What are propositions and why does a realist believe in them?

To answer this, consider the question: What is asserted when you say (or think) “a is F”? Let’s take as an example “This ink is black.”

According to the realist, it can’t be a sentence that you assert because:

a. You can assert the same thing in another language, but sentences are language bound.

b. A sentence by itself doesn’t have a truth value. Contextual information is needed to determine the content. But, even the “sentence + context” is not what is asserted. It doesn’t make sense to assert a “sentence + a context”. Although the context and sentence together express what is asserted, what is asserted is not merely the sum of its parts but something further (viz., the proposition expressed by the sentence in the context of utterance).

Thus, a realist posits propositions as that which is asserted or thought. They are abstract entities that are mind and language independent but essentially available to be thought asserted. Propositions are also eternal, necessary and intersubjectively available (i.e., common mental property).

Now, what is the role of that-clauses, or nominalizations? A that clause is literally the name of the eternal, nonlinguistic proposition. To nominalize is to name. So at this point the realist appeals to strategies we saw in connection with universals. Since that clauses behave like names, or nouns, it seems that we have syntactic evidence that there are propositions. The further fact of that clauses playing the subject role (“That this ink is black is true.”) seems to offer semantic evidence that there are propositions. A realist takes it that to act as a name/subject of predication is itself evidence that the that-clauses are in fact referring, i.e., that propositions exist.

Thus a realist will treat that clauses as complex singular terms with referential force, but with the important difference that co-referential terms cannot be substituted salva propositio, i.e., they are opaque. This is the point about Sam Small and “the tallest man in Indiana.” Propositions are unique representations of the world such that co-referentiality (in a particular world) does not result in sameness of propositions. Two propositions are the same if they have the same truth value in all possible worlds. So, the fact that Sam Small might not have been the tallest man in Indiana tells us that the truth values of the following two sentences are not necessarily the same:

Sam Small was admitted to Harvard.

1 Keep in mind these are not necessarily decisive arguments. Certainly the nominalist will have responses at hand. What are they?
The tallest man in Indiana was admitted to Harvard.

So what’s opaque is the step to reference, or the world, for definite descriptions. Proper names seem to be rigid designators so that they refer to the same particular in all possible worlds (transparent), whereas definite descriptions might pick out different particulars in different worlds (opaque — it’s easy to imagine that someone else could have been the tallest man in Indiana). So, substituting a description for a name has the effect of making it possible for the subject to vary across possible worlds. And, so, this implies that different propositions are expressed, since identity of propositions requires having the same truth-value in all possible worlds.

This leads to the further question about whether propositions are complexes like the sentences, or not. Proponents of propositions as meanings will be inclined to treat propositions as compositional, made up of the meanings of constituents and consider this to fit nicely with the phenomenon of opacity. Objections to this view raised by Loux include that we don’t seem to assert meanings and that it isn’t meanings that are true or false. Further, indexicals apparently pose a problem since they identify counterexamples to the proposition as meaning position by finding cases where we have a single meaning and multiple propositions (“I am here now”).

Perhaps the most important feature of propositions is that they are the bearers of truth values, as indicated by the truth of a sentence like “That this ink is black is true.” We also know about propositions that they are eternal and necessary, which generates some puzzles about whether propositions have their truth values eternally. To be eternally true or false, a proposition has to include all relevant contextual information. So to be eternally true that this ink is black, the proposition has to be indexed to this document at this time, etc. The proposition that this ink is black written at another time in blue ink will be eternally false because it is indexed to its ink.

But what of the option that the truth values can change? The problem here is brought out by the notion of a future contingent: e.g., that there will be a sea battle in the Persian Gulf tomorrow. Since it is part of the realist picture that the law of excluded middle holds (that a proposition is always either true or false), the truth-value of the proposition that there will be a sea battle in the Persian Gulf tomorrow must be determined now. If we say that propositions have their truth values eternally, then we seem committed to some form of determinism. But to say that the truth value might change between now and then seems mysterious, insofar as there seems to be no possible reason or way for the truth value to change.
It is from this puzzle that a discussion of possible other truth values or lack of truth values ensues. For example, one might argue that propositions about the future do not yet have a truth value since they don’t have arguments (referents) yet to complete the function (proposition). Such a Fregean approach would say that a proposition/function is expressed — as in $x + 2 = 5$ — but that it has no truth value without a referent to fill the $x$ position. This approach is in potential conflict with other features of the propositions, namely that the law of the excluded middle applies. In other words, how can we say of something that is essentially a bearer of truth value that it sometimes doesn’t have one? Or, how do we argue against the law of the excluded middle that there are only two truth values available?

The Liar Sentence provides a related puzzle since it looks like it might express a proposition with no truth value. In this case, it is a more intuitive option to deny that the sentence it expresses a proposition. Do we thereby have to deny that it is a meaningful sentence, albeit grammatically correct? What about the future contingent, though? What reasons do we have for treating it differently from the Liar Sentence? Or, should we treat them equally and say. . .

1) That they are meaningful and express propositions in conflict with excluded middle?
2) That they are meaningful but do not express a proposition? Is this possible? Not likely on a Fregean view.
3) That they are not meaningful, and no proposition is expressed? Seems right for the Liar Sentence, but do we want to say that statements about future contingents are not meaningful? I think I do know what it means to say there will be a sea battle tomorrow. What if we rephrase to say: tomorrow there is a sea battle. Does this make option 3 more intuitive?

Deep problems indeed.

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