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Objects, Concepts, Unity[1]

Abstract: The paradox of the concept *horse* has often been taken to be devastating for Frege's ontological distinction between objects and concepts. I argue that if we consider how the concept-object distinction is supposed to account for the unity of linguistic meaning, it transpires that the paradox is in fact not paradoxical.

Keywords: Gottlob Frege, paradox of the concept *horse*, predication, ontology, structure, extrinsic properties, unity of the proposition

The most fundamental distinction in Frege's ontology is that between concepts and objects. The difference between them is that concepts are 'incomplete' or 'unsaturated' entities, whereas objects are 'complete' or 'saturated'; that is, concepts are functions, in the simplest case taking objects as arguments to return objects as values. Yet, Frege's way of drawing this distinction gives rise to the famous 'paradox of the concept *hose*:' 'the concept *horse* is not a concept' (Frege 1892: 42). Whereas this follows straightforwardly from Frege's theory, it has often been taken to be a serious problem for Frege. Dummett (1973: 212), for example, argues that, if the paradox is not resolvable in some way or other, it constitutes 'a reductio ad absurdum of Frege's logical doctrines.' Furthermore, according to Soames (2010: 21), the paradox shows the 'self-refuting' character of Frege's philosophy. Also Lowe (2006: 84) argues that the paradox 'vitiates' the

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concept-object distinction, and Davidson (2005, chapter 6) maintains that it shows that Frege has not solved the problem of the unity of meaning (which Davidson calls 'the problem of predication'). Davidson's judgement is particularly problematic for Frege, given that one of Frege's central motivations for drawing a distinction between concepts and objects in the first place was to ensure the unity of the meanings of sentences, which Frege called 'thoughts': Frege (1892: 54) argues that without a distinction analogous to his distinction between concepts and objects, it remains unexplained how 'all parts of a thought […] hold together.'

In the following, I argue that if we consider how an ontological distinction like the object-concept distinction could provide an answer to questions concerning the unity of meaning, it transpires that the paradox of the concept *horse* is in fact not paradoxical, as Frege (1892) also argued himself.

The problem of the unity of meaning[2] consists in the following puzzle: sentences have meaning, but words on their own also have meaning. The meanings of the words of a sentence are systematically related to the meaning of the sentence. But the sentence is not just the sum of the meanings of the words: it exhibits a certain unity that the sum of the meanings of its constituents misses. For example, the meaning of the sentence *John sits* is a proposition (or 'thought' in Frege's terminology). In contrast to the meaning of a list of two words, such as *John, Mary*, the unity of the proposition exceeds that of an ordered set. The clearest sign for this unity is that the proposition is evaluable for truth and falsity whereas the meaning of the list is not. Thus, we face the question of how the meanings of the words combine to make up a proposition. It might be tempting to think that the problem can be resolved by referring to the ingredients: a sentence requires (at least) a noun and a verb, two nouns like *John* and *Mary* are not sufficient to get a sentence. However, having the right ingredients is only a necessary, not a sufficient condition for unity (cf. Gaskin 2008; Schnieder 2004). Exchange *Mary* for

[2] Versions of this problem have recently been discussed from a systematic point of view by Davidson (2005), Gaskin (2008), King (2009; 2013), Soames (2010), and Collins (2011). See also the metaphysical literature on Bradley's Regress summarized in Maurin (2012).

sits in the list *John, Mary* – the result *John, sits* is still a list of words and its meaning not a proposition evaluable for truth and falsity.

As we shall see below, the unity of linguistic meaning faces a further complication which originates in the nature of natural language. To separate this complication from the unity issue, let us first consider a simpler case: the unity of a complex spatio-temporal object like the arch in figure 1. What is it, we may ask, that unites all the stones which the arch is made from, such that together they make up an arch, not a house, a pile of stones or a set of stones scattered around the world? The answer to this question is probably that the stones make up an arch, rather than any other object or no unified object at all, because they are spatially arranged in a particular way. In other words, the stones make up an arch, because they are all part of a particular spatial structure. Needless to say, the structure is not itself a further stone that, if added to the other stones, unites them in the required way. To assume otherwise would, it seems, mean making a category mistake and would also lead straightforwardly into Bradley's Regress, as Russell (1903, chapter 4) had to note.

Nonetheless, the spatial structure does not only unite the stones in the appropriate way, it also determines some extrinsic properties of the stones. Extrinsic properties are properties which an object has only in virtue of some other object. For example, being a grandfather is an extrinsic property, since in order to be a grandfather, there has to be a child that happens to be the offspring of one of your children. Similarly, the stone in the centre of the arch (the one with the rose) is the keystone – not because of its form or mass or any other intrinsic property, but in virtue of playing a particular role in the arch. If this stone was part of the foundation of the arch, or if it was lying around somewhere else, it would fail to be a keystone. Thus, we could say that it is the keystone which unites the arch, instead of saying that it is the spatial structure which does so; for, given that the keystone is only a keystone when it plays this particular role in a certain structure, these two claims are equivalent: if there is a keystone, there has to be the structure of an arch; if

there is the structure of an arch, there has to be a keystone (special circumstances aside).

Keystones, then, are not only stones: they are keystones only in virtue of being part of a structure – we could say, a keystone is a stone with gaps for other stones. In this respect, keystones are quite similar to Fregean concepts: concepts are also said to contain 'gaps' for arguments and are therefore 'incomplete' or 'unsaturated'. The structural nature of Fregean concepts is relatively explicit in the following quote:

> 'Instead of putting a judgement together out of an individual thing as subject and an already previously formed concept as predicate, we do the opposite and arrive at a concept by having the judgeable content fall into pieces [zerfallen]. However, for it to be possible to fall into pieces, the expression of the judgeable content has to be structured. […] Yet, it does not follow that the ideas of these properties and relations are formed independently of the objects [to which they apply] […]. For this reason, their expressions never stand on their own in the *Begriffsschrift*; rather, they always occur in combinations which express jugeable contents.' (Frege 1880-1881: 18-19)

Concepts, then, originate in complete thoughts ('judgeable contents') by abstracting over some parts of the thought. What remains, the concept, retains the structure of the complete thought; concepts therefore are not independent of the thoughts and 'never stand on their own'. As Diamond (1979) suggests, Frege's (1884: X) context principle, 'never [to] ask for the meaning of a word in isolation, but only in the context of a sentence,' may well be motivated by the insight that the meaning of a word depends on the function it plays in a sentence. Also Frege's (1891a: 96; 1892-1895) explicit distinction between concepts and their extension (and the more general distinction between functions and their value ranges (Frege 1891b: 32; 1892-1895: 132)) seem to be motivated by the structural nature of concepts (functions): Something is only a concept if it plays a certain role in a thought; yet, the extension of a concept, the set of objects falling under it, is not sensitive to the structure of the thought.

If concepts are thus structural entities, it is clear how they can be used to account for the unity of thoughts: Without there being a complete thought, there is no concept, in the same way as there is no keystone unless there is an arch. Therefore, concepts guarantee the unity of thoughts and can thus be said to 'hold' the parts of the thought together.

The structural, or extrinsic, nature of the distinction between concepts and objects has to be separated from the question whether an entity is a concept or object necessarily. In the case of the arch, it is clear that the stone which functions as keystone in a particular arch could have been used in a different function in the same or another arch, or in a house, or a pile of stones. Keystones, thus, are keystones contingently, not necessarily. Frege suggests at some places that the same is true of concepts: when he writes that 'it is a mere illusion to suppose that a concept can be made an object without altering it' (Frege, 1884: X), he seems to imply that, in principle, concepts can be made objects. Whether something is a concept or object, then, is a contingent matter. Also in a later article, Frege (1892: 46) writes that, before it can be made the referent of a subject, 'the concept [...] must first be converted into an object,' which again seems to commit Frege to contingent ontological categories. However, at this place, Frege adds that, 'speaking more precisely, [the concept has to be] represented by an object,' which relativizes Frege's commitment to the contingent nature of the concept-object distinction. Nonetheless, whether or not the distinction is a contingent one, what matters in respect to the unity question is that it is extrinsic. If entities possess their ontological categories necessarily, they fail to exist when they do not play the role that constitutes the particular ontological category. The category itself may nonetheless be extrinsic.

Frege's distinction between objects and concepts is closely related to a distinction in (logical) syntax. Frege writes: 'The concept (as I understand it) is predicative.' And he adds in a footnote: 'It is in fact the referent of a grammatical predicate', before proceeding: 'On the other hand, a name of an object, a proper name, is quite incapable of being used as a grammatical predicate' (Frege 1892: 43). The referents of singular terms are, therefore,

always objects and the referents of predicates are always concepts – in this way, syntax decides over the ontological category of the referents of the terms {cf. \Ricketts, 1986 #1000@66}. As Collins (2011: 37) concludes, 'for Frege, logic or semantics has priority over any metaphysical conception of objects and properties.'

Furthermore, Frege's logical syntax is very close to the grammar of natural language. For example, consider Frege's (1879: 13) definition of functions:

> Suppose that a simple or complex symbol occurs in one or more places in an expression […]. If we imagine this symbol as replaceable by another (the same one each time) at one or more of its occurrences, then the part of the expression that shows itself invariant under such replacement is called the function; and the replaceable part, the argument of the function.

This definition allows for grammatical singular terms to act as functions. We could, for example abstract over *sits* in the sentence *John sits* and thereby receive a predicate *John ( ).* Yet, following natural language grammar, Frege never considers this as a possibility. As Gaskin (2008: 180) concludes, 'it is a mark of Frege's mature thought […] that the object-concept dichotomy is not treated by him as a purely logical distinction […], but is assumed to line up neatly with traditional grammatical categories'. Frege's most fundamental ontological distinction, therefore, is ultimately based on the grammatical distinction between referential and predicative expressions.

The grammatical origin of Frege's object-concept distinction is in line with the structural nature of the respective grammatical categories, since the grammatical distinction between referential and predicative expressions is also determined extrinsically (cf. Hinzen and Sheehan 2013): Whether *radium*, for example, acts as a name or as a predicate depends on the context of the sentence. In (1), *radium* is a mass term and is thus used predicatively, whereas in (2) *radium* is used to refer to a kind (cf. Longobardi 1994).

(1) Radium was found in this lake.
(2) Radium was discovered by Madame Curie.

Similarly, as Frege (1892: 50; cf. 1882) observes, *Vienna* can be used to refer to an object as in (3), but it can also be used as a predicate as in (4).

(3) Vienna is a beautiful city.
(4) Trieste is no Vienna.

Frege (1892:50) concludes from this that 'language often uses the same word now as a proper name, now as a concept-word' and warns us not to be 'deceived' by this fact.[3]

Given the extrinsic nature of the grammatical distinction between referential and predicative expressions, the unity of linguistic meaning can already be guaranteed on the level of grammar: if something is only a grammatical predicate if it stands in the right grammatical configuration, something is only a grammatical predicate if it is part of a sentence (or rather part of a clause). And sentences, as opposed to mere lists of words, have the unitary meanings we seek to account for. Hence, so far, the analogy between the arch and the linguistic case holds: what the spatial structure is for the arch, the grammatical structure is for the sentence; and what the stones are for the arch, the constituents (that is, words and phrases) are for the sentence.

Nonetheless, the case of linguistic meaning is in at least one way more complex than that of the arch. As noted, the structure of the arch cannot be used as a stone in another building. Also, given the structural understanding of *keystone* discussed above, when the keystone of the arch is taken out of the arch and made part of a house, it stops being a keystone, as it is not part of the structure anymore that makes it a keystone. However, treating structure as a lexical constituent is one of the great things language can do. We can talk about the grammatical structure of a sentence or the predicate of a sentence as in (6) and (7). I will call this process 'lexicalization of structural categories'.

[3] One could insist that different lexical items underlie the different readings of these expressions. However, even if so, this does not change the structural nature of the distinction (cf. the discussion on necessity above).

(5) John sits.
(6) The grammatical structure of (5) is simple.
(7) The predicate of (5) is *sit*.

Is *the grammatical structure of (5)* grammatical structure or a lexical constituent? It seems it is both: it picks out the structure of (5), but features in (6) as a constituent. Given that constituents are not structure, *the grammatical structure of (5)* is both structure and not structure. Yet, this is not a contradiction, since it is structure and not structure in different respects: Grammatically, it is not structure in respect to (6), but the lexical content renders it structure in respect to (5). The same is true of (7): the lexical content of *the predicate of (5)* renders it a predicate in respect to (5), but it is grammatically not the predicate (but the subject) of (7). Again, this is not a contradiction, as *the predicate of (5)* is a predicate and not a predicate in different respects.

However, although lexicalized predicates are predicates in a lexical sense, there is one important aspect of predicativity which they lack: they cannot account for the unity of meaning anymore. Whereas we can say that *sits* in (5) is the predicate of the sentence and thus guarantees the unity of the meaning of (5), *the predicate of (5)* cannot be taken to play this role. Correspondingly, (8) cannot be a sentence and does not have a proposition as meaning.

(8) John, the predicate of (5)

Given that one of Frege's concerns was to account for the unity of meaning, lexical predicates, then, are not really predicates, as they don't guarantee unity. Therefore, he has reason to only count grammatical predicates as predicates. And in that case, *the predicate of (5)* in (7) will not count as a predicate. Hence, it is true that that *the predicate of (5)* is not a predicate, in the relevant sense of *predicate*.

Given Frege's (implicit) assumption that the structure of thoughts mirrors that of natural language, the case of the concept *horse* is analogous to the grammatical case (Frege 1892: 46, n. 2). Language can not only pick out (that is lexicalize) grammatical structure, but all kinds of structure and treat it, not as structure, but as a constituent. Thus, we can refer to concepts and say something about them, disregarding the thought they are a part of.

(9) John is a horse.
(10) The concept *horse* is instantiated.

In (9), for example, *horse* is a concept structurally. It therefore guarantees the unity of the proposition. However, only the lexical content renders 'the concept *horse*' a concept in (10), not the structure of (10). Structurally it is a constituent like *John* in (9). Treated in this way, the concept inevitably loses one aspect of its structural nature: it cannot guarantee unity anymore. Yet, given that for Frege the ability to guarantee unity is central for concepts, lexical concepts are not proper concepts. Hence, the concept *horse* is not a concept.

In sum, when considered in light of Frege's urge to account for the unity of linguistic meaning, concepts have to be understood in a structural way; that is, whether something is a concept or not is determined extrinsically, by the role it plays within a thought. It is an 'awkwardness' (Frege 1892: 46) of natural language that we can refer not only to things but also to structures, thus treating them as things, rather than structures in different thoughts.[4] Yet, when treated in this way, they inevitably lose their ability to account for unity. The same is true of concepts: language provides the possibility to refer to a concept. Yet, thereby, the concept loses its structural aspect and thus cannot account for the unity of the thought anymore. If this ability is taken to be essential for concepts, concepts thus referred to are not concepts. This, it

[4] Perhaps it is needless to add that the 'awkwardness' of language which gives rise to the purported paradox of the concept *horse* in the first place is an aspect of what increases the expressive power of natural language greatly – and is therefore (perhaps *pace* Frege) not to be legislated away.

seems, is fully consistent. It is, therefore, not ‘a reductio ad absurdum of Frege’s logical doctrines’, a ‘vitiation’ of the concept-object distinction, or evidence of the ‘self-refuting’ character of Frege’s philosophy. And, most importantly, it is an account – even if perhaps not an explanation – of the unity of linguistic meaning.

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