

Intuitions, Externalism, and Conceptual Analysis

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Semantic externalism about a class of expressions is often thought to make conceptual analysis about members of that class impossible. In particular, since externalism about natural kind terms makes the essences of natural kinds empirically discoverable, it seems that mere reflection on one's natural kind concept will not be able to tell one anything substantial about what it is for something to fall under one's natural kind concepts. Many hold the further view that one cannot even know anything substantial about the *reference-fixers* of one's natural kind concepts by armchair reflection. In this paper I want to question this latter view and claim that, because of the way our standard methodology of doing theories of reference relies on semantic intuitions, typical externalists in fact *presuppose* that one can know the reference-fixers of one's natural kind concepts by mere armchair reflection. The more interesting question is how substantial such knowledge can be. I also take some steps toward answering this question.

Keywords: intuition, semantic externalism, conceptual analysis

1. Introduction

It is often assumed that an *externalist* view of meaning or content (for a class of concepts or expressions) precludes the possibility of *conceptual analysis* about members of the class. Externalism about a given concept C makes the *semantic content* of C depend on the nature of the external world, and it is generally thought to follow that mere possession of C cannot then put one in a position to know anything substantial about what it is for something to fall under C. In this paper I want to question this common line of thought. Whether a certain concept is to be given an externalist semantics depends on our semantic *intuitions* about the correct applicability of that concept, and hence mere possession of a concept does put one in a position to know

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something about its content. How substantive that something turns out to be is unclear, as is the question of whether the armchair activity I'm defending deserves to be called conceptual *analysis*. My aim here is to take at least some steps towards answering these questions.

Most philosophers of language today (though not all) think that the arguments given by Kripke and Putnam in the 1970's (Kripke 1980, Putnam 1975) establish that one cannot know the essences of individuals and natural kinds merely on the basis of being a competent user of a proper name, or of possessing a natural kind concept. Perhaps most famously, Putnam's Twin Earth example has convinced most philosophers that the essence of water is having the molecular composition H_2O (assuming water really is H_2O), and that is something we obviously cannot know by mere reflection on our *concept* of water. Let us call a fact *c-knowable* when it is such that one can know it merely on the basis of being competent with the relevant concepts.¹ Twin-Earth style thought experiments can, it appears, be constructed for any natural kind concept. It follows that the essences of natural kinds are, quite generally, not *c-knowable*.

I accept this consequence of externalism. However, we can still ask whether mere possession of a concept might put one in a position to know the *reference-fixers* of a natural kind concept.² Do Kripke-Putnam style arguments also show that reference-fixing conditions are not *c-knowable*? Or is there a set of properties such that, merely on the basis of one's competence with a natural kind concept, one can know that those properties fix its reference?

Quite a few philosophers have claimed that Kripke-Putnam style arguments can be used to establish that reference-fixers are not *c-knowable* (for example, Block and Stalnaker 1999, Byrne and Pryor 2006, Nimtz 2004, Schroeter 2004). In all these papers, the authors construct clever thought experiments to show that various seemingly promising candidates for reference-fixing descriptions fail. For example, Christian Nimtz (2004) argues that, for any property *F* that we might be tempted to include in the usual candidate for a reference-fixing description for 'water' (*i.e.* something like 'the clear, odorless and tasteless liquid which primarily fills the oceans'), we can imagine situations such that, were it to turn out that the actual world is like that, 'water' would denote something which is *not F*.³ The authors all go on to

¹ Some theorists are happy to call *c-knowable* propositions *a priori*; however, I do not want to get dragged into discussions of whether any genuine knowledge is justified wholly independently of sensory experience. Readers sceptical of the *a priori* are free to interpret *c-knowledge* as conceptual knowledge the justification for which is ultimately empirical.

² From now on, I will limit my attention to natural kinds and natural kind concepts.

³ More recently, Nimtz has changed his mind and come to defend a view not dissimilar to the one I am sketching (see Nimtz forthcoming).

conclude that no *c*-knowable descriptions which do the job are to be had.

These claims are typically made as criticisms of *two-dimensional* semantics. The main two-dimensionalists, Chalmers (1996, and elsewhere) and Jackson (1998), do put a lot of weight on the view that we can *c*-know the reference-fixers (under the banner of “A-intensions” or “primary intensions”) of the words on which Kripke and Putnam focused. While I do want to defend such *c*-knowability, this should not automatically be taken as an endorsement of two-dimensionalism, for at least two reasons. First, two-dimensionalism makes strong claims about the knowledge of primary intensions being *a priori*, and I am not sure whether *c*-knowability amounts to *a priori* knowability in any traditional sense of the term. Secondly, two-dimensionalism maintains that primary intensions are a component of *semantic content*, a further commitment which I am not sure I want to take on board. In this paper I am interested in the question: does mere semantic competence with a natural kind term put one in a position to know anything substantial about natural kinds or about the contents of one’s natural kind concepts? I will mostly set aside the further questions of whether such knowledge, if it exists, deserves to be called *a priori*, or whether it concerns something which deserves to be called *semantic content*.

2. Three ways of specifying reference-fixers

In this section I will distinguish between three different kinds of specification for reference-fixers and claim that the question of whether the reference-fixers of natural kind concepts are *c*-knowable may depend crucially on which kind of specification we have in mind.

2.1 Conditional-conjunctive specifications

The critics mentioned above all rely on Kripke-Putnam style thought experiments to argue against *c*-knowability. Just as, for example, Kripke’s celebrated Gödel/Schmidt example showed that the description ‘the man who proved the incompleteness of arithmetic’ cannot either give the meaning *or* fix the reference of the name ‘Gödel’, these critics claim that for any proposed reference-fixing description, we can imagine situations in which that description gets the reference of the expression wrong. The implication is that those who think reference-fixers are *c*-knowable have not fully learned their lesson from reading Kripke and Putnam.

I think this strategy is self-defeating. In evaluating proposed counter-examples we are relying on intuitive evidence about what our words denote; that is, we are relying on *c*-knowable reference-fixers, at least of a certain sort (see below). Thought experiments can only provide counter-examples to *particular* claims about what the reference-fixing conditions are, not to

their c-knowability in general.

Because of this reliance on semantic intuitions, the strategy of using thought experiment *presupposes* that reference-fixers are c-knowable, at least under the following kind of specification:

- (W1) The reference of ‘water’ is fixed by the property of *being composed of H₂O if the actual world is thus-and-so, and being composed of XYZ if . . . , and being composed of H₂O or XYZ if . . . , and . . .*

where we would have a separate conjunct for each situation we can imagine in our thought experiments. Thus, one conjunct will say that, were it miraculously to turn out that the actual world is just like the world Putnam described Twin Earth to be, the reference of ‘water’ would be fixed to stuff which has the molecular constitution XYZ. Another conjunct would say that, were it to turn out that water is like jade, ‘water’ would denote stuff which is *either H₂O or XYZ*. And similarly for any other imaginable situation.⁴

To say that reference-fixers, as specified in (W1), are c-knowable is really only to say that the theory of reference is properly done from the armchair. This is, of course, how Kripke and Putnam did theory of reference: by considering various ways the actual world might turn out to be, and consulting their intuitions about what their terms would denote in these situations (and, what they would denote in counterfactual situations, given certain assumptions about what the actual world is like). And the critics clearly accept this methodology; they, too, are relying on semantic intuitions, elicited by thought experiments. Hence, the strategy of the critics in fact *presupposes* that reference-fixers are c-knowable.

Of course, (W1) is not very informative—it is merely a list (an infinite one) of all the intuitive verdicts we would have in response to different epistemic possibilities. To get a more substantial specification of reference fixers, some kind of a generalisation of these intuitions would need to be available. The other two kinds of specification are attempts at such generalisations.

2.2 Reference-theoretic specifications

If the theory of reference is properly done from the armchair, and a complete theory of natural kind terms is possible, a more substantial specification of reference-fixers will be c-knowable.

This point is familiar from the writings of David Lewis and Frank Jackson; for example:

⁴ In fact, (W1) would contain countless *separate* conjuncts for scenarios in which ‘water’ denotes H₂O (or XYZ, or their disjunction etc. . .). These would vary in ways which make no difference at all to the denotation of ‘water’—we would have a separate conjunct for each and every epistemically possible scenario.

The descriptive sense associated with a name might for instance be ‘the place I have heard of under the name ‘Taromeo’ or maybe ‘the causal source of this token: Taromeo’, and for an account of the relation being invoked here, just consult the writings of causal theorists of reference. (Lewis 1997, 399)

Similarly, then, if a complete causal theory of reference for natural kind terms is to be had, and if such a theory is motivated solely by thought experiment, we should expect something like the following to be c-knowable:

- (W₂) The reference of ‘water’ is fixed by the property of being the stuff at the beginning of causal chains of the appropriate type ending with my use of ‘water’.

To guard against misunderstanding: I am merely claiming that, if a causal theory is possible, (W₂) will be c-knowable (of course, ‘causal chains of the appropriate type’ will need to be spelled out). I do *not* want to follow the causal descriptivists in claiming that such descriptions *give the meanings* of natural kind terms, for at least two reasons. Firstly, the descriptions would appear to always contain indexicals, and secondly, there is no reason to think that the descriptions would always be shared across speakers and times. But again, the c-knowability of something like (W₂) is in fact *presupposed* by those who take armchair methods to be sufficient for doing the theory of reference.

2.3 Descriptive specifications

The third, most substantive specification of reference-fixing conditions would claim that we can give the specification using only *manifest* properties. Thus, we might think that something like (W₃) holds:

- (W₃) The reference of ‘water’ is fixed by the property of being the clear, odorless, drinkable stuff which primarily fills the oceans and lakes.

It is precisely against specifications like (W₃) that Schroeter and Nimtz mount their attacks. Even if they succeed in this, we’ve already seen that it would be a mistake to conclude that they’ve shown that reference-fixers are not c-knowable *at all*.

Schroeter and Nimtz do, I think, succeed in showing that simple descriptions such as (W₃) will not do: for any property we think should figure in the description, we can imagine ways the world might turn out to be, such that ‘water’ would refer to stuff which lacks that property. And simple fixes such as requiring the majority of properties listed to be instantiated will, it seems obvious, fail for similar reasons.

I will suggest a direction for solving such problems at the end of this paper. For the time being, I will just note that we should have some reason for optimism on this matter. Our semantic judgments do not come out of nowhere; and most of the time we have no serious difficulty in saying what ‘water’ or other natural kind terms would denote, given different ways the world might turn out to be. We should not let the fact that, in thought experiments, we usually consider *difficult* cases blind us to the fact that for most scenarios we might consider, the answers would be quite obvious. It would be surprising if *no* description of the features which guide our semantic intuitions could be given, as a matter of principle. We should not be too hasty in concluding, on the basis of the failure of the rather obvious candidates, that no descriptive specification is possible.

3. Sortal constraints

We have seen that there are (at least) three ways of specifying reference-fixers. The c-knowability of the first, conditional-conjunctive kind should be admitted by anyone who accepts the intuition-driven methodology generally used by externalists. Now I want to look at a problem that arises for the second and third kind of specification (and, plausibly, for any kind of specification which attempts to formulate a useful generalisation).

Schroeter (2004) has pointed out that specifications of these types⁵ will need to include a *sortal*: we need to be told what ‘stuff’ means in (W₂) and (W₃). The reason is that, without a sortal, reference *failure* will be difficult to account for. According to Schroeter, the sortal constraint is an insurmountable obstacle for conceptual analysis: we cannot c-know what the proper sortals are for our natural kind terms.

Here is her central example:

Consider the four classical elements: earth, air, fire and water. Aristotle took these to be four basic configurations of prime matter which entered into the constitution of all material bodies. [...] So a modern analyst might be tempted to say Aristotle’s ‘water’ concept referred to that basic configuration of prime matter which most closely satisfied Aristotle’s own criteria for identifying water in the actual world. If that *is* what Aristotle had in mind, however, his ‘water’ concept did not manage to refer to anything at all—or at least not anything in *this* world.” (Schroeter 2004, 437)

This is not, of course what we want to say. We want to be able to say that Aristotle’s ‘water’ concept *did* refer to water—he just had mistaken views about the underlying nature of water.

⁵ To be precise, Schroeter only considers descriptive specifications, but obviously a sortal will be needed for reference-theoretic specifications as well, for identical reasons.

What, then, is the appropriate sortal for ‘water’? ‘Basic configuration of prime matter’ is clearly too strict. Schroeter considers other candidates (Schroeter 2004, 438). We might think that something like ‘the *structural kind* that underlies watery phenomena⁶ in the actual world’ would do the job. And this would seem to give the right account of ‘water’. The trouble with this suggestion is that it will not generalize: Aristotle thought that ‘earth’, ‘fire’, ‘air’, and ‘water’ were on a par, so we should expect the same sortals to have been associated with each one. Earth turned out *not* to be a structural kind; hence, Aristotle’s ‘earth’ would come out non-referring. And that cannot be right.

We might try a yet more liberal sortal: ‘the *substance* that underlies watery phenomena in the actual world’. Now ‘earth’ behaves as it should, but the sortal is still too strict, for Aristotle’s ‘fire’ comes out non-referring: fire has turned out not to be a substance, but a process. Schroeter concludes that no appropriate sortal can be specified. Yet we clearly do need a sortal, because otherwise we run the risk of making reference-failure *impossible*. Without a sortal, we might be forced to say that ‘phlogiston’ does refer, after all, not to a substance but something like *oxygen deficit*.

The solution is to recognize that there need not be a single sortal associated with a natural kind term. Rather, I think that natural kind terms have a *conditional sortal structure*. For ‘water’, the structure would be roughly as follows:

(W4) The reference of ‘water’ is fixed to:

the unique structural kind that underlies watery phenomena
in the actual world, if there is one;
failing that, the finite disjunction of structural kinds which
underlie watery phenomena in the actual world, if such ex-
ists;
failing that, the functional kind that underlies watery phe-
nomena in the actual world, if there is one;
failing that, the process that underlies watery phenomena in
the actual world, if there is one;
failing that, ...
...
... failing that, nothing.

Something similar would presumably hold for other natural kind terms, too,

⁶ The use of ‘watery phenomena’ here suggests, of course, a descriptive specification. But obviously the problem arises equally for reference-theoretic specifications. I will ignore this complication below; similar reasoning will apply for both kinds of specification.

but there is no reason to think that the sortal structure would be identical for all natural kind concepts.

One might think that a conditional specification of this kind is far too sophisticated to be assumed to be *c*-knowable just on the basis of one's semantic competence. But my claim is not that such a structure would have to be *learned* in order to become competent, or that it should be even remotely obvious to competent speakers. Rather, to become competent one has to acquire a set of dispositions towards a pattern of (possible) usage which conforms to such a structure. Our semantic intuitions make this pattern of usage manifest, and the conditional sortal structure is a *systematization* of such a pattern. Natural kind terms *prefer* a unique structural kind, but this preference is defeasible. We find out what the structure is like by consulting our semantic intuitions about the reference of 'water', given various ways the world might turn out to be.

4. Objections and Replies

4.1 "A Posteriori Externalism"

The view that our natural kind concepts *prefer* unique structural kinds as their referents, but may still denote *something* if unique structural kinds are not to be had, has been suggested as a way of possibly rescuing semantic externalism from the problems of reference failure (Gallois 1996) and the problems of self-knowledge (McLaughlin and Tye 1998, Korman 2006, Haukioja 2006). Sören Häggqvist and Åsa Wikforss (Häggqvist and Wikforss 2007, Wikforss 2005) have presented a number of objections to this line of thought. I will here quickly respond to what I take to be their central concerns.

Wikforss's main complaint is that conditional sortal structures are *ad hoc* and violate the spirit of externalism:

Putnam and Kripke both reach their anti-descriptivist conclusions by arguing that intuition tells us that none of the descriptions associated with 'water' or 'gold' are necessary. On the disjunctivist [conditional] view, however, intuition can tell us nothing about the modal status of statements about water, since intuition can tell us nothing about the semantics of 'water'. (Wikforss 2005, 78)

I think this misrepresents both the conditional view and the views of Kripke and Putnam. Putnam, in particular, clearly argued that, *if* the actual world is roughly as we think it is (water-wise), *then* 'water' is a rigid designator, and any descriptions we may associate with 'water' will be at best contingently true of water. Similarly, on a conditional view such as the one I sketched above, it is simply not true that "intuition can tell us nothing about the semantics of 'water'". On the contrary, intuition (and *only* intuition) tells us

how the semantics of ‘water’ varies as a function of how the actual world turns out.⁷

Similar remarks apply to Wikforss and Häggqvist’s worry that what they call “a posteriori semantics” would sever the connection between speakers’ intentions and the semantics of their terms in an unacceptable way. Their main target of criticism is a view on which “the details of the environment determine *what sort of a term* a given expression is, and hence what kind of semantics they should be given in the first place” (Häggqvist and Wikforss 2007, 380). But of course the sensible externalist will not claim that the environment, *all by itself*, determines such things. Our intentions determine the semantics of ‘water’, *for any given way the world might turn out to be*—our physical environment merely determines which of these ways is the actual one.

Häggqvist and Wikforss do acknowledge views of this kind (which posit subjects with what they call “disjunctive intentions”—“*conditional* intentions” would, in my view, be more accurate), only to dismiss them quite quickly:

... the appeal to disjunctive intentions clearly requires ordinary speakers to have intentions concerning *semantics*, involving semantic theories, and attributing such meta-semantic intentions [...] to ordinary speakers is utterly implausible. (Häggqvist and Wikforss 2007, 382)

But surely the intentions need not (and do not) concern semantic *theories*! It is enough that speakers have the kinds of *intuitions* about the application of ‘water’ which are captured in something like (W₄)—and at least in my own case, fairly simple thought experimentation is enough to bring these out. Semantic theories may be formulated to *systematize* such intuitions, but it would be absurd to require speakers to have *explicit* intentions about reference determination.

4.2 Social Externalism

So far I have been almost exclusively concerned with *physical* externalism. One might worry that *social* externalism would cause problems for my view. If a certain kind of social externalism is true, it could apparently always turn

⁷ Accordingly, Wikforss’s claim that “no thought-experiment, such as the Twin Earth-experiment, can be used to support the a posteriori externalist [*i.e.* conditional structure] position” (Wikforss 2005, 79) is simply false. The conditional structure gets all its support from our intuitions about what we would say in response to various Twin Earth-like thought experiments; the only difference is that, unlike in the most common Twin Earth experiments, we are now contemplating various ways the *actual* world might turn out to be. But this difference does not in the least violate the spirit of externalist thought experimentation: Putnam was already engaged in this kind of reasoning in “The meaning of ‘meaning’” (Putnam 1975, 241).

out that I am not fully competent with a given concept, and hence any claims about reference-fixers that I might arrive at by mere reflection on my concept would be empirically defeasible. Although I have avoided explicitly equating *c*-knowability with apriority, it would still be natural to worry that such empirical defeasibility would call into question the claim that reference-fixers are *c*-knowable.

Social externalism, if accepted, will have an effect on the specification of reference-fixers which we should think of as *c*-knowable, but I do not think that it causes any serious problems. To clarify matters it will be helpful here to rely on the distinction between *instrumental* and *pure* deference (see Jylkkä 2009, 37–38). In short, a speaker or thinker defers to experts instrumentally when he or she relies on the experts to be more reliable about the empirically discoverable essences of natural kinds. This notion of deference is, I think, what people usually have in mind when they think the folk defer to experts with respect to their natural kind concepts. It is important to note that instrumental deference does not cause any complications for my view: the experts will merely be more knowledgeable about which clause of the *c*-knowable conditional structure will “kick in”—instrumental deference has no effect on the structure itself.

The *pure* deferrer, on the other hand, defers to experts on the conditional structure itself: on the way the semantics of a kind term varies as a function of how the world turns out to be. A pure deferrer’s intentions with respect to his or her natural kind concept leaves open the possibility that, whatever *kind* of stuff he or she might believe ‘water’ could turn out refer to, these intentions could be overridden if they turned out to be at odds with the *experts’* metasemantic intentions. If we in fact are pure deferrers with respect to our natural kind concepts—and this assumption is more controversial than the assumption of wide-spread *instrumental* deference—then we will need to embed the conditional sortal structure in another conditional, along the following lines:

(W5) If my metasemantic intentions are aligned with the experts, then the reference of ‘water’ is fixed to:

the unique structural kind that underlies watery phenomena in the actual world, if there is one;
 failing that, the finite disjunction of structural kinds which underlie watery phenomena in the actual world, if such exists;
 failing that, the functional kind that underlies watery phenomena in the actual world, if there is one;
 failing that, the process that underlies watery phenomena in

the actual world, if there is one;
 failing that, ...
 ...
 ...failing that, nothing.

Hence, if pure deference exists, the *c*-knowable specifications of reference-fixers turn out to be even more complex, but that does not make them any less *c*-knowable.

4.3 Is This Conceptual Analysis?

Yet another kind of worry about the view I am proposing is that the claims about reference-fixers will truly be results of conceptual *analysis* only on pain of collapsing my position to two-dimensionalism, or another related form of two-factor semantics. Even if reference-fixers are *c*-knowable, the worry goes, as long as I deny that the reference-fixers give the *meanings* of natural kind terms, the activity by which we arrive at them is not conceptual analysis, but something different.

I do not want to place too much of an emphasis on terminology—it may be true that the armchair activity I am defending does not fully fit the traditional notion of conceptual analysis; the way we arrive at knowledge of reference-fixers is not by an analysis of the *semantics* of our natural kind terms, but rather by reflection on the *metasemantic* intentions which make our natural kind terms express the concepts which they in fact express. However, the activity still looks very much like conceptual analysis: proposed reference-fixing descriptions are tested against our semantic judgments concerning a range of fictional examples. And, most importantly for my purposes, if the activity is successful, we arrive at *c*-knowledge of reference fixers, and the counterarguments of Schroeter and Nimtz have been answered. The question of whether or not the activity deserves to be called “conceptual analysis” is of less importance.

5. Conclusions

I have claimed that *some* specifications of reference-fixers *must* be *c*-knowable if intuition-driven thought experimentation is the proper tool for doing the theory of reference for natural kind terms. At the minimum, conditional-conjunctive specifications are. If a causal theory of reference for natural kind terms is true, and conditional sortal structures are allowed, reference-theoretic specifications will be *c*-knowable as well.

The main moral of this discussion is that it is at best misleading to claim that thought experiment can show that reference-fixers are not *c*-knowable. The most one might be able to show by Twin Earth-style thought experiment

is that *descriptive* specifications are not c-knowable. This is what the critics in fact attempt to do. The important thing to notice is that even if they succeed, (meta)conceptual analysis has not been shown to be *impossible*, it has merely been shown to have *certain limits*.

Finally, a speculative suggestion. If a conditional structure is allowed for the sortal, why not allow one for the manifest properties which figure in the descriptive specifications as well? I cannot develop this idea here, but there does not seem to be any principled reason against such a view. If a descriptive specification of the reference-fixing conditions with conditional structures both in the specification of the sortal and in the specification of the manifest properties is possible, we have secured a place for a substantial kind of conceptual analysis, without compromising any of the fundamental insights of externalism.

Acknowledgements

This paper grew out of material that I have presented at conferences, seminars and workshops in Barcelona, Jyväskylä, Lisbon, San Francisco, Tartu, and Turku. I am grateful to the audiences for discussion. I owe a special gratitude to Oscar Cabaco, Sanford Goldberg, Henry Jackman, and an anonymous referee for this journal, for detailed and helpful comments on earlier versions of the paper. This work was financially supported by the Academy of Finland (grant 207129).

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