REPLY TO "LINGUISTIC MEANINGS MEET LINGUISTIC FORM"

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Article info
CDD: 410
Received: 26.08.2021; Revised: 19.10.2021; Accepted: 30.10.2021
https://doi.org/10.1590/0100-6045.2022.V45N1.PF

Keywords
Semiological Function of Language
Polysemy
Aspectual Verbs
Monosemy
Truth-Conditional Semantics

Abstract: Infiltration of a word's meaning by world-knowledge is argued to be consistent with the semiological principle. While acknowledging variability in what people know about elephants, there is a common core of what everybody knows that we know we can evoke in anybody's mind; this constitutes the meaning of the word "elephant". Regarding truth-conditional semantics, to say that the difference between "dog" and canis familiaris "is not a semantic difference; it is not a difference in what they mean" is to equate meaning with truth-value. This would entail that the complex NP direct object in "I took the four-legged fur-bearing carnivorous animal that barks out for a walk" would have the same meaning as the noun "dog". From a linguistic point of view, this is completely indefensible. My criticism that the truth-conditional approach erroneously takes sentences to be the basic sign/meaning unit is not obviated by the fact that truth-conditional semantics treats sentence meaning as compositional, the point being that sentences are clearly not pairings of sounds

with meanings since they do not have stable meanings which could be paired off with their linguistic forms. This is argued to be the case even if one defines meaning as Logical Form.

I found the contribution entitled "Linguistic meanings meet linguistic form" (henceforth LMMLF) to be very insightful in highlighting both a general problem concerning the comprehension of my position on the relation between form and meaning in language and some specific problems regarding my characterization of the meanings of certain linguistic forms discussed in my monograph.

Regarding the general problem of understanding how adherence to the semiological principle is compatible with the recognition of the existence of words with encyclopedic-type meanings, I must admit that this is not immediately obvious. I recognized the existence of encyclopedic meaning in the monograph because I was trying to grapple with the reality of meaning in language as it actually exists, even though the picture is complicated and there does not seem to be a one-size-fits-all template for linguistic meaning. I do not think however that the fact that the world-knowledge we have of an entity may infiltrate into the meaning of the word denoting it – i.e. that certain meanings are constituted of encyclopedic-type content – is necessarily inconsistent with the semiological principle that there are stable meanings associated with linguistic signs. While acknowledging the variability in what people may know or not know about the world, I think we all have a pretty good grasp of what just about everybody knows about elephants, and it is only this common core of encyclopedic knowledge, that we know we can evoke in the mind of just about every English speaker, that in my view

constitutes the meaning of the word "elephant". The author of LMMLF comments that:

> Many people will not know that elephants used to be (and in fact still are) hunted for ivory, or that French speakers are associated with frogs. But these people can still be competent users of the words "elephant" or "frog", and it still makes sense to say that they mean the same thing as others when they use them. (Krempel, 2022, pp. 38-9)

I would not agree at all that speakers/hearers for whom the information mentioned above is not part of the word's meaning mean or understand the same thing as others do when they use or hear the word "elephant" or "frog": someone who does not know that elephants are hunted for ivory would be completely mystified by an utterance such as "These people turn elephants into pianos", as would someone ignorant of the connection between frogs and French-speaking people upon hearing "She is going out with a frog".

Of course, meanings constituted by world-knowledge associated with a linguistic sign by a linguistic community are subject to a certain amount of temporal, geographical and inter-speaker variation. Sometime since the chemical composition of water was discovered in 1811 by the Italian physicist Amadeo Avogadro, for instance, the meaning of the word "water" has integrated the chemical formula

H_2O.[1] The meaning of the word "kangaroo" is undoubtably much richer for an Australian than for a Canadian, and probably includes the fact that these animals are collision hazards on the highway, as reflected by the fact that there were 8,000 car collisions involving kangaroos in Australia in 2019, representing 4.5% of all automobile accidents in the country. An English speaker who grew up in the Canadian countryside probably has a richer meaning for the word "maple" than a Texan (the mere fact of being Canadian and having the leaf of this tree on one's flag already ensures this).

The definition of linguistic meaning that I am proposing is thus that it represents any mental content that is stably associated with a linguistic sign in the minds of a community of speakers. Linguistic meaning cannot be defined in abstraction from a linguistic community, as there are signs that only have content in very restricted sub-communities, such as proper names, and signs that have different content attached to them in different geographical sub-communities (e.g. the noun "bonnet" in British English referring to what North Americans call the hood of a car). Although some mental content attached to linguistic signs is encyclopedic in nature, a distinction between linguistic and encyclopedic content can still be made, in that linguistic meaning corresponds only to world-knowledge that is shared by the majority of the linguistic community and so is evocable in the minds of just about anybody by means of the linguistic sign. Thus the chemical formula for water (H_2O) is now part of linguistic content for English

[1] This gives rise to what Rémi-Giraud (2008, p. 157) calls "commonplace scientific conceptions," halfway between partially assimilated scientific concepts and everyday language.

speakers; the chemical formula for sugar is not.[2] Langacker's claim (1987, p. 154) that there is no specific point along the graded scale of cognitive content that can be non-arbitrarily chosen to demarcate linguistic meaning from encyclopedic knowledge[3] is true of cognitive content considered in and of itself – as shown by the scientific character of the chemical formula for both water and sugar (which is now part of the first word's meaning but not of the second one's)[4]. However, this claim is not true of cognitive content in its relation to a linguistic sign: either a given cognitive notion is associated with a given linguistic sign in the minds of the speakers of a given linguistic community or it isn't – at a given point in history in a given linguistic community, it's an all-or-nothing affair. And the ultimate arbiter is the usage of the ordinary speakers belonging to the linguistic community in question, which implies that linguistic meaning can only be determined by the observation of linguistic usage. So in some sense the author of LMMLF is right by their facetious comment that "we would have to conduct polls in order to find out what the meaning of 'elephant' or 'frog' is." (p. 39).

Regarding the specific problems with my characterization of the meanings of certain linguistic forms,

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[2] It is $C_{12}H_{22}O_{11}$.

[3] Langacker has argued famously that "the distinction between semantics and pragmatics (or between linguistic and extralinguistic knowledge) is largely artifactual."

[4] Although one must also recognize that the understanding of 'H_2O' is not the same for a chemist as for an ordinary speaker, just as the understanding of 'genetic' is not the same for a doctor as for a patient (see Condit 2010, 2011; Vogh and Courbon 2018).

I must thank the author of LMMLF for showing the need to improve some of these descriptions. Thus I agree with the commentator, in the case of the use of the preposition "for" in "They voted for independence", that "it is strange to say that there is an initial state where there is just the vote with no connection to independence," (p. 31) and in the case of "Eileen is proud of her family for their support" that "it seems odd to say that pride existed in an initial state prior to its being moved towards the family's support for Aileen." (p. 31-2). To my mind, however, this is not an argument against the monosemy of "for", but rather highlights the need to rectify the description of this preposition's meaning, which should be something like 'there is a movement from an initial state in which there is no association between X and Y to a final state in which X is closely associated or bonded with Y". The commentator asks: "what is so bad about polysemy?" (p. 32). What is bad about polysemy is that it leaves one with no explanation as to why the same sign "for" is used to express all these different senses and why an English speaker feels a deep unity between them. Homonyms do exist in human language, but they are necessarily exceptions, since rampant homonymy would render communication by means of language completely impossible.

The subsequent discussion of the sequence "I can see it" as a case where the multiple possible meanings observed on the level of the whole sequence are best explained by polysemy fails to make a plausible case for this claim. Even though dictionaries list distinct meanings such as "to perceive by the eye," "perceive the meaning or importance of/understand," and "to attend as a spectator" for this verb, these senses are not conveyed by "see" itself, but rather by the combination of "see" with certain types of direct objects. Thus the visual perception sense is cued for

by direct objects denoting concrete material objects ("I saw the tree"), the mental comprehension sense by direct objects denoting mental entities ("I see what you mean"), and the spectator sense by direct objects referring to events that one attends as a spectator ("I saw a show last week"). There is no need at all to assume that "see" is polysemous, when these different messages can be accounted for by the context in which this verb occurs. The commentator's use of the noun "mouth" as an argument against assuming a highly abstract unique meaning misses the mark completely because this word has an encyclopedic-type meaning, which, although complex, is still stable and shared by practically all English speakers, who know that this word can be applied analogically to the opening of a cave or to the part of a river that opens out into a larger body of water.

Krempel´s discussion of the verb "start" is another case where I must thank her for bringing to light an inadequacy in my description of the meaning of this verb. While I would not accept the criticism that I posit polysemy for "start" because I describe it as implying initiation of an event in some but not all of its uses, I do recognize that my description of the meaning of this verb as denoting "breaking out of a state of rest or inactivity" requires rectification. The reason why "start" implies initiation of an event in some of its uses but not all of them is simply because in these cases it is followed by a *to*-infinitive or a gerund-participle denoting an event. Consequently, the idea of initiation is not part of the meaning of "start", but is due to the complement with which "start" is used. As for the description of the meaning of "start", I would now formulate it as denoting an irruptive movement out of non-existence into existence. This formulation covers more adequately the uses which the commentator identified as

being problematic for the notion of breaking out of a state of rest or inactivity:

(1) That was how they started being friends.

(2) George Granger has started a health centre and I know he's looking for qualified staff.

(3) It started to rain.

(4) The baby started sleeping through the night.

(5) The rates start at $10.

Thus in (1) the people referred to moved their friendship from a state of non-existence into a state of existence; in (2) Granger brought his health centre from non-existence into existence; in (3) the environment moved from a state in which there was no rain into a state in which rain existed; in (4) the baby brought a new habit of sleeping through the night into existence; and in (5) the fact that there are no rates below $10 implies that the rates only come into existence at that point on the price scale.

Regarding the commentator's contention that "start" refers to the initial segment of the event in uses such as (6) below, I must beg to differ:

(6) She started to say something but decided not to.

Of course, in order for (6) to be true the subject must have at least opened her mouth, even if no sound came out. However, one cannot take the opening of one's mouth to be the initiation of the action of saying something.

Otherwise, an utterance such as (7) would be contradictory, which it is not:

(7) I started to scream but couldn't with the ball gag in my mouth. (https://www.asstr.org/~pervman/oldsite/stories/P001/PlightOfAnn/PlightofAnn.htm)

This contrasts with cases where '*start* + verbal complement' does convey the idea of the initiation of the event, as illustrated in (8) and (9):

(8) I started screaming.

(9) *I started screaming but couldn't with the ball gag in my mouth.

My view of the meaning of "start" is able to explain both why, when followed by a verbal complement, this verb implies the initiation of an event in most of its uses, and why in 10% of its occurrences it denotes a preparatory movement that takes place prior to the actual beginning of the event: every beginning is a start, i.e. an irruptive movement from non-existence into existence; however, not all starts are beginnings, as one can have an irruptive movement from non-existence into existence that corresponds to a movement performed in preparation for the initiation of an event.

Regarding truth-conditional semantics, as a general comment I would say that the commentator takes sides with logicians against ordinary language users. To say that the difference between "dog" and *canis familiaris* "is not a semantic difference; it is not a difference in what they mean" (p. 41) is to equate meaning with impact on truth-

value. If lack of effect on the truth-value of the sentence in which it is used is taken as the standard for synonymy, the complex noun phrase direct object in "I took the four-legged fur-bearing carnivorous animal that barks out for a walk" would have the same meaning as the noun "dog". From a linguistic point of view, this is completely indefensible. Furthermore, my criticism that the truth-conditional approach takes sentences to be the basic semantic unit is not obviated by the fact that truth-conditional semantics treats the meaning of a sentence as compositional. My point is that sentences are clearly not "pairings of sounds with meanings" (Hornstein 1995: 1), since they do not have stable meanings which could be paired off with linguistic forms. Although I did not discuss this in *Linguistic Meaning Meets Linguistic Form*, I am aware of the fact that compositionality is linked to the postulate of Logical Form, i.e. that sentential constructions are viewed as being each paired off with a meaning-determining compositionally-constituted Logical Form that is proper to it. The fact that the vast majority of sentences are assembled on the fly to express situation-specific messages, however, makes them highly unlikely candidates for being stable "pairings of sounds with meaning" even if the latter is defined as Logical Form. Although in actual fact the generative model does not claim storage of sentences in memory, its view of syntax as autonomous from semantics is tantamount to doing so as far as the relation between linguistic form and meaning is concerned. Since the sentence is generated autonomously from both meaning and context as a purely syntactic structure which, once assembled, is sent to the semantic component for interpretation, it is treated as a context-and-meaning-independent syntactic unit that gets an intrinsically-defined context-independent meaning assigned to it in the form of its Logical Form.

Moreover, since in the most recent version of Generative Grammar, the Minimalist Program, the number of syntactic operations postulated in the grammar has been reduced to only two – Merge and Move – one wonders how a Logical Form capable of determining a sentence's truth-conditional interpretation could ever be generated entirely from the context-free meaning of lexical items and a Minimalist syntax of the sentence. Merge is a function that simply takes two objects (e.g. α and β) and merges them into an unordered set with a label indicating which component of the phrase is the head (e.g. either α or β); Move, according to Hornstein (1995, p. 64), "is actually copying and deletion." To take the example of a simple noun phrase, in (10) below how could these two elementary syntactic operations together with the meanings of the lexical items "computer" and "guy" ever determine this phrase's multifarious possible interpretations?

(10) the computer guy

This sequence could mean 'the guy who repairs computers,' 'the guy who sells computers,' 'the guy who makes computers,' 'the guy who programmes computers,' 'the guy who installs computers,' 'the guy who loves computers,' or perhaps even 'the guy who buys used computers'. All of these interpretations would have an impact on the truth-conditions of a sentence in which this noun phrase was the subject. What determines the interpretation of an utterance of (10) is thus much more than the context-free meaning of the lexical items it contains and the generative syntax of their combination, as the interpretation is clearly dependent upon the incorporation of free enrichments concerning the real-world relation between the guy in question and computers.

There are other more fundamental problems with Logical Form too. Iacona (2018) argues that the way formal explanation works in logic raises a problem for mainstream Generative Grammar's intrinsicalist notion of Logical Form as determined by the internal properties of the sentence as the latter is generated by the grammar. According to the intrinsicalist postulate, the logicians' logical form that determines the truth-conditions and inferential potential of a sentence is supposed to be merely the formal notation of the linguists' Logical Form determined solely by syntactic structure. However, formal logic requires that the representation of a proposition be relational, i.e. that the logical form assigned to a sentence should not depend solely on the sentence itself, but also on the logical relations that the sentence bears to other sentences in the language. This makes logicians' logical form dependent on something outside the sentence, in contradiction to mainstream Generative Grammar's intrinsicalist view of Logical Form. Thus one could say that Logical Form is at the same time both not logical enough for logic and not linguistic enough for linguistics. I discuss these matters in greater depth in Duffley (2021).

References

Condit, C. M. (2010), "Public Understandings of Genetics and Health", *Clinical Genetics* 77, 1–9.

_____. (2011), "Got", *Sociology Compass* 5, 618–635.

Duffley, P. J. (2021), "Logical Form: Not Logical Enough for Logic, Not Linguistic Enough for Linguistics", *Journal of Pragmatics* 182, 163–175.

Hornstein, N. (1995), *Logical Form. From GB to Minimalism*, Cambridge, Cambridge University Press.

Iacona, A. (2018), *Logical Form. Between Logic and Natural Language*, Cham, Springer.

Krempel, R. (2022), "Linguistic Meanings Meet Linguistic Form", *Manuscrito*, v. 45, n. 1, 28-42.

Langacker, R. W. (1987), *Foundations of Cognitive Grammar*, Volume 1, Stanford, Stanford University Press.

Rémi-Giraud, S. (2008), "Mots courants et connaissances scientifiques", in J.

Lautrey, S. Rémi-Giraud, E. Sander and A. Tiberghien (eds.), *Les connaissances naïves*, Paris, Armand-Colin, 154–192.

Vogh, K. and B. Courbon. (2018). "'For me, it was very genetic': usage de termes issus du domaine de la génétique dans le discours en ligne de diabétiques anglophones", in C. Roche (ed.), *TOTh 2016. Terminologie & Ontologie: Théories et Applications*, Chambery, Éditions de l'Université de Savoie, 83–103.

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