

Living without Sense and Use?

Theses towards a Representationalist Account of Meaning

These theses aim at a *systematic* account of meaning. Some of the (bold) theses made on language and mind, and the ontological assumptions should be supported later on by the overall picture developing.

1.

A belief is a relation to a propositional *representation* in some *natural or mental language* (and thus indirectly to the *informational content* of this representation). The mind/brain is best understood following some computational and *representational theory of the mind*. An occurring belief processing a propositional representation employs this representation, but relates the subject of the belief (or another propositional attitude) to the content of the representation. The informational content can be specified as an *infon* or *state of affairs* (given the latter is then understood in this sense only). One, for instance, believes or fears a state of affairs to obtain.

An infon or state of affairs contains the referents of the expressions of the sentence in question, given its ultimate logical analysis. [One may be allowed to specify infons in shallow analysis for some purpose.] This infon may contain logical functions (for, say, the quantifiers), as they are the referents of logical vocabulary. This infon may contain other infons in as much as content can be compounded or embedded. An infon contains a polarity depending on the sentences claiming a relation to obtain or not. That objects are contained in an infon together with some relation thus does not imply by itself that they stand in this relation. Negative particles refer to the one polarity, the absence of negative particles leaves in force the default positive polarity. An infon is more than a mere list as there are conditions on infons mirroring the conditions on sentences (in contrast to lists of words). For instance: an infon has to contain at most and at least one polarity, an infon has to contain exactly one central relation (being the referent of the general term responsible for the unity of the sentence) and further entities corresponding to the referents of the arguments of this general term. An infon can be pictured as a tuple (i.e. a set-like entity, at least as long as sets aren't reduced in the ultimate ontological picture to something else, or set talk is reduced to talk about propositional functions), one might introduce them as entities of a type *sui generis* otherwise.

2.

Two expressions of a natural language have the same meaning if they point to the same concept as their core meaning in their lexical entry. Two *Language of Thought* (LoT) expressions cannot have the same meaning, because LoT-expressions haven't meaning at all, they *are* the essential ingredient in the meaning of natural language expressions. Two LoT-expressions having exactly the same referential content are *identical*, since LoT-expressions are configurations in the mind/brain hooked to parts of reality and these pathways of hooking up with reality single out one configuration referring to a property in question. A token of a LoT-type is, in case it refers, *directly referential*: as LoT-tokens are representations themselves no other *representation* mediates their hooking up to reality (in some way). They need no Fregean 'sense' to mediate their relation to their referents.

3.

A natural language expression has a meaning, and by this (indirectly) referential content (as the concept [LoT-expression type] being the core of that meaning has referential content), and its syntactic properties. A LoT-expression has referential content and its syntactic properties – and nothing else. So a complex LoT-expression also has referential content and syntactic features – and nothing else. The referential content of the complex LoT-expression derives compositionally from the referential content of its constituting LoT-expressions.

Consider now

(1) The teacher of Alexander wrote the *Analytiks*.

(2) The most famous pupil of Plato wrote the *Analytiks*.

Their referential content contains different properties. Somebody can believe (1) but deny (2) for the well-known reason that thus different LoT-expressions are involved. So the mere syntactic differences between either the natural language or the LoT-expressions involved accounts for this type of phenomenon, usually associated with (Fregean) 'sense'. This holds even if proper names had no descriptive content, as two different names may point to different LoT-labels, which again differ syntactically.

As (1) and (2) have different referential content they refer to different facts. It happens that both have the same truth value (in the actual world). In (1) and (2) only co-referential expressions can be substituted for each other to preserve referential content. Especially “teacher of Alexander” and “most famous pupil of Plato” cannot be substituted for each other without changing referential content. The two expressions can be interchanged preserving the truth value of the sentences. As the

truth value of a sentence is its semantic evaluation and not its reference that interchangeability does not make the two expressions co-referential. What do they share? The simplest answer, the answer which does not introduce new entities, is to say that these expressions are 'extensionally equivalent'. 'Extensional' is used here in the common usage of elementary logic: affecting the truth value respectively depending on truth value only. In contrast two expressions sharing referential content are 'referentially equivalent'. So referential equivalence is a tighter relation than extensional equivalence, but to distinguish these two relations no Fregean 'senses' have to be introduced. [To proceed from here to 'intensionally equivalent' we have to enter semantic two-dimensionalism, as, although referential content is identical to itself in all possible worlds (models), the possession of some referential content by an (LoT-)expression depends on empirical contingencies.]

4.

That two expressions share their meaning need not imply that they share all their logical properties, as these depend on syntactic features as well. Syntactic differences account for differences in a *derivational (i.e. mechanical) system*, no further ingredient of 'sense' is needed for this. Nominal definitions serve the purpose of facilitating derivations by chunking content in more feasible representations. *Definiens* and *definiendum* share their meaning and informational content, they can be interchanged and thus the more feasible syntactic features of the defined expression are exploited.

5.

The core of the meaning of a natural language sentence is the LoT-sentence build up compositionally from the conceptual content of the expressions which make up the natural language sentence. This LoT-sentence may be dubbed 'thought'. As the building LoT-tokens have referential content, so the *thought* has referential content: an infon. The thought may be connected to a fact if the infon is realized in reality. As the infon captures the referential (i.e. informational) content of the thought, and thus of the sentence, all synonymous sentences of a natural language expressing the same thought have the same informational content. As the LoT-types are hooked up with parts of reality and thus are *directly* referential, there is no 'mode of givenness' coming with thoughts, it seems. There are two ways 'modes of givenness' may enter in this picture:

- i) we process the natural language sentence in our mind and its very features (i.e. syntactic features) distinguish its way of presenting a content from other synonymous sentences, or

- ii) we process the thought and although LoT-expressions need not be given to consciousness directly, again syntactic features of LoT-expressions may be relevant in distinguishing a specific LoT-sentence from synonymous ones if such exist at all.

Our picture thus involves natural language sentences (i.e. syntactic entities), LoT-sentences (a.k.a. thoughts) as the core of their meaning, and referential content connected to the components of the thought.

6.

Analytic dependencies and prototypical justification rules are closely associated to but need not be part of the core meaning of a sentence. *Conceptual atomism* claims that many if not most concepts cannot be decomposed into a set of conceptual parts or features thus that this set of features is not just necessary but also provides a sufficient analysis of the concept, thus that the conjunction of the features is equivalent to the concept in question. Of course there are lots of concepts that are derived compositionally from these atomic concepts, and these derived concepts can, obviously, be decomposed again. As many concepts are atomic this can be easily stated in a disquotational theory of truth. Having at some level of presentation a representation of this theory is part of semantic knowledge (*internal semantics*).

The articulation of concepts within some natural language, nonetheless, is inherently connected to question of justifying the use of some expression in a specific situation. Even if these justifications are not meaning constitutive they are part of what competent speakers got to know when they acquired their language. Even if possessing some concept does not require (in all cases) being able to verify the presence of one of its instances, and even if being a competent user of a word does not require being able to justify the employment of that expression under all circumstances, someone sometime has to be able to link the word to the concept and thus to situations of justified use.

7.

Assertoric sentences are evaluated as being true or false corresponding to their referential content being realized in a fact. Truth bearers are, thus, token sentences, of course only declarative sentences uttered in a situation of usage to make an assertion. Within these some contain temporal or otherwise indexical expressions which are anchored to referents given the situation of usage. Assertion of such an indexical sentence yields an eternal sentence by substituting for the indexical expressions expressions which refer to the entities the indexicals are anchored to in that given

situation of utterance. These eternal sentences express the content of the assertion made. Their own informational content (the infon coming with such an eternal sentence) captures the informational content of the assertion made in that context. Truth bearers are, properly speaking, eternal declarative sentences, either asserted themselves or going back to an asserted indexical declarative sentence. Indirectly one may consider the indexical sentences themselves as bearers of truth. A true sentence refers to a fact (corresponding to the referential content of the thought expressed by the sentence). A belief is true iff the infon yielded by the belief's representational component corresponds to a fact (i.e. a structured piece of reality containing the referents present in the infon and governed by the main relation present in the infon). [Instead of infons eternal sentences could also be taken to specify the content of propositional representations. One can thus drop the commitment to infons and circumvent the problems of how constituent referents are to be 'in' them (e.g. with respect to never or no longer existing objects).]

8.

Facts are part of reality. Facts are a *sui generis* ontological category besides objects. Sets – and thus infons – are a type of object, although coming in a hierarchy of sets (i.e. objects). We may picture facts by expressions which build on expressions we use for infons, but facts do not become infons or objects by this. Chunks of reality can be referred to by singular terms (and thus be considered as objects) or by true sentences (and thus be considered as facts). In this sense 'fact' and 'object' are ontological categories (i.e. categories employed within our ontological framework) covering the same pieces of reality. That doesn't mean in any sense that there either aren't objects or aren't facts. A chunk of reality has structure, taken the structure into consideration we have a fact, otherwise an object. That we 'take into consideration' again doesn't mean that it otherwise isn't there. Object talk refers to objects. Fact talk refers to facts. Some object talk and some fact talk can refer to the same chunk of reality. It is wrong to state that objects do not exist in reality, because we do not take into consideration (abstract away from) some structures present in them.

Properties ('universals' in some sense of that term) are abstract entities in the sense of being a structure or structural component of an object (a chunk of reality), i.e. abstract in as much as they have no independent existence. They are thus just the opposite of Platonic 'forms' ('abstract entities' in another sense). Them being abstract in this way doesn't make them non-existent, constructed by us and the like. We refer to them as structures of reality by our concepts. A general term is unsaturated because its referent is an abstract entity dependent on an object. The singular term referring to this object taken as argument of the general term in question yields a true atomic

sentence. [In infons *paradigmatic exemplars* of properties may occur at those places where referents for corresponding concepts (LoT-expressions) are needed, enabling so to picture the infons that come with a false sentences.]

9.

The thought and other LoT-items involved in the realization of inner and outer speech make up a representational whole. The meaning of a sentence is part of the representational whole which is processed when the sentence is spoken (overtly or in inner speech). Thoughts are not abstract objects like Fregean 'senses', but LoT-representations. All which is done by Fregean 'sense' is done and accounted for by the sentences (be it natural language or LoT-sentences) and their syntactic features. We think in sentences and we think about their content.

10.

To *know the meaning* of an expression is only partially explained by knowing the conventions governing its use. It is better to say that as far as we participate in these conventions of usage (and thus have at least implicit knowledge of them) we know the lexical entry of the expression (i.e. know of the link to a concept and its reference). Conventions of use establish and maintain the link between phonemes/graphemes of a type and the conceptual components of the lexical entry. The lexical entry itself covers semiotic features syntactical (in the broad sense of including phonetic features), semantic features and pointers to analytic dependencies and pragmatic markers. Conventions of usage thus do not exhaust the meaning of a word. They correspond broadly to the meaning of a word, so that we can come to understand the meaning of a word if we follow its usage. Concepts are not constituted by (semantic) rules, but expressing some concept by a specific *word* within some linguistic community requires rules and possibly shared knowledge of them. So, *identifying* the meaning of a word has to consider these rules, which by this are rules of meaning (semantic rules).