
Frames and the nature of concepts

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Frame theory currently gains considerable attention among linguists and cognitive scientists. Several authors (e.g., Barsalou 1992, Loebner 2013, Petersen 2007) promote frames as a unifying format for concepts, arguing that a frame-theoretic analysis is best suited to account for the various functions that concepts are commonly assigned in linguistic, psychological and epistemological contexts. A root assumption frame theorists share with most cognitive scientists is that concepts are *theoretical entities* postulated in the course of folk or scientific studies of cognitive behavior. In this talk, however, I shall argue that the attribution of concepts really does not comply with the principles of theoretical reasoning. As I will try to explain, this calls for a re-evaluation of the relation between 'theoretistic' approaches to concepts and the pre-theoretical phenomenon of conceptuality, and hence of the status and scope of a frame theory of concepts.

That concepts are not theoretical entities may be illustrated by the observation that attributions of concepts seem to be immune to certain types of error, which should be possible if concepts were indeed theoretical postulates. For then, it would have to be possible, once we have identified a concept with a certain type of internal representation, for instance, that we might be pressed to *withdraw* the attribution of a certain concept C to an individual who continuously acts in complete accordance with C as soon as we learned that the individual *lacks* an internal representation of the kind prior identified with C. Conversely, we might also be *forced* to ascribe C because the subject *has* a corresponding internal representation, and we would have to maintain the ascription even if, by some coincidence, that inner state caused stable behavioral patterns that are inconsistent with the behavioral criteria for C.

Yet, both kinds of error seem to be practically unthinkable. We would not withhold the attribution of a concept to an individual who demonstrates in her overall behavior that she possesses that concept even if we learned that the individual lacks internal representations of the kind predicted by the theory. Similarly, we would refuse to accept the attribution when a subject provides evidence that she has not the relevant abilities at her disposal. Our resistance to allow for such errors suggests that concept attribution follows a different pattern altogether.

The alternative is to regard the attribution of concepts to an individual as part of a *contextual* apprehension of her actions, which renders them susceptible to some sort of *normative* evaluation. Very roughly, possessing a concept means discriminating and associating things by following an acquired set of rules. This may occasionally be done 'in private,' as when an individual mentally discriminates and associates the objects of her perception. Still involved in this capacity, however, and indeed prior to it, is the discriminative and associative engagement with one's environment in overt behavior (for this is where the rules of discrimination and association can be probed, corrected, and hence learned.) Concepts, according to this picture, are the *rules* by which an individual discriminates and associates things. They are *not*, however, things in themselves – i.e., mental mechanisms – by which the individual is enabled to follow rules. For there might be no such things: an individual might lack any candidate mental representation and still *enact* the relevant rules. Concepts, then, are like values. Just

as the value of a coin is not an entity somehow related to the coin but just a way the coin is treated, concepts are not entities (concrete, mental, or abstract) related to agents but just ways agents treat things in their environment.

In the light of these considerations, and given the initial commitments of frame theory, what can this theory actually accomplish for a 'unified understanding' of concepts? Here, we must distinguish between frames as a *formal model* of concepts and frame theory as a *neuroscientific theory* of mental representations. As a formal model, on the one hand, frames can certainly be used to describe a structure of rules (rather than laws) relating behavioral abilities (rather than mental representations). The model will no less be subject to broadly empirical inquiries and testing procedures. As regards a neuroscientific frame theory, on the other hand, nothing of what has been said precludes the empirical hypotheses that individuals feature neural mechanisms, that these mechanisms are frame-structured and that such neural frames enable their possessors to follow conceptual rules. Yet, such a research program will now have to be regarded as an investigation into what *causes*, rather than what *constitutes*, an individual's possessing concepts.

But could it not be that a sufficiently advanced neuroscientific frame theory will eventually alter our very *concept* of 'concept'? That is, could not the featuring of a neural frame be regarded one day not only as an indication, but as a full-fledged criterion for the possession of a concept? Here we must distinguish between primary and secondary criteria. Taken as secondary criteria, neural conditions could indeed complement our current criteria for concept attribution, especially in cases where behavioral criteria are indecisive or unavailable (e.g., in cases of paralysis). Being secondary, such neural criteria would be kept under the constant corrective of the primary behavioral criteria for concept ascription. Taken as primary criteria, however, neural frames would open the possibility to assign to individuals concepts completely disregarding their actual or potential behavior. Such a criterial shift would arguably neglect the ultimately social interests that we pursue in the enterprise of concept ascription – which are the deeper reason why concepts are not theoretical: we employ the psychological vernacular, including the vocabulary of concepts, precisely for the reason that we care for each other and our common weal. To detach the criteria for concept attribution from people's acting in a public space would be to unlink attributions of concepts from their applicability to practical issues. Still, there is no general argument that such a shift could not possibly happen. Whether it *will* happen, however, is not so much a matter of future discovery, but of decision.

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