Trust without Shared Belief: Pluralist Realism and Polar Bear Conservation

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Trust-building has implicitly been characterized in epistemology as necessitating the adoption of shared belief. If this is so, such models of trust-building appear at odds with a metaphysical commitment to pluralist realism. In this article I offer the first steps in modeling how a pluralist realist might understand trust building. I argue that entertaining pluralist realism as a possibility may actually be more fruitful for trust building than a monist conception because each side is given an important concession: the possibility that their knowledge claims might be correct. The case of polar bear conservation in the Canadian arctic illustrates that trust-building without shared belief is possible. I wish the members of these round-table discussions success in the future.

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1. Introduction

Trust in an epistemic context is often understood in terms of shared beliefs. That is, if I trust you with regards to the knowledge claims you are making, then I accept and believe your knowledge claims as true. This model of trust building appears problematic for those who hold pluralist realism[1] to be a conceptual possibility because the strength of pluralist accounts is often thought to be in the divergence of opinion, not the convergence on a shared

1. See Helen Longino (2002) *The Fate of Knowledge*. This use of the term will be discussed in greater detail in section 3.

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belief. Thus, if pluralist realism is a possibility, there may be cases where, much as trust is needed, it may be unwise or impossible for knowledge claims to be shared. Fortunately, as I will demonstrate with reference to polar bear conservation in the Canadian arctic, trust need not require shared belief.

In the following essay, I will outline the ways in which trust has been dealt with by social epistemologists in the past, illustrating that trust has usually been explicitly or implicitly connected with the acceptance of another's knowledge claims. I will argue that the situation facing the Inuit and the southern Canadian scientists is one in which trust is demanded in order for both groups' epistemic projects to succeed, and yet the conceptual possibility of pluralist realism raises the problem of how to gain or give trust precisely because (among other things) neither group is likely to accept the knowledge claims of the other as true, and it isn't clear that they should do so. Having set up the problem, I will argue that the Inuit and southern Canadian scientists were able to find a compromise because they were able to employ a concept of trust that does not require shared belief. I further speculate that, accepting pluralist realism as a conceptual possibility might allow both sides to strengthen this trust-building going forward.

2. Epistemology and Trust

Kyle Powys Whyte and Robert P. Crease give a definition of trust in their 2010 article "Trust, Expertise and Philosophy of Science" which can serve as a place from which to begin an investigation into the nature of trust. They claim that "trust means deferring with comfort and confidence to others about something beyond our knowledge or power, in a way that can potentially hurt us" (Whyte and Crease 2010, p. 412). Key to this understanding is the asymmetrical relationship that holds between the trustor and the trustee. The trustee is an expert, with knowledge that exceeds that of the trustor. Thus, the trustor puts him or her self at *risk* in trusting the expert, and does so with *confidence*. The knowledge is held by the trustee. The burden of the risk is taken on by the trustor.

But this confidence itself needs to be explored. For, as Annette Baier pointed out in 1986, there is a difference between trust and reliance.

> We all depend on one anothers' psychology in countless ways, but this is not yet to trust them. The trusting can be betrayed, or at least let down, and not just disappointed. Kant's neighbors who counted on his regular habits as a clock for their own less automatically regular ones might be disappointed with him if he slept in one day, but not let down by him, let alone had their trust betrayed. *When I trust another, I depend on her good will toward me*. (Baier 1986, pp. 234–35 *emphasis added*)

Relying on another may be as simple as assuming that you know them and can predict their actions. Trusting another is something deeper. If I predict your actions wrongly, I am not betrayed by you. But if I think you bear a good will towards me and this is wrong, I will feel betrayed. I trust you because I believe I know that your attitude towards me is one of good will. This is what allows me to put myself at risk with confidence, which Whyte and Crease highlight as a hallmark of trust. It is, then, not enough for me to identify you as an expert. I must also identify you as an expert who bears me a good will.

But on what basis do I form this belief regarding another's will? Alvin Goldman examines how a "novice" or "lay" (non-expert) person could attempt to adjudicate the claims of experts in order to determine whether the experts are trustworthy. He lists four ways, but it is the two ways he considers to be the most dominant that are of interest to me. He claims the novice can use 1) "Evidence of the expert's interests and biases vis-a-vis the question at issue," and 2) "Evidence of the 'expert's' past 'track-record'" (Goldman 2001, p. 93). The reason for relying on these two sources of evidence appears to be the same: bias and track-record will likely indicate something about the expert's will towards the novice. If, in the past, the expert has tried to persuade the novice to take actions that were harmful towards her, or if she suspects that the expert has a good reason to want to see her fail in this case, then the novice has good reason to doubt the expert's good will towards her. If Goldman is correct, then using someone's past track-record, or their potential biases, are both rationally justified ways of adjudicating whether or not to trust them.

Naomi Scheman argues that often marginalized lay communities are fully justified in their distrust of scientists when the workings of the scientific institutions are "demonstrably unjust" *even* if the injustices do not affect the validity of the knowledge claims being made (Scheman 2011, pp. 146–7). She backs up this claim with reference to the same kinds of avenues for judging trust-worthiness that Goldman listed above. Scheman's example is of the African American community's distrust of current medical research as a result of an institutional history that includes the Tuskegee experiments (Scheman 2011, p. 223). In judging this distrust as rational, one must ask the following question: "Is the lay public responsible for learning the scientific practices that would allow them to judge the validity of scientific knowledge claims"? And the answer is surely 'no'. It is unrealistic to expect members of the lay public to be responsible for judging the technical claims of scientist, since they lack the expertise to do so. In the absence of this expertise, Scheman argues that it is reasonable to judge current scientists based on their institution's track-record (Scheman 2011, pp. 50–1). Since scientific institutions are expected to police scientists and ensure that

they have the expertise they claim to have, it seems reasonable to judge current scientific claims based on the track record of the institutions that support those claims. Notice that the argument Scheman gives demands an extension of Goldman's original account of how trustworthiness is judged. Now, an individual's trustworthiness can be measured with reference to the track-record and biases of the institution to which the individual belongs, particularly since institutions are often the policing agents who ensure that proper procedures and methods are being observed by individuals working within them. For example, if I know that an institution has a history of racism or sexism, then I have good reason to think, *prima facie* that an individual member of this institution will not be prevented from operating on racist or sexist assumptions herself. Notice that trust seems, here, to be tied to belief; African Americans do not *trust* medical researchers and therefore do not *believe* the researchers' knowledge claims.

Indeed, there is another case that supports the idea that trust is tied to acceptance of an expert's knowledge claims. Goldman calls this the "novice-2expert problem." It is a case in which the novice faces two different experts who are each offering differing expert opinions. The problem is whether, and how, a novice may judge which of the two experts to trust in a given situation because Goldman states that the novice cannot trust both experts at once (Goldman 2001, p. 92). This seems to be, again, because trust is tied to belief. So a novice who trusts both experts would need to believe two contradictory claims at once, which is epistemically problematic to say the least. The way in which Goldman proposes that a novice determine which expert is trustworthy is similar to the way in which a novice chooses whether to trust an expert at all; by considering whether there is evidence that the expert holds a bias against the novice.

> If N[ovice] has excellent evidence for such bias in one expert and no evidence for such bias in her rival, and if N has no other basis for preferential trust, then N is justified in placing greater trust in the unbiased expert. This proposal comes directly from common sense and experience. If two people give contradictory reports, and exactly one of them has a reason to lie, the relative credibility of the latter is seriously compromised. (Goldman 2001, p. 102)

So, again, the novice can still rely on past track record and potential bias in order to adjudicate between the two experts and determine which one is telling the truth.[2]

2. Goldman offers a few other ways in which the novice can adjudicate between two different experts, but those ways won't factor into this discussion. (See Goldman 2001).

The assumption in all of these accounts of trust and trustworthiness seems to be that an expert who bears a good will towards one will also be an expert who will tell the truth, and therefore will be an expert worthy of trusting. Indeed, Heidi Grasswick's work advocates that scientists make sure to do two things in addition to telling the truth in order to rebuild trust: 1) determine who needs to know (who is most impacted by the scientists' research) and 2) ensure that they do know (share scientific knowledge with those at risk of significant harm).

> Knowledge must be shared with those at risk of significant harm. It is important to note that this claim is much stronger than the more common demand that scientific results be public—that is available for perusal by those who seek them out, or sharable in principle. (Grasswick 2010, p. 399)

Grasswick, in offering this suggestion, continues the implicit connection found between trustworthiness, belief, and accuracy of knowledge claims. Sharing accurate claims with those who are affected is a way of appearing trustworthy. One knows one has been recognized as trustworthy when one's knowledge claims are believed by others. And I think there is something correct about this connection. It makes sense that those who have a good will towards me (and are thus trustworthy) would likely be more inclined to tell me an accurate claim, insofar as knowing accurate models tends to be a better overall survival strategy.[3]

But there is also something that has been overlooked in this implicit connection between trust and shared belief. Increasingly, those working in philosophy of science (one of the biggest areas wherein issues of trust are cashed out) are entertaining the possibility of pluralist realism. Longino, for example, considers pluralist realism a conceptual possibility (Longino 2002, 2006, 2013), as does Scheman (2011) and Harding (2015). The need for pluralist realism is often cashed out in moral or political and epistemic terms. The arguments given are of two related varieties: 1) that reality is pluralistic, and so we need a plurality of theories developed from different perspectives, and 2) that issues of marginalization will be easier to overcome if pluralist realism is endorsed, since it ensures space for members of marginalized communities to speak. It should be noted that these types of arguments are not referring to only marginalized scientific communities. Indeed, often the claim seems to be one of including members of marginalized social

3. There have been debates in both virtue epistemology and philosophy of science over whether it matters that our knowledge claims be accurate or truthful. However, for the purposes of this essay, I will assume that, all other things being equal, it is better to believe truths than falsehoods.

communities (visible minorities, indigenous communities, LGBT communities, for example) into mainstream scientific communities. (See, for example, Grasswick 2010). So, pluralist realism is often marshaled to deal with just the sort of problems explored in situations of lost trust. By illustrating that the novice/lay person has good reason to distrust, one is granting rationality and authority to the novice to judge how things stand from her perspective. Thus, standpoint theory is often seen as a friend to pluralist realism, and vice versa (Harding 2015). The problem is that pluralist realism, if seriously entertained as a conceptual possibility, seems to complicate, and perhaps preclude, any efforts at trust-building between communities with different knowledge claims. For, if pluralist realism is endorsed as at least a conceptual possibility, then it seems we open ourselves up to a plurality of knowledge claims, in addition to a plurality of perspectives. This is one of the main objections to pluralist realism; it seems to result in perspectivalism, relativism and (potentially) nihilism (Harding 2015). That is, it results in an erosion of the concept of a single knowledge claim as better, more accurate, or truer than others. In a world where multiple knowledge claims may accurately describe the phenomena observed, it becomes unclear why someone should defer with comfort or confidence to another. And worse still, it is very unclear how anyone could be expected to adjudicate between two divergent opinions.

3. Pluralist Realism

In order to understand why pluralist realism might appear to be a problem for epistemic trust-building the first thing to do is to understand what pluralist realism entails. And to understand that, I will begin with a slightly different account: scientific pluralism. In 2006 Stephen H. Kellert, Helen E. Longino and C. Kenneth Waters edited an anthology entitled *Scientific Pluralism*. In the introduction to this anthology, they claimed that pluralist realism captured a general idea:

> The general idea is that some natural phenomena cannot be fully explained by a single theory or fully investigated using a single approach. As a consequence, multiple approaches are required for the explanation and investigation of such phenomena. (Kellert, Longino, and Waters 2006, p. vii)

Scientific pluralism, then, suggests that the plurality of scientific disciplines and investigations are potentially beneficial, because it is theoretically possible that reality itself cannot be captured under a monist model. So, scientific pluralism depends on the possibility of pluralist realism for its intelligibility. The reason it might be necessary to have multiple scientific disciplines is because reality itself might be pluralistic. Thus, it might be not

only possible, but *necessary* to approach a given phenomenon from multiple perspectives.

The scientific pluralism that the editors have in mind is more than merely ways of representing phenomena, then. It is a metaphysical commitment, or rather, a refusal to make a metaphysical commitment. The editors argue that it is theoretically possible that pluralist realism is true. They don't necessarily commit themselves to the idea that reality itself is so complex as to defy any one encapsulating explanation. But they do argue that there are no good reasons to deny that pluralist realism is a possibility, and hence that scientific pluralism is a possibility. "We believe it is metaphysical prejudice to deny this possibility [the possibility of scientific pluralism], and we fail to see what is to be gained by this denial" (Kellert, Longino, and Waters 2006, p. xii). Scientific Pluralism looks at pluralism in a strictly scientific setting, as the title suggests. It examines whether or not we should think, for example, that psychology must reduce to biology. It argues that there are good reasons for thinking the two may not ever be able to reduce to one complete science. But, if one is committed to pluralist realism, then this surely can have ramifications beyond science, a fact that Longino acknowledges.

Context is key to Longino's understanding of pluralist realism. But it is also a problem when it comes to adjudicating between different knowledge claims, and this can have consequences well beyond the sciences as traditionally understood. On Longino's model, a theory or hypothesis is adopted if it is found acceptable in the epistemic context and by the community for whom it arises. If it makes sense to them (given their epistemic and ontological background beliefs), fulfills their intellectual needs, and survives criticism from multiple points of view, then *prima facie*, the hypothesis gains the status of objective knowledge (Longino 1990, p. 214).[4] This, of course, leaves open the possibility that several theories could be reliable at the same time in different contexts. And, furthermore, that these theories might well appear inconsistent with each other.

4. Longino expands on this discussion of the process of theory acceptance both in 1990 and again in 2002 by developing four norms that scientific communities must adhere to: 1) There need to be recognized avenues for criticisms, such as peer-reviewed journals. 2) There need to be shared standards among the members of the scientific community. Criticisms that are offered must be relevant in some way. 3) The community must respond to the criticisms offered. This doesn't necessarily mean recanting a theory that is criticized, but it does mean defending against the criticism. 4) There needs to be equality of intellectual authority (or as Longino calls it, "tempered equality"). Everyone, regardless of their race, social status, gender, etc. must be able to enter the epistemic discourse. No one can be kept out based on political or religious reasons alone (Longino 1990, pp. 76–9; Longino 2002, pp. 128–31).

> [t]he constrained elasticity of conformation and epistemic acceptability means that more than one account of a phenomenon can be correct, even though those accounts, *if detached from their contexts,* are irreconcilable (Longino 2002, p. 211; *emphasis added*).

So, it may well be unclear how to integrate one's own knowledge claims from those that arise in a markedly different context. And this, as Longino acknowledges, extends beyond the domain of scientific pluralism. She addresses different forms of epistemic investigation, other than Western science, explicitly, accepting those knowledge claims as ones that could be in conflict with Western science, but nevertheless be accepted knowledge claims for the indigenous communities (Longino 2002 p. 211). However, she notes that "[t]he efforts to identify indigenous scientific traditions and to link those with contemporary practices are fraught with controversy, both political and intellectual" (Longino 2002, p. 211). One reason for the intellectual controversy is surely the complications that arise from the role contextualism plays in pluralist realism, and the seeming inability to reconcile knowledge claims that arise in vastly different contexts. However, while Longino touches on this, she does not investigate the possibility of widening the concept of pluralist realism beyond strictly scientific pluralism. That project lies beyond the scope of her research.

However, works like Sandra Harding's "Must The Advancement of Science Advance Global Inequality?" make it difficult to see how a pluralist could draw a line at scientific pluralism alone, particularly if what they mean by "science" is what is identified in European and North American culture as science. Harding argues that the only way to demarcate science from non-science in this way is to assume a form of ethnocentrism.

> [T]he conventional histories of WMST [Western Modern Science and Technology] that we all learned, and that still are assumed by most historians and philosophers of science today, are Euro-centric in two respects. First, they conflate Western scientific traditions with all possible scientific activity, or, to put the issue another way, they restrict "real science" to WMS [Western Modern Science]. *Yet every culture does science for every culture must ask questions about its particular location in nature's heterogeneous order, and will bring culturally distinctive discursive resources (metaphors, models, narratives) to this task.* (Harding 2002, p. 97; emphasis added)

Harding argues, then, that each culture will have its own form of scientific investigation. If this is correct, a scientific pluralist may well have to acknowledge a wider form of ontological pluralism as at least a conceptual possibility, since to do otherwise is to invoke a form of Euro-centrism as

justification for the demarcation of Western Science from other forms of knowledge-making. With these arguments in mind, I argue that pluralist realism can be conceived to be much broader than the scientific pluralism suggested by Longino, Kellert, and Waters. Epistemologies that have traditionally been viewed as unscientific may not in fact be unscientific in any sense other than an ethnocentric one. Furthermore, drawing a sharp boundary between scientific and non-scientific ways of knowing may be imprecise and impractical, as Harding herself points out (Harding 2002, p. 102). All of this leads me to entertain pluralist realism as at least a conceptual possibility, and to resist the move to only allow epistemic pluralism within the Western European disciplines historically labeled as scientific.

This move to a wider pluralist realism, lifting the restraints that allowed epistemic pluralism only within the domain of Western European science, raises one of the strongest concerns against pluralist realism: that pluralism leads to epistemic relativism (see, for example, Freedman 2009; Harding 2015). I will not be taking up this question here. There has already been enough work done to demonstrate that different forms of pluralism need not lead to relativism, and indeed may actually represent a more robust attitude towards realism than monism.[5] But I think there is another puzzle or concern related to this fear of relativism. The fear seems to be that if we cannot converge on one singular account or model, it will become practically impossible to get anything done. As Harding notes, one reason monists cling to monism is that it provides the illusion of there being of a reliable way to settle disagreements. Monists fear that pluralism, by contrast "eliminates reliable standards for settling conflicting knowledge claims" (Harding 2015, p. 110). Here, the issue is not relativism itself, but the ability to make practical decisions. If we think reality cannot be captured by singular ontological claims and commitments then how will we decide which knowledge claims that arise from these differing epistemic practices to act upon? The fear is that the metaphysical commitment to pluralist realism and the epistemic pluralism that arises from this metaphysical commitment result in what I will call a "practical paralysis." Of course, one should readily admit that it may not be the case, even for pluralists, that all epistemic practices are treated equally. Longino tells us in *The Fate of Knowledge* that our ontological categories are likely not undetermined but

5. For a discussion of how pluralism does not necessarily lead to relativism, see Naomi Scheman *Shifting Ground,* (2011); Helen Longino *The Fate of Knowledge* (2002) particularly chapter 8; Donald Davidson's account of triangulation in *Subjective, Intersubjective, Objective,* (2001); Nancy Cartwright's *Dappled World,* (1999), and John Dupre's *The Disorder of Things* (1993) to name a few. Each author listed here argues that pluralism does not lead to relativism, though they do so in various ways.

are rather *under*-determined. (Longino 2002, pp. 40–1) But whether there are an infinite number of ontological categories for reality or not, the problem remains: as long as there is more than one, and they are equally acceptable or are so divergent that comparison is practically impossible, *how do we choose?* This, I think, is often the worry behind the charge of relativism. On Longino's story, a community chooses with reference to the four norms of critical contextual empiricism, and their own cognitive needs (Longino 1990, pp. 76–9; Longino 2002, pp. 128–31). In other words, they choose on both pragmatic and epistemic grounds. But things become less clear when multiple communities are involved, who may well have different cognitive goals, and may have interpreted the four norms in different ways. Each community may well be justified in choosing different ontological categories, and different epistemic theories, based on different cognitive needs. When a practical need requires these communities to work together, it is far from clear which community's theory should be adopted, or even if divergent knowledge claims could be understood by the members of other communities, much less integrated into a workable solution.[6] That is, this worry is not motivated by intra-community epistemic decisions, but by *inter*-community epistemic decisions. I will speak more of this in the penultimate section of this paper.

Furthermore, for theorists working on trust-building, particularly with regards to communities with differing belief-systems, the concern might well seem to be even greater. It might seem that it is impossible to entertain pluralist realism as a conceptual possibility if one is engaged in research on epistemic trust, precisely because epistemic trust has typically been characterized as coinciding with shared beliefs or knowledge claims. However, pluralist realism gives us some reason to think that a single shared knowledge claim is actually a potential epistemic loss, since it is a loss of different ways of capturing, modeling and explaining a reality that may be too complex to be explained by just one theory. That is, we should not lose or discard reliable models of reality for the sake of building trusting relationships. If community X subscribes to model *a* and community Y subscribes to model *b*, and each model is working for its respective community, then pluralist realism seems to suggest both models should continue to be adopted. But, if X continues to believe *a*, and Y, *b*, then how can they share

6. Indeed, Longino herself suggests that, when divergent epistemic communities engage with each other's research practice, the result is a strengthening of each community's understanding of itself, of the ways in which it interprets questions differently, and of its cognitive goals that are different. That is, engagement with other communities does not necessarily produce collaboration, but rather seems likely to strengthen differences (Longino 2006; Longino 2013).

knowledge claims? Thus, the adoption of pluralist realism as a conceptual possibility seems to complicate or impede our ability to build trust through knowledge sharing in inter-community settings.

In what follows, I intend to show that trust building is still possible under such conditions. Indeed, I think the co-management of the polar bears in the Canadian Arctic serves as a model illustrating how such trust building can be done under these conditions. Furthermore, I argue that an acknowledgment and acceptance of pluralist realism as a conceptual possibility among those participating in co-management discussion may actually serve to facilitate trust-building, not impede it.

4. Pluralism and Polar Bear Conservation

The issue of polar bear conservation in the Canadian arctic is one that throws the problems of trust-building between divergent communities into sharp relief. The polar bears of Nunavut, in the Canadian arctic are currently managed through a co-management system that involves representatives elected or appointed from the residents of Nunavut, the Government of Canada, and the Government of Nunavut. Together, these individuals make up the Nunavut Wildlife Management Board (NWMB) and include a mixture of Inuit hunters and elders, scientists, and government policy-makers. While the NWMB's role is, strictly speaking, only advisory, in most situations their decisions are the ones adopted (Lokken 2015).

Co-management throughout the world is the most successful when mutual trust is established. Indeed, as several researchers have found, the importance of trust between those involved in co-management cannot be overstressed as a requirement of the success of a co-management practice (Dowsley 2009; Stenseke 2009; Zulu 2013). Geographer Martha Dowsley reports that those with indigenous knowledge and scientists "can only work effectively together when both forms of knowledge are reported honestly and when both sides trust each other" (Dowsley 2009, p. 55). The consistent observation is that co-management works best when the individuals involved trust both their partners in management, and the system that has been designed for setting policy. If they do not have trust in their partners to follow the system, and in the system being fair, then they are unlikely to adopt the policy decisions made at round-table discussions. And if those living in the areas where these management policies are implemented do not adopt the policies, then the policies will prove to be unsuccessful at reaching the goals laid out by the co-management team (Lundquist and Granek 2005). Thus, trust-building is crucial to the success of polar bear conservation efforts.

Currently, in many countries around the world, including the USA, polar bears are an endangered species. This is not the case in Canada,

though they are a species of concern (Grasswick 2010, p. 405). The ice flows get thinner every year, and the Northwest Passage is now navigable through much of the summer in a way that was unprecedented even a few years ago. Many ecologists and environmental scientists speculate that this is having and will have a profoundly negative impact on the polar bear population in the Canadian arctic. Polar bears hunt by crouching at breathing holes in the ice and waiting for seals to resurface for air (Clark et al. 2008, p. 349). The conclusion is simple and hard for many of us to avoid drawing: less ice = fewer breathing holes = fewer hunting grounds for polar bears. But this is not the only conclusion to be drawn. There is a debate that is political, ethical and epistemic in nature on whether the polar bears populations are dwindling, with experts (though of very different natures) on both sides. One of the points of disagreement in this debate, as Dowsley notes, is that while scientists claim polar bear populations are on the decline, some Inuit communities in Nunavut and elsewhere report increased bear sightings in and around human settlements.

> The reason for increased Inuit sightings of bears and bear signs when scientific studies indicate a declining population in Baffin Bay is unknown. Possible explanations for this phenomenon include 1. Immigration from abundant adjacent populations (Lancaster Sound) has increased numbers in the northern area, 2. Scientific studies underestimated the population, and 3. Climate change induced changes in bear [behavior] have increased densities along the coast. This question cannot be resolved with the information available at present. (Dowsley 2007, p. 53)

The debate, at least in Baffin Bay, centers on polar bear sightings. With Inuit hunters and other members of three Baffin Bay communities (Pond Inlet, Clyde River and Qikiqtarjuaq) noting an increased number of polar bears in and around the community—93% of those interviewed reported seeing more damage in their respective communities caused by bears today than in the past (Dowsley 2007, p. 69)—the credibility of scientists is drawn into question. What the scientists report does not seem to match up with the visible evidence available to the local population. In addition, hunters are experts themselves, claiming a vast amount of knowledge about polar bears and their movements. This makes the situation different from Goldman's "novice-to-2expert" problem discussed in section 2. This might be more properly characterized as a simple "2expert" problem. Scientists and hunters are also trying to find a way to work together and recognize and respect one another's expertise. Thus this is an inter-community problem.

It should be noted that not all communities viewed the increased visibility of polar bears in human settlements as necessarily challenging the scientists'

claims that polar bear populations are on the decline. In Qikiqtarjuaq, a town located on southern Baffin Island, only 60% of respondents drew the conclusion that the bear population had increased in the past 10–15 years. In the other two more northern towns (Pond Inlet and Clyde River) over 90% of respondents claimed the bear population was increasing (Dowsley 2007, p. 69). But the situation is more complicated than just scientific knowledge claims potentially conflicting with interpretations of observable evidence.

Grasswick discusses the polar-bear situation briefly as an example of a context in which trust has broken down. Since it is well established that trust is necessary for a co-management strategy to work, the break down of trust is concerning. Grasswick notes that

> [b]ecause of marginalization, *the existing community's belief system may not be well-integrated with that of the scientific community*, resulting in increased conflicts between the claims of the two communities. This difficulty can be illustrated in the current relations between Canadian Inuit communities and southern-based scientific communities. Although Inuit have incorporated many technologies into their daily lives (such as mechanized snowmobiles and satellite television), they lead lives quite far removed in culture and lifestyle from those of southern Canadians. They live in settled communities and participate in the cash economy, though they still hunt (both for themselves and as guides with trophy hunters from the south) and spend a significant amount of time on the land. *Inuit have also experienced a long history of mismanagement and injustice in their relations with government officials and policy makers that has resulted in high levels of distrust*. (Grasswick 2010, p. 405; emphasis added)

Grasswick outlines two reasons why Inuit communities might have difficulty trusting southern Canadian scientists: 1) because both communities have differing belief-systems that do not seem to integrate sufficiently with each other and 2) because Inuit communities view southern based policy decisions with distrust due to a history that includes things like the residential schools.[7] Thus, the Inuit and the southern Canadian scientists have differing belief-systems, and the Inuit view scientists as belonging to

7. The residential school program was a program set up and run from 1857 until 1947. Inuit children were taken from their families and removed from their communities, and sent to school in southern Canada. They were not permitted to speak their own languages, and were dressed as Europeans. The schools, thus, mark a disturbingly successful effort on the part of the Canadian government to remove a generation of Inuit children from their own culture, history and language. There is a long history of physical and sexual abuse

a community and working with other institutions that have a history of injustice towards Inuit communities.[8]

Reason #2 is one that is likely quite familiar to most social epistemologists working in the areas of trust and trust-building. It is similar to the reason that Scheman cites to explain why African Americans distrust of medical research is rational, and it is also a reason sanctioned by Goldman in detailing the two most common strategies used by the novice/lay person in trying to adjudicate whether an expert is trustworthy. In this case, I think that we can extrapolate further and argue that, before trust is given, it also makes sense to consider the ways in which institutions will *use* the knowledge claims being made. Thus, it makes good sense for the Inuit to consider the past track record and history of their relationship with government officials and policy-makers since these are the institutions most likely to act on the claims being made by the expert scientists. And the reason it makes good sense traces its origin to Baier's 1986 claim that trust is fundamentally about judging whether or not this other person, group of persons, institution, or group of institutions bears one good will. If what is necessary here is for the Inuit not simply to rely on the claims being made by the scientists, but to trust them, then it is reasonable (more than reasonable) that they consider whether or not these claims come from a position of good will and mutual respect. It is also reasonable that they consider the ways in which policy makers will use these scientific claims. In a recent exchange on *Hypatia*'s website regarding her article, "Climate Change Science and Responsible Trust; A Situated Approach" Heidi Grasswick argues that "[i]n cases of severe marginalization … it is possible for distrust to reasonably travel from its target from one scientific community to the next" (Grasswick 2014).[9] Since, as Grasswick notes, trust and distrust travel, it is possible that one's distrust of a community may well damage one's relationship with those individuals viewed as experts within that community. This means that, even were an individual scientist to be considered trustworthy, were he or she to work with policy makers who are not considered

attached to these schools, as well as a long list of missing children from these schools (*A History of Residential Schools*, CBC [Canadian Broadcasting Company] 2008).

8. Trust seems hard to gain on both sides since the scientists come from a cultural background with a history of exploiting the Inuit and the environment, and the Inuit recently have found that polar bears are also economically important. In the 1970's polar bear skins became extremely popular, making them economically valuable to the Inuit community. In addition, the rise in interest of sport hunting has further increased the cash value of polar bears (Grasswick 2010). Thus, the Inuk also looks far from unbiased to the southern Canadian scientists.

9. Grasswick has confirmed this position in discussions with me on several occasions, most recently at CSWIP (Canadian Society for Women in Philosophy) 2012.

trustworthy, his or her own trustworthiness may rightfully diminish.[10] But this is all likely familiar ground. And Goldman, Scheman, and Grasswick among others have developed tools to help work out when an expert should be trusted, and what actions an expert must take in order to be trustworthy.

Reason #1 might be less familiar, and is where my own focus will be. What exactly does it mean to say that the Inuit have belief systems that "may not be well-integrated with that of the scientific community"? This is where pluralist realism as a conceptual possibility comes in. Jeremy J. Schmidt and Martha Dowsley argue that scientists are working with one set of ontological commitments, but that the Inuit are working with another.

> Modern resource management has inherited a peculiar ontology. Its tradition is based on dualisms, such as passive/active and subject/object, which provide base distinctions for Western understanding of the human-environment relationship (Schmidt and Dowsley 2010, p. 377).

Schmidt and Dowsley argue that this ontology affects the ways in which southern resource managers approach and design the study and management of polar bears. They must track the polar bears, count how many bears come inland in a given season, and extrapolate from this whether or not the polar bear is an endangered species. This comes from an ontology that divides the world into two types of things: people and resources. (Schmidt and Dowsley 2010, p. 377)

> However, many indigenous cultures view animals and other aspects of the natural world (such as plants, mountains and rocks) as non-human persons who are sentient, spiritually powerful and also active, causative agents. (Schmidt and Dowsley 2010, p. 377)

Thus, according to Schmidt and Dowsley the Inuit, like many other indigenous cultures, view the world in terms of relationships and interactions with others. Thus, their interactions with polar bears are ones in which both the human and the bear can be manipulated and changed by their mutual encounter (Schmidt and Dowsley 2010, p. 380). "[A]nimals are not passive resources; they are active participants" (Schmidt and Dowsley 2010, p. 381).

10. In a recent survey for the provincial government of Nunavut, Moshi Kotierk found that residents of the province were more likely to trust scientists than to trust government and policy-makers. So the problem scientists face is not so much their own trustworthiness *as scientists* but the company they keep. Nunavut residents placed their greatest trust in community elders. ("Public and Inuit Interests, Western Hudson Bay Polar Bears and Wildlife Management: Results of a Public Opinion Poll in Western Hudson Bay Communities," *np* social science research for the Department of the Environment, Nunavut Government. May 2012). http://www.gov.nu.ca/environment/documents/public-and-inuit-interests-western-hudson-bay-polar-bears-and-wildlife (accessed 28 August 2016).

The Inuit community's background assumptions are markedly different from those of southern Canadian scientists. This makes communication of knowledge claims between communities exceedingly difficult. But even more worrying is that scientists are often not aware of this ontological commitment when sharing their findings with the Inuit.

> Problematically, this [dualistic] bias is often unquestioned in explanations of the management of natural resources that are held in common by groups of people whose worldviews do not countenance such claims. (Schmidt and Dowsley 2010, p. 377)

Because the Inuit do not share the scientists' ontological assumptions regarding what kind of thing a polar bear is, they are often unlikely to accept the scientists' knowledge claims. Take the claim at issue: how to explain the increase in polar bear sightings in towns on Baffin Island. Southern Canadian scientists tend to explain this by claiming that the bears are driven inland in search of food, since their preferred hunting grounds are melting earlier every year (Dowsley and Wenzel 2008, p. 182). But many Inuit are wary of this claim. "Many Inuit express the belief that polar bears are sentient and, in fact, have superior mental powers to humans in that they are psychic and can read human thoughts and intentions" (Schmidt and Dowsley 2010, p. 381). As such, many Inuit explain polar-bear aggression by noting that those who fail to show respect to the bears will have their property damaged by the bears (Schmidt and Dowsley 2010, p. 381). In fact, sometimes the scientific treatment of the bears as objects is blamed for the increased visibility of bears in human settlements. "[M]any Inuit are uncomfortable with the modern management system because it denies personhood to bears and conflicts with their worldview" (Schmidt and Dowsley 2010, p. 383).

The Inuit then not only have good reason to distrust whether or not southern Canadian scientists bear them a good will (based on biases and past track record of southern Canadian institutions with regard to the Inuit) but they also have good reason to dismiss the southern Canadian scientists' claims as genuine knowledge based on their own perspectives and the knowledge claims of experts within their own communities. The scientists' treatment of the polar bears and their proposed methods of studying the bears simply don't make sense from within an Inuit belief system.[11] Here, we have a pluralistic environment. There are two sets of

11. As Shari Gearheard and Jamal Shirley report in their 2007 article "Challenges in Community-Research Relationships: Learning from Natural Science in Nunavut" there are some places in the arctic where "local Inuit refer to researchers as "siksiks"—"ground squirrels"

ontological categories, and two different knowledge claims arising out of those categories. If we follow Longino and entertain pluralist realism as a conceptual possibility, and follow Harding in refusing to draw a sharp ethnocentric boundary around what counts as scientific knowledge, we cannot make the move to dismiss one group's knowledge claims as unscientific. Furthermore, if we heed Longino, Kellert, and Waters' warnings, and avoid metaphysical prejudice, then we perhaps *should* not dismiss either claim. It remains to be seen whether either set of knowledge claims will be found to be inaccurate, but at present both sets successfully explain the observed phenomena to their respective communities. But then, if we accept pluralist realism as a possibility, it is hard to see how trust can be built here precisely because it is hard to see how these divergent beliefs can be shared.

The importance of a need for shared knowledge claims in order to build trust appears to be reinforced in Inuit self-reports of why they do not trust the Canadian Government's management of polar bears in the arctic. Currently, Inuit from various parts of Nunavut express distrust of the co-management process because they do not perceive that *Inuit Qaujimajatuqangit* (IQ, an Inuit word to refer to Inuit knowledge)[12] is being taken seriously by scientists and policy makers (Lokken 2015). And, to some degree, they are correct. Nadasdy notes that there are often political pressures on ecologists to back up their policy recommendations with scientific evidence rather than indigenous knowledge claims (Nadasdy 2003, p. 376). Nadasdy goes on to observe that the integration of traditional indigenous knowledge claims with Western Scientific knowledge claims is difficult to say the least. There is a legitimate fear that as Western Scientists attempt to understand what indigenous communities are saying, they will distort the traditional knowledge claims badly, perhaps resulting in profound misunderstandings (Nadasdy 2003, p. 369). This harkens back to Longino's observation that contextualization is key to understanding knowledge claims. When one examines a knowledge claim from a context deeply divergent from one's own, it can be difficult to tell what is being said, let alone whether what is being said is inconsistent with one's own beliefs. Indeed, Dale and Armitage note that while marginalization of IQ is happening, it may not be intentionally dismissive. Instead, it is possible that scientific researchers simply do not

in Inuktitut" (Gearhead and Shirley 2007, p. 63). They compare scientists to ground squirrels because the scientists only pop up in the summer months "scurry around on the tundra doing who-knows-what, and then disappear just as quickly" (Gearhead and Shirley 2007, p. 63). Thus, the Inuit appear to have additional reasons to distrust southern Canadian scientists because the scientists are not in the arctic for long periods of time, and do not communicate their activities and objectives clearly to the locals.

12. Dale and Armitage define IQ as "a holistic blend of knowledge, values, practices and beliefs" (Dale and Armitage 2011, p. 445).

know how to include IQ into their policy recommendations (Dale and Armitage 2010). And the problem likely goes both ways. Inuit may also not know how to include scientific knowledge claims into their own understanding of the world.[13] But, if trust is required for successful co-management, and trust itself requires shared belief, then it seems that successful co-management may not be a possibility in this case. And entertaining pluralist realism as a conceptual possibility might seem to exacerbate this problem, as pluralist realism entails that both knowledge claims, arising as they do from divergent contexts, might be reliable representations of reality. Yet each claim might well be one that those from outside the context in which it was generated cannot reconcile with their own worldviews. Fortunately, as I will illustrate, pluralist realism is not the problem here. Instead, it may well be the solution.

5. Trust in the Case of the Polar Bears

Prior to the 2005 round table policy discussion on the management of the polar bears, a fixed quota system was in place whereby Inuit hunters were allowed to harvest a set number of bears every year. In 2005, southern Canadian scientists proposed extending this fixed quota system to counteract their observations of declining polar bear populations. This fixed quota system would have strictly dictated how many bears could be harvested in a given area in a given season. It was initially rejected by the Inuit in Nunavut (Schmidt and Dowsley 2010, p. 383). But, though it was rejected, the round table discussion did eventually lead to a workable, if imperfect, solution, and did begin the work of building trust between these two groups. In order to understand how and why, one must further examine the differences between Inuit and southern scientific ontology.

Schmidt and Dowsley report that an Inuk[14] hunter must not only show respect to other hunters and communities who use the land he hunts on, but must also show respect for the animals using the land.

> For Inuit, hunting responsibilities include a prohibition against taking more than is needed, as well as restrictions on behavior toward, and thoughts regarding, animals … Animals, as sentient beings, are believed to be aware of the proper rules for thinking about, hunting, and using and distributing animal products.

13. It should be noted that there are past instances where IQ was found to be more reliable than scientific knowledge claims. (See, for example, Dowsley 2009). Dowsley notes that in 1996 Inuit hunters and elders reported that polar bear populations were on the decline and called for a lowering of the quota. This was not corroborated by scientists until their survey in 2001, when they found the Inuit were correct (Dowsley 2009, p. 50).

14. Inuk is the singular form of Inuit.

> Therefore, it is not only humans who actually hunt that are involved in the relationship with animals. Rather, the relationship includes the interactions between the individual hunter (or hunting party) and one animal and also the interactions between the human community and the animal community. Furthermore, it assigns to animals the ability to know and respond to human thoughts, intentions and actions (Schmidt and Dowsley 2010, p. 381).

As Schmidt and Dowsley report, this respect that must be shown is heightened again for polar bears, who are thought to be able not only to react to human thoughts and actions, but also to understand speech and to make plans. Thus, polar bears can plan retaliations against humans should they wrong them, which makes polar bears significantly more dangerous than other animals. Because animals are subjects in their own right, participating in a relationship with the Inuit, even a failed hunt (failed in the sense that no food was acquired) can be successful (successful in the sense that the hunter followed proper procedure and thus strengthened his relationship with the animals). Hunting, then, is not only a means of acquiring food. It is a way of strengthening a relationship with another group (the polar bears themselves). Though many of the traditions regarding polar bears are no longer practiced, the Inuit do still treat polar bears differently from other animals (Schmidt and Dowsley 2010, p. 381). Dowsley reports that in 2005, while gathering data on interactions between Inuit and polar bears, she was warned not to be hopeful about seeing a bear. "Hoping to see a bear was considered disrespectful to bears, who appear when they wish, rather than when humans want them" (Schmidt and Dowsley 2010, p. 381). Being hopeful might goad a bear into fulfilling your wish by causing you or someone close to you harm.

All this supports Schmidt and Dowsley's report that the Inuit traditionally view animals in general and polar bears in particular as partners in a relationship, not as objects, and that this tradition still influences the way they think of and categorize bears today. From this perspective, it makes sense that the Inuit would resist wildlife managers from the south trying to implement quota systems. It is understandable that the Inuit would reject scientific results that are based on a treatment of the polar bears as objects, given that the Inuit do not categorize the polar bears as such. They may further interpret scientific investigations as harming their own relationships with the bears, insofar as scientists may fail to say the right words, take the right actions, or think the right thoughts. Finally, banning hunting altogether is banning a practice that the Inuit view as integral to maintaining a good working relationship with the bears. Remember that even when a hunter returns with no game, the hunt can be viewed as

successful. If we accept the conceptual possibility of pluralist realism, then we must be open to the possibility that both groups have experts who are articulating accurate representations of reality.[15] Thus, these Inuit concerns, no matter how much they may conflict with a southern Canadian scientific perspective, must be taken into consideration.

In this case, the Inuit and southern Canadian scientists were able to successfully begin to build a trusting relationship without insisting that either group defer to the other as experts. In 2005, members of various Inuit communities participated in discussions with scientists, government officials and NGO's in order to come up with a solution (Grasswick 2010, p. 405). The scientists advocated for an extension of the existing straight year-by-year quota system detailing how many bears can be harvested in a given year, but such a system was not feasible from the Inuit hunters' point of view. As Schmidt and Dowsley report "[f]rom the Inuit perspective, the best the quota system may do is cover the human side of the hunter-bear relationship and, as constructed by Western managers, on the physical (i.e., consumptive) aspects of that relationship" (Schmidt and Dowsley 2010, p. 383). Yet, even so, one quarter of the Inuit elders did think that the quota system was good for the bears. It was simply incomplete (Schmidt and Dowsley 2010, p. 383). So, after the round table discussions in Nunavut, the following quota system was implemented:

> In Nunavut Territory, a flexible quota system has been introduced which meets the conservation objective of controlling the number of animals harvested, but which differs in both spatial and temporal restrictions from conventional quotas … The flexible system is based on the total allowable harvest from an ecologically defined population of polar bears over a given time period… The system allows communities to bank unused hunting tags and gives some flexibility in over-hunting the quota by allowing communities to "borrow" unused tags from neighboring communities in the same polar bear population area … This system encourages hunters to stay within the quota for the polar bear population areas over the medium term (a 15 year cycle) but allows Inuit hunters to follow their belief systems in day-to-day practice, such as the need to harvest a bear

15. Furthermore, in this case and in others like it, there may simply be no time to gather the data needed in order to falsify one of the two knowledge claims. That is, if the scientists are right, then waiting while they collect the data needed to falsify the Inuit hunters' claims is only wasting more time where the bear populations continue to dwindle. And, if the Inuit are right, in the time it would take to demonstrate this, their relationship with the bears may well be irreparably damaged.

> that presents itself regardless of how many tags were assigned for that community for that year. (Schmidt and Dowsley 2010, p. 384)

The system combines the quota-system recommended by a scientific viewpoint, with the Inuit view of polar bears as subjects participating in a reciprocal relationship with the hunters. There is a cap on the number of bears that can be harvested over a 15 year period. But the system is also flexible, allowing for the reciprocity required in context-dependent encounters with the bears that hunters might have. This system has been in place since 2005. It can hardly be called a consensus, though. At best, it is a compromise, and it is imperfect. Many Inuit perceptions are still that the polar bear population is stable or is increasing. Southern Canadian scientists still perceive the opposite, and fear that the population is in decline.

I do not claim that this flexible quota system illustrates that the Inuit of Nunavut and southern Canadian scientists have formed a solid, trusting relationship. Evidence from recent interviews conducted in various parts of the Nunavut region suggest the Inuit still mistrust the scientists and policy makers, and still dislike the way in which polar bears are being managed (Lokken 2015). But, I argue that this flexible quota system has two virtues: 1) It allows for two differing knowledge claims from two differing ontological positions to be integrated into a plan of action, thus finding a workable temporary solution, and 2) It allows for a continued conversation and continued efforts at trust-building between southern Canadian scientists and policy makers, and Inuit communities. The first virtue ensures that practical paralysis has been avoided, and the second virtue helps safeguard the avoidance of paralysis in the future. While scientists may claim that the changes being made aren't happening fast enough (Clark et al. 2008, p. 349) this solution must be preferable to doing nothing at all.

The example of polar-bear conservation in the Canadian arctic illustrates that entertaining pluralist realism as a conceptual possibility, and thus allowing for multiple representations of reality to be acknowledged and respected in a plan of action, need not result in practical paralysis. The Inuit and the southern Canadian scientists were able to come to a workable plan that was agreed upon by both parties. Scientists view this solution as a temporary one, and it has been and will be revisited in subsequent round table discussion every few years (Lokken 2015). Scientists are hopeful that eventually consensus can be reached, in which both sides have shared beliefs and knowledge claims (Dowsley and Wenzel 2008, p. 186). But, in the meantime they are not waiting for that consensus before acting. Action has been taken without shared beliefs by integrating divergent beliefs into a shared policy.

Although this is compromise, not consensus, I argue that it still demonstrates some measure of trust. In order to find any kind of compromise at all, the southern Canadian scientists and the Inuit had to agree to sit down together and listen to what each had to say. In addition, they had to believe that their opinions would be heard and taken into consideration. Indeed Douglas Clark et al. argue that the most important aspect of polar bear conservation is to build a strong relationship of mutual respect and trust between the Inuit and the southern Canadian scientists (Clark et al. 2008, p. 348). They argue that what is needed is a "more constructive, less divisive dialog about polar bear conservation" (Clark et al. 2008, p. 348). Clark et al. report that this call for dialog based on mutual respect and dignity was also made by Inuit activist Sheila Watt-Cloutier in her 2007 Op-Ed piece for the *Nunavut Times* (Clark et. al. 2008, p. 348).

And in a released statement in 2011, the Inuit Tapriit Kanatami (ITK, Canada's national Inuit organization)[16] reported on a workshop they held on the need to apply traditional aboriginal knowledge to the management of the polar bears: "[a]n important area of focus of the discussions centered on the need to improve relations, communications, and levels of mutual respect and trust between aboriginal knowledge-holders and scientific researchers when it comes to polar bear research and management processes" (ITK October 2011).

This suggests to me that scientists and members of the Nunavut Inuit community recognize the importance of trust to this endeavor, and that they cash this understanding of trust out in terms of mutual respect and good will. They have successfully avoided practical paralysis, but if they hope to continue to avoid it in the future, they need to take measures to continue to build a trusting relationship. Dowsley and Wenzel suggest that the scientists view this trusting relationship as most naturally arising out of a convergence of belief. "Continued monitoring, using both large-scale scientific studies and smaller-scale local observations, will likely result in a consensus over time if communication and cooperation between the two sets of observers are maintained or improved" (Dowsley and Wenzel 2008, p. 186). I want to suggest a different, pluralistic, option.

In what follows, I will begin the work of modeling trust-building while entertaining the possibility of pluralist realism. What I offer is not a complete theory of trust-building, but it is a start.[17] I offer a way of engaging

16. An organization that represents and promotes the voice of various Inuit communities on matters concerning the environment, and other social and political issues the Inuit face (www.itk.ca).

17. Notably missing from this account will be any discussion of power and power imbalance. It is clear that an analysis of power relations with regards to trust-building with

in dialogue and coming to a consensus on *practice* while continuing to diverge in terms of ontological and epistemic commitments. I argue that the relationship between trust and the acceptance of knowledge claims is conditional, but it is *not* biconditional.

6. Trust Without Shared Belief

The cooperation cited above between the Inuit and the southern Canadian scientists is, currently, imperfect. I do not claim that it can ever be ideal. I suspect that, where divergent ontologies and epistemologies are present, neither group will ever feel that the ideal has been reached because neither group will ever feel that their own beliefs are being fully represented and recognized. Neither group can feel entirely excluded from the discussion, either, and that I think is one of the virtues of entertaining pluralist realism as a possibility. Each side gets an important part of what they want here: the acknowledgment that their views may be correct. Thus, though pluralist realism appears to complicate trust-building, I believe it can facilitate it as well.

I offer a few suggestions for how trust-building can continue in the interaction between southern Canadian scientists and the Inuit without maintaining that either must accept the knowledge claims of the other as a condition of trust. Perhaps neither can, as they are too divergent to compare. And perhaps—if pluralist realism is indeed correct—neither *should*, as each claim may capture something correct about the phenomenon that escapes the other. If pluralist realism is correct, there may be advantages to be found in working with multiple knowledge claims that are lost when we demand consensus. What follows are suggestions only. I do not offer a fully developed theory of trust without shared belief, but only a more modest outline of how such a theory might be developed and what some of the elements of the theory might be.

Trust with shared belief is certainly one kind of trust available. But it is not the only kind. I argue that the example of the Inuit of Nunavut and the southern Canadian scientists illustrates that the relationship of trust to belief is conditional, not biconditional. It seems true to say that *If I believe you, then I trust you* (at least with respect to the knowledge claim you are making). It seems true to say that *If I don't trust you, then I don't believe you*. But it does not follow from this that if *I trust you then I do believe you.* I argue that we could also come to trust another without believing her knowledge

and without shared belief is important to understanding how trust works, but such an analysis demands a paper of its own and is unfortunately too large to be tackled in this preliminary work.

claims. Instead, we must develop at least three beliefs of our own in adjudicating the trust worthiness of another:

1) That this other individual—and by extension the community she represents—bears us a good will,
2) That this other individual—and the community she represents—is telling us what from her or their perspective is an honest knowledge claim.
3) That this other individual is an expert—and that this expertise is acknowledged and supported by the community she represents (thus granting her the license to speak for the community).

I will discuss each of these claims in turn.

6.1. Good Will

The first claim is more complicated than it might, at first appear, especially once pluralist realism is included. There are numerous cases of marginalized groups facing an individual in a position of power who, from his own perspective, bears the member of the marginalized group a good will, but ends up doing harm. So, the first claim should be understood in the following manner: *I understand that you, from your perspective, bear me a good will and that it is this good will that is, in part, driving you to share your knowledge claims with me.* This harkens back to Heidi Grasswick's argument that scientists must share their claims with the individuals most at risk of significant harm (Grasswick 2010). To do so is to illustrate that they bear those individuals a good will. But, furthermore, *I understand from my own perspective that the knowledge claims you are sharing with me, and the course of action you propose, do not do me harm*. This second caveat helps to side step issues where the expert is genuine, but mistaken about what will cause harm. I must both accept that you bear me a good will and that the claims you are making seem *to me* to not be harmful. This is still imperfect, and I may make a mistake regarding either the expert's good will towards me, or their ability to avoid inadvertently causing me harm. But trusting is risky, as stated earlier. When I trust someone, I bear the burden of that risk, because I place myself in a vulnerable position.

Scientists are making the knowledge claim that the polar bear population is decreasing. In sharing this claim with the Inuit directly, they hope to send the message to those at risk of significant harm (the Inuit) that an animal with huge symbolic, cultural, economic and social significance may be in danger. However, if the scientists also pressed the need for a straightforward traditional quota system instead of the flexible quota system in place currently in Nunavut, they would not be fulfilling the second caveat of the first part of demonstrating trust-worthiness: They would not be

proposing a plan of action that, *from an Inuk's own perspective* did not cause harm. A straightforward quota system would be viewed as harmful to the relationship between the Inuit and the polar bears. A flexible quota system does not seem to be met with the same reaction. But the flexible quota system could not have been devised unless scientists and policy makers did more than simply share their own knowledge claims. They also had to *listen* to the Inuit of Nunavut. Thus, we can determine that part of what it means to bear me a "good will" is to "show respect for my beliefs." However, respect need not entail adoption. You can listen to me and consider what I have to say without agreeing with me. Still, your willingness to modify a course of action to my satisfaction, such that I judge that it does not do me harm, illustrates this respect, this good will, because it grants me agency.

6.2. Honest Knowledge Claim

The second point related to trust-building aims to capture our intuitions that trust-building has something to do with reliable knowledge claims. But it aims to do so in a way that respects and allows for pluralist realism. As stated above, if we accept pluralist realism, then we also must accept that there are (or could be) multiple knowledge claims that accurately capture reality (or parts of reality) because of the complexity of reality itself. But there is still something intuitively correct about the claim that "If I bear you a good will I will tell you the truth." Of course there are cases in which I might think a lie is better for you. In those cases, it doesn't seem *prima facie* that I bear you a good will. Instead it seems that I wish my own will to override yours. I deceive you in order to protect you, which is another way of controlling you. As Kant would say, if I lie to you, then I do not show you respect because I do not grant you agency (Kant, 1993). Deceiving is a manipulation (however well-intentioned) and shows a lack of respect. One who is being lied to, even if the lie is for one's own good, has *prima facie* good reason not to trust the deceiver.

But in the case of pluralist realism, it may well be that I tell you something that I accept as true but that you regard, nonetheless, as false, questionable, or unintelligible. In these cases, I am not lying to you, or attempting to deceive you. I simply see the world differently. So, I argue that another way to build trust in the case of pluralist realism is to *tell one's interlocutor what one believes to be the case*. But, you need not accept my knowledge claim as your own in order to believe that I am speaking truthfully from my perspective. Therefore, you need not believe *what* I believe in order to trust me. If you believe *that* I bear you a good will, that the plan of action I suggest is one I think will benefit you (and you think will not do you harm), that I have devised this plan of action based on what I

believe to be the case, and that I am recognized as an expert on such matters by my community, then you can trust me without accepting my knowledge claim.

The case of polar-bear conservation in the Canadian Arctic illustrates this point as well. Neither side accepts the ontological structures of the other. Thus, neither side accepts the other's knowledge claims about what kind of entity a polar bear is. Finally, neither side accepts the knowledge claims made by the other with reference to whether the polar bears are thriving or are in decline. Again, these claims are supported by investigations/observations done with reference to background beliefs about what kind of entities polar bears are. Thus, divergent ontologies lead to divergent investigations and divergent knowledge claims. But—this is the important part—neither group has to accept the knowledge claims of the other in order to accept that the other really does believe what they are saying and really does think that the course of action they are proposing is the best one. Once this acceptance is reached, a compromise can be found.

6.3. Expertise

Finally, there is the issue of expertise. In choosing whether to trust you, while I may not be choosing whether or not to *believe* you, surely I care about whether your own community believes you, and whether you are an expert in your field. That is, in matters of epistemic trust, even when entertaining pluralist realism as a possibility, expertise still matters. It is not enough that the person before you bears you a good will and is honest; the person must be recognized by their own community as someone who is knowledgeable. While the southern Canadian scientists may not accept the knowledge claims of the Inuit elders and hunters, they need assurance that the elders and hunters do speak with the authority of the community they represent, and that they are trusted as experts within this community. This is to say, the scientists should not simply pick and choose who to listen to in Nunavut. Trust building would not be possible if the experts were not engaged with directly. Of course, in adjudicating whether or not someone is an expert in their community, I may also wish to consider whether the community itself—the body of individuals who adjudicated what is required in order to be an expert, and has recognized the person before me as meeting those requirements—is trustworthy. This harkens back to Scheman's point with regards to the Tuskegee experiments.

One might object that trust-building has no place in an examination of inter-community policy making. It might seem that a procedural account of social knowledge like Longino's account is more appropriate here precisely because such a procedural account removes the need to build trust. Thus, such an account, it might be hoped, removes biases, resulting in

objective knowledge claims that we can build policy on without having to worry about whether or not the holders of such knowledge claims, or the communities in which such knowledge claims arise, are trustworthy. So, one might object to my whole project as being one that is better modeled by social accounts of knowledge, rather than by accounts of epistemic trust.

But, I maintain that trust-building is vitally important to these co-management projects, because of their inter-community collaborative nature. Longino's four norms of Critical Contextual Empiricism (Longino 1990, pp. 76–9; 2002, pp. 128–131) dealt mainly with knowledge production within a community of scientists who share many background assumptions and methodologies. It is worth noting that Longino's 2013 book, which seeks to examine inter-community interactions between different groups of scientists studying behavior, makes no mention of the Four Norms of Critical Contextual Empiricism as operating *between* these different communities of scientists. And, indeed, it is not clear how those four norms would help the various scientific disciplines she studies arrive at a consensus regarding either aggression or sexual orientation. Furthermore, given the possibility of pluralist realism, it is not clear that consensus is desirable in these cases. Thus, nothing I have said here should be viewed as a challenge to Longino's original theory of science as social knowledge. The original theory, complete with the Four Norms, applies in an intra-community setting. It is not clear that it applies, nor that it is desirable that it should apply, in an inter-community setting. Thus, I argue that it is models of trust, rather than procedural models of knowledge production, that are best equipped to examine cases like the co-management of polar bear conservation. The legitimacy of the use of models of trust to examine these policy discussions is further strengthened by the insistence, noted above, from both the Inuit and the scientists that trust and mutual respect are fundamental to the success of this project, and the research illustrating the importance of trust to successful co-management strategies in general. Finally, it is worth noting that procedural accounts of knowledge production no doubt have something to say about designing and facilitating successful round table discussions. However, even here, the participants involved must trust that the procedures are fair, and that all present will abide by them.

I argue that adopting pluralist realism as a conceptual possibility could facilitate the continued building of this trust between the members of the round-table discussions, precisely because it does away with the need for anyone to defer to another's knowledge claims while disallowing anyone to be dismissive of another's knowledge claims. It does so in three ways: 1) because all the knowledge claims presented might be correct, none can be dismissed outright, 2) because all knowledge claims might be correct

simultaneously, no one should be required to defer to someone else on the grounds that a claim is unscientific, and 3) because it can be difficult, or perhaps impossible, to integrate divergent knowledge claims from ontologies different from one's own, and doing so risks eroding or misunderstanding the original claim that was made, such integration is not a requirement. Pluralist realism allows us to make sense of how these three statements could be possible in a way a monist realist position does not. Thus, it frees us to listen to each other without needing to be on the defensive regarding our own beliefs.[18] Instead of attempting to integrate the knowledge claims *themselves*, the 2005 round table discussion found a way to build a policy that respects both sets of knowledge claims to some degree. The policy, in other words, is supported by both claims about what type of entity a polar bear is, even though each claim may well be divergent, or even inconsistent, from the other. This is the direction I suggest co-management round table discussions take. It is the best model for trust-building in an epistemic context because each party is granted what they want: for their knowledge claims to be listened to, respected, and integrated into the policy. Thus, each party's beliefs are shown respect, and each party is granted agency. In other words, pluralist realism opens space to demonstrate that one bears one's interlocutor a good will. Finally, while one must adopt the policy, one need not adopt all the knowledge claims that informed the policy. Thus it is possible to build trust without shared belief.

7. Conclusion

In this article I have examined whether it is possible to build a model of epistemic trust while entertaining pluralist realism as a possibility. I have argued that it is possible to build trust without endorsing and accepting the knowledge claims of the trusted individual or group. The relationship between trust and belief is a conditional one. It is not a biconditional one. Instead, I argue that trust entails believing a trusted individual or group bears one a good will, is honestly sharing their beliefs, and is an expert in their respective community. While this may sometimes entail also believing the knowledge claims given by those we trust, we can also simply believe that the knowledge claims given are accepted as accurate by them and their community (though not by us) and that they intend us no harm (and that we believe their plan of action will do us no harm). Thus, I conclude that, even if pluralist realism is endorsed, it is still possible to build trust

18. This is not to say one should not be critical of the knowledge claims presented by one's interlocutors. As discussed above, one needs to be sure that one's interlocutor is recognized as an expert by their community, and that the institution that confers expertise is one that is unbiased.

between communities with differing ontological commitments. Indeed, I think pluralist realism may actually be an asset for trust-building. The case of polar bear conservation in the Canadian arctic illustrates two groups who have successfully begun this delicate process of trust building. I believe that, by mindfully endorsing pluralist realism as a conceptual possibility, this process could be facilitated even more. And I wish them success in the future.

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