

## Review of: "Mental Recognition of Objects via Ramsey Sentences"

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The idea of using Ramsey sentences as device to explore the neural basis of conceptual processing in the brain is extremely interesting. In particular, this field has been inherited by the conflict between embodiment semantics and amodal (supramodal, or hypermordal) theory since the struggle between realism and materialism in medieval theology, even if there have been attempts at mediation and compromise by Abelardus and others. In other words, the perspectives of the semantic approach are, so to speak, traditionally constrained, and it is extremely difficult to escape from or sublimate them. If universals do not exist in the individual, then abstract concepts must be transcendentally localized somewhere in the neural substrate. On the other hand, if universals are embodied in every individual object that we experience and observe, how can we recognize the dog as a general concept? As a theory that can avoid such a vicious cycle, Ramsey sentence-based approach of exploring the neural circuits in the brain seems worthwhile. This can be seen as the most significant aspect of the author's proposal from an epistemological perspective.

However, as one category of memory as a cognitive function of the brain, "semantic memory" must be considered along with this neural basis of conceptual understanding. It is no exaggeration to say that it is not easy to overturn this position in the field of neuroscience. This doesn't require long-term memory storage in the brain indeed, but a concept (object) specific group of neurons exists in the temporal lobe, which causes a temporary loss of recognition of the concept (object) when a weak electric current is applied during brain surgery, for example. It becomes thus necessary to explain this phenomenon in the Ramsey-like circuit. And, acknowledging that there is an essential difference between a working hypothesis and a functional image analysis, how should we link the Ramsey-style circuit with parallel paths and the "distributed representation" in the enunciation in which human sensation, perception (or motion) allow us to identify the object, the dog, for instance? Furthermore, parallel non-interfering channels should be shared, in part, between the concept of dog and that of wolf. If this is the case, it may be necessary to hypothesize that there is a mechanism in the temporal lobe or other brain areas that discriminates between different circuits of concepts, and that the impairment of this mechanism causes the aforementioned loss of recognition. Despite these doubts, this paper is an extremely ambitious attempt that has the potential to lead to a variety of subsequent developments.

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