1 Rules: Propositions or Imperatives?

Professor Boghossian begins his discussion with asking what we follow exactly in rule-following; is it a (conditional) imperative of the form “If C, do A!” or a normative proposition which states either a norm of permission or that of requirement? Professor Boghossian gives two reasons why we should prefer a propositional construal of rules in general. Firstly, unlike an imperatival construal, we can encode the types of rules into their propositional contents, and thereby we can easily distinguish between the kinds of rules applying to different domains. Secondly, it is essential for our rule-following that some rules we follow are norms of permission, which can be captured only by a propositional construal.

Although, as it will be clear later, I don’t think the pair Professor Boghossian considers exhausts among them all the possible forms a rule can take, I completely agree with him in that a propositional construal of rules is better than an imperatival one; it seems to be very difficult to mark the different kinds of rules in terms of imperatives, and I don’t know how we can express a norm of permission by an imperative. However, according to Professor Boghossian, there is also an argument which pushes us in the direction of favoring an imperatival construal of rules. I repeat the argument here.

A picture of rational belief Professor Boghossian recommends consists in maintaining a principle such as:

(RatBel) S’s belief that p is rationally permitted only if S arrived at the belief that p by following the correct rule N.

And, the rule N is an epistemic normative proposition of the form:

(EpNorm) If C, then S is rationally permitted to believe that p.
Professor Boghossian gives some concrete examples of such rules on p.1 of his paper. One of them is the following:

(Observation) If it visually seems to you that p, and conditions D obtain, then you are rationally permitted to believe that p.

Let us suppose that it visually seems to S that there is a table in front of S, and several conditions that are necessary for S to be in an optimal state in seeing are all satisfied. According to the rule (Observation), S is rationally permitted to believe that there is a table in front of S. However, according to the principle (RatBel) which defines our picture of rational belief, S is not rationally permitted to believe that there is a table in front of S. Why? Even if S does not realize that there is a rule such as (Observation), S is rationally permitted to believe what S believes if the antecedent of (Observation) is satisfied by S. In other words, what (Observation) requires of S is only that S be in some epistemically favorable situation, and not that S follow the epistemic rule (Observation). Thus, if we want to uphold a picture of rational belief such as (RatBel), we should not say that S is rationally permitted to believe that there is a table in front of S, because S has not followed any epistemic rules in arriving at the belief.

I find this a very intriguing problem. As Professor Boghossian notes, this problem does not arise if we formulate the rules in imperatives. For example, let us reformulate (Observation) in an imperatival form:

(Observation-Imperative) If it visually seems to you that p, and conditions D obtain, then believe that p!

Now S should recognize this conditional imperative and follow it in order to be rationally permitted to believe that p. The reason why the problem does not arise if we use the rules in imperatival form is that an imperative is in its nature what demands an action on the part of a person whom it is addressed, at least a decision as to whether it should be followed or not. In contrast, asserting a proposition in itself does not demand any action on the part of a person whom it is addressed.

Is there any remedy which enables us to have the epistemic rules in propositional form and maintain the rule-following picture of rational belief at the same time? I believe there is.

What our consideration on the rule (Observation) has shown is that this rule is not correct in the light of the rule-following picture of rational belief; it is too strong in that it allows any person who is in a certain epistemically favorable situation to be entitled a rational belief. This indicates that (Observation) should be weakened and I suggest the following:

(Weakened Observation) If it visually seems to you that p, and conditions D obtain, then you are in a position to be rationally permitted to believe that p.
I understand by “being in a position to be rationally permitted to believe that p” a modality weaker than “being rationally permitted to believe that p.” Another way of characterizing this weaker modality is “having a chance of being rationally permitted to believe that p.” For example, a person who is in an epistemically favorable situation to believe that there is a table in front of her, but does not recognize that there is a general rule linking visual appearance to beliefs, is not yet rationally permitted to believe that there is a table in front of her; but, she has a chance of being entitled a rational belief in the sense that she will be rationally permitted to believe that there is a table in front of her if she recognizes the existence of a rule relating visual appearance to belief and applies it to her own case.

In general, an epistemic rule N which takes a form of a normative proposition should be weakened in the following way:

(Weakened EpNorm) If C, then S is in a position to be rationally permitted to believe that p.

Accordingly, the principle (RatBel) should be revised in the following way:

(Revised RatBel) S’s belief that p is rationally permitted only if S arrived at the belief that S herself is in a position to be rationally permitted to believe that p in such a way: for some correct epistemic rule N,

(i) S recognizes the truth of the antecedent of N, and
(ii) on that recognition and N itself, S recognizes the truth of the consequent of N, which says that S is in a position to be rationally permitted to believe that p.

Let me give an example. Suppose that it visually seems to S that there is a table in front of S, and the relevant conditions are all satisfied. Then, according to (Weakened Observation), S is in a position to be rationally permitted to believe that there is a table in front of S. But, this is not sufficient for S to be rationally permitted to believe it. For that, firstly, S should recognize that it visually seems to S that there is a table in front of S and that the relevant conditions are all satisfied, and secondly, S should infer from that and the rule (Weakened Observation) that S is in a position to be rationally permitted to believe that there is a table in front of S. Then, and only then, S is rationally permitted to believe that there is a table in front of S, according to (Revised RatBel).

2 Inference and Intention

But, Professor Boghossian’s main claim in his paper is independent of the question whether rules should be formulated in imperatives or propositions. (But I
do not think it is independent of the assumption that rules should be formulated in either of these forms. I will take this up soon.) It is concerned with the fatal flaw Professor Boghossian finds with the intentional view of rule-following.

Roughly speaking, there are now three types of responses to Kripke’s Wittgensteinian argument. Firstly, there is a sceptical solution which Kripke himself recommends; secondly, there is a variety of the dispositional views of rule-following; and lastly, there is the intentional view. Of these three, the intentional view seems to be the most reasonable response, and I myself have a sympathy to it. However, according to Professor Boghossian, the intentional view has the fatal flaw that it cannot be sufficiently general to cover all the cases of rule-following.

I understand Professor Boghossian’s argument as based on two claims: (1) the claim that, if we adopt the intentional view, any case of rule-following would involve some deductive inference such as Modus Ponens, and (2) the claim that performing an inference is itself a case of rule-following. A subsidiary argument to establish (1) seems to proceed in the following way:

a. Suppose we adopt the intentional view of rule-following.
b. Then, my adoption of any rule involves an intention (or, more generally, an intentional state) on my part to conform to some imperative or normative proposition which expresses the content of the rule.
c. But such imperative or normative proposition is conditional in form.
d. Thus, in following a rule, I should perform an inference like detaching the consequent (or antecedent, if I infer incorrectly) after recognizing the truth of the antecedent (or consequent).

But, as (2) claims, performing an inference is itself a case of rule-following. Therefore, as long as we stick to the intentional view of rule-following, we should conclude that performing such an inference necessarily involves another inference, and we are right off on a vicious regress.

It seems that (2) is undeniable, that is, we must admit that performing an inference is a case of rule-following. A vicious regress starts only after we reach the stage where we perform a deductive inference. So, even if we have only deductive inference as an example of rule-following, the same difficulty arises. Thus, it seems we are allowed to restrict our considerations on rule-following to the cases of performing a deductive inference.

The conclusion which we cannot accept but it seems we are forced to do if we adopt the intentional view of rule-following, is this:

(3) Performing an inference always involves another inference.

This shows that we think what is true is not (3), but its negation:

(4) There is a case of inference which does not involve any other inference.
As we have already accepted (2), we must conclude that

(5) There is a case of rule-following which does not involve any inference.

It is worth emphasizing that the conclusion (5) has been established without any assumption on rule-following except (2), and, for that reason, it is independent of any particular view of rule-following. Therefore, if we accept (5) as valid, then we can use (5) as a kind of touchstone to test any view of rule-following.

Now the problem is whether the intentional view of rule-following necessarily conflicts with (5). If the above argument for (1) is valid, then we should conclude that there is no prospect for the intentional view.

Can we find any step which can be refused with reason in the argument for (1)? There is one step which involves an assumption that seems suspect. It is the step b. and the assumption is that the content of every rule can be expressed by either an imperative or a normative proposition.

However, it seems that there must be some rules whose contents cannot be expressed fully by any single imperative or proposition, and I believe this is the lesson we should have learned from Lewis Carroll’s paradox.

Why could not the poor Achilles reach the conclusion q even though he had p and “if p, then q” as premises? It is because he thought only a conditional sentence like “if p and ‘if p then q’, then q” could justify his inferential step. If he had realized that an inference rule ¹ like

\[
\begin{array}{c}
p \\
\text{If } p \text{ then } q \\
\hline
q
\end{array}
\]

was all right as it was and needed no supplementation, he should have had no difficulty in reaching the conclusion.

So, the present suggestion is that we might be able to save the intentional view if we express the content of the Modus Ponens rule as an inference rule and not as a conditional proposition.

What is the intention which underwrites the Modus Ponens rule then? If it were something like

Intention: I hold valid any argument with the pattern

\[
\begin{array}{c}
A \\
\text{If } A \text{ then } B \\
\hline
B,
\end{array}
\]

¹ Henceforth I will use “an inference rule” to designate the logical rules a logic textbook distinguishes from logical axioms. An inference rule in this sense is an expression which indicates an argument form by the use of schematic letters.
then it would be no help. For, this would be really a single conditional sentence which says that, for any x, if x is an argument with a certain pattern, then I hold x valid, and we would be sent to the same vicious regress. So, let’s try again.

How about the following?

Intention: I use an inference rule \(^2\)  (MP)

\[
\begin{align*}
A \\
\text{If } A \text{ then } B \\
\text{B.}
\end{align*}
\]

There are two questions we should ask concerning this proposal. Firstly, doesn’t it lead us to a vicious regress? And, secondly, can it still be called an intentional view?

Let us suppose that I have two premises:

(P1) This is an email that I have just received.
(P2) If this is an email that I have just received, then I will answer it immediately.

and that I conclude:

(C) I will answer it immediately.

from these premises.

According to the present proposal, what explains my action of concluding (C) is my intention to use the inference rule (MP). But, in applying the rule (MP) to the present case, shouldn’t I perform another inference which moves from a general case represented by the use of schematic letters to the particular case I have here? It seems such an inference must be explained by another intention which takes the form of some sort of substitution rule. But then, this would be a beginning of a vicious regress.

Only way I can think of that can avoid such a regress is to refuse to admit that there is involved any inference in applications of basic inference rules such

\(^2\) If it is possible to think that there is a speech act of presenting an inference rule, this will be its canonical expression; so, the expression “I use an inference rule” functions just like “I command thus” or “I assert that,” and could be dropped when the kind of a speech act is obvious from the expression following it. So, this intention could be expressed more simply thus

Intention: (MP)

\[
\begin{align*}
A \\
\text{If } A \text{ then } B \\
\text{B.}
\end{align*}
\]

This shows that we can regard an inference rule itself as an expression of the intention behind its use.
as (MP). This is not so desperate as it sounds. After all, as we have already seen in (4) above, it is undeniable that there must be some inferences which do not involve any other inferences. We may suppose that what is involved in applications of a basic inference rule to a particular case is not a discursive ability like how to argue but more basic ability to discern and recognize a certain pattern in a syntactical construction, and this ability does not presuppose any inferential ability.

Here I would like to emphasize that, whether we formulate the Modus Ponens rule in an argument form like (MP) or formulate it in a single proposition, we should suppose that the basic ability of pattern recognition is equally indispensable in using them, for example, for judging whether we have an instance of a given argument form or propositional form. Therefore, what causes an infinite regress in one case and not in another is not that there involved the primitive ability for pattern recognition in one case and not in another. The difference lies entirely in the form the Modus Ponens rule takes, namely whether it is formulated as an inference rule, or as a single conditional proposition.

To see this, let us take again the transition from (P1) and (P2) to (C). This transition is made possible, firstly, by my recognizing the same pattern between the premises of the inference rule (MP) and the two particular premises (P1) and (P2), and secondly, by applying the rule (MP) to conclude (C). What would happen if we had only a conditional form of the Modus Ponens rule, i.e.

\[(\text{CMP}) \text{ If A and } \text{if A then B}, \text{ then B} \]

In this case too, I recognize in the premises (P1) and (P2) the patterns found in the antecedent of (CMP) by the basic ability I have for pattern recognition. But it itself does not help me to get to the desired conclusion (C); to do that we need at least two more inferences, namely, to get the conjunction from (P1) and (P2) to a single proposition

\[(\text{P1) and (P2),} \]

and perform Modus Ponens with this conjunction and an instance of (CMP) as new premises.

But, is the present proposal still an intentional view of rule-following? According to Professor Boghossian, “following a rule consists in acting on one’s acceptance of a rule” (the proposition 2 on p.19). And he characterizes the Intentional View of rule-acceptance as a “class of views according to which rule acceptance consists in some intentional state or other, even if it is not identified specifically with an intention” (p.11). So, our question comes to whether there can be an intention (or more generally, an intentional state) whose content can be expressed only in a form of an inference rule.

As I said before, one lesson we should learn from Lewis Carroll’s fable of Achilles and tortoise is that there must be an inference rule which cannot be
replaced by any single imperative or normative proposition. I believe that this lesson should be taken to heart also by those who are doing philosophy of mind; we should recognize that there is an intention which is essentially concerned with an argument pattern and cannot be reduced to anything else.