

A rough sketch of the architecture of our language faculty*

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We may begin with the observation that the word 'horse' has not the properties of the horse itself. A horse can run fast, but the word 'horse' can't do that. The properties of the word and that of the object to which it refers do not share the same scope. 'Horse' has morphophonological features, while a horse has biological, physical features like the ability to reproduce, the ability to run, etc.

I want to relate another subjective experience which I can only guess others have experienced too. Sometimes when you concentrate too much on a particular word, for example 'dog', you reach a sort of meditative state where you just cannot discern any logical connection between the phonetic features of the word 'dog' and its dictionary meaning how much ever you try to. You keep repeating the word 'dog' to yourself again and again in the hope of making that connection, but it never comes. All you are left with is this weird phonetic signal 'dog'.

The above experience intuitively tells me that Hilary Putnam's conclusion that "meaning just ain't in the head" is completely lopsided. Instead, the statement "if meaning exists then it exists only in the head" is close to being accurate, because while experiencing moments of the above kind, I was actually trying to look for a link, a logical connection between the phonetic signal 'dog', which is just a random collection of sounds, and its dictionary meaning -- the canine, which I had a priori knowledge of in my head. What I was actually looking while finding this connection is a straightforward derivation of the canine from the phonetic signal 'dog'. If there really was such a (logical) connection, then uttering the word 'dog' would somehow construct an actual physical dog in front of me. Since this doesn't happen, the only conclusion is that the relation between the word and the object it refers to isn't a logical one but merely that of labelling. Whatever this phonetic signal 'dog' labels is a mind-internal entity having no relation to the quadruped creature that fetches my bone.

This collection of labels, i.e., the lexicon, lends itself to symbolic computation (syntactic operations like MERGE) yielding language-specific constructions like "Colorless green ideas sleep furiously", in this case of English. Suppose language **L** has a syntactic rule-set **A** which, using **L**'s lexicon, produces a set of sentences **S**. The very fact that **S** is derivable using **A** ratifies its syntactic correctness in **L**, by definition. There will be no sentence in **S** that does not sound good to a native speaker of **L**, for example, "furiously ideas green sleep colorless" does not sound good to a native the English speaker and hence is a non-element in the set of syntactically correct English sentences, but "colorless green ideas sleep furiously" does sound good and hence is an element. "Colorless green ideas sleep furiously" is non-incomprehensible to a native English speaker but "furiously ideas green colorless sleep" is incomprehensible. Thus, **S** consists of only the sentences that are derivable using **A**, and the task of the grammarian is to find out **A** given **S** which would in turn define **L**, not caring for the semantic content of **S**.

At this point, we should try to define semantic correctness. Suppose, using the normal rules of English we have derived a sentence -- "some dogs are phonological" -- which is non-incomprehensible to a native English speaker and hence is an element of the set of syntactically correct English sentences **S**. This sentence though syntactically perfect

contributes nothing to the knowledge of the speaker and hence falls on deaf ears. The speaker will listen to it, try to discern its meaning in vain, and move on with his life. But suppose a hundred years later some canine psychologists really do introduce the term 'phonological' to describe some features of some breeds of dogs and this term eventually enters normal canine psychology discourse. The original sentence that fell upon deaf ears is now used with serious intent by canine psychologists. What happened is that an element in the set S, derived by A using L's lexicon, has now entered a mind-internal subset M (of S), which only includes semantically correct or "meaningful" sentences as judged by the speaker. That this set M is a subset of S is trivial to show. To be clear, there is no demand on the speaker to be a canine psychologist, but only that the ordinary tools of human reasoning should make the speaker judge the above sentence as "meaningful" in some way and hence available for further reasoning.

A question arises -- is there a rule-set (call it B) that would generate this subset M directly from L's lexicon, bypassing the generation of the intermediate set S? We would be advised to call B the knowledge generating algorithm.

In other words, we wish to determine that the conscious or unconscious knowledge of set A contributes for the speaker to determine the meaning of a syntactically valid sentence and are hoping for the non-existence of the knowledge generating algorithm. If A does contribute to this effect, as we think it to be, then there are two alternatives -- either A is accessible to consciousness while judging a sentence to be meaningful or A is inaccessible to consciousness but is still involved in judging a sentence meaningful. If the former is the case, then the grammarian's job to describe A given S is completely futile. Since he already is consciously aware of A, it becomes unnecessary to articulate A. If it is the latter, that A is not accessible to consciousness, then the grammarian that we defined in the previous passage is on the right track. He should work hard to discern the rule-set A that generates S given L's lexicon.