

WARREN'S CONVENTIONALISM

Ted Sider
Philosophy of Mathematics

1. The view

Logical conventionalism (p. 10) Facts about logical truth, logical falsity, logical necessity, and logical validity in any language are fully explained by the linguistic conventions of that language.

“Explanation” is of the “ordinary” sort, not “metaphysically heavyweight”.

“Conventions” are linguistic rules, such as *modus ponens*.

These are syntactic rules, akin to rules of grammar.

That we conform to them is a complex dispositional fact.

They are implicit in community usage; they're *not* explicit stipulations.

They can involve rejection, not just acceptance.

They are open-ended.

2. Unrestricted inferentialism

How do conventions explain logical truths? JW's answer: “unrestricted inferentialism”. Roughly: we are free to choose any rules we like, and those rules are thereby automatically valid.

Logical Inferentialism In any language, the meaning of a logical expression is fully determined by certain inference rules (its “meaning-determining” rules) governing its use

Meaning Validity Connection In any language L , the meaning-determining inference rules for a logical expression are automatically valid in L .

“Automatically valid” means that “nothing more is required of them for validity” (p. 59), and that their validity “can be given no deeper explanation” (p. 61).

Totality In any language L , if a logical inference involving a logical expression is valid in L , then its validity is fully determined by the automatic validity of the meaning-constituting rules for the expression.

Meanings Are Cheap Any collection of inference rules that can be used for an expression can (in principle) be meaning determining for the expression.

‘*Can*’: there are practical constraints on which rules we can actually follow, given the limitations of our computational powers; and, “a conflict between two rules could make it conceptually impossible to follow both of them at the same time. This will happen when the dispositions that constitute following one rule can’t be had jointly with the dispositions that constitute following the other rule” (p. 65). For example:

$$\frac{}{+(A \vee \sim A)} \quad (R1) \qquad \frac{}{-(A \vee \sim A)} \quad (R2)$$

One cannot both accept and reject any given sentence, any more than one could both catch and miss a bus. The functional roles of accepting p and rejecting p cannot be jointly instantiated... This impossibility isn’t owed to some external constraint in metasemantics; rather, it is rooted in the capacities of physical beings in a physical world.” (p. 132)

Thus the overall view is:

Unrestricted inferentialism Logical inferentialism (= Meaning Validity Connection + Totality) + Meanings Are Cheap

3. Tonk

Adding the Tonk rules really does result in every sentence being true, but those sentences don’t mean what they used to mean.

4. Does unrestricted inferentialism imply conventionalism?

Concern: even if conventionalism were false, unrestricted inferentialism might be true simply because metasemantics is extremely deferential to the use of logical expressions.

(Though JW might say that ‘automatically valid’ requires more than “inevitably valid”.)

5. Reply to the “master argument”

1. Necessarily, a sentence S is true iff p is true, where p is the proposition that S means.
2. Linguistic conventions don't make p true
3. So, linguistic conventions don't make S true

JW's reply: it's invalid since explanation is hyperintensional.

This sounds like it accepts 2 for the sake of argument. But surely conventionalists want to give an explanation of, e.g., that Snow is white or it isn't.

6. Response to the contingency objection

1. Our conventions are contingent
2. If our conventions are contingent and conventionalism is true, then the LEM is contingent
3. LEM isn't contingent
4. Therefore, conventionalism isn't true

...from the fact that our linguistic conventions, including those that we use to explain the truth of the LEM, could have been otherwise, it does not follow that the LEM could have been false, but only that in some possible languages a sentence of the syntactic form $\ulcorner \phi \vee \neg \phi \urcorner$ is false. (Warren, 2020, p. 172)

7. The use of natural necessity

In JW's unrestricted inferentialism, the the rules in question must be possibly used. JW argues that the notion of necessity here is a naturalistic one; but there is an epistemological issue: we apparently need to know that the rules are possibly used. Where is that knowledge coming from?

8. The notion of explanation

Concern about the use of the “ordinary” notion of explanation: in ordinary explanations we are happy to elide background information (e.g.: “Why did the match light? Because it was struck.”) But in this context we shouldn’t be eliding logical knowledge.

9. Knowledge of logic

Rule-circular argument that a given instance of modus ponens is truth-preserving:

1. Suppose ‘Snow is white’ is true
2. Suppose ‘If snow is white then grass is green’ is true
3. Then Snow is white (1, T-schema)
4. And if snow is white then grass is green (2, T-schema)
5. So Grass is green (3, 4 MP)
6. So ‘Grass is green’ is true (5, T-schema)

For this to yield knowledge, it’s enough that we’re “entitled” to use MP.

Boghossian’s defense of this entitlement:

Suppose it’s true that my taking *A* to be a warrant for believing *B* is constitutive of my being able to have *B*-thoughts (or *A*-thoughts, or both, it doesn’t matter) in the first place. Then doesn’t it follow that I could not have been epistemically blameworthy in taking *A* to be a reason for believing *B*, even in the absence of any reason for taking *A* to be a reason for believing *B*? For how could I have had *antecedent* information to the effect that *A* is a good reason for believing *B*, if I could not so much as have had a *B*-thought without taking *A* to be reason for believing *B* in the first place? If inferring from *A* to *B* is required, if I am to be able to think the ingredient propositions, then it looks as if so inferring cannot be held against me, even if the inference is blind. (Boghossian, 2003, p. 240)

(PB thinks we usually need to “conditionalize” concepts as a hedge against their being empty; but this wouldn’t work for ‘if’, so we are blameless for using its

unconditional version.)

JW's summary of the upshot (p. 163):

Meaning Entitlement Connection (MEC) Speakers are automatically epistemically entitled to use the basic rules of their language in all contexts.

My thought: it's no defense of a concept that if it weren't in good standing, we couldn't raise the question of its being in good standing.

10. Warren on mathematics: quantifier deflationism

Warren also accepts conventionalism for mathematics. E.g. the Peano axioms, construed as rules of inference, are automatically valid.

Many people (e.g., Kant) can't see how statements that imply the existence of entities could be analytic or conventional. In reply to this, JW embraces "quantifier metadeflationism". Roughly speaking: unrestricted inferentialism extends even to quantifiers; and all it takes to be a quantifier is to obey the usual inference rules (e.g., existential generalization, universal instantiation). This allows multiple inequivalent quantifiers.

References

Boghossian, Paul (2003). "Blind Reasoning." *Aristotelian Society, Supplementary Volume* 77: 225–48.

Warren, Jared (2020). *Shadows of Syntax*. New York: Oxford University Press.