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# How to think about shared norms and pluralism without circularity: a reply to Anna Leuschner

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**Abstract**
Anna Leuschner has argued that there is problematic circularity in Helen Longino's approach, which postulates the existence of some shared norms as a necessary precondition for objective communities. As an alternative, Leuschner has proposed to approach the establishing of more objective pluralistic communities through political means on a case-by-case basis, taking relevant epistemic and political factors into account. In the paper, I argue that there is an alternative understanding of norms that avoids circularity. I do so by drawing on Isabelle Peschard's discussion of scientific practice. I go on to show that norms, so understood, are important in the cases where a political decision may not alone be sufficient for establishing a successful community. Specifically, I discuss pluralistic communities that include laypersons in possession of relevant expertise as an example.

**Keywords**
objectivity; pluralism; norms; lay expertise; Longino

## 1. Introduction

The aim of the paper is to discuss how to better understand the influential account of objectivity in scientific community that Helen Longino (1990; 2002) has developed. In an important critical paper, Anna Leuschner (2012) has argued that there is a crucial weakness in Longino's account of objectivity achieved through pluralism. Longino outlines a number of criteria for pluralistic communities, including the criterion of shared public standards. As Leuschner points out, this criterion introduces circularity: objective standards are both a precondition of an objective community and are made possible thanks to such a community. In practice, the requirement of shared norms may help to entrench existing norms and to prevent the admission of novel perspectives into community—the point that some other critics also make (e.g., Intemann and Melo-Martín 2014; Kourany 2010). As a solution, Leuschner proposes to approach the institution of pluralistic communities through explicitly political decisions on a case-by-case basis. Leuschner discusses the Intergovernmental Panel on Climate Change (IPCC) as an example of such a pluralistic body established by political means.

In the paper, I suggest that while political decisions may be the first step for establishing a pluralistic community, this step alone may not be sufficient. In particular, this may be the case when

it is desirable for such a community to include laypersons (non-scientists). As Leuschner herself mentions, in some cases laypersons may have relevant knowledge or perspectives the inclusion of which would benefit scientific community. However, analyses of public involvement in science and science policy show that the political decision to include laypersons may sometimes fail to result in a successful pluralistic community. I argue that in these cases some shared norms that enable seeing laypersons as full community members may be required. In order to avoid the problem of circularity, I suggest relying on a different approach to understanding such norms. I describe how Isabelle Peschard's (2007) approach to norms as a shared practice rather than specific shared beliefs and commitments may help community to accommodate a variety of relevant perspectives. I also show how Marybeth Long Martello's (2008) case study of the participation of Arctic indigenous peoples in climate change research may serve as an example how the norms so understood make possible a successful pluralistic community that includes laypersons.

The argument is presented in the paper as follows. The second section introduces Longino's account and the third summarises Leuschner's criticism and an alternative to it. The fourth section describes how Peschard's account of science as practice can be applied for understanding Longino's criterion of shared norms. The fifth section argues that pluralistic communities involving laypersons constitute a case where some such norms may be necessary and the sixth section uses Martello's analysis to describe a successful pluralistic community characterised by such norms. The concluding section follows.

## 2. Longino on objectivity and pluralism

The notion of transformative criticism plays a crucial role in Longino's account of evidential reasoning (Longino 1990, 38–48 and 2002, 124–128). Longino argues that there is no unique one-to-one relation between evidence and hypothesis. As hypotheses go beyond a simple summary of data, there is a logical gap between the state of affairs and the hypothesis for which it is taken to be the evidence. In order to fill in this logical gap, evidential reasoning must inevitably rely on some background assumptions about the relations between the two. However, if evidential reasoning always involves background assumptions, subjective biases can influence acceptance of hypotheses via those assumptions.

Longino argues that this danger can be avoided, and objectivity maintained, thanks to the social nature of knowledge production (Longino 1990, 66–76). Before being recognised as a part of public knowledge, individuals' claims are subject to scrutiny by other members of knowledge-producing community. This collective criticism allows for explication and subsequent modification of the assumptions involved.

Longino thus argues that in order for objectivity to be possible, critical dialogue in community is necessary. However, different communities may be better or worse at supporting collective criticism that sustains objectivity. In order to judge the conditions for critical dialogue in community, Longino proposes several criteria. The criterion of shared norms is one of them:

> There must be publicly recognised standards by reference to which theories, hypotheses, and observational practices are evaluated and by appeal to which criticism is made relevant to the goals of the inquiring community. (Longino 2002, 130)

Norms help to keep discussions in community productive, ensuring that both original claims and their criticism meet certain standards of quality and relevance.

### 3. Leuscher's criticism and an alternative to Longino's approach

In her discussion of pluralism and objectivity, Leuschner is sympathetic to the basic idea of Longino's account—the connection between plurality of perspectives and the possibility to improve objectivity by exposing biases. However, according to Leuschner, Longino's approach is unsatisfactory, as it engenders circularity. In order to have an objective community, it is necessary to involve all relevant perspectives; in order to pick up relevant perspectives, objective norms for evaluating perspectives are necessary; in order to have objective norms, an objective community is necessary. In Leuschner's (2012, 193) words, "That way, objectivity (of the standards) is premised for a process (pluralism) that is to generate that very objectivity". If some standards are taken to be objective in this way, contributions from those who do not share them are excluded, undermining pluralism of perspectives. Longino's approach is thus ultimately detrimental for pluralism.

Leuschner argues that this problem cannot be solved analytically, on the level of Longino's ideas. As an alternative, she proposes a solution in the form of political regulations for critical debate, widely understood. These regulations may encourage some perspectives (for example, with the help of hiring quotas for specific social groups) and limit others (for example, with the help of regulations for the use of specific technologies). The decisions about the membership and norms of pluralistic expert bodies are to be made by political means, in a way that reflects relevant epistemic, ethical and political considerations. In this way, enabling pluralism without running into the problem of circularity becomes possible. Leuschner discusses the IPCC as a successful example of such a politically established, experts-staffed, pluralistic body.

### 4. Responding to Leuscher: re-interpreting norms on the basis of Peschard's account of scientific practice

I agree that Leuschner's argument points out an important issue for Longino's account. My response to it consists of two parts, presented in this and the following sections. First, I argue that this criticism depends on a certain understanding of the nature of norms; it can be deflected if norms are

interpreted differently. Second, I argue that having some norms-based approach is not just possible but necessary in order to address some issues of inclusion. Specifically, I suggest that when it comes to the inclusion of laypersons in scientific community, approaches that bypass the issue of norms altogether may be inadequate. The alternative way of thinking about norms that I describe in this section can be useful for just these cases.

One common way to think about community's norms is in terms of members' commitments to certain substantial aims, standards, items of knowledge etc. For example, Joseph Rouse (1987) argues that this is how Kuhn's paradigms have often been interpreted—a paradigm with its aims, values and norms is a set of agreed upon commitments to specific points. Some of Longino's writings support just this interpretation of norms—such as, for example, her characterisation of norms as "everything discussed as methodology by philosophers of science and more" (Longino 2002, 145).

This interpretation captures some important aspects of what unites a specific well-established scientific community. However, it may lead to problems when inclusion of those who currently do not belong to the community is discussed. One may be disqualified if one does not already possess all the knowledge of an established community member and does not interpret and apply it in the same way—so, relevant perspectives may be excluded (see, e.g., Intemann and Melo-Martín 2014). Acquiring these norms and associated items of knowledge, may, in turn, bring biases of the community with it, distorting perspectives of new members (see, e.g., Kourany 2010). Most importantly, the issue of justifying the norms as objective before the inclusive community that is necessary for objectivity is established looms large, as described by Leuschner.

I suggest that these problems do not arise if one recognises the possibility of a different understanding of what it means for a community to have shared norms, alongside the more traditional one. In order to show the possibility of such an alternative understanding, I draw on Peschard's (2007) argument about the nature of scientific practice.

When discussing scientific practice, Peschard first summarises the traditional idea that a practice requires homogeneity among participants—"in practical performances, in shared beliefs or in normative commitments of the practitioners" (Peschard 2007, 140). If this is so, those who do not share these commonalities cannot take part in the practice; their invitation would threaten to destroy its basis. Peschard argues that this traditional understanding is inadequate, pointing out its inability to explain the amount of variation, and the possibility of novelty, within a practice. Practitioners may disagree with each other without losing the status of practitioner. Practitioners may also innovate.

As an alternative, Peschard argues that practice be better understood in terms of interaction

and mutual accountability, of acknowledging the mutual relevance of each other's claims and actions:

> What is important to qualifying as practitioners in the same practice is not sharing certain ways of doing, beliefs, or presuppositions, it is being accountable to certain norms, it is one's performances and utterances being subject to questions, to demands of justification, to criticism, to constructive elaboration, being something that matters to the other, something that can make a difference to their own performances and utterances. (Peschard 2007, 148)

Peschard proposes to think about norms regulating a practice as constituted in the process of practice, from responding to what is at issue and at stake there—and the recognition of what is at issue and at stake itself develops in the course of practice. Accordingly, norms are not something fixed in advance, something that definitely distinguishes the community of scientists with their practice from non-scientists. On this view, the participation of those who do not share all of the established community members' commitments is not an obstacle for successful research practice, as long as all parties recognise, and act on, mutual responsiveness and accountability.

I suggest that this approach to thinking about scientific practice can be usefully applied to thinking about scientific communities in Longino's account. On this reading, for a community to have shared norms is to have this kind of shared recognition that certain claims and perspectives make a difference, offer something of relevance, demand accountability. Some aspects of Longino's position support such a reading—for example, when talking about standards as covering „methodology" Longino continues that they are better understood not as rules guiding individuals but as „touchstones of critical interaction" (Longino 2002, 145). In the case of well-established scientific communities this kind of normativity may be less visible next to specific shared methodological norms and standards. However, also in their case, the shared practice that Peschard writes about can be recognised as a necessary condition for community's successful functioning. Ultimately, Longino's criterion of shared norms within her account of objectivity as intersubjectivity may be seen as capturing the idea that overcoming subjectivity requires being accountable to someone beyond oneself and that members of the same community recognise each other as someone to be accountable to. This is precisely the idea that Peschard develops in her account of scientific practice.

Crucially, recognising and cultivating this second understanding of normativity may help to open communities to outsiders. According to this understanding, new participants in community, be they researchers from a different community or laypersons, are not required to possess all the knowledge and standards of expert members. Rather, what is required to be shared is the recognition of a common discussion and the mutual duty to react to other participants. This approach also allows avoiding the threat of circularity as described by Leuschner. One can

recognise that community at any given point has certain norms (in the first sense), and some degree of objectivity. At the same time, one can also recognise that it is possible for community both to change the norms and to include new members who do not fully share them (falling back on the second understanding of shared normative practice), thus improving community's objectivity further.

## 5. Responding to Leuschner: the issue of including knowledgeable laypersons in pluralistic communities

An alternative interpretation of Longino's norms is therefore possible. Is it, however, necessary? Is it not possible to bypass the issues of norms, as Leuschner does with her proposal? I suggest that discussion of a specific case of inclusion—the issue of involving laypersons in research—shows the importance of norms.

Most generally, involvement of laypersons seems a fitting case for testing an approach to enabling pluralistic communities, as this is where the differences between insiders and outsiders may justifiably be expected to be the greatest. Besides that, I suggest that the topic of public participation is relevant for Leuschner's argument in other respects. Discussing deliberative expert bodies, such as the IPCC, Leuschner brings out both epistemic and political reasons to require plurality there. Inclusion of different perspectives helps to expose biases and utilise local knowledge; simultaneously, it helps to achieve agreements that all parties involved can recognise as fair. I suggest that similar reasons can be given for the involvement of laypersons.

There is a growing body of analyses of epistemic contributions some groups of the public can provide. Brian Wynne's (e.g., 1992) analyses of the specialist local knowledge of Cumbrian sheep farmers in the context of research effort after the Chernobyl accident is probably the most famous example. Especially relevant for Leuschner's example of climate change research and the IPCC, there are some projects that invite the participation of laypersons, specifically indigenous communities, with the aim to integrate their knowledge into research on climate change (see, e.g., Alexander et al. 2011; Fernández-Llamazares et al. 2017; Marin 2010). More generally, there has been a considerable number of initiatives to involve laypersons in science and science policy. Improving the production of knowledge, improving the quality of decisions and policies, increasing the legitimacy of these decisions are among the common aims; specific initiatives often combine several of them.

At the same time, analyses of these initiatives attract attention to several important problems they may face in practice. The balance of power between experts and officials on the one hand and laypersons on the other is a crucial issue here (see, e.g., Powell et al. 2011, 45–46). Given the

professional power on the side of the former, concerns are raised that experts may be able and willing to manipulate public participation events. So, analyses of lay participation in science and science policy express concerns about the ability of experts to control public involvement initiatives (e.g., Martin 2009, 318–319) and to limit the effect that public input could have (e.g., Martin 2012, 1852). Relevantly for the topic of this article, Few et al. (2007) demonstrate the danger that the more powerful—expert—side may be tempted to contain public participation and to steer it towards pre-determined results in the sphere of climate change adaptation.

Public participation initiatives, such as discussed by Few et al. (2007), are often based on a mix of epistemic, ethical and political considerations and organised by political means. This is how Leuschner proposes to create pluralistic epistemic communities. Crucially, these analyses expose the possibility that establishing communities politically may not be enough to enable productive interactions within communities where laypersons are invited. Even in a nominally inclusive community, contributions of laypersons may be discouraged or ignored if the more powerful expert party wishes so and if the inequalities of power are not addressed.

I thus suggest that some shared normative basis ensuring mutual accountability may be necessary. In the following section I describe a case of successful inclusion of laypersons that I believe to be an example of that.

## 6. Using Martello's case study to show the importance of shared norms as accountability

In her analysis of representation in the field of environmental change research, Martello (2008) describes how Arctic indigenous peoples are gradually coming to play an important role in research and politics of climate change (Martello 2004 also discusses some of these issues). These peoples are a distinctive group under threat from climate change. As such, they act as spokespersons for themselves and other groups in a similar position. In addition to that, Martello shows that they are increasingly seen as capable of important epistemic contributions:

> In these forums, Arctic indigenous peoples are becoming recognised as holders of specialised knowledge, which is crucial for identifying and understanding local manifestations of global environmental change and attendant nature–society interactions. (Martello 2008, 353)

Martello describes one of the research projects that have received considerable input from these groups—the 2005 Arctic Climate Impact Assessment (ACIA), prepared by the Arctic Council and the International Arctic Science Committee. The ability of indigenous peoples to contribute a specific kind of knowledge (which Martello 2008, 366 calls "environmentally rooted") was recognised and utilised:

> ACIA portrays the knowledges and experiences of these peoples as helpful for understanding the changes that have taken place, how indigenous peoples have coped with those changes in the past, and how they and others might address them in the future. (Martello 2008, 360)

Martello (2008, 362) lists some of the phenomena about which indigenous peoples can provide information: weather predictability, snow and ice characteristics and seasonal weather patterns as well as the consequences of these changes for the interactions between indigenous peoples and their environment.

Martello's analysis thus demonstrates epistemic grounds for including representatives of these lay communities in institutions attempting to study and address climate change. As I suggested in the previous section, the same reasons that Leuschner gives for pluralism in the IPCC can be used to argue for widening this pluralism to include some laypersons.

Crucially, the involvement of indigenous peoples in the ACIA case did not stop with the political decision to include them in the community preparing the assessment. Martello describes how the participation of indigenous peoples was encouraged throughout the preparation of the document so that they took part in reviewing and writing some parts of the report (they could themselves choose the extent to which they were involved with each chapter).

So, the widening of the relevant research community was accompanied by the recognition of new sources of relevance and accountability. The stake that the indigenous peoples have in the discussion was recognised, as well as their ability to contribute to identifying what is at stake and at issue scientifically. While Martello does not stress that, I suggest that the success of the project also required the opposite be true. Even though, obviously, the participating laypersons could not have been expected to possess all of the norms of scientific community, the cooperation could not have succeeded if they had not recognised researchers as also having a stake in the issue and as offering something that required listening and reacting. This mutual accountability distinguishes this collaboration from cases where concerns are raised about the experts' neglect or manipulation of lay participants even after the political decision to involve the latter is made.[1]

I conclude that the community behind the ACIA can be interpreted as an example of a productive pluralistic community of experts and laypersons that is based on a shared practice as Peschard characterises it. Importantly, in this case one does not need to see the norms of expert community as the immutable basis for the selection of relevant perspectives—the danger that Leuschner warns against. Instead, community's objectivity is improved and community's practices

[1] A comparison of several climate change documents as to the inclusion of indigenous knowledges concludes that the ACIA is an example of „respectful and appropriate inclusion" (Smith and Sharp 2012, 467), which I take as supporting my assessment. (In contrast, Smith and Sharp (2012, 467) see these knowledges as „marginalised" in the IPCC's Fourth Assessment Report.)

change as a result of a more inclusive collaboration in the context of a specific problem where both expert and indigenous communities recognise each other as offering something worthy of consideration and response.

## 7. Conclusion

In the paper, I acknowledged that Leuschner's analysis of Longino's criterion of shared norms, as usually understood, exposes an important problem for it as the basis for creating pluralistic communities. At the same time, I argued that some analyses of public participation initiatives show that simply letting go of norms is not a viable option in the case of pluralistic communities where participation of laypersons is desirable. I used Peschard's account of scientific practice to offer an alternative interpretation of what it means for a community to have shared norms. I then discussed Martello's case study of indigenous peoples' participation in climate change research to show how an understanding of shared norms as a shared practice may describe a successful instance of pluralistic community.

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