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On the Insufficiency of Form to Determine Meaning

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The idea that form is sufficient to determine the semantics of linguistic expressions is encapsulated in the principle of compositionality. Intuitive notions of compositionality have a long history, though its first formulations in modern theory can be found in Chomsky's *Aspects* (1965) and Montague's 'Universal Grammar' (1970). In *Aspects*, building on the work of Katz & Fodor (1963), Chomsky describes the architecture of a speaker's linguistic competence as containing a syntax that arranges morphemes into hierarchical structures that receive both phonetic and semantic interpretations. On these terms, there is a direct and transparent relation between form and meaning effected by our syntactic competence.

Although much has changed since, this core understanding of the relationship between form and meaning—the T-model—is still mainstream today, with it often labelled a 'virtual truism'. However, even within frameworks that endorse the cognitive necessity of compositional meaning (as recognised most forcefully in Fodor 1975), the idea that syntactic structure *itself* relates form and meaning through an interface with semantics has had its detractors. Indeed, even Fodor, who played such a significant role in linguists trying to ground syntax with respect to semantics, eventually came to believe that "quite possibly, English has no semantics, some appearances to the contrary notwithstanding" (2008:198).

In this talk, I will examine certain problems in the philosophy of language, linguistic theory and language acquisition to shed light on Fodor's seemingly bizarre conjecture and, in so doing, I will argue that the T-model of syntax is undermined in such a way that we cannot regard the compositional meanings of expressions as being properties of *the expressions themselves*. Instead, all words and sentences must be regarded as non-compositional approximations of compositional meanings, which only receive their compositional interpretations through discourse pragmatics, and we must reconfigure our architecture of the language faculty to account for syntax's underdetermination of the form-meaning relation.

A useful way into these issues is to appreciate how *Aspects* established the importance of compositionality for linguistic theory. In particular, it's worth noting that the principle of compositionality was absent from *Syntactic Structures* (1957) and not as a mere lacuna — there, Chomsky argued *against* a direct relation between structure and meaning, believing that only the *use* of linguistic expressions could fix that relation. As such, I will characterise the essential differences of the *Syntactic Structures* and *Aspects* models, so that we can properly understand the theoretical drive behind the introduction of the T-model.

The key insight here is that the ability of syntax to relate structured form to compositional meaning relies upon the properties of the elements that it structures. While the terminal elements in *Syntactic Structures* were said to have only phonological content, ruling out the possibility of a semantic interface, *Aspects* argued for terminal elements with phonological as well as semantic content, so that syntax could have both a phonetic and a semantic interface. In other words, for T-model syntax to function, we must have lexicons that contain lists of morphemes with (minimally) phonological and semantic content.

While it is intuitive to regard the lexicon as being *necessarily* so structured, so we can encode and decode semantics by looking up entries in our mental dictionaries (the coding metaphor reinforcing the view that form and meaning are transparent), note that a lexicon is just *not* required to explain how we use and understand words. As children, we are born without any lexicon at all, as we must acquire one according to experience, in which case we must naturally have some way of knowing the meanings of words *without* a lexicon to specify them, and there is no reason to suppose we start to need one once we have filled it.

The reason why such a lexicon has been assumed since *Aspects* is not because it permits semantic coding but rather because it records *context-independent* form-meaning relations for our context-independent syntactic competence to operate upon. In other words, it is entirely derivative of the supposition that syntax has a phonetic and a semantic interface that we model lexical items as having phonetic and semantic content. Yet, since at least Wittgenstein (1953) (and, somewhat less rigorously, the German idealist philosophers of the nineteenth century), some have argued that it is simply impossible for words to have context-independent semantics, ruling out the lexicon that the T-model needs to function.

Recently, in theories more sympathetic to the generative program, the evacuation of semantics from the lexicon has been embraced to a greater or lesser extent in varieties of relevance theory (e.g. Recanati 2004; Carston 2013) and exo-skeletal syntax (Borer 2013 argues that lexical items have no intrinsic semantics but that they still acquire context-independent meaning via syntax). Here, I will present a new argument from observations of language acquisition, based on an attempt to reconcile generative theory with Fodor's later views, to show that we are able to *use* words to refer to compositional concepts given our pragmatic capacities, but in light of an essentially Humean problem of induction applied to the arbitrariness of the sound-meaning relation, we are psychologically incapable of entering context-independent associations of form and meaning into a lexicon given our limited childhood experience. This is analogous to the poverty of stimulus in syntactic structure, but while syntax has an innate grounding, sound-meaning relations do not. It follows from this that T-model lexical items cannot exist and so nor can the T-model's interfaces.

To conclude, I will offer some remarks on why T-model syntax has seemed so promising despite the impossibility of the lexicon it requires and I will suggest how we can salvage the many valuable post-*Aspects* discoveries about syntax. In particular, I will argue that standard analyses of syntactic structure are really analyses of *purely* semantic structure, with morphemes standing as proxies for concepts—as morphemes have no context-independent meaning, they cannot genuinely participate in what purport to be context-independent structural representations. As such, we must consider generative theory to be a theory of meaning and we must develop a new theory of meaning's relation to form.

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