

## Putnam, “Meaning and Reference”

### *Two Assumptions*

- (i) Individualism “knowing the meaning of a term is just a matter of being in a certain psychological state”
- (ii) The Fregean view: “the meaning of a term determines its extension (in the sense that sameness of intension entails sameness of extension)” (p. 306-7). [Non-negotiable]

### *The Twin Earth Thought-Experiment*

Imagine a planet just like Earth in 1750, except there is no H<sub>2</sub>O on Twin Earth (“TE”) but instead a superficially indistinguishable, yet distinct chemical compound we can call “XYZ” (though it is called ‘water’ on TE). Suppose Oscar (on Earth) and his *doppelgänger* Oscar<sub>2</sub> (on TE) are in type-identical psychological states. Then:

### The Argument

- (1) *Ex hypothesi*, uses of ‘water’ between Oscar and Oscar<sub>2</sub> have different extensions even though they are in type-identical psychological states.
- (2) But if (ii) is true, then their uses of ‘water’ have different *meanings*.
- (3) So, the meaning of ‘water’ is not determined by a psychological state.
- (4) So, knowing the meaning of ‘water’ is not just a matter of being in a certain psychological state [= the denial of (i)]

Putnam’s other examples: ‘molybdenum’ and ‘aluminum’, ‘elm’ and ‘beech’ (in Putnam’s idiolect) [Ludlow’s variant: ‘chicory’ and ‘endive’ in SAE vs. BE]

### Objections and Replies

*Objection*: Isn’t the meaning of ‘water’ fixed by ostension? (I point to some liquid and call it “water”) And [my read:] isn’t that a matter of *intending* to call the ostended liquid “water,” where intending is a psychological state?

*Reply*: Such ostension occurs under the assumption that the liquid is *the same kind of liquid* that I and other speakers in my linguistic community have called “water” in the past. I do not intend my ostensive utterance to be accepted if that turns out to be false.

### *The Division of Linguistic Labor*

“every one to whom gold is important...has to *acquire* the world ‘gold’; but he does not have to acquire the *method of recognizing* whether something is or is not gold. He can rely on a special subclass of speakers” (p. 309). But compare: ‘chair’, ‘water’ in 1750.

“the way of recognizing possessed by these ‘expert’ speakers is also, through them, possessed by the collective linguistic body, even though it is not possessed by each individual...and in this way the most *recherché* fact about water may become part of the *social* meaning of the word although unknown to almost all speakers” (p. 310)

### ***Indexicality and Rigidity***

Two theories:

- (I) 'water' is *world-relative* but *constant* in meaning... 'water' means the same on Earth as on TE; it's just that water is H<sub>2</sub>O on Earth and water is XYZ on TE.
- (II) Water is H<sub>2</sub>O in any world... 'water' does not have the same meaning on Earth as on TE. So 'water' is *rigid*.

(II) is correct, because when I point to something and call it "water", I do not mean that for any possible world W, water in W is whatever I am ostending in W. Rather, I mean that for any world, water is the same liquid (construed as a cross-world relation) as the liquid I am *actually* ostending.

Another argument: "If I agree that a liquid with the superficial properties of 'water' but a different microstructure *isn't really water*, then my ways of recognizing water cannot be regarded as an analytical specification of what *it is to be* water" (p. 311).

Conceivability and Possibility: "we can perfectly well imagine having experiences that would convince us (and that would make it rational to believe that) water *isn't* H<sub>2</sub>O. It is conceivable but it isn't possible! Conceivability is no proof of possibility... a statement can be (metaphysically) necessary and epistemically contingent. Human intuition has no privileged access to metaphysical necessity" (p. 312)

#### 'Water' as an Indexical

For indexicals, "no one has ever suggested the traditional theory that 'intension determines extension'" (ibid.)

Between Oscar and Oscar<sub>2</sub>, "the same word, 'I', has two different extension in two different idiolects; but it does not follow that the concept I have of myself is in any way different from the concept my Doppelgänger has of himself" (ibid.)

"Our theory can be summarized as saying that words like 'water' have an unnoticed indexical component: 'water' is stuff that bears a certain similarity relation to the water *around here*... Thus the theory that (1) words have 'intensions', which are something like concepts associated with the words by speakers; and (2) intension determines extension—cannot be true of natural-kind words like 'water' for the same reason it cannot be true of obviously indexical words like 'I.'" (ibid.)

#### The Indexicality Objection:

"that natural-kind words like 'water' are indexical leaves it open, however, whether ['water' in Twin English] has the same *meaning* [despite having]... a different extension... [This is] what we normally say about 'I' in different idiolects—thereby giving up the doctrine that 'meaning (intension) determines extension'" (ibid.)

*Putnam's Reply:* What Kripke said.

## Millikan, “Truth Rules, Hoverflies, and the KW Paradox”

By offering a solution, Millikan takes herself “to be defending the strongest possible kind of correspondence theory of truth and the most flatfooted interpretation possible of the truth-conditions approach to semantics [approx. ‘metaphysical realism’]” (p. 639-40)

### *The Kripkenstein Paradox*

Since I have only seen/computed finitely many sums, *what constitutes my meaning addition by ‘plus’ rather than quaddition?* (Quaddition: “ $n$  quus  $m$ ” =  $n + m$  if  $n, m < 57$ ; = 5 otherwise)

It’s not a matter of obeying a formula (on pain of Wittgensteinian regress). It’s not a matter of having all the sums “before the mind.” It cannot be determined by some mental picture or any other “epistemological given” (since W. shows that’s not the final criteria to determine if we understand). Nor can it be a matter of having a disposition (since there are dispositions to make errors).

Kripke’s Wittgenstein concludes there is *no fact-of-the-matter* about whether I mean plus or quus by ‘plus’.

### *Millikan’s Solution*

“to mean to follow a rule is to have as a purpose to follow it. Whether my actual dispositions are ‘right’ or ‘wrong’ depends on whether they accord with what I have purposed” (p. 641)

But since purposes are not necessarily explicit, “root purposing is unexpressed purposing; our job is to discover what this purposing consists” (p. 642)

### A Three-Way Distinction

[1] “merely coinciding with a rule...

[2] purposefully following an explicit or expressed rule...

[3] purposefully conforming to an implicit or unexpressed rule... It is the same as displaying a *competence* in conforming to the unexpressed rule or displaying an *ability* to conform to it” (ibid.)

“My thesis will be that the unexpressed purposes that lie behind acts of explicit purposing are biological purposes; a competence to conform to an unexpressed rule is a biological competence. By a biological purpose I mean the sort of purpose the heart has, or those of the eyeblink reflex... Biological purposes are, roughly, functions fulfilled in accordance with evolutionary design” (ibid.) [But such purposes are not always innate, e.g. the chick following its mother requires an “imprinting” in accord with evolutionary design.]

“Similarly, if knowing a language involves having a competence in following certain rules for construction and interpretation of sentences, the purpose that informs this competence, I will argue, is a biological purpose” (ibid.)

### ***Hoverfly Rule-Following***

Proximal Hoverfly Rule: *Chase a target by turning away from the retinal image of the target at such-and-such angle, and then accelerating in a straight line.*

“Taking note that this rule is not about how the hoverfly should behave in relation to distal objects, but rather about how he should react to a proximal stimulus, to a moving spot on his retina” (p. 643)

Presumably, the hoverfly rule is unexpressed. So: “the hoverfly has an unexpressed biological purpose to conform to this rule. That is, the hoverfly has within him a genetically determined mechanism of a kind that historically proliferated in part *because* it was responsible for producing conformity to the proximal hoverfly rule” (ibid.) [This mechanism may cause other things, but only conformity to the rule explains proliferation.]

“The hoverfly displays a *competence* in conforming to the proximal hoverfly rule when his coinciding with it has a ‘normal explanation’, that is, an explanation that accords with the historical norm” (ibid.) [vs. being serendipitously blown by the wind into a female]

Having a biological competence does not imply an ontogeny of conforming to the rule, nor a future of conforming to the rule (blind hoverflies). Nor is it the same as having a “disposition;” birds are disposed to get squished when stepped on, but that’s not a biological competence.

### ***Hoverflies and the Paradox***

There will be “quoverfly” rules that fit the hoverfly’s behavior, but the hoverfly does not have a biological purpose to conform to these rules. Only the proximal hoverfly rule explains the proliferation of hoverflies.

“surely, on any reasonable account, a complexity that can simply be dropped from the explanans without affecting the...explanandum is not a *functioning* part of the explanation. For example, my coat does not keep me warm because it is *fur-lined and red*, but just because it is fur-lined” (p. 644) *Parenthetical remark*: This assumes an objective standard of simplicity, but Millikan assumes Lewis’ view that there are objective natural kind properties. Besides, she’s not interested in solving the grue-paradox (epistemic vs. metaphysical paradox).

The distal hoverfly rule: “*If you see a female, catch it.*”

“Conforming to the proximal hoverfly rule is a means...of following a less proximal, or more distal rule...[That is,] the normal explanation for conformity to the distal rule contains the specification that the hoverfly first conform to the proximal rule” (p. 645).

“that the hoverfly may not be very reliable in his conformity to the distal hoverfly rule bears not at all upon whether it is one of his biological purposes to conform” (compare with the biological purpose of the sperm’s tail).

Overkill rule: ‘Chase anything that flies by you that appears to have such-and-such size’  
“this overkill rule does not correspond to any biological purpose...it is not coinciding with the overkill rule that has helped to account for hoverfly proliferation.” (ibid.)

### ***Rat Rule-Following***

Proximal Rat Rule: “If ingestion of a substance is followed by illness, do not ingest any substance with that taste again.”

Distal Rat Rule: “Do not eat poisonous substances”

“that the rat’s evolutionary history dictates that it is normal for him to undergo learning in order to follow his rule...does not affect the biological status of the rule...Conformity to the rat rule is what [aided] his ancestor rats...to flourish and proliferate, so it is what the mechanism, hence the rat, biologically purposes” (p. 646)

Derived Proximal Rat Rule: “Do not eat what tastes like soap”

A learned rule: “animals that learn can acquire biological purposes that are peculiar to them as individuals, tailored to their own peculiar circumstances or histories” (ibid.)

### ***Human Rule-Following***

“Are descriptions of human intentional actions quus-descriptions from the standpoint of evolutionary design?...Surely a naturalist must answer no...To suppose otherwise would be to suppose that the whole mechanism of human belief, desire, inference, concept formation, etc.,...[is] an epiphenomenon of biology” (p. 648).

“*whatever* you mean to do when you encounter ‘plus’, that content has been determined by your experience coupled with evolutionary design. But, reasonably, whatever you mean by ‘plus’ is the same as what other people mean who are endowed with the same general sort of cognitive equipment and have been exposed to the same sort of training...This meaning has been determined by the application of *Homo sapiens* rules of some kind to experience” (p. 649)

### ***Biological purposes and Truth Rules***

“My claim will be that if we interpret rule following and, in general, purposes and competencies in the biological way, then we can see how...reference to correspondence truth rules might *easily* fall out of an analysis of language competence” (ibid.)

- “ ‘Verificationist’ truth rules...would be rules that governed responses to prior thoughts and... ‘bare sense experiences,’ hence would be proximal rules.
- ‘Realist’ or correspondence rules...would for the most part be distal rules, rules that governed the manner in which assertions were to correspond to affairs that lie, very often, well beyond the interface of body and world” (p. 650)

“if truth rules were distal rules they would surely have to be *backed* by proximal rules... that determined assertability conditions...Call these back-up rules ‘proximal assertability rules’...Conformity to these rules would have, as a biological purpose, to effect conformity to distal rules, that is, to correspondence truth rules” (ibid.)

A truth rule may imply: “if you have reason to speak (think) about the color of snow, say (think) ‘snow is white’ if and only if snow is white” (ibid.)

Millikan’s positive theory:

[Passage from p. 650, 2<sup>nd</sup> column, middle—to p. 651, 1<sup>st</sup> column, 1/3 down.]

*Objection:* “If proximal assertability rules were...followed only as a more or less reliable means to following distal truth rules, then...those who shared a language...[i.e.,] having the same competences to abide by the same truth rules...[may not] need to share proximal assertability rules as well.” (p. 651).

“were the proximal assertability rules that Helen Keller used when she spoke English the same as those that you use? If not, does it follow that she did not really speak English after all?” (ibid.)

*Reply:* “if agreement is effected on the distal level, what need would there be for agreement on the proximal level? Hence what reason is there to assume, say with Quine, that comparison of only proximal rules *ought* to yield determinate translation between idiolects?”

### ***Contra Dummett and Putnam***

According to Millikan, Putnam and Dummett hold that “understanding a language is a practical ability, constituted by a set of *dispositions*, in this case, learned responses” (p. 651-2). [She also mentions Dummett’s “manifestation argument”]

“surely Kripke’s remark about illegitimate ‘equation of performance with correctness’ is applicable here” (ibid.)

- Distinguish “misusing a language” from “speaking a different language” from “speaking falsely”

“It is because purposes set standards that ‘true’ is a normative notion and that no set of dispositions could determine truth rules.

Knowing how to use a language: “most know-how involves *distal* action, and there is no such thing as a simple *disposition* to involvement with anything distal. How one interacts with things at a distance always depends upon what lies in between, on surrounding conditions...It follows that to assimilate language competence to a set of dispositions directly begs the question against distal truth rules. There is no need for tortuous arguments to demonstrate that truth rules must then be verificationist” (p. 653)

“Compare the hoverfly...what he has a *disposition* to do is, at best, to conform to the proximal hoverfly rule. Does it follow that he has no ability to catch females?

“*whatever* the status of rule-following, we have no reason to think that the following of correspondence truth rules is any more *problematic*” (ibid.)

A Lingering Question: See the last paragraph.