Ability and epistemology

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1 Modality and epistemology

Non-actual possibilities, whatever they are (concrete particulars, abstracta), are *non-actual*. So how could we learn and know about them?

This can be seen as a *puzzle* about modality; an argument for *skepticism* about modality; and/or for *anti-realism* about modality.

Melissa: if you're talking to an anti-realist/skeptic about modality, ask them if they can run a four-minute mile.

There's something about ability that makes the skeptical and anti-realist conclusions seem especially farfetched. I just *can't* run a four-minute mile, and I know that; there's no question about this, and I use facts like this to reason all the time.

Moreover, it seems like knowledge of our abilities is *basic* to our conception of ourselves and *easy* in some sense; this intuition is supported by developmental data showing early acquisition of agentive meanings.

So how do we know about our abilities?

2 Vetter on the epistemology of ability

Vetter's interest is in our knowledge of general ('robust') abilities.

One hypothesis: our knowledge of general abilities arises from the ability to *generalize* over our knowledge of *specific* abilities. If general abilities are generic specific abilities, this seems like a natural hypothesis, and then we'd want to study these separately.

Vetter, however, wants instead to tackle the question directly, though the picture that emerges isn't so different.

2.1 Perception

One source of knowledge about modality: 'visual perception discloses to us not just shapes and colours, but also what we can do with objects. Thus we see trees as climbable, mugs as reachable, coffee as drinkable'

Certainly it seems like you can see that a vase is breakable, etc. Though would this answer the challenge? (If someone asks how we know about the external world, is it enough to say 'by perception'? Is there supposed to be some deeper philosophical question here?)

Perception can thus reveal possibilities for action vis-à-vis objects, i.e., *affordances*.

○ But: these abilities are extrinsic, labile, and situation-dependent; it is not clear how perception of affordances helps us know about abilities like riding bicycles in general, climbing trees, singing, counting.

○ Could we be *generalizing* from affordances? Not for object-independent abilities like singing etc.

○ Anyway, this gets things backwards: we know the tree is climbable partly because of knowledge of our own abilities.

> Well, we might perceive the tree as climbable in general but not by us.

> however complex abilities may seem from the standpoint of logic and semantics, our epistemology of them should allow for (some) ability knowledge that is both easy and early.

Moral: the story needs to essentially involve the agent herself.

2.2 Conditional approaches

Can we reduce knowledge of abilities to knowledge of conditionals? There would remain a puzzle about the latter, but we need an account of knowledge of conditionals anyway.

This would fit will with the Williamsonian (2007) idea that modal knowledge *in general* reduces to conditional knowledge, which reduces to 'the capacity to develop a hypothesis 'offline''. The idea roughly is that we know whether p is possible by seeing whether p conditionally implies $\bot$; since $\Box p$ (in various flavors, corresponding to different interpretations of the conditional) is definable as $\neg p > p$, knowledge of possibility and necessity can follow from this conditional knowledge.

Worries:

○ circularity: in cases like Lehrer's, you have to know what you can *try* to do in order to know what you can do. So, e.g., on our picture, you need to know what you're able to do in order to know which actions are contextually available.

 – could there be something like knowledge of *basic abilities* which can precede knowledge of robust, general abilities?

 – also, the Lehrer case is pretty weird. It's controversial whether his judgment is even correct. Maybe that's a kind of ability knowledge that just comes later.

○ development: children can grok ability ascriptions in an adult-like way before they can reason explicitly with counterfactuals.

 – This is an interesting worry. But it might just show that children master *a certain kind* of counterfactual reasoning first. I wonder, e.g., if children can reason with *agent-involving* counterfactuals already when they acquire ability modals.

– Insofar as this objection is compelling, it might generalize: I assume that children can reason well about blame, regret, etc. But it must be that they learn about regret etc. by reasoning conditionally, right?

2.3 Actuality

We reason using the T axiom from $\varphi(S)$ to $A_s\varphi$, and then generalize to relevantly similar situations.

> the focus on similarity seems ill-placed when we are dealing with knowledge of our own abilities— we do not learn about our abilities from observing the actions of others

Well, but what about from our own?

◦ the reliance on T is misplaced, since it's not valid for ability.

– But: if T is valid for specific ability, this might be fine: we learn about general ability by generalizing.
– Worry might remain: 'Abilities come with an element of control whose presence cannot be inferred from a single event'
Ok but again why not via generalization over multiple events?

◦ 'ability knowledge is plausibly easier than possibility knowledge, and thus should not be assumed to require it'; our process for learning about our own abilities must be easy and early, perhaps even automatic like perception, vs. simple ability/possibility.

> But, it will be replied, knowledge of possibility is easy! Axiom T, after all, is close to, or perhaps really is, a conceptual truth for any alethic concept of possibility. To this I respond that it may be difficult, in fact it may take significant philosophical work, to isolate the kind of alethic concept of possibility for which axiom T is a conceptual truth. Historians of logic are familiar with a distinction between 'one-sided' and 'two-sided' possibility, the former corresponding to our modern understanding of possibility and the latter to what we would now call 'contingency': being neither necessarily true nor necessarily false. Aristotle himself explicitly draws the distinction (in both the Prior Analytics and De Interpretatione 13) but formulates his modal logic primarily in terms of the 'two-sided' notion, which he apparently found more natural, and which does not validate axiom T (for a truth may be necessary, hence not two-sidedly possible). Inferences that go strictly by axiom T, the inference from a proposition's truth to that very same proposition's possibility, are rarely found in everyday thought

I mean, how do we know that? what's the evidence here for the lack of cognitive basicness of T? Being cognitively basic need not imply being being introspectibly/philosophically accessible

2.4   The positive account

An epistemology of ability should

- address the control condition of robust abilities,

- focus on experience of the agent herself, and

- rely on processes that are both easy and developmentally early

  hence, neither counterfactual reasoning nor principles of modal logic

  our experience of our own agency provides the key to the epistemology of ability. . . it is nothing more or less than success in exercising our abilities, especially repeated success, that gives rise to (positive) ability knowledge . . . we typically learn that we have an ability simply in acquiring that ability.

But repeated success is not enough: compare e.g. blushing repeatedly or regularly winning lotteries; 'the exercise of our abilities seems to be something that is initiated by us, and not just triggered by some circumstance'

familiar distinction between abilities and dispositions

So what more? We have distinctive *agentive phenomenlogy*.

It is from repeated success with a feeling of our own agency, both in initiating and in controlling the action, and modulated by a feeling of effort, that we learn what we are able to do. . . ability and its exercise are part of the very content of agentive phenomenology. . . It is by feeling ourselves to be the agents of our repeated successes that we can learn that something is in our power.

Even two-month-old infants distinguish between movements of a mobile that they control and those that they don't' (Rovee and Rovee 1969)

- this feels a bit circular to me. Compare: How do we know about the external world? via our experience of it. . .

- does this rely on something like T and/or a conditional analysis? we learn that we have the ability by *trying and succeeding*; don't we need a bridge from that to the conclusion about ability?

- what about unexercised abilities and inabilities? I know that I have the ability to make loud fart noises with my mouth during a colloquium talk; I know I *don't* have the ability to run a four minute mile. How?

2.5   Lessons for modal epistemology

given the role of ability knowledge for action, and given the ease with which I have argued it can be obtained, it appears that we have a grasp on abilities very early on; plausibly earlier than we have a grasp on the cleaner notions of possibility and necessity. If we are to give a cognitively plausible epistemology for our knowledge of our own abilities, then we should resist the temptation to construct the apparently more complex knowledge out of apparently simpler elements.

I.e., we start with the messy (cf. generics vs. quantification) and possibly obtain other modal notions out of it

> Modal epistemology has by and large been spectator-first. In focusing on ability knowledge, or on agentive modal knowledge generally, we might have the beginnings of an action-first epistemology of modality.

I think there might be something to the thought that ability is a basic kind of modality in some sense. It makes sense that this would be the first kind of thing we'd learn about, from seeing our own role in causing changes in the world.

I'm more sanguine than Vetter about a reduction of ability to conditionals (generalizing from conditionals).

In fact, I'm not sure the extent to which she departs from a CA. Why should repeated trying and succeeding be a good way to learn we are able, unless the CA is correct? But that doesn't mean that conditional cognition is more basic or that agentive cognition can be reduced to conditional cognition. Indeed, maybe we learn about conditionals by generalizing from agency. And then the rest of modal knowledge collapses into conditional knowledge (a la Williamson).

This is extremely speculative, though, and I'm not sure how one would test these ideas.