

Kendig, Catherine (2023)  
“Finding realism in a plurality of situated scientific perspectives”

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This commentary is for realists of all stripes, antirealists, agnostics, and label-avoiders unconvinced *Perspectival Realism* offers anything for them but who care about science, multiculturalism, and inferential reasoning. Michela Massimi provides one path that might possibly lead you all back. *Perspectival Realism* (hereafter *PR*) explains how science works from the inside out by exploring problems of inference from within histories of scientific experimentation including those in quantum physics, climate crises, and indigenous science. In doing so, she provides means by which realist commitments about data, phenomena and natural kinds are formed and are conceivable only insofar as they are from a human point of view.

1. What sort of realism is perspectival realism, *really*?

*PR* rejects many central commitments associated with traditional accounts of realism. It eschews the mind-independent claim that is often tethered to many realist accounts. For Massimi, mind-independence is not just resisted but inverted in her approach to perspectivist realism. Mindedness—or rather a fully human and culturally situated mindedness—is required for realism. A world that is real is real *because* it is part-made by our human points of view rather than one whose existence depends on something independent from us. These historically and culturally situated perspectives provide access to what is possibly real (161-162). This is an accounting of reality that focuses on the processes and justifications that lead to forming realist commitments to the data points, measurements of phenomena, and culturally situated practices like those I’ve referred to as *kinding* and *ontologizing* rooted in inextricably situated life histories, rather than in a world beyond our grasp (Kendig 2016a, b, 2020).

*PR* traverses philosophical landscapes also traversed by fellow self-identified realists and anti-realists alike. But rather than seeking justifications for no-miracles arguments, or defences of PMI, Massimi seeks new ways of answering questions about the nature of knowledge assertions such as those we state about the veridicality of scientific representations and how it is that we can justifiably assert belief in the sorts of things we think are in the world from our particularly situated points of view. For instance, in Chapter 2, representation is considered *representation-as* something whose reference is always represented from a specific point of view which shapes the content of it by what it leaves out. The puzzle to be solved is how is this perspective-shaped representation is one that still provides a “window on reality”? (39-40). Massimi talks of these perspectival representations and later models as “acting as” though they were blueprints and other times that “they are” blueprints. The “acting as” may make table-thumping realists worry that perspectivism has too much of a human face in the reflections of it.

Truth is contingent on us, our models, and our goals rather than a truthiness that is always beyond our grasp. The truth-conduciveness of inferences comes from and is grounded in models that are used by teams of scientists to reliably explore what is possible.

What grounds reality on Massimi's account is more than just pragmatism as *PR* pursues experimental questions that seek to trouble the relationship between reality and the perceiver of it with the aim of capturing the constitutive format of the phenomenological perspectival nature of reality. This may perturb pragmatists and perhaps puzzle realists especially those of the *out-there* sort of realism, but it may also delight those who, like me, think that knowing what it means to *be* or *made* real is often underpinned by metaphysical and ontological commitments.

*PR* draws from many philosophical traditions but can be helpfully understood as a Kantian-inspired realism that is constituted by—rather than divorced from—the humanness of our perspectival representations of it. What this means to Massimi is that we approach ontology through phenomena because it is phenomena that realists are realists about. Phenomena are what make perspectival realism really realism—events that are modally robust and therefore stable across many different ways inferences and data are used to capture them by us.

## 2. A naturalist, anti-foundationalist, anti-essentialist account of kinds

While the first half of *PR* focuses on providing motivation for and explication of the phenomena-first approach to perspectival realism, the remainder is devoted to presenting an alternative view of natural kinds that falls out of this: Natural Kinds with a Human Face (NKHF). NKHF are kinds that are the result of collaborative work and the interlacing of different historical and cultural perspectives from which to view reality, as it is.

Those interested in preserving, eradicating, or even queering natural kinds will find much in Chapters 7-10 of interest and use. NKHF has much to recommend it, as an anti-essentialist, anti-foundationalist alternative to traditional natural kinds. But that does not mean that there will be wholehearted agreement with the view in its entirety. Even perspectival realist superfans like me will find points of disagreement. The remainder of this commentary will include some of my own questions and critical comments. These are invitations for Massimi to correct my misconceptions, elaborate further on her motivation for the views laid out in *PR*, and continue some of the conversations we've already started on adjacent topics.

In Chapter 9, Massimi asks, rejigging Neurath's antifoundationalist simile for knowledge as a more-than-capable literary figure for the fixing-up process required to make natural kinds inferential: "what glues the planks of Neurath's Boat together?" (287). The explanation she offers is that the planks are held together by the same sort-relative sameness relation that they were sorted with and so what it means to be a realist means being committed to contingentism as well as perspectivism. She doesn't say what

the sameness relation is for Neurath's Boat exactly. But she instead offers an account of the contingentism that underpins her NKHF that, while illuminating, is also puzzling:

- “(1) A natural kind *K* is identical to some historically identified grouping of phenomena  $G = \{P_1, P_2, P_3, \dots\}$ .
- (2) A natural kind *K* *could* include phenomena *different from* those actually included in the historically identified open-ended grouping of phenomena  $G = \{P_1, P_2, P_3, \dots\}$ .
- (3) Yet there is a sense in which the phenomena defining the natural kind *K* *could not* have been *that* different from the historically identified open-ended grouping of phenomena  $G = \{P_1, P_2, P_3, \dots\}$  that *K* is actually identified with” (291-92).

With (1) and (2), I agree. Natural kinds are historically identified, and phenomena not currently included in the natural kind could have been. What I disagree with is (3). The root of my disagreement is based on the same thoroughgoing perspectivism that I think motivates Massimi's NKHF but my intuitions are different. That is, I find it more reasonable to expect that at least some of the phenomena that were shaped by choices based on very different valuations and ontological commitments of differently situated communities would be very different than those historically identified. This perspectivism, like Massimi's, takes *how* histories of human kinding activities are formed seriously and are a necessary route by which to understand what we mean by natural kinds. As such, my point of disagreement is with Massimi's “could not have been *that different*” claim.

If NKHF is thoroughly perspectivist, then surely it necessitates what is indicated: humans. Humans with not just different faces but differently abled bodies, different experiences in the world, different interactions with other natural kind interlocutors. How humans interact in, with, and through the world do so in different, sometimes wonderful sometimes horrific ways that impact the valuation of what should and should not be conceived of as kinds or *kinded*, and the choice of practices employed to identify phenomena for putatively natural kinds (cf. Kendig and Grey 2021: 364-372). Natural kinding activities do not comprise a univocal set of practices among differently situated kinders with different goals of kinding, different worldviews, and different ways of being in the world. The assumption that kinding activities are univocal across communities of investigators would make the claim that *the phenomena defining the natural kind could not have been that different* from those historically identified a lot easier to justify. But to be sure, this is not the view set out in *PR*.

This brings me to my second set of questions: how does perspectival realism license the “could not have been *that different*” claim? Following on from this, a related question has to do with the tension in holding 1), 2) and 3). If natural kinds are always open to revision—since they are historically contingent, evolve and are in some ways different at different times than how we understand them now—does this openness also apply to the status of those things that we talk about as natural kinds? What I mean is, does the openness of natural kinds include the possibility that those things we talk about as natural kinds end up not being ascribed the status of natural kind at some future time? For Massimi, the answer is “yes”, there are some kinds that were once those in the making that turned out to be not as (nomologically) resilient as others (266-68).

Although I agree with Massimi that historical groupings of phenomena have and will be used to define any natural kind will always outstrip those to which natural kind status is

conferred. Her examples, including that of Urey's discovery of the isotope deuterium oxide, heavy water, show dramatic historical changes to what phenomena were and were not considered to be phenomena defining the natural kind water. Changes that seemed to occur as the result of adoption of different conceptualizations of what kind of thing water was by investigators. Changing the natural kind water to include something that is poisonous when ingested is a dramatic addition to the grouping. I'm still wondering what, on Massimi's view, are the family-relation-type sameness relations she refers to in grouping them together as being of the same sort. Massimi's answer is that natural kinds are Spinozian sortals that issue count rules and provide measures for how two things are the same sort as each other. While reference to sortals is intended to illuminate the nature of their conspecificity, it provides no obvious justification for the *that different* claim and so no reason for me to give up my view that it is more reasonable to expect that at least some of the phenomena that might have been included as kind-defining but were not, might have been *very different* than those actually used. This seems reasonable if very different valuations and ontological commitments, developed in different situated communities, shaping the way these phenomena were perceived as potentially kind-identifying in equally different ways. My last question is more of an invitation to Massimi to further motivate the *that different* claim. My hope is that this might include: an account of how the ontological commitments investigators hold underpins the choice of phenomena they use to define natural kinds, what roles these choices play in making inductive inferences based on the resultant natural kinds successful, and how different possible historical natural kind-defining phenomena identified by investigators with differently situated perspectives *could not have been that different* from those actually identified by current investigators.

Chapters 10 and 11 flesh out a partial answer as they specify the role perspectivism plays in considering how natural kinds can be differently conceived of by communities. But in these, the claim of realism—that there is one science; remains in tension with understanding science as the bringing together of different cultural contributions. Chapter 11's "interlacing of perspectives" offers a multicultural approach to knowledge integration. The aim is to track a growing body of knowledge in a way that brings diverse contributions together, interlacing different knowledges whilst retaining the cultural embeddedness and historical situatedness of the communities from which they came.

I conclude with some final comments on the final chapter as a teaser to invite the still reluctant antirealists as well as others still reading this. For those unfamiliar with perspectival realism or those who have given up on realism (whatever flavor), perhaps one of the more surprising topics in *PR* will be a discussion of the social function of philosophy of science and the duties and rights attached to scientific knowledge. Cosmopolitan obligation and perspectival pluralism are, as Massimi writes, "not just desirable features of scientific methodology, useful for explanation and modelling... [they are] the very engine of how scientific knowledge claims get refined and revised over time, and of how reliability accrues" (367). One might wonder what cosmopolitanism has to do with NKHF. I attempt to explain by returning to Neurath's irresistible motif, with the full view from *PR*. What seems for Massimi to hold the planks together, doesn't really sound like glue (or even sort-relative sameness relations), but what makes Neurath's Boat continuously seaworthy. It's the many different shipmates, the whole crew, shipbuilders, longshoreman, and extended coastal communities, their

individual and collective attentiveness, care, and above all the different perspectives that make it make sense to them all differently.

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