

Wittgenstein on Logical Necessity: Two Interpretations

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In this short paper, I will look at Wittgenstein's ideas about logical necessity as developed in the *Remarks on the Foundations of Mathematics (RFM)*. Dummett's interpretation of Wittgenstein is first discussed and criticised, and then Stroud's interpretation is put under scrutiny. Stroud's interpretation is closer to a correct reading of Wittgenstein in *RFM* than Dummett's, but it ignores an important aspect of his thoughts on logical necessity, namely the decision element. Dummett's interpretation, though flawed, has the merit of taking into account Wittgenstein's notion of decision. I suggest that properly understood, the decision element can be incorporated to Stroud's interpretation, thus yielding what I believe is the correct and most plausible understanding of Wittgenstein's view on the subject.

Let us begin with Dummett's interpretation of Wittgenstein's views on logical necessity. According to Dummett, Wittgenstein espouses a full-blooded Conventionalism. On this view, nothing at all forces one to give a determined result when, say, applying an arithmetical function to a given number. For instance, when applying the function '+2' to the number 1000, nothing at all forces one to come up with the result '1002'. One is free to deliver the result one wants. Dummett writes [1959: 337] that Wittgenstein's idea is that 'one has the right simply to *lay down* that the assertion of a statement of a given form is to be regarded as justified, without regard to the use that has already been given to the words contained in the statement'.

So on this understanding of Wittgenstein's view, to apply an arithmetical rule in a certain way is tantamount to confer necessity on the result of the application. It is in relation to this special feature of arithmetical statements that we get an idea of the central role such statements play in our lives for Wittgenstein. The arithmetical case is indeed different from, say, applying the word 'red' to an object - in the latter case, we don't want to say that we put the result in the archives and will count nothing against it. In effect, the languages of mathematics and logic occupy for Wittgenstein a very special place. They act as determinants of sense, as rules of the grammar (the syntax) of our language. At one place, Wittgenstein writes: 'What I always do seems to be - to emphasise a distinction between the determination of a sense and the employment of a sense' [*RFM*: III, 37]. For instance, in the case of 'red' described above, we are using a

sense, whereas in the arithmetical case we are determining a sense. Two remarks later [RFM: III, 39], he says: 'to accept a proposition as unshakeably certain - I want to say - means to use it as a grammatical rule: this removes uncertainty from it'. He clearly has in mind here the acceptance of a proposition such as '1002 comes after 1000 when applying the function "+2"'. Putting these two remarks together, we arrive at the view according to which the acceptance of such arithmetical statements amounts to the adoption of a rule of grammar. Rules determine what expressions mean, so accepting a proof is tantamount to confer meaning to expressions.

For the moment, let us remember that according to Dummett's Wittgenstein, every time one accepts a statement as logically necessary, one is conferring meaning on the expressions involved. Two points are worth pointing in relation to that. First, since the expressions, before the decision to ascribe logical necessity, already have a meaning, it follows that expressions are constantly changing meaning. Second, since nothing guarantees that everyone in a community of speakers will make the same ascriptions of necessity, it follows that speakers in the community will use the same words but confer a different meaning to it.

The problems with such a view are tremendously great. To sum up, we here have a theory that says:

- (1) The source of logical necessity consists in individual decisions, ungoverned by any norms.
- (2) Ascribing logical necessity to an expression affects the meaning of the expressions involved.
- (3) Nothing guarantees that speakers will make the same ascriptions.
- (4) The meaning of expressions thus may constantly vary, from speakers to speakers and also from the individual speaker's perspective.

Dummett is right to say that this theory is very hard to swallow. It is clear that (1) - (4) together renders communication between speakers an unexplained phenomenon. So we are faced with a dilemma: either we accept that communication is problematic, or we find fault with (1) - (4). Adopting the first option leads to another dilemma: either we consider communication impossible, or we consider it as a miracle (since it involves that by an amazing coincidence, all speakers happened to have made the same ascriptions of necessity - despite the fact that no norms at all govern such ascriptions). It should be clear that both options are in effect a *reductio* of Wittgenstein's position so conceived. For one thing, communication is not impossible: it is a fact that people communicate and understand each other, the challenge being to make sense of that obvious phenomenon, not to dismiss it as a myth. For another thing, considering the effectiveness of

communication as a miracle is as counter-intuitive as holding that communication is impossible. There is undeniably a rational explanation to the phenomenon of successful communication, it won't do to hold that there are no explanations and that we are just lucky to be able to communicate to each other. The view appears plainly absurd. Dummett agrees with this assessment, and I agree with him on that. Where I disagree with him is on the attribution of this astonishingly counter-intuitive theory to Wittgenstein. Let us now examine Stroud's views on the matter.

Stroud [1965] also holds that Dummett's interpretation of Wittgenstein is incorrect and he attempts to credit Wittgenstein with a more plausible view on logical necessity. His interpretation is worth discussion since it reflects an aspect of Wittgenstein's philosophy that has been - and still is - much discussed. Stroud thinks it is wrong to put the emphasis on Wittgenstein's talk about 'decision'. Remember that the crux of the problem in Dummett's interpretation is the idea that what is logically necessary is the product of decisions taken somehow arbitrarily. This is what leads, coupled with Wittgenstein's views on rules and meaning, to the apories mentioned above. According to Stroud, we would do better to read Wittgenstein as saying that there are norms to which ascriptions of logical necessity have to answer to. It's just not the case that anything goes: the facts show, on the contrary, that there is a wide convergence on ascriptions of logical necessity. There seems to be nothing prompting wider agreement - nothing more necessary, one is tempted to say - than the truth of correct simple arithmetical operations. Stroud argues that Wittgenstein does offer an explanation of the convergence in play here, an explanation which manages to avoid the pitfall of Platonism.

The problem is the perennial one of locating norms in a naturalistic framework. This is what the problem of logical necessity is all about: we want to say, intuitively, that we are following a somehow 'objective' norm when applying the necessity operator without postulating an abstract realm of objects to which ascriptions of necessity would have to answer to. Wittgenstein is not, on Stroud's interpretation and contrary to Dummett's, merely escaping the problem by postulating that there are no norms after all. Rather, what determines correct ascriptions of logical necessity has to do with 'facts of our natural history'. Wittgenstein says, in an important passage that clearly contradicts Dummett's interpretation:

But how then does the teacher interpret the rule for the pupil? (For he is certainly supposed to give it a particular interpretation.) - Well, how but by means of words and training?

And if the pupil reacts to it thus and thus; he possesses the rule inwardly. But this is important, namely that this reaction, which is our guarantee of

understanding, presupposes as a surrounding particular circumstances, particular forms of life and speech. [...]

(This is an important movement of thought.) [*RFM*: VII, 47]

So Wittgenstein, in this passage, is clearly affirming the existence of a norm - contrary to what Dummett holds. Reading this quote in the context of logical necessity, it appears that the reason why we agree on our ascriptions of logical necessity is because we share a 'form of life'. The idea of a form of life is by no means clear and sharp. But in any case, Wittgenstein is suggesting that there is a norm that human beings are following.

A word on the notion of forms of life is in order at this stage. The motivation for introducing it is, it seems to me, to make sense of the idea of people making different ascriptions of logical necessity. To keep with a simple example, we want to say, intuitively, that a proof of ' $2 + 2 = 4$ ' is logically necessary. That is, if '2' means what it means, and '+' means what it means, and so forth, then it appears that adding two to two must result in having four. There is wide agreement on the impossibility of having a different result - in fact, the agreement is so wide that were someone to say that the outcome of the calculation is different from what the rest of us takes it to be, we would assume that this person does not understand the concepts involved. Wittgenstein agrees that there is this wide agreement: 'If you draw different conclusions you do indeed get into conflict, e.g., with society; and also with other practical consequences' [*RFM*: I, 116]. But he warns us not to be seduced by this convergence into thinking that something outside of us makes such ascriptions true. He wants to avoid the pitfall of Platonism. His notion of a form of life offers a means to explain the convergence without embracing Platonism. It is because we are entrenched in a form of life that we have the beliefs about logical necessity that we do, not because of external facts corresponding to these ascriptions. All of those who share our form of life will broadly agree on what is logically necessary and what is not. Therefore, on this view, it is conceivable that there is another species, another people, who do not share our form of life and think that when you add two to two, you have five. Now it is important to emphasise that what is conceivable to us is the idea of different forms of life, not the concepts belonging to these different forms of life. The idea of adding two to two and not obtaining four is simply not intelligible to us: what is intelligible to us, according to Wittgenstein, is the idea of people not sharing our form of life. That is the whole point behind remarks such as 'somebody may reply like a rational person and yet not be playing our game' [*RFM*: I, 115]. We thus avoid Platonism by recognising the possibility of people sharing a different form of life and having a different arithmetic. If what is necessary, in arithmetic, is relative to a form of life, it follows that the correctness of ascriptions of logical necessity does not depend on an abstract realm making these ascriptions true.

So what we have, under Stroud's interpretation, is a view locating the source of logical necessity in these very general facts about human nature. We do not explicitly, in the manner of the conventionalism of the positivists, adopt our form of life as we adopt a convention. When asked for an ultimate justification in ascribing logical necessity, the only answer is 'this is simply what I do' (see for instance [*RFM*: I, 63; *PI*: I, 117]). In other words, the only answer refers to our form of life. The only thing forcing us to believe in the logical necessity of certain statements is a desire to be true to our own human nature. Someone who would not make the same ascriptions of logical necessity as we do would be someone who is not part of our language-game, of our culture.

Stroud's interpretation, then, seems much more plausible than Dummett's. However, Dummett's interpretation puts great emphasis on the 'decision' element present in Wittgenstein's writings on logical necessity and it is undeniable that Wittgenstein talks about our making a decision when ascribing logical necessity. Stroud denies any role of decision in the ascriptions of logical necessity. This is because, I take it, this idea is in tension with Stroud's emphasis that we are somehow forced to accept logical necessities by our form of life. But then, was Wittgenstein merely confused when he talked about the decision element? Should we, like Stroud, ignore this aspect of Wittgenstein's thought? I believe there is a way to resolve this tension between Stroud's interpretation and the decision element. The key is to understand the decision element in such a way that 'deciding' to ascribe logical necessity is to somehow 'decide' to be playing this language-game and be true to our own human nature. Nothing forces one to accept logical necessities but the desire to be part of a form of life. The decision element in Wittgenstein's writings has to be understood in relation with his attack on Platonism. He wanted to free us from the idea that we are somehow responding to mysterious states of affairs when ascribing logical necessity, and to do that he made us realise that we are free to decide what is logically necessary in a way that we are not free to decide whether or not there is a tree over there. The sentence 'there is a tree over there' does owe its truth to something external, namely the fact that there is a tree over there. But that it is logically necessary that ' $2 + 2 = 4$ ' does not owe its truth to some facts external to us in this way. So one can decide not to ascribe logical necessity the same way that the rest of us do: it's just that this person took the decision not to share our form of life.

References

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