

What are concepts? How does analysing the concept of a 'concept' help to illuminate the way language works?

Eureka! To 'Grasp' an idea. Then it 'clicked'. We snap our fingers: "I've got it!" It all fell into place. When we use these terms and phrases to express that we've comprehended something or experienced some breakthrough in a line of thought, it certainly feels as if *something* has happened in our brain. But *what?* And is that enough to claim that the thought, or its constituents, is indeed a *concept*? Or do we need to be able to communicate the it for it to be accepted as a concept?

From real-time MRI scanning of a Zebrafish's brain as it chases its prey, and thus a real-time visualization of neuronal activity during perception, to finding the oddly shaped inferior parietal lobules, which participate in spatial reasoning and intuition about number, in Einstein's brain, even to results of brain functionality studies on psychopaths, which show significantly less brain matter in their anterior rostral prefrontal cortex and temporal poles, areas which are important for understanding people's emotions and intentions, we feel that we're closing in on hard evidence about how the brain relates to thoughts, and we feel justified in thinking that there is *some* connection between our thoughts and the physical matter that is our brain. Do we learn concepts? Do concepts *exist* in our brains and only in our brains? Do we need language in order to have concepts? Do concepts exist *before* they have been conceived of? If so, *where?* Once a brain has acquired a concept, is it *literally* represented in the brain by a network of synapses?

Concepts, we could say, are the parts which make up the content of thoughts, or the parts making up certain abilities to comprehend, or reason with, contents. But what are they, that is concepts, in themselves? Ontologically, we have three options in which to try and explain concepts: 1. Concepts as Mental Representations, 2. Concepts as abilities, and 3. Concepts as Fregean senses/as abstract objects. I want to briefly outline and comment on these three options before moving on to what we might gain from analysing the 'concept' of a concept.

Concepts as Mental Representations - This option is an extension of the representational theory of the mind (RTM). As such, it adheres to the line that thought takes place in an internal system of representation. For example, I might believe that the USA is a larger country than the UK, and also believe that the UK is a larger country than Iceland, and with these two beliefs, I hold that the USA is larger than Iceland. My beliefs here would be made up from mental representations about these countries and their relative sizes. This is dependent totally on my having these mental representations in my head. But, as an argument against MR, critics say that indeed it is possible to have propositional attitudes towards something without having the necessary mental representations. People can hold beliefs about a certain statement even if they have never before thought about it.

Concepts as abilities - Here, concepts are abilities that are particular to cognitive agents (reasoning, context based behaviour etc). The concept BIRD might well be simply the ability to distinguish birds from other things and to make certain assumptions about birds. This view is held by many philosophers who claim that MR fails to explain how a mental representation is associated with a certain thing. "There is really no sense to speaking of a concept's coming into someone's mind. All we can think of is some image coming to mind which we take as in some way representing the concept, and this gets us no further forward, since we still have to ask in what his associating that concept with that image consists" (D. Dummett). Does it matter, though, that MR doesn't explain *how* mental representation is associated with a certain thing?

Surely we all have different mental representations of particular concepts?

Concepts as Fregean Senses/Abstract objects - Concepts mediate between thought and language, on one hand, and referents, on the other. They are what make up propositions. For critics, the main point of attack is how, if abstract objects exist outside the casual realm, we can get to them? By what means do they get *into* the brain? By what means are they comprehended?

In his novel *Through the Language Glass* linguist guy Deutscher argues that colour words in a language reflect the state of the culture's need to distinguish one colour from another, as well as its exposure to a wide range of hues (particularly, artificial). The basic facts are these:

All languages have a set of colour words.

Languages do not share the same colour words (some have no word for blue and what gets labelled as blue in one language may be different from what gets labelled as blue in another).

Colour words are not arbitrary (each word refers to a coherent subset of the visible spectrum)

Acquisition of colour terms is predictable (language acquire names for colour terms in a predictable order).

The predictable order of acquisition is this:

black & white > **red** > **yellow/green** > **blue**

Guy Deutscher recounts an interesting anecdote in his book about an arguably irresponsible experiment he did with his daughter as the unwitting volunteer: he denied his daughter exposure to the colour word 'blue' so as to see, excuse the pun, what she would use in its place and how long it would take for her to acquire it. His daughter would use colour words 'black', and sometimes 'white', to describe things like 'the sky', for example. As referred to above, the colour concept 'blue' comes near the end in human being's colour concept acquisition. As with other colours, we acquire the concept of 'blueness' through the experience of learning which objects are described as 'blue'. Wouldn't it then follow that our comprehension of colour concepts is an ability? And it begs this question: if one does not have a concept of 'blue', does 'blue' *exist*? Is it here where the notion of concept as abstract objects comes into play? That regardless of whether a person has a concept of something, the concept exists/can exist?

Regarding concepts as Mental Representations, which has support from within Cognitive Science, including Jerry Fodor and Steven Pinker, I cannot see why the notion that an acceptance of this ontological definition of 'concepts' automatically forces one to reject the abilities option. I imagine the concept of 'justice' that is in my brain to be one that has been built through experience, learning, and application of the concept in various contexts. My concept of 'justice' almost certainly differs from your concept of 'justice'. You formed your concept of 'justice' through an amalgamation of experiences and contexts different to my own. We could say that our concepts are *roughly* the same, if we assume that our concepts of 'fairness', 'punishment', 'crime', et al, are somewhat similar also. We both have different mental representations of the concept of 'justice', but we both have *a* mental representation of it.

In addition, the concepts as Mental Representation option also states rather unequivocally that concepts are prior to and independent of language, meaning that language is not necessary to the existence of concepts but

rather it is just a means to convey thought. This is justified by the following: 1. Language is ambiguous and vague in ways that thought is not. 2. Since language has to be learned, thought is prior to language. 3. people seem to formulate concepts before naming. A response to this could be that we are only capable of conceiving of such a concept that our language ability would allow. When we are thinking it certainly is as if we 'hear' ourselves silently talking. Are we then limited by our language in terms of what concepts we are able to have?

To conclude, I'm inclined to say that concepts are learned mental representations, that *literally* exist in the brain. Is this even possible? There is still certainly an issue when we think about what prompts what. Does language prompt concepts or do concepts prompt language? It is this question that is illuminated in analysing the concept of a concept. It is somewhat comforting to think that our ability to conceive of something is hindered by our language. It's nice and uncomplicated. However, I think I can almost conceive of an instance where a concept exists in a brain that doesn't have the language capability to comprehend or express it.