Rule-Following Made Easy

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I wish to argue that the problem of rule-following rests on semantic internalism and that semantic externalism makes the problem evaporate. Given that the rule-following problem is a version of the general problem that the reference of an intentional phenomenon is underdetermined by its meaning, semantic externalism solves the problem by reducing meaning to reference. Since both Kripke and Wittgenstein are proponents of semantic externalism, the problem of rule-following is not a problem for either Kripke or Wittgenstein, but only for Wittgenstein's internalist interlocutor.

1. The Problem of Rule-Following

In *Wittgenstein on Rules and Private Language*, Saul Kripke attributes a skeptical problem to Wittgenstein: given any symbol or word, there is nothing in one's past history, including one's past mental states, that would both explain and justify one's current application of the word or symbol. Kripke illustrates this problem by means of a thought experiment: imagine a person--let's call him Oscar--who learned the mathematical function '+' in elementary school but who never before used this function to calculate with numbers larger than 57. Suppose that Oscar is asked "How much is 68 + 57?". When Oscar follows the rules of addition, the answer is clearly '125'. Yet Kripke's point is that Oscar's past calculations can also be subsumed under a rule other than addition. There is no fact about his past history that determines that his expression '+' cannot be interpreted as standing for, say, the rule of *quaddition*, which is defined as follows:

x quus y = x + y, if x,y < 57

x quus y = 5 otherwise.

If Oscar's past calculations are interpreted according to the rule of quaddition, the correct answer to the question "How much is 68 + 57?" is not '125' but '5'. The problem of rule-following culminates in the question: what fact about Oscar's history determines whether '125' or '5' is the correct answer to the question "How much is 68 + 57?"? Is there a fact of the matter by virtue of which "Oscar means addition by '+'" is true or false?

A naive answer to the question "What about you makes it the case that by '+' you now mean plus and not quus?" runs something like this:

The reason I mean plus and not quus is because I have been trained to do arithmetic in a certain way, and as part of that training I learned to use the '+' sign for addition and not for some other function. According to that training, if I now compute '68 + 57' and get anything other but than '125', I have made a mistake.

Prima facie, this is a convincing answer to the question at hand. The reason it seems to be a convincing answer is that it provides a causal account of why Oscar gives the answer '125' as well as a normative account of why that answer is correct and other answers are not correct. Yet despite its intuitive appeal, Kripke rules the naive answer out of court.

What is Kripke's reason for dismissing the naive answer to the problem of rule-following? Why is Oscar not allowed to explain and justify his use of the '+' sign by citing his training in elementary school? Two explanations suggest themselves. Firstly, Kripke could justify the dismissal of the naive answer by pointing to the prevalence of memory failures. This, however, is not to the point. Kripke assumes that Oscar has perfect memories. We may even suppose that Oscar distinctly remembers his elementary school teacher having said "68 + 57 = 125". Does this piece of memory allow him to know that his use of '+' refers to the rules of addition rather than the rules of quaddition? No! For even if Oscar correctly remembers his teacher having said "68 + 57 = 125", and even if we assume that his teacher is known to be a reliable source of information, that piece of memory can be interpreted in a number of different ways. For how does Oscar know that the word 'plus' which his teacher used when he said "68 + 57 = 125" should be interpreted according to the rules of addition rather than, say, the rules of *gruddition*? 'Gruddition' is named after Nelson Goodman's favorite color 'grue'. Something is grue if it is examined before time t (where t is some time in the future) and green, or not examined before time t and blue. Given the definition of 'grue', the function of gruddition can be defined as follows:

x gruus y = x + y, on Monday morning, 17 September 1974

x gruus y = 5 otherwise

If Oscar cannot decide whether his elementary school teacher taught him the rules of addition or the rules of gruddition, he doesn't know whether the correct answer to the question "How much is 68 + 57?" is '125' or '5'.

The conclusion of Kripke's problem of rule-following is that there are no mental facts of the matter which constrain our uses of words and symbols. Any fact of the matter that we are able to introduce to answer the skeptical problem will always be subject to reinterpretation. Intentional phenomena (such as rules, words and beliefs), by themselves, are incapable of determinate representation in at least the following sense: they always permit a multiplicity of interpretations. The rule-following problem is a version of the general problem that meaning doesn't uniquely determine truth conditions. The reference of an intentional phenomenon is underdetermined by its meaning.

Assuming that the problem of rule-following is not just Kripke's invention but is in fact Wittgenstein's problem, and assuming that Wittgenstein attempts to solve the problem the question imposes itself: what does Wittgenstein's solution amount to? Since it is notoriously difficult to be confident about the views of the historical Wittgenstein, I will not attempt to do an exegesis of Wittgenstein. Rather than trying to say how Wittgenstein solves the problem of rule-following, I will focus on how, in my view, he *should* solve the problem of rule-following.

2. Semantic Externalism and Rule-Following

In this section I will argue that semantic externalism makes the problem of rule-following evaporate. In the following section I will show that if the later Wittgenstein can be categorized at all, he belongs in the externalist camp.

Semantic externalism is the thesis that psychological states are individuation-dependent on aspects of the environment of their subjects. The contents of an individual's mental states and the meanings of his words crucially depend on systematic relations that the individual bears to aspects of his physical and/or social environment. A mental state can bear different contents depending on its relation to factors in the environment. Semantic externalism stands opposed to internalism, which holds that the contents of our intentional states are determined independently of any particular object or property in the environment; they are determined 'in the head', to use Putnam's idiom.

When the meaning of an intentional phenomenon is independent of environmental conditions, a logical gap opens up between meaning and reference, intension and extension, or intentionality and representation. The gap between what an intentional phenomenon means and the affairs in the environment it denotes is a necessary presupposition of the rule-following problem. For, as was explained above, the rule-following problem is a version of the general problem that the reference of an intentional phenomenon is underdetermined by its meaning. Obviously, the thesis that meaning underdetermines reference rests on the internalist view that meaning and reference are logically distinct.

To drive home the point that the problem of rule-following presupposes semantic internalism, consider the following passage by Kripke:

I feel confident that there is something in my mind--the meaning I attach to the 'plus' sign--that *instructs* me what I ought to do in all future cases. I do not predict what I will do [...] but instruct myself what I ought to do to conform to the meaning. [...] But when I concentrate on what is now in my mind, what instructions can be found there? [...] The infinitely many cases of the table are not in my mind for my future self to consult. [...] What can there be in my mind that I make use of when I act in the future? It seems that the entire idea of meaning vanishes into thin air (pp. 21-2).

Kripke's preoccupation with the idea that when I apply my words I consult something in my mind leads him to think that knowing the meaning of a term is a matter of being in a psychological state that determines the reference of the term. Meaning is thought to determine reference. And the point of the rule-following argument is that this assumption cannot be sustained since I may know the meaning of my word 'plus' and still not know which rule is picked out by this word.

Given that Kripke presupposes semantic internalism to get the problem of rule-following off the ground, a 'straight' solution to the problem of rule-following consists in the adoption of semantic externalism. Since externalism reduces meaning to reference, it makes the logical gap between meaning and reference disappear. The problem of rule-following disappears with this gap. For once meaning is identified with reference, it is impossible that reference should be underdetermined by meaning.

According to (social) externalism, it is the cooperative use of a term that determines its meaning. Once an individual knows how his language community uses a term, he knows what the term means. Analogously, when he knows the meaning of a word in his vocabulary, he knows what his language community uses the term to denote. By reducing meaning to reference and by connecting an individual to its language community, (social) externalism undermines the foundation of the rule-following problem.

If I am correct in claiming that semantic externalism makes the rule-following problem evaporate, then rule-following considerations could be used as an argument in favor of (social) externalism.

3. Wittgenstein and Semantic Externalism

If Wittgenstein can be categorized at all, he belongs in the externalist camp. His commitment to externalism comes out in his repeated attacks on those who think of reference as being determined by something in the speaker's head, something lying behind and giving life and meaning to otherwise meaningless sounds. One of the many places where Wittgenstein's rejection of semantic internalism surfaces is § 139 of the *Philosophical Investigations*. Wittgenstein confronts us with a picture of a man walking on a slope (Fig. 1).

Figure 1

What does the drawing represent? A man walking up a steep hill? Or a man sliding backwards downhill? Does it depict how a particular person walked on a particular occasion or how we ought to walk? Wittgenstein's point is that these questions are wrong-headed. The drawing can be *used* to represent any of these things. And whatever it is that the drawing represents, it doesn't represent it intrinsically. Its meaning depends on something extrinsic to it, such as its use by society.

One may suspect that the reason the drawing under consideration has to rely on contextual factors to determine satisfaction conditions is because its meaning, taken by itself, is ambiguous. Therefore one may want to add an arrow to indicate the direction of the man's travel (Fig. 2; both drawings are taken from Heil 1992, p. 27).

Figure 2

But adding an arrow will not help, for the arrow allows for a multitude of interpretations just as the initial drawing does. Does the arrow represent the direction in which the figure is moving, or the direction from which it has moved? Or does it mean something else altogether? Just as the drawing of the man, by itself, means nothing, so does the arrow, taken by itself. It must be given a meaning by some extrinsic feature. To insist that a sign or image can possess intrinsic meaning is to fall prey to what Hilary Putnam dubs a 'magical theory' of meaning.

What the discussion of the walking man illustrates is that representational items depend for their meaning neither on their own intrinsic properties nor on the intrinsic properties of other representational items. Rather than possessing meaning intrinsically, representational items and inten-

tional states owe their meaning to something outside themselves. They acquire meaning only by way of systematic relations they bear to states of affairs extrinsic to them. According to Wittgenstein, these states of affairs concern the function of representational items and intentional states in the lives of speakers and thinkers. The meaning of words and thoughts is determined by their use by a given community.

Given that the problem of rule-following rests on semantic internalism, and given that Wittgenstein is a proponent of semantic externalism, it follows that the problem of rule-following isn't a problem from Wittgenstein's own point of view but only from the standpoint of his internalist interlocutor. And since, in *Naming and Necessity*, Kripke too embraces a version of semantic externalism, the rule-following argument doesn't challenge his point of view either. We may conclude then that the problem of rule-following that Kripke attributes to Wittgenstein is not a problem for either Kripke or Wittgenstein.

4. Conclusion

Philosophical problems are rarely solved; usually the problems merely change their form. This is also the case here. For even if semantic externalism dissolves the rule-following problem, and even if there are convincing arguments in favor of semantic externalism, this solution of the rule-following problem gives rise to a new problem.

Given that the meaning of intentional states is determined 'in the head', there is the problem of knowing the reference of intentional states on the basis of knowledge of their meaning. This is the general structure of the rule-following problem. By reducing meaning to reference, semantic externalism solves the problem of rule-following, but only at the cost of giving rise to a new problem. For when the meanings of my words and the contents of my thoughts are determined by external affairs, knowledge of the meanings and contents seems to require information beyond what is available to reflection. Thus semantic externalism seems to come into straightforward conflict with the claim that knowledge of one's own intentional states is typically *direct*, since knowing what type an intentional state is seems to require knowing the factors that individuate that type from others.

My view is that semantic externalism *is* compatible with direct knowledge of one's thought contents. But that's not the point. Rather, the point is that while semantic internalism raises the question of how we can know the reference of an intentional state on the basis of knowledge of its content, semantic externalism raises the question of how we can directly know the contents of our intentional states. Essentially the same epistemological problem remains, only now it operates at another level.

Literature

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