

Class 22 - Philosophical Intuition and Psychology

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“Whose Concepts Are They, Anyway? The Role of Philosophical Intuition in Empirical Psychology”

I. Child Psychology and the Instability Thesis

The central claim of Gopnik and Schwitzgebel is that there is psychological evidence for the transience of our intuitions.

Gopnik has done extensive and interesting work investigating the psychology of children.

Much of the work on children’s psychology, over the last century, has focused on how much children know and how early they know it.

Older psychologists, behaviorists like Skinner and developmental psychologists like Piaget, argued that children’s development is guided mainly by their experiences, that they are born essentially as blank slates.

Piaget described four invariant stages of cognitive development.

The Four Piagetian Stages

1. Sensorimotor stage (birth - age 2): The child builds concepts about the external world and how it works, correlating sense experiences with external objects. The child lacks, and learns, object permanence.
2. Pre-operational stage (ages 2 - 7): The child is not able to think abstractly. The child lacks and learns conservation of quantity.
3. Concrete operations (ages 7 - 11): The child starts to reason logically about concrete events. Some limited abstract problem-solving is possible, but only applied to concrete phenomena.
4. Formal operations (ages 11 - 15): The child develops abstract reasoning.

More recently, psychologists have found increasing evidence that children are born with innate capacities that can not be explained by behavioral learning.

We have already seen how Chomsky uses a poverty of the stimulus argument to support nativism about language.

Child psychology generally has become increasingly nativist, using similar arguments.

The amount of knowledge that children have about, say, object permanence, gravity, and contiguity far outstrips their experience.

In some studies children are shown impossible events, like a train going into a tunnel one color and emerging another color, or a car seeming to pass through a blocked passage, behind a screen.

Infants look reliably longer at the seemingly impossible scenarios, suggesting that they understand that the train continues to exist despite the fact they can not actually see it.

Children as young as three-and-a-half months thus seem to have concepts of object permanence.

Similarly, children’s memories have been shown to be much more substantial than was thought, earlier, including substantial memory as early as eight weeks old.

Gopnik has discovered that preschoolers can use probabilities, a result she described in the *NY Times*.

We put a yellow block and a blue block on a machine repeatedly. The blocks were likely but not certain to make the machine light up. The yellow block made the machine light up two out of three times; the blue block made it light up only two out of six times. Then we gave the children the blocks and asked them to light up the machine. These children, who couldn't yet add or subtract, were more likely to put the high-probability yellow block, rather than the blue one, on the machine. We also did the same experiment, but instead of putting the high-probability block on the machine, we held it up over the machine and the machine lit up. Children had never seen a block act this way, and at the start of the experiment, they didn't think it could. But after seeing good evidence, they were able to imagine the peculiar possibility that blocks have remote powers. These astonishing capacities for statistical reasoning, experimental discovery and probabilistic logic allow babies to rapidly learn all about the particular objects and people surrounding them.

(http://www.nytimes.com/2009/08/16/opinion/16gopnik.html?_r=2&emc=eta1)

Such results have undermined the fixity of Piaget's developmental stages.

The idea that children learn a lot more, a lot more quickly than the developmental psychologists of the mid-twentieth-century claimed has led to some ugly commercialism.

A line of Baby Einstein products sold by Disney, including CDs and DVDs, were marketed to parents of babies and very young children, who were told that having their children watch videos would make them smarter.

The research that supported the Baby Einstein products was actually done on adults, and the memory improvements were short-lived.

Nevertheless, the products became ubiquitous.

Fortunately, further research has recently debunked the claims, and has led to threats of litigation in response to which Disney has offered refunds on the products.

Led by Frederick Zimmerman and Dr. Dimitri Christakis, both at the University of Washington, the research team found that with every hour per day spent watching baby DVDs and videos, infants learned six to eight fewer new vocabulary words than babies who never watched the videos. These products had the strongest detrimental effect on babies 8 to 16 months old, the age at which language skills are starting to form. "The more videos they watched, the fewer words they knew. These babies scored about 10% lower on language skills than infants who had not watched these videos."

Children's intuitions do differ from those of adults.

They lack focus, and imagine and explore in ways that adults do not.

More aptly, here, they have different intuitions about how the world works.

Those intuitions develop and change as we grow.

Children have different semantic intuitions.

Sometimes, they assume that words refer to underlying causal powers, rather than superficial perceptual features, while being less sensitive to the constancy of causal powers.

Gopnik and Schwitzgebel report that children five and six years old thought that a cat painted to look like a skunk would become a skunk, but they did not think that discoveries that the internal structures of cats and skunks were identical would mean that cats are the same as skunks.

Children do not have the same intuitions about the relationship between conscious, phenomenal

experience and action as adults; some believed that we could decide to turn over in bed when fast asleep. Children lack theory of mind, and are susceptible to failing theory of mind tests.

Gopnik and Schwitzgebel don't describe theory of mind tests, but here's a version [from the web](#).

You introduce the child to two dolls, Sally and Ann, and show the child that each doll has her own box, with a marble hidden inside. Then you tell the child that Sally is going out for a minute, and remove the doll from the scene, leaving her box behind. Next, you tell the child that Ann is going to play a trick on Sally: she opens Sally's box, removes the marble, hiding it in her own box. Sally returns, unaware of what happened and you ask the child where Sally would look for her marble.

A child with Theory of Mind will realize that Sally doesn't know that Ann has played a trick on her, and will therefore look in her own box for her marble, and discover it missing. But a child lacking in Theory of Mind will only see the situation from her own point of view, and suggest that Sally look for the marble where it actually is: in Ann's box.

Very small children will not be able to guess correctly in this test, since Theory of Mind takes time to develop, but most children should be able to do the test by 6 or 7 years old at the latest and some as young as three years old can.

We have seen arguments undermining the legitimacy of our intuitions on the basis of their demonstrated unreliability.

In Idiotfest, we saw data about our limited abilities to make or recognize correct statistical inferences.

The experimental philosophy results showed odd inconsistencies in our philosophical intuitions.

Gopnik and Schwitzgebel's thesis is that we should be careful about relying on our intuitions because they are unstable.

We can call this claim the instability thesis.

Gopnik and Schwitzgebel examine three cases in which intuitions are used in philosophy in ways that are supposedly undermined by the instability thesis: Putnam's Twin Earth externalism; Searle's argument that links intrinsic intentionality with phenomenal consciousness; and Davidson and Shoemaker's arguments that our concept of belief presupposes first-person authority.

It is important, but difficult, to remember that when we talk about "children" we are talking about our past selves. Hilary Putnam, John Searle, Sydney Shoemaker, and the rest of us once, not so long ago, had very different intuitions about the nature of meaning, phenomenology, and belief than we do now. Our intuitions are not constant; they have changed quite radically in the past (90).

Discussion of all three cases is beyond our ability in a single class, and the descriptions of the three cases given by Gopnik and Schwitzgebel are far too quick.

I'll take the first case, Putnam's, in a little detail.

II. Semantic Externalism

Gopnik and Schwitzgebel attribute semantic externalism to Putnam and Kripke, though Tyler Burge developed semantic externalism around the same time.

Burge asks us to consider two possible worlds, w_1 and w_2 .

In w_1 , which is relevantly like ours, people speak English₁.

One of the English₁ speakers, let's call him Tyler₁, thinks (mistakenly) that he has arthritis in his thigh.
But, arthritis only afflicts joints, and the thigh is not a joint.
So, he has a false belief.
He expresses this false belief by uttering the false statement A.

A I have arthritis.

In w_2 , Tyler₂'s personal history and experiences are exactly the same as those of Tyler₁.
The only difference between w_1 and w_2 is that in w_2 , the word 'arthritis' refers, not to arthritis, but to a different disease, which we can call tharthrititis.
Tharthrititis is like arthritis, but it afflicts bones and joints.
Tyler₂ lacks any beliefs about arthritis.
No one in w_2 has any beliefs about arthritis.
Instead, people in w_2 have beliefs about tharthrititis.
They refer to tharthrititis by using the word 'arthritis',
So, in w_2 , 'I have arthritis' means that one has tharthrititis.
Tyler₂ thus believes, truly, that he has tharthrititis.
The statement that Tyler₂ makes by uttering A is true.

But that is the very same sentence with which Tyler₁ expresses a false belief that he has arthritis.
And Tyler₁ has exactly the same history and experiences as Tyler₂.
Thus, whether one or the other Tyler has a true belief about tharthrititis or a false belief about arthritis depends wholly on matters external to Tyler.
All that matter to whether Tyler's statement is true or false, and to whether his reference is successful or not, are the practices of the linguistic community in which he finds himself.

Putnam argues for externalism about natural kinds, specifically water.
In Putnam's Twin Earth case, we are also asked to imagine two worlds.
The first world is ours, before chemical analysis, around 1750.
The second world is called Twin Earth, and it is almost exactly like Earth.
The only difference between Earth and Twin Earth is that where we have H₂O, Twin Earth has XYZ, a completely alien compound, which looks, and tastes, and acts just like water.
Everywhere that we have H₂O, they have XYZ, and vice-versa.
The Twin Earthlings call XYZ water, just as we call H₂O water.

When an Earthling uses the term 'water', s/he is referring to H₂O.
If, somehow, Earthlings were able to manufacture or discover XYZ, we would be wrong to call it water.
Similarly Twin Earthlings use the term 'water' to refer to XYZ.
Thus, 'water' refers-in-English to water (i.e. H₂O).
But 'water' refers-in-Twinglish to twater (i.e. XYZ).
The terms have the same meaning in both languages.
Earthlings and their Twin Earth counterparts (or, dopplegangers) think of themselves as drinking water, swimming in the water, and washing themselves with water..
But, 'water_E' and 'water_{TE}' have different referents.

In Putnam's Twin Earth case, no one knows that the referents of their terms are different.
Me and my Twin Earth doppleganger have the same thoughts.
So, whatever way we think about 'water' is the same.

Yet, our references are to different substances.

The reference of 'water' is determined by factors external to anything to which an individual has access. I can not know that the reference of my term 'water' is water or twater.

According to Putnam, the reference of 'water' is determined not by the individual, but by a small group of experts, the scientists, who determine what the essence of the natural kind is.

The class of people who need to acquire a given natural kind term is larger than the class who need to know how to recognize it.

With the rise of science, it is too time-consuming and inefficient for members of a community to all know how to identify surely each term.

Thus, reference is determined only by the experts in a division of linguistic labor.

The average speaker does not acquire anything which fixes the extension of the term.

Ordinary people have facility with stereotypes, which they can indicate through ostensive definition or by description.

In describing, one might refer to a stereotype, an exemplar with typical features.

Speakers are required to know about the stereotype in order to count as having acquired a word.

These requirements vary with the community and its needs.

When we call something 'water', we imply that the microstructure must be the same for anything else to be water.

The catch-phrase for semantic externalism is that meanings are not in the head.

Semantic externalism is thus a fairly controversial thesis.

And, it depends essentially on our intuitions about Twin Earth, that the meanings of the Twin Earth uses of 'water' differ from the meanings of Earth uses of 'water'.

If Wayne on Earth and Dwayne on Twin Earth are molecule-for-molecule identical to each other (except that Dwayne is 70% twater), it is intuitive to claim that they, nonetheless, mean different things when they utter the word 'water'. This intuition is generally taken to support the surprising thesis that the meaning of words depends not wholly on what takes place in one's head but also on one's environment (78).

If the instability thesis is correct, then we have to worry about the philosophical force of our intuitions. Instead of adopting the surprising externalist thesis, we might question whether our intuition is evidence for anything.

We might want to ask what role intuitions are supposed to play in philosophical arguments.

III. Three Roles for Intuition

One nice aspect of Gopnik and Schwitzgebel's paper is that they try carefully to say what an intuition is and what roles intuitions plays in philosophical arguments.

We will call any judgment an *intuitive judgment*, or more briefly an intuition, just in case that judgment is not made on the basis of some kind of explicit reasoning process that a person can consciously observe (77).

This characterization of an intuition seems perfectly apt for philosophical work.

They make it clear that intuitions are judgments, that they can be represented propositionally, and are not just feelings or affect.

An intuition can play a role in an argument like any other proposition.

Their use is also consistent with traditional philosophical uses of 'intuition', like Descartes's claim about the cogito.

When someone says "I am thinking, therefore I am, or I exist," he does not deduce existence from thought by means of a syllogism, but recognizes it as something self-evident by a simple intuition of the mind. This is clear from the fact that if he were deducing it by means of a syllogism, he would have to have had previous knowledge of the major premise "Everything which thinks is, or exists." In fact he learns it from experiencing in his own case that it is impossible that he should think without existing (AT 140).

Gopnik and Schwitzgebel further distinguish three roles for intuitions in philosophy: as hypotheses, as evidence, and theoretically.

First, when we use intuitions as hypotheses, we start our reasoning with an intuitive theory.

Intuitions may be used to generate hypotheses in all sorts of domains, including psychology and physics, in addition to philosophy.

Then, we test our theories, ceding them when better evidence contravenes our intuitive hypothesis.

Second, when we use intuitions as evidence, they play the role that observations or data play in scientific reasoning.

No intuition is infallible, just as no observation is infallible.

We seek the theory that accounts for as many of our data points as possible, as simply and coherently as possible.

Our scientific methodology will determine when and whether we cede an intuition.

In the best case, we will account for our false intuitions and false beliefs, and false observations.

A psychological theory has to explain why we have these intuitive beliefs even if, indeed especially if, the beliefs are quite false. The psychologist cannot simply reject the beliefs if she is treating them as evidence about the mind of the person who has them. On the other hand, nothing stands in the way of the complete overthrow of intuitions if they are construed as psychological hypotheses (80).

The difference between using intuitions as evidence and using them as hypotheses is not exactly sharp.

When we use them as hypotheses, we cede them quickly after constructing theories.

When we use them as evidence, we resist ceding them unless a new, better and more comprehensive theory which eschews them comes along.

Third, Gopnik and Schwitzgebel argue that we can use intuitions to illuminate or draw out the consequences of our theories.

Some philosophical theories are complicated and technical.

To arrive at a useful understanding of such technical or quasi-technical terms requires a scientifically informed balance of intuitive considerations with historical, stipulative, and pragmatic elements (82).

Gopnik and Schwitzgebel also point to the difficulty we find in forcing a conclusion from premises, as in Lewis Carroll's wonderful, "[What the Tortoise Said to Achilles](#)."

In that dialogue, Carroll points out that the validity of an argument is not sufficient to force someone to accept the argument; they might also require a belief that they should accept valid arguments.

And, they might want justification for that belief, as well; and so on.

At some point, intuitions about what to believe can enter the discourse.

That's Kripke's point, as Buckwalter and Stich pointed out.

Some philosophers think that something's having intuitive content is very inconclusive evidence in favor of it. I think it is very heavy evidence in favor of anything, myself. I really don't know, in a way, what more conclusive evidence one can have about anything, ultimately speaking (Kripke 1980, p. 42).

IV. Is the Externalist Claim the Product of Intuitions?

Let's ask whether the conclusions that Gopnik and Schwitzgebel make are consistent with their characterization of 'intuition'.

They say that the conclusions we draw from the Twin Earth cases are intuitive.

Intuitive judgments, on their characterization, are not inferential.

But it is not clear that the externalist conclusion is non-inferential.

[Putnam and Kripke] articulate in an interesting and perceptive way an unexpected and surprising intuition we ordinarily have about meaning (at least many philosophers seem to have found this intuition surprising). The intuition is that meaning is, in Putnam's words, not in the head. We have the intuition that what a word means, for a person, depends not only on what is going on internally with that person, but also on facts about the world external to the person (84).

It seems to me, in contrast, that the claim of semantic externalism is not merely an intuition.

It is, in fact, the conclusion of an argument.

1. The sense (or meaning) of a term determines its reference. That is, it is impossible for terms to differ in extension while having the same intension.
 2. Reference can vary without variation in thought.
 3. So, the senses of terms must be able to vary without variation in thought.
- So, our thoughts do not determine the meanings of our terms; meanings are not in the head.

Of course, some of the support for this argument relies on intuition.

In particular, the arthritis and Twin Earth cases support the second premise.

But, the intuitions about Twin Earth do not determine a theory of meaning.

The conclusion of semantic externalism can only be made in the context of a wider argument.

That conclusion is made precisely by an explicit reasoning process that a person can consciously observe, contradicting their claim that it is an intuition.

Gopnik and Schwitzgebel seem to be using 'intuition' regarding semantic externalism in the second or third sense.

Still, that sense of the term seems hopelessly vague, and liable to the same criticisms that Gopnik and

Schwitzgebel level at philosophers.

Within philosophy of mind, there has been a tradition of either accidentally confusing different uses of intuition, or deliberately treating them as identical, and consequently drawing inappropriate conclusions... (84)

V. Eschatology, or the Strong Claim

Gopnik and Schwitzgebel admit that skepticism about intuitions is counter-intuitive (ironically). In fact, they call the skeptical position, which they attribute to the eliminativists Stich and Churchland, eschatological.

Eschatological, from the *American Heritage Dictionary*:

1. The branch of theology that is concerned with the end of the world or of humankind.
2. A belief or a doctrine concerning the ultimate or final things, such as death, the destiny of humanity, the Second Coming, or the Last Judgment.

Still, in the end, they claim that we must cede claims based on intuition on the basis of the instability thesis.

The eschatological possibility described by Churchland and Stich becomes not only possible but likely. If our intuitions about the mind were mistaken in the past, and the error of these intuitions was revealed as our knowledge about the mind grew, then surely our intuitions about the mind now, as imperfect adults, can be mistaken in way that will be revealed as our knowledge about the mind grows (91).