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OU Epistemic Goodness Conference

On Understanding (with some Epistemic Goodness at the End)

I. Understanding

the primary aim of science?
an intrinsic epistemic good?

This paper will focus mainly on the nature of understanding rather than its value

Also, focus on our understanding of the natural world, rather than other sorts of understanding (e.g., linguistic understanding)

Three main questions, concerning:

- a. the object of understanding
- b. the psychology of understanding
- c. the normativity of understanding

(for comparison, think of the JTB account of knowledge)

II. Objects of Understanding

Understanding can apparently take a variety of objects, corresponding to the variety of grammatical complements that are available to the verb “understands.” Consider, for example, the following sentences:

- (1) Mary understands that her class starts in an hour.
- (2) Mary understands her desktop printer.
- (3) Mary understands why the coffee spilled.

Compare with knowledge

- (4) Mary knows her printer.

Can plausibly be read in three ways: (a) is acquainted with/can recognize; (b) knows true things about; (c) know-how

Know-how seems to suggest an ability to manipulate; hence the object of know-how plausibly must be the sort of thing that can *be* manipulated, or has a certain structure with interdependent parts

Objects of understanding/know-how

some possibilities: (a) concrete, (b) abstract, (c) a pluralist view

Understanding why

object not so clear; a possible reduction:

(i) Mary understands why the coffee spilled

reduces to

(ii) Mary understands (or, alternatively, knows) that p, where p is a correct answer to the question “Why did the coffee spill?”

One benefit of this proposal is that we now have a natural object for instances of understanding why such as (3): namely, the proposition p, where we can suppose that p is something like *that the coffee spilled because of the jostling*.

Some problems

Possessing this knowledge seems compatible with an inability to answer a range of “what if things had been different?” questions that intuitively go along with the state of understanding why. (vagueness here)

some additional cognitive work therefore seems needed

A suggestion

cases like (3) [i.e., cases of understanding why] are more similar to cases like (2) [i.e., cases of “systemic” or structural understanding] than it might initially seem. In particular, cases along the lines of (3) seem to involve structures or systems as well.

III. Psychology

The psychology of understanding is multi-layered: seems to be an element of assent; also an element of “grasping” or “seeing”; additional complication arise when we figure in conditional, or qualified assent

“Grasping” or “seeing”

“Grasping” a structure seems to bring into play something like a modal sense or ability—that is, an ability not just to register how things are, but also an ability to anticipate how certain elements of the system would behave, were other elements different in one way or another.

IV. Normativity

subjective v. objective appropriateness

objective appropriateness conditions are sometimes thought to be less strict when it comes to understanding; in particular, that there can be “lucky” understanding in a way that there cannot be “lucky” knowledge

Kvanvig Comanche case; Pritchard fire case

Some responses

- a. perhaps there can be lucky knowledge too, at least in a weak sense of knowledge
- b. if this critique shows that understanding is not a kind of knowledge, then it should show that “know-how” is not a kind of knowledge either; but this is absurd; one conclusion is that there seems to be some kinds of knowledge where aetiology matters, and other kinds where it does not
- c. we can grant that it is lucky that you ended up with this information; but that you identified certain dependency relations rather than others is not lucky; it is owing to an ability on your part to identify genuine relations of dependency, given certain information; compare with “lucky” mathematical knowledge

V. Epistemic Goodness

is understanding really intrinsically worth pursuing, from a purely epistemic point of view?

or: why should we think that a *special* sort of epistemic value resides in understanding—value that seems to be lacking in phone book knowledge, grass counting knowledge, and the like (in other words, instances of apparently “trivial” knowledge)?

first: not clear what a “purely epistemic point of view” comes to; perhaps: a “disinterested” point of view, or the point of view of curiosity? but curiosity, at least, often seems far from disinterested

that aside, some suggestions about the value of understanding:

- a. practical value: understanding, as characterized above, clearly brings with it great practical value—in particular, the possibility of manipulating one’s environment to bring about what one wants

b. cognitive labor/cognitive achievement idea: perhaps the particular epistemic value of understanding comes from the cognitive labor one puts into it; the sort of labor one does not find in other cases of knowledge; the value therefore comes from the difficulty (Aristotle) involved in “seeing” or “grasping”

but: why can't there be instances of understanding that lack this labor? and why can't there be instances of apparently trivial knowledge that require a great deal of labor?

c. intellectual pleasure: perhaps the value comes from the particular pleasure one finds in understanding; according to Allison Gopnik, the *Aha!* experience one experiences when one achieves understanding is similar to an intellectual orgasm—and this sounds like an intrinsically good thing, doesn't it?

but: seems that this feeling of pleasure—or something like relief or satisfaction—comes at the end of inquiry in general, and not just at the end of explanatory inquiry; so, could likewise apply to phonebook cases

A suspicion

the difference between cases of “trivial” knowledge and cases of “higher” knowledge—such as understanding—looks like it is breaking along the following lines:

trivial knowledge: derives primarily from perception, or testimony, or memory

higher knowledge (or perhaps, intrinsically good knowledge): derives primarily from reason (or rational insight, etc.)

but: is this a conclusion we want to accept? why are the deliverances of reason more valuable than the deliverances of perception or memory or testimony?

some (quite traditional) possibilities:

a. the deliverances of reason have to do with necessary (perhaps just nomologically necessary?) truths, rather than contingent ones; since necessary truths are more noble than contingent truths, the knowledge inherits its value from the nobility of its objects

b. the deliverances of reason are more certain or secure; but is security really an epistemic value? why isn't it a practical one?

c. reason is related to greater autonomy (less dependence on how the world is, or the information we receive from others, or in general the favors of nature); but is autonomy really an epistemic value? why isn't it a moral one?