Propositions, Representation, and Fineness of Grain

Abstract

A standard reason for rejecting views of propositions as sets of truth-supporting circumstances—hereafter, *circumstantialist* theories—is that there are not enough such sets to play all the roles that we want propositions to play in our theories of language and mind. Thus it is common to complain that sets of truth-supporting circumstances are not *fine-grained* enough, or that they have the wrong individuation conditions. The precise form such complaints take depends in part on the nature of the truth-supporting circumstances adopted by a particular circumstantialist theory of propositions. If truth-supporting circumstances are identified with metaphysically possible worlds, and hence propositions are taken to be sets of metaphysically possible worlds, then the complaint is simply that all necessarily true sentences will express the same proposition. If truth-supporting circumstances are taken to be situations (as defended by Jon Barwise and John Perry), then the complaint is more subtle. Scott Soames (1987) showed that such views of propositions also face a fineness of grain worry when combined with direct-reference views of names, indexicals, or variables.

Recent work on circumstantialist theories of propositions (e.g., (Ripley, 2012), and (Jago, 2014)) responds to these complaints by offering sets of circumstances that are just as finely individuated as any structured propositions. The possibility of such views suggests that the fundamental difference between views of propositions as structured, information encoding entities—hereafter, *structuralist* theories—and circumstantialist theories of proposi-

tions is *not* that there are not enough propositions according to the latter. The difference must lie elsewhere.

In this paper I argue that one fundamental difference between structuralist theories of propositions and circumstantialist theories of propositions is that on the former, but not on the latter, there are at least two ways of individuating propositions. Specifically, I argue that any view of propositions as sets of truth-supporting circumstances is committed to what I call the *fineness of grain thesis*:

> *Fineness of Grain Thesis*
>
> For any representations R_1 and R_2 (like intentional states, or sentences relative to contexts), R_1 and R_2 represent the world as being the same way if and only if the propositional content of R_1 = the propositional content of R_2.

Views of propositions as structured, however, are not committed to the fineness of grain thesis. The conjunctions $\ulcorner S_1$ & $S_2 \urcorner$ and $\ulcorner S_2$ & $S_1 \urcorner$ plausibly represent the world as being the same way, but express distinct structured propositions.

An immediate consequence of the fineness of grain thesis is that any difference between propositions, on any circumstantialist theory, must be a difference in how the world can be represented as being. But any difference in how the world can be represented as being requires some truth-supporting circumstance that is as one representation represents the world as being, but not as another representation represents the world as being. Thus in order to distinguish between propositions, circumstantialist theories of propositions must distinguish between circumstances: there must be some circumstance that is a member of one proposition but not the other. There is no other way to individuate propositions on a circumstantialist theory.

This gives rise to dilemma for circumstantialist theories, based on some of Frege's (1956) remarks on the truth predicate. Either (i) (1) and (2) express the same proposition, or (ii) they do not:

(1)   Mathematics reduces to logic.

(2)   That mathematics reduces to logic is true.

The first horn of the dilemma generates what I call a *naming* problem. If (1) and (2) express the same proposition, then the truth predicate is redundant:

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any sentence s that predicates truth of a proposition p itself expresses p. Yet there can be agents who do not believe the proposition expressed by (2), yet who do believe the proposition expressed by (3):

(3)   Logicism is true.

Assuming a relational analysis of belief, the propositions expressed by (2) and (3) are therefore distinct. Thus by the fineness of grain thesis, there is some circumstance that is as (3) represents the world as being, but not as (2) represents the world as being (or vice-versa). Yet both propositions are expressed by sentences that predicate truth of some proposition. By the version of redundancy for truth above, the propositions that (2) and (3) predicate truth of must therefore be distinct. But these are just logicism and the proposition that mathematics reduces to logic. So logicism is not the proposition that mathematics reduces to logic. The argument generalizes to any name one might try to give to the proposition that mathematics reduces to logic. Hence on this horn of the dilemma, the proposition that mathematics reduces to logic is unnameable.

(A similar problem arises for the attempt to avoid Soames's (1987) argument by distinguishing between Hesperus and Phosphorus (Edelberg, 1994; Ripley, 2012). Any attempt to name an object, on this view, introduces a new object to which the name refers.)

The second horn of the dilemma fares no better. If (1) and (2) express distinct propositions, then by the fineness of grain thesis, there must be some circumstance that is as one represents the world as being, but not as the other represents the world as being. In any such circumstance, the T-schema for propositions fails:

T The proposition that p is true if and only if p.

Thus this horn of the dilemma requires abandoning a fundamental claim about the transparency of truth.

The dilemma arises because circumstantialist theories of propositions have only one way to distinguish between propositions. A structuralist view of propositions can maintain that (1) and (2) express distinct propositions that nonetheless represent the world as being the same way. They are distinct because the proposition expressed by (2) includes a constituent that the proposition expressed by mathlogic does not: the property of being true. Sentences (1) and (2) provide an example in which there are plausibly distinct propositions such that any competent agent would recognize that they

represent the world as being the same way. If this were all that were at play, we could identify these propositions. But sentence (3) shows that this is too quick. An adequate theory of propositions must capture the relationship between all of these in a systematic way. Three lessons of this paper are (i) that circumstantialism lacks the resources to capture these relationships, (ii) that avoiding the problems above requires treating propositions themselves as representational, and (iii) that the debate over theories of propositions may be informed by debates about the nature of truth.

Word count: 996

References

Edelberg, Walter. 1994. Propositions, Circumstances, Objects. *Journal of Philosophical Logic*, **23**(1), 1–34.

Frege, Gottlob. 1956. The Thought. *Mind*, **65**, 289–311.

Jago, Mark. 2014. Hyperintensional propositions. *Synthese*, 1–17.

Ripley, David. 2012. Structures and Circumstances: Two Ways to Fine-Grain Propositions. *Synthese*, **189**, 97–118.

Soames, Scott. 1987. Direct Reference, Propositional Attitudes, and Semantic Content. *Philosophical Topics*, **15**, 47–87.