and this is because the possibility of ambiguous answers explains the problematic ones. The following subsection will first present straightforward cases of ambiguity and how they arise from variations in the description of the cases under consideration. Secondly, it will survey problems relating to criteria being too permissive or excessively stringent, trying to show how those cases could also be considered as explained by ambiguity.

### 2.2.1. Diagnosing ambiguity: problems of description

Hicks (2014) argues that both the criterion of lexical priority of evidence (Brown, 2020, p. 84-85) and Douglas's criterion based on the direct/indirect role of values in research turn out to be ambiguous when they come to bear in some paradigmatic cases<sup>7</sup>. And since they are ambiguous in paradigmatic cases, it is reasonable to expect that they will also fail to provide a clear-cut judgment in more complex ones. In one situation, where commercial values influence pharmacological research, both criteria come off as ambiguous depending on when and where the *epistemic phase of inquiry* (as called by Hicks) begins or stops. On the one hand, if we consider that commercial values began only when evidentiary matters were exhausted, then both criteria could label the case as legitimate. On the other hand, if we think that we are still in the epistemic phase when such values enter, then both criteria could say it is illegitimate, but deciding where and when such a phase stops appears underdetermined. That is, the facts of the case do not allow a disciplined decision about where to pinpoint the beginning and end of the epistemic phase, which is crucial for both criteria under consideration if they are to spell out an answer<sup>8</sup>. An analogous situation is encountered in the case where feminist values play a role in archeological research. Given that such cases have been taken to be paradigmatic of when our intuitions tell us that the influence of values is illegitimate (the pharmacological case) or legitimate (the archeological case), that the criteria under consideration result in ambiguous judgments even in the easy cases makes a *prima facie* case for thinking that they will be ambiguous in relevant cases, failing to provide a solution to the demarcation problem<sup>9</sup>.

<sup>7</sup> For a matter of extension, we will not spell out in detail the cases with influence from commercial and feminist values. Readers interested in knowing more details please refer to Hicks (2014).

<sup>8</sup> A similar point, hinging upon the untidy character of scientific practices, where it's hard to classify phases in distinct pigeon-holes, is used by Brown (2020) to criticize similar accounts.

<sup>9</sup> With respect to Hicks's proposed alternative, although they provide their own attempted solution, supposedly evading the ambiguity, such a response is problematic. The criteria of synergy between values that Hicks put forward as an alternative can also be interpreted in many ways. That ambiguity hinges upon how one identifies values and how the relation of synergy is understood. Just as a brief sketch, in the commercial case, I could identify a synergetic relation between commercial values

WOS faces a similar problem. For example, Kitcher argues that, in the case of research on diseases: “well-ordered science recommends a plausible principle: the fair-share principle” (Kitcher, 2011, p.118)<sup>10</sup>. Comparing the actual rules of research with that ideal principle would serve as the yardstick to make judgments of legitimacy or illegitimacy. However, deciding what would be the principle chosen, given that there are reasonable alternatives, seems unjustified. If there are alternatives, and the chosen alternative determines the judgment of legitimacy in any given case, then it seems that judgments of legitimacy or illegitimacy afforded by the ideal are also ambiguous (Larroulet Philippi, 2020, p.378).

### **2.2.2. Diagnosing ambiguity: problems of permissiveness and stringency**

Intemann (2017), in her critique of Longino’s social value management ideal (SVM), argues that such an account could positively sanction the inclusion of problematic values, such as racist or sexist ones. This is because one of the phases of the SVM involves the introduction of agents with varied values and interests in the discussion process. Intemann argues that it is unclear how this can exclude people with racist or sexist values and interests, especially when such elements are more tacit than explicitly articulated. Given our intuitions about the problematic character of such inclusion, the SVM is an undesirable way to tackle the issue of values in scientific research.

Another critique is Brown’s (2020, pp.212-213) reading of Douglas’s functionalist criteria of demarcation<sup>11</sup>. Given the role that some evaluative concepts, values, and interests play in characterizing evidence (particularly when it is necessary to use thick concepts to characterize an event or phenomenon), there may be cases where one need to use values as evidence (at least in some sense), being immediately ruled out by the functionalist criteria. The proposed solution results too stringent to be taken as actionable.

In both cases, the permissiveness or stringency of a criterion is just *under a description*. If the inclusion of varied values and interests is interpreted as implying the inclusion of racist values, then

and epistemic ones as the ongoing revenue afforded by commercial values permits ongoing research production (thus being a legitimate use of values). This last point, about the possibility of ruling the case as legitimate, contra Hicks, showcases that ambiguity persists. Which values in what type of synergetic relations I should consider for making the judgment of synergy is underdetermined, since it seems possible to focus on different ones (commercial, social, ethical, etc.) and finding the synergy relation depends on which values one uses for making the judgment. Ambiguity, then, seems more widespread and not confined to the few cases where the problem has been explicitly denounced. This may be because they still want to provide a criterion for legitimacy that is apparently universal, being binding *tout court* and not just relatively so.

<sup>10</sup> Kitcher defines the fair-share principle in the following words: “each disease should be investigated according to its contribution to the total suffering caused by disease. A simple measure, applicable only to fatal diseases, would measure the contributions by the numbers of resultant deaths. More subtle appraisals discount the years of a person’s life by the disabilities to which she is subject.” (Kitcher, 2011, p.118)

<sup>11</sup> Douglas’s functionalist criterion refers to her proposal on differentiating legitimate from illegitimate uses of values in terms of the function they play in inquiry. If values influence science directly, playing a direct function, they are illegitimate (e.g., predisposing the results of inquiry). If they play an indirect role (e.g., they serve the function of helping the practitioner weigh the probative value of the evidence) they are legitimate. For more detailed explanations see Douglas (2009) or Holman and Wilholt (2022) treatment of functionalist criteria.



it is too inclusive. If the barring of using values as evidence includes their role in characterizing or describing evidence, then it is too stringent. The point is that the criteria provide a description of something which might be taken as appropriate or inappropriate in the context of inquiry, but which things would be counted under the description seems underdetermined. Depending on what we count under that description, the criterion might result appropriate or inappropriate, simply pushing back one stage the problem of making a decision.

In conclusion, I have defended that ambiguity is a widespread problem for the proposals under consideration, considered under straightforward cases of ambiguity and cases where criteria give problematic responses. Having fleshed out both sets of problems, the next section will present the absolutist theses of VALUE SOVEREIGNTY and VALUE SOVEREIGNTY LEGITIMATION, some textual evidence of a commitment like that being present in the discussion, and how both types of problems could be seen as stemming out of those assumptions.

### **3. VALUE SOVEREIGNTY: or the absolutist assumption in the values in science discussion**

To recap, I propose that the problematic patterns just surveyed found in these proposals (i.e., Kitcher's WOS, Longino's SVM, and Douglas's role distinction) stem from an absolutist conception of judgments of value legitimacy. In order to defend this, I will first contextualize how we understand absolutism. I will do this by articulating the relativism/absolutism dichotomy, insofar both concepts are necessary for understanding the contrast. After that, I will propose a specific thesis relating to absolutism in the context of this discussion. With that in place, I will provide textual evidence taken from some of the aforementioned proposals to argue that such a commitment is partially explicit. Finally, and more importantly for my case, I will try to show how the abovementioned problem stems from the commitment to the absolutist theses.

#### **3.1. VALUE SOVEREIGNTY defined and diagnosed**

I understand absolutism as part of a dichotomy between absolutism and relativism. First, in reference to relativism, it is understood as the negation of the possibility of having absolute knowledge, that is, a knowledge transcending particular and relative contexts. Although such a definition of relativism may seem circular (due to its counterpart, absolutism, already figures in the definition), we will supplement it so that we can understand absolutism as the negation of relativist theses. Other features of relativism that I understand as paradigmatic, following Kusch (2021, p.3), these are:

“(PLURALITY) There is (has been or could be) more than one set of standards in the same domain; the standards of different sets can conflict. (I shall write “S” for such sets.)”

“(CONFLICT) Epistemic verdicts, based on different S, sometimes exclude one another. This can happen either ... (a) because the two S license incompatible answers to the same question, or (b) because the advocates of one S find the answers suggested by the advocates of another S unintelligible.”

“(SYMMETRY) Different S are symmetrical in that they all are: (a) based on nothing but local, contingent, and varying causes of credibility (LOCALITY); (b) impossible to rank except on the basis of a specific S (NONNEUTRALITY).”

Given these theses, and paraphrasing some absolutist conceptions as described by Kusch (2021, p.4), a paradigmatic sketch of absolutism includes the following theses:

(UNIVERSALITY) A given judgment ought to be accepted by every rational being (this negates PLURALITY and CONFLICT)

(OBJECTIVITY) A judgment enables us to ascertain truths that “are there anyway” or that would be accepted at the end of the inquiry.

Having sketched an intuitive picture of absolutism and relativism, now I proceed to define a thesis relating to absolutism as it specifically pertains to the discussion of values in science. This will be the thesis of *value sovereignty*, which I define as:

(VALUE SOVEREIGNTY): When I make a judgment of the legitimacy or illegitimacy of the inclusion of values in a given epistemic practice, such judgment should be endorsed (at least in principle) by all rational agents, independent of context.

How does VALUE SOVEREIGNTY translate to the actual discussion? Let us remember the aims of the discussion about values in science. As expressed by Douglas (2021) and Holman and Wilholt (2022), the aim is to differentiate between legitimate and illegitimate uses of values. Let’s call this the DEMARCATION AIM:

(DEMARCATIION AIM): Proposals in the discussion aim to uncover criteria by which we can differentiate legitimate from illegitimate uses of values.

What if we join VALUE SOVEREIGNTY and DEMARCATION AIM? If we aim to uncover the criteria by which we can differentiate legitimate from illegitimate uses, and we also accept that when we judge a case as legitimate or illegitimate that judgment is universal, then the criterion that we look for also must be universal. This is the case since a contingent, locally available criterion cannot ground a universal judgment. We can name the conjunction of VALUE SOVEREIGNTY and DEMARCATION AIM the thesis of VALUE SOVEREIGNTY LEGITIMATION:

(VALUE SOVEREIGNTY LEGITIMATION): The aim of proposals in the values in science discussion is to provide criteria of demarcation that are absolute, universal and endorsable by all rational agents.

Now, I proceed to briefly review some textual evidence relating to VALUE SOVEREIGNTY LEGITIMATION’s presence in the discussion.

### 3.2. Weber's fence, the *need* for a criterion and the new ideal for values in science

Many authors in the tradition have explicitly endorsed absolutist assumptions. Starting from the most recent, the baptizers of the new demarcation problem squarely express absolutist assumptions. Holman and Wilholt (2022), considering the absence of clear criteria for arbitrating between competing proposals, put forward criteria that *prima facie* seem very similar to the absolutist image I have been canvassing. These criteria, as the authors themselves point out, are taken from the motivations that first led to defending the value-free ideal (what they mention as 'Weber's fence'). Their three criteria are:

“Veracity: Scientists should pursue the discovery of knowledge.

Universality: Scientists should produce results useable by anyone for purposes not anticipated by the researcher.

Authority: Scientists should produce a trustworthy knowledge body that has broadly recognized social legitimacy” (Holman and Wilholt, 2022, p.220).

Although 'Universality' is not the same as VALUE SOVEREIGNTY LEGITIMATION, the connection seems clear enough: The epistemic products coming out of scientific practices could be used by *anyone*. That is, they should be useable in an absolute manner, not circumscribed nor relative to any particular context. If the criterion of demarcation should ensure that the scientific product under consideration must be universally usable, then it seems safe to say that the criterion also should comply with being universal or, in the lingo we are considering, absolute. A merely relative criterion could not ensure that the scientific practice under consideration could give us anything more than a product usable just relative to certain context. In conclusion, Holman and Wilholt bake in universalist assumptions into their criteria for judging answers to the new demarcation problem.

Another instance of an absolutist pretension is Kitcher's WOS. Kitcher maintains that “without some understanding of where you want to go, efforts to improve on the status quo will be leaps in the dark” (Kitcher, 2011, p.125). How is this pretension absolutist? Kitcher is arguably saying that unless there is some ideal, universal standard, local decisions and judgments are not sufficiently justified (they are merely 'leaps in the dark'). This attitude seems very similar to VALUE SOVEREIGNTY LEGITIMATION. Another author, which will become more relevant later, describes such an absolutist attitude in epistemology:

Like the political sovereign as arbiter among competing powers, epistemic sovereignty is projected as an impartial referee among conflicting claims. The establishment and especially the deployment of the rational methods of evaluation which distinguish sovereign knowledge from subordinate assertions must in principle be impartial among particular substantive statements. Assertions are rationally justifiable only so long as they can be independently shown to accord with the law. (Rouse, 1996b, p. 403)

Kitcher aims to find a law against which particular judgments can be assessed. This attitude is absolutist since it contradicts one feature of relativism we included in the beginning: LOCALITY, which pointed to the fact that causes of credibility and justification are understood as always local and contingent. That is, there is nothing above and beyond what could be said in favor or against

something which escapes the context of what is being considered and, most of all, that such criterion of credibility is not needed. Kitcher is explicitly searching for that criterion, betraying a relativist sensibility and positioning himself as an absolutist. Given the absolutist criterion with which Kitcher starts, then his account is characterizable as at least attempting to be absolute, according to our previous characterization<sup>12</sup>.

Finally, Douglas presents her account in terms of a new absolute ideal for values in science. We defend this based on Douglas's own formulation of what she is looking for: "The new ideal that rests on this distinction in roles holds for *all kinds of scientific reasoning*, not just science in the policy process, although the practical import of the ideal may be most pronounced for policy-relevant science" (Douglas, 2009, p.88, emphasis added). Apart from that explicit pretension of universality, the very fact of Douglas committing to an ideal can be tied to absolutist pretensions. As Berg (2018) argues, theorizing in ethics faces a tension between having to pursue an ideal of action while, at the same time, being constrained enough so that it can inform actual moral deliberations. Berg solves the tension by understanding those aims as being served by two different kinds of normative theorizing: ideal and non-ideal theory. Ideal theory, by not paying attention to contingent constraints, represents, as Berg says, "an ultimate standard" (Berg, 2018, p.2). In our terminology, given the absence of any contingent qualification of the judgment, it may be analogous to the UNIVERSALITY thesis we outlined. Hence, such an absolutist pretension becomes connected intrinsically with the tool known as ideal theory. Given Douglas's adoption of such an ideal aim, it is arguably connected to an absolutist pretension in its normative scope. This is because it tries to inform practices in general, not circumscribing its recommendation to a particular context<sup>13</sup>. In brief, due to its aim and the character of the normative proposal she puts forward, Douglas's account is also committed to VALUE SOVEREIGNTY LEGITIMATION.

For now, we move exegetical matters aside. The core of the present proposal is that the problem of unformativeness could be seen as *explained* by the absolutist assumptions. Showing that will be the task of the remainder of this section.

### **3.3. How VALUE SOVEREIGNTY LEGITIMATION explains unformativeness: generality and information**

Let us recall that the pretension of absolutism means that the criterion offered should be universally valid. That is, all contexts must be normed by the criterion. This means that the

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<sup>12</sup> Kitcher's original formulation of his problem is arguably different to the one set by Douglas or Holman and Wilholt. Nonetheless, as Holman and Wilholt themselves note, his work has also been read as a response to the new demarcation problem. Larroulet Philippi's critique could also be seen as showing how WOS's fails to answer the problem we are considering, as it also depends on having an ideal scenario (where values would be legitimate) to compare actual cases with.

<sup>13</sup> Trying to read absolutist pretensions in different authors and works can be a work in and of itself. Another example could be Longino's comments on her refusal to accept a naturalization of reason (Longino 2002). Such a refusal to naturalize could be interpreted as refusing to make reason relative to something (our contingent natural constitution or another, see Bloor 2007, p. 252 for brief comments on the relation between relativism and naturalism). I think that showing how both Kitcher and Douglas, pioneering authors in the discussion, and Holman and Wilholt, which baptized the new demarcation problem, both assume some absolutist pretensions is sufficient for making our case for now, since the meat is in showing how the systematicity of the problems encountered is explained by the absolutist commitment and not on some exegetical account.

normative tools of the criterion cannot be indexed to or depend on contingent relative features of any given case, as that would make them relatively valid (to the cases where information is appropriately indexed), and not universally so.

The idea is essentially the following: due to less information (information here being understood loosely) being included in the normative account given its attempt at absoluteness, the accounts under consideration fail to be informative for actual cases. A toy example would be proposing a criterion in ethics like ‘be good’. Despite the possibility of such a criterion of providing at least a form of guidance, it is intuitively clear that it would fail to be considered as a solution to the problem that invited the formulation of the proposal in the first place. If we were considering criteria for mediating relations between, for example, researchers and local communities, and if the criteria included information relative to the type of encounter and to the character of the stakeholders in the criteria itself, then it is *prima facie* reasonable to believe that it would prove more informative than a criterion just mentioning general epistemic facts (e.g. a criterion stating that participants should consider all the evidence) and so on. In brief, given that the absolutist pretension considered invites accounts to get rid of information that might tie them to particular and relative contexts, then that lack of contextual information makes the criteria less informative.

Something similar has been discussed in another context, as the tradeoff concept in model building. In short, a tradeoff involves a relation of attenuation between two model features. Generality, for example, is in a tradeoff relation with precision (Matthewson and Weisberg, 2009). Although precision is not immediately translated into what I have been calling informativeness, there is nonetheless a strong relation. This is because it is reasonable to assume that the least precise a model is, the more difficult it would be to apply to actual instances. Given the pretension of VALUE SOVEREIGNTY LEGITIMATION, which demands complete generality, it is reasonable that the attenuation of precision, and thus of informativeness, will be significant. Henceforth, if we assume that in models and other sorts of theoretical tools there is a tradeoff between generality and precision, that precision is closely related to informativeness, and that VALUE SOVEREIGNTY LEGITIMATION demands complete generality, then how absolutism is the culprit of instances of uninformiveness so far seems clear.

### **3.4. How informative they should be? on the context of action and a stronger kind of failure**

It might be argued that we are failing previous proposals because we are deploying excessively stringent assessment standards<sup>14</sup>. An aspect of that is that we are not specifying how informative an account should be, so any account could count as uninformative. There are two things to say at this juncture: first, it is more or less assumed by many in the discussion that one of the goals of writing, discussing and thinking about values in science is to *guide or inform policy*. Of course, what could count as something concrete enough to be informative might possibly change with context, but that’s precisely the problem of the accounts we are considering. If the proposal is couched at a level of generality so wide, then it is hard to see how and where it can actually inform decisions.

<sup>14</sup> I thank one of my anonymous reviewers for pressing this point and giving birth to this subsection.

A second and more pressing issue is how much or in which way such accounts are informative. Apart from the lack of indexing information that can be applied to particular contexts, there is a stronger kind of failure considered, whereby we might deem the proposal is not talking about its intended object at all<sup>15</sup>.

This is what is disclosed by Fernandez-Pinto's previously introduced critique. The assumptions of the normative accounts under consideration as to what could count as science and its conditions of development are so systematically eschewed as to be inapplicable to the current globalized, commercialized context of science. That is, apart from the possibility of some accounts to be uninformative due to their lack of appropriate indexing, the account could fail to be informative due to it treating the theme in such a distorted manner that it can fail to even touch it. Such is the danger of absolutism, as it implies generalizations, simplifications, and idealizations attempting to transcend particular contexts whereby which ends up talking about something else.

In conclusion, given the absolutist pretension of universality, the proposed solutions fail to be informative. We have found an explanation to one of the problems encountered many times in the literature, under the guise of lack of access to counterfactual conditions (Larroulet Philippi, 2020), lack of empirical fit (Fernandez-Pinto, 2014, 2015), ambiguity (Hicks, 2014), and permissiveness (Intemann, 2017) or stringency (Brown, 2020) of criteria.

## **4. A sketch forward: Beyond Value Sovereignty**

Thus far, the main task of this article is already completed. What follows is a sketch of how the discussion of values in science could continue while avoiding the abovementioned problems. For this purpose, the absolutist pretensions would have to be abandoned. A similar movement was already proposed by Rouse (1996b), in reference to the epistemological side of philosophy of science. Showing how that suggestion is informative for this case is what the present sketch will do, such that we can envisage a philosophy of values in science that is sufficiently attuned to context and being able to inform epistemic practices without pretenses.

### **4.1. Joseph Rouse's guide to engage with epistemic practices**

After the failure of legitimizing projects in the philosophy of science, like the old demarcation problem and attempts at rational reconstruction of science's history, the question of what role was left to the philosopher of science, who was before paradigmatically concerned with those specific problems, arose. Rouse, first debasing what we mentioned as legitimizing projects, proposes a way forward: going beyond epistemic sovereignty. This means, for Rouse, abandoning the search for norms and standards that are rational and specifiable outside local epistemic practices. Instead of searching for general criteria to the sciences, philosophers choose to *go local* and make their work continuous with the practices of different epistemic projects, taking normative considerations and issues from within. Following Slowik (2002), this assumes a certain form of relativism. The standards will not be global, but local for the given practice under consideration. That's why later,

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<sup>15</sup> For a similar point about the problem of using over stringent criteria when judging ideal theory and this stronger kind of failure, all in the context of political philosophy, see Valentini (2009).



following his own suggestion, Rouse defends that philosophy of science stops being an autonomous discipline and becomes part of interdisciplinary cultural studies of science (Rouse, 1996a). It becomes a form of empirically and normatively approaching scientific practice which can abandon the legitimation project (a legitimation project that could be seen as similarly embodied in the new demarcation problem). This meant, for many practitioners, turning to Science and Technology Studies, and the influence of Rouse in that tradition has been recognized (Soler et al., 2014).

#### **4.2. Normativity as internal to practices: what that means for values in science**

Our relativist assumptions involve a form of LOCALITY. This means that a relativist philosophy of values in science cannot but help engage with concrete epistemic practices and critique or support given values and interests inside and in the context of that practice. The search for general criteria, then, could be abandoned (this last point holds unless general proposals, such as a criterion for scientific practices in general, are appropriately indexed and contextualized. For example, in the form of criteria for given epistemic practices in some cultural, institutional, or other types of contexts). This tailors well not only with the continued calls for making philosophy of science more practice-oriented, but also with the intent to make institutional and sociological issues of science relevant to the philosophy of values in science (Douglas, 2018). This attention to contingency is what is called for by a relativist philosophy of values in science. Continuing with the diachronic side of the matter, philosophy could pay attention to not only *what* values are embodied, but *how* they come to be included. In short, seeing values also as value practices, and how they evolve and get contested in different epistemic contexts (Dussauge et al., 2015). A turn to the concrete, so to speak, is what is recommended.

#### **4.3. In the flesh: arguing to and from cases**

Of course, such a proposal for concreteness would be moot if it did not include how actual examples of bottom-level work could proceed. Luckily, there are many works able to jointly position itself as normative, empirically attuned, and properly contextual. Our example will be the work by the philosopher Manuela Fernandez-Pinto, especially her '*Doubly disadvantaged: On the recruitment of diverse subjects for clinical trials in Latin America*' (2019), to which we now turn.

##### **4.3.1. Denouncing illegitimacy without theory**

In brief, in her article Fernandez-Pinto showcases some aspects concerning the recruitment of clinical subjects in Latin America. This in order to denounce that, due to the incentives and social context of the research, there is a problem of injustice and epistemic and ethical misalignment in the research. This is because the goods pursued by the inquiries under consideration, although benefitting from their presence in Latin America, do not consider the interests of the clinical subjects nor of the overall region. There is, then, a situation of relative exploitation (Fernandez-Pinto, 2019, p.399).

Although Fernandez-Pinto does not use the language of values or illegitimacy of the presence (or absence) of values, the situation readily lends itself to being analyzed under those terms. Let us remember that values have been understood in terms of *what is being pursued* multiple times (Hicks, 2014; Shaw, 2022), and one of the main goals of the literature is to avoid the problem of wishful thinking. That is, to avoid that the inclusion values could justify pursuing predetermined outcomes

(Douglas, 2021). In the case at hand—and understanding it in terms of pursuit, as the author puts it—there is a situation of misalignment between important parts of the research. In other words, the goods under consideration are being pursued in a detrimental, unfair, or illegitimate manner.

Note that Fernández-Pinto herself denounces some normative accounts' incapacity to actually inform concrete normative judgments (see section 2.1.1). Her account does not rest at the moment in some kind of ideal horizon, but it is clear in her work that this does not make the normative judgments of the case 'leaps in the dark' nor unjustified. A situated positioning of our research in terms of the current political, social, and economic situation allows us perfectly to denounce certain research as harming or preventing social justice efforts. Such positioned judgments are what might propel the legitimate inclusion of values in scientific research, as they can position themselves amid problems and actually suggest ways forward. Other examples of such work could be Leuschner and Fernandez-Pinto's (2021) article on the detrimental dimensions of forms of scientific dissent or Cowen's (2019) article on how the alignment of values in research and applications of evidence-based education does not take into consideration the interests of the public, but the bureaucratic apparatuses in charge of implementing the policy.

In short, scholarship contextually situated to analyze and challenge the values in epistemic practices in today's context is already being done. Furthermore, abandoning normative projects which create sterile (because uninformative) proposals might make it even more widespread, and promote philosophical work which might help science to be well-ordered.

#### **4.4. What is at stake**

I want to end this proposed route for future discussion standing on one of Rouse's key concepts: what is at stake (Xu and Wu, 2020, ch.2). Scientific and other epistemic practices matter. There are things at stake in those practices which imbricate the epistemological, ethical, and social. Explaining what is at stake and how to proceed in one way or another considering those stakes and our values is a quintessentially reflexive task that philosophy has taken throughout its history, but especially so in ancient times: philosophy was seen as essentially concerned with the good life. Such a task is a philosophical task, and abandoning absolutist pretensions might make philosophy capable of taking it up again, this time in the context of 21<sup>st</sup> century scientific practices and their multi-varied values. Quoting Rouse: "to recognize this interconnection is not to devalue knowledge or science for political purposes, but to take seriously the stakes in struggles for knowledge and truth, and to place epistemology and philosophy of science squarely in their midst" (Rouse, 1996b, p. 416). That is, moving towards a truly political philosophy of science that takes up the questions of values and interests seriously, together with the contestations they imply. Seeing its own practice in that context, and not idealizing away the messiness while positing philosophy as arbiter, is what is called for.

### **5. Conclusion**

This paper argued that, in the context of the values in science discussion, the problem we found in central proposals arise out of absolutist commitments. We began by presenting that problem, which was identified as the problem of uninformativeness, shown through the aspect of

straightforward unknowability, and the aspect of ambiguity. With that problematic context in mind, we defined how absolutism (and relativism) would be understood. Together with framing absolutism, we presented some textual evidence of authors in the discussion explicitly endorsing some form of absolutist theses. We concluded that section with the promise of the paper: showing how the problem under consideration could be seen as being explained by the presence of the thesis of VALUE SOVEREIGNTY LEGITIMATION in the proposals. The final part, being programmatic rather than argumentative, pointed us towards the methodological alternative proposed by Joseph Rouse as a way of continuing engagement with epistemic practices, this time without absolutist pretenses and with particular attention to the local, relative conditions, values, and features of epistemic practices. This was accompanied by a brief exposition of work in the literature which takes such a contextual, relative perspective, not losing its normative grip but at the same time being actually informative as to what directions to take. We finish proposing to practitioners to avowedly take such contextual perspectives that might inform scientific practice, achieving the practical goal that earlier ideal accounts set themselves with.

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