

A Naturalistic Account of Intuitions

1. Kornblith on the Proper Role of Intuitions

Kornblith is a naturalist who rejects both the *a priori* and conceptual analysis:

- *rejection of conceptual analysis*: The proper object of philosophical inquiry is natural phenomena in the world, not our concepts of those phenomena: “. . . epistemologists ought to be concerned with the nature of knowledge, not the concept of knowledge; the proper subject of ethics is the right and the good, not the concepts of the right and the good; and so on” (“The Role of Intuition,” p. 133).

Just as chemists would be ill-advised to study their concept of an acid, since that concept might demonstrate *error* or *ignorance*, so too philosophers are ill-advised to study their concept of knowledge (or causation, or moral permissibility).

- *rejection of the a priori*: Intuition should not be construed as “*a priori* intuition”; the investigation of the phenomenon of knowledge (or causation, or moral permissibility) is a wholly empirical investigation analogous to the scientific investigation of natural kinds.

Kornblith’s vision for how philosophy should proceed is motivated by a certain analogy:

the rock collector analogy:

1. The rock collector begins by gathering obvious samples of some interesting kind of stone.
2. She investigates these samples to determine if they share some deep, underlying properties that explain why they have the superficial properties that initially attracted her attention.
3. If they the samples do possess such an underlying theoretical unity, then the rock collector deems them to constitute a natural kind, and she can propose increasingly more and more sophisticated theories of what it is that links these samples together.
4. As her theorizing progresses, the rock collector’s judgments about what sorts of properties are relevant to classification (for example: hardness, but not size) become increasingly theory-mediated.
5. As her theorizing progresses, the rock collector might also deem that some of her initial judgments about what constitutes an obvious sample of that type of rock were mistaken.

Kornblith thinks that philosophical investigation of knowledge (or causation, or moral permissibility) should proceed in much the same way:

philosophy as investigation of natural kinds:

1. The philosopher begins by gathering (intuitively) obvious samples of philosophical kind X.
2. She investigates these samples to determine if they share some deep, underlying properties which explain why they have the superficial properties that initially attracted her attention.
3. If they the samples do possess such an underlying theoretical unity, then the philosopher deems them to constitute a natural kind, and she can propose increasingly more and more sophisticated theories of what it is that links these samples together.
4. As her theorizing progresses, the philosopher’s judgments about what sorts of properties are relevant to classification as an instance of X become increasingly theory-mediated.
5. As her theorizing progresses, the philosopher might also deem that some of her initial intuitions about what constitutes an obvious sample of X were mistaken.

Several features of this methodology:

- The philosopher’s initial intuitions about what constitutes an instance of X have some evidential value, but once theoretical understanding of X begins to take place, those intuitions “carry little weight unless they have been endorsed by the progress of theory” (“The Role of Intuition,” p. 135).
- Thus “appeal to intuition early on in philosophical investigation should give way to more straightforwardly empirical investigations of external phenomena” (ibid.).
- After theorizing has progressed, intuitions about merely imaginable cases need not be accounted for, just as rock collectors need not account for merely imaginable rocks with a certain combination of color, hardness, malleability, etc. in their taxonomies.
- Appeals to intuition do not completely disappear; they simply become more theory-mediated.
- If it turns out that samples of philosophical kind X do not share any underlying theoretical unity, then X is not a natural kind, and philosophical investigation of it is not possible.

Kornblith’s reply to Bealer’s argument from terms of epistemic appraisal:

Epistemological terminology earns its keep in just the way that chemical, biological, or physical terminology earns its keep: by being part of a successful theory.

Examples of philosophical work that does not proceed by means of appealing to intuitions (“Appeals to Intuition and the Ambitions of Epistemology,” pp. 14–15):

- Descartes’ arguments for dualism from the *Discourse on Method* that appeal to certain features of human language which are unamenable to explanation in terms of physical mechanism.
- Chomsky’s empirically driven arguments for the innateness of a language-acquisition faculty.
- Fodor’s arguments that a large range of theories in cognitive science can only be made sense of if we suppose there to be a language of thought.
- Burge’s argument that Marr’s theory of visual perception is only a good explanation if we assume that the content of the representational states involved is construed anti-individualistically.

Worry: although most of these arguments *appeal to empirical premises*, it is far from clear that each of them *constitutes a wholly empirical investigation of a natural kind*.

2. Three Grades of Naturalistic Involvement

Three different sorts of projects that have fallen under the label “naturalized epistemology”:

radical naturalized epistemology: Traditional epistemology should be replaced with the empirical study of the relation between scientifically described sensory input and the resulting cognitive output in human subjects.

less radical naturalized epistemology: Epistemology should be continuous with the natural sciences, in the sense that the methods of epistemological investigation should be fundamentally the same as the methods of scientific investigation.

moderate naturalized epistemology: Epistemology should be continuous with the natural sciences, in the sense that results from the natural sciences should inform our epistemological theorizing about the proper criteria for justified belief, knowledge, etc.

Kornblith clearly wants to practice *less radical naturalized epistemology*. However, there is a continual danger that he slides into *moderate naturalized epistemology*, and moreover does so in a way that makes crucial use of appeals to intuition—thus raising all of the methodological issues about the proper grounding for intuition that he sought to avoid.

3. Kornblith's Methodology in Practice

In "Knowledge in Humans and Other Animals," Kornblith applies his naturalistic methodology to the study of knowledge itself (rather than our concept of knowledge).

He begins by noting that in the work of *cognitive ethologists* such as Carolyn Ristau (in her work on piping plovers) and Louis Herman & Palmer Morrel-Samuels (in their work on dolphins), attributions of *knowledge* to the animals in question seem to play a crucial role in the adequacy of the explanations being offered.

Taking these attributions seriously, and working under the assumption that these theories are good theories, Kornblith believes we can infer the truth of *reliabilism about knowledge*. He appears to argue as follows:

Kornblith's empirical argument for reliabilism:

1. Ristau's and Herman & Morrel-Samuels' explanations of animal behavior and of why that behavior is conducive to species fitness involve attributing knowledge to the animals in question. [*premise*]
2. Ristau's and Herman & Morrel-Samuels' explanations are the best ones available. [*premise*]
3. Their explanations require that we attribute knowledge to the animals rather than some other intentional state. [*premise*]
4. Their explanations require that knowledge is reliably produced true belief. [*premise*]
5. So, knowledge is reliably produced true belief. [*follows by inference to the best explanation*]

Some places to be worried about (Kornblith's use of) this argument:

- Premise 4 is the most contentious premise, but it is barely argued for. In particular, Kornblith slides very quickly from talk of *not merely accidentally true belief* to talk of *reliably produced true belief* (p. 331), and later from talk of *information-processing systems* to talk of *reliable belief-forming processes* (pp. 332–333).
- Kornblith's defense of premise 3 appears to be little more than an appeal to authority.
- A non-reliabilist might claim that premises 3 and 4 are in tension with one another: insofar as what is really required for the explanation to be a good one is that the animals have reliably produced true beliefs, the explanation doesn't require that we deem beliefs of that sort to be knowledge.
- It is controversial whether having processes of belief formation that tend to produce *true* beliefs really best conduces to survival.
- The argument (on its own) doesn't license the conclusion that *every* case of knowledge is a case of reliably produced true belief. (There might be two kinds here: *animal knowledge* and *human knowledge*.)
- The defense of premises 3 and 4 appears to be a purely armchair enterprise.

4. How Could Knowledge Be a Natural Kind?

Following Richard Boyd, Kornblith takes a *natural kind* to be a *homeostatic cluster of properties*: a cluster of properties which, when realized together in the same substance, work to maintain and reinforce each other, even in the face of changes in the environment.

Example 1: Homeostasis in living organisms (clustered properties: having a body temperature in such-and-such a range, having such-and-such salt and ion levels in the blood, etc.).

Example 2: H₂O (clustered properties: having two hydrogen atoms, having one oxygen atom, and having such-and-such a bond between those atoms).

Example 3: Quarks (clustered properties: mass, charge, weak isospin, flavor, etc.).

Standard metaphor: natural kinds "cut nature at its [theory-independent] joints."

There are many, many places to be puzzled by this definition of a natural kind:

- What does it mean for *properties* to work to maintain and reinforce each other?
If all this means is that the properties in question tend to be co-instantiated despite changes in the environment, the definition would appear to count too many things as natural kinds.
If the (thing instantiating the) properties must actually contribute somehow to the stability of the property cluster, then quarks no longer seem to count as homeostatic clusters of properties.
- When discussing biological or chemical natural kinds, Kornblith often slips into talk of there being certain *underlying/microscopic/unobservable properties* that are responsible for (or help explain) the *superficial/macrosopic/observable properties* of that kind. However, the microscopic vs. macroscopic and observable vs. unobservable distinctions are inapplicable in the case of philosophical natural kinds. And the superficial vs. underlying distinction seems to amount to little more than the *explanans* vs. *explanandum* distinction.
- Why couldn't there be a natural kind whose underlying nature consists of a single property?
- A cluster of properties can be more or less homeostatic, depending on the degree to which it is stable. But then the homeostatic cluster account seems to be in tension with the "joints of nature" picture motivating our talk of natural kinds: what threshold of stability do we count as stable enough for a given cluster of properties to qualify as a natural kind?
- In general, it is far from clear how we are to apply this account to scientific kinds that are not spatiotemporal things, such as *heat, gravity, chaos, natural selection*, etc.
- Moreover, it is also far from clear how to apply the homeostatic cluster account to Kornblith's own example of a philosophical natural kind, namely knowledge. Do the properties of being a belief, being true, and being reliably produced somehow work to maintain and reinforce each other?

However, even if there are problems with Kornblith's Boydian conception of a natural kind, this doesn't rule out the possibility that there is another, better conception that he can avail himself of.

A deeper problem: Theorizing about the best account of natural kinds seems to proceed in a largely traditional, *a priori* manner, and moreover seems to make crucial use of appeals to intuition. (Shades of Bealer's Starting Points Argument.)

5. Does This Leave Out the Normative?

A common objection to radical naturalized epistemology: It calls for us to purge epistemology of any normativity, and so involves changing the subject.

One might ask whether Kornblith's brand of *less radical naturalized epistemology* faces the same worry.

Kornblith's reply: Our explanation of what knowledge is also explains why knowledge is worthy of pursuit. In particular, reliably produced true beliefs conduce toward a species' fitness and help it fulfill its biologically given needs, so knowledge is instrumentally valuable.

Two problems with this line:

1. This is like saying that the science of candy engineering is a normative discipline because we are able to realize that its products are worth pursuing, or that nuclear physics is a normative discipline because we are able to realize that nuclear explosions should be avoided.
2. Kornblith's response depends upon the judgment that the fulfillment of one's biological needs is a worthy pursuit, and upon the judgment that things which conduce toward that end are themselves worthy of pursuit. Moreover, these judgments seem to be the ones doing all the work here, and it is far from clear how to establish them without appealing to intuition.