

Verbs and nouns as phases: the role of categorial features

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In the generative literature on grammatical category – with Chomsky 1970 and Jackendoff 1977 acting as pivots, the features [N] and [V] are essentially perceived as syntax-internal classificatory features with no LF interpretation (see also the discussion in Haeberli 2002: Ch. 2). This is a serious problem for Full Interpretation and, more generally, for a conception of grammar as a system that manipulates interface-interpretable features (Chomsky 1995; 2001) as categorial features seem to fulfil no other purpose than a taxonomic one. The essential question is

(1) What is grammatical category; what does it do in syntax and at LF?

Two paths have been followed towards answering this question in recent years: the first is a programme couched within Distributed Morphology, aiming to rid syntax from categorial specifications altogether, as advanced in Halle & Marantz (1993), Marantz (1997), Harley & Noyer (1998), Embick (2000), Arad (2003; 2006) and – somehow differently – in Borer (2005). In this programme grammatical category is not the result of a categorial feature that combines with a root in a pre-syntactic lexicon, in principle because there is no such thing as a pre-syntactic lexicon. Roots combine in syntax with a relevant battery of functional heads that gives them their nominal, verbal or adjectival character. A more consistent use of the mechanisms available to Distributed Morphology, a more pronounced analysis of the effects of blocking (Embick & Marantz 2006) and the incorporation of Phase Theory (Marantz 2000; 2006) have resulted into this programme overcoming some of its initial problems, outlined in Baker (2003: Ch. 4), Don (2004) and Panagiotidis (2005). The above developments recast category as the side-effect of the existence of at least a nominaliser (*n*) and a verbaliser (*v*) category whose projections constitute “word-internal” phases within which compositionality does not hold. Setting aside for the moment the issue of why or how compositionality is suspended within this innermost phase, the main question remains: what differentiates the nominaliser from the verbaliser? In other words, what do they do at LF?

A second approach to problems of category is that of Baker (2003), who attempts to address them by appealing to categorial features being LF-interpretable. He advances a theory of category where [V] and [N] are privative features. Verbs are specified as [V] and are interpreted at LF as predicates, nouns are specified as [N] and are interpreted at LF as bearing a criterion of identity, making them referential. Although Baker’s is a straightforward and coherent theory, there are problems. For instance, Baker (2003: Ch. 3) takes an [N] feature to force / consist a referential index on the nouns themselves. Accordingly, Baker argues extensively against the by now received analysis that nouns are predicates (see Higginbotham 1985; Stowell 1991; Longobardi 1994; Chierchia 1998) and that referentiality is the effect of the presence of a Determiner. The idea that all nouns *universally* bear referential indices introduces significant complications to grammatical theory, as becomes clear once a detailed and meticulous study of categories D and Num in determining the interpretation of nominals is considered, as in Larson (1991; 2004), Borer (2005: Ch. 3-6) and Corver (2005). Turning to [V], a first difficulty with this feature as encoding predication (Baker 2003: Ch. 2) is that syntactic predication, say the projection of a ‘subject’ specifier, hardly coincides with semantic predication (see

for instance Rothstein 1983 and Chomsky 1995 on the EPP along with much subsequent work).

This leaves us with a dilemma. While Baker's programme to make categorial features just like all other features, i.e. interface-interpretable and LF-interpretable more specifically, is an attractive thesis, the actual interpretations proposed for the two categorial features, i.e. a criterion of identity for [N] and predicativity for [V], are not. On the other hand, the category-less syntax enterprise offers a coherent way to theorise (inter alia) on category, conversion, nominalisations, word-formation and thematic structure, which until then required either two separate generative engines, a 'morphological' and a 'syntactic' one, or the lexicon functioning as a quasi-generative engine itself. On the empirical plain, the category-less programme has successfully tackled a significant number of phenomena cross-linguistically, as a survey of Harley & Noyer (1998), Embick (2000), Marantz (2000), Alexiadou (2001) and Arad (2003; 2006) – among many – illustrates.

Keeping the above in mind, we zoom into one of Baker's observations: that category distinctions should be taken to correspond not to inherent ontological properties of concepts but, rather, to *perspectives* on (concepts about) the world (Baker 2003: 293-294). Having said that, concepts of particular types are found to be canonically mapped onto particular categories cross-linguistically, with objects getting mapped onto 'prototypical' nouns (*rock, tree, child*) and with dynamic events onto 'prototypical' verbs (*buy, hit, walk, fall*). Moreover, 'prototypical' category members (such as the nouns *rock, tree, child*) share exactly the same *grammatical* properties as 'non-prototypical' ones (e.g. *theory, liberty, game*). (ibid.: 296-297; Newmeyer 1998: Ch. 4). In other words, grammatical category cannot be a completely arbitrary, grammar-internal affair. Having said that, we have to recognize that linguistic categories are hardly coextensive to conceptual ones. As David Pesetsky (p.c.) put it, all physical objects are nouns cross-linguistically, despite not all nouns denoting concepts of physical objects – and so on. Hence, the still important question of whether category comes from the lexicon or is imposed by a low functional head necessarily comes second.

Another matter that needs be addressed here is the following: assume that the category-less story is the correct one – I, for one, and despite my (2005) objections, am proceeding to do so, in the face of its empirical power. What is it that makes a nominaliser (*n*) and a verbaliser (*v*) what they are – as opposed to, say, a causative or a voice head? (I will assume adjectivisers do not exist and that adjectives are not as ubiquitous or basic as has been argued). The zero hypothesis is that they bear some distinctive feature, say [N] and [V]. In other words, even if we get rid of nouns and verbs in the lexicon, we cannot eliminate the difference between them, a difference that can be expressed in terms of features. Rephrasing the question: what is the difference between [N] and [V]? What is their interpretation at LF?

Dwelling on the 'perspective' aspect of grammatical category, we need to ask ourselves what the proper semantic interpretation of nouns and verbs is – whether they are derived in the syntax or they are root-categorial feature combinations coming from the lexicon. Obviously, we should not expect *rock* and *theory* to belong together in any conceptual category, as the naïve version of the notional definition of categories would have it, but we could take them to be viewed by grammar and semantics in an identical

perspective by virtue of their [N] feature, responsible for their identical grammatical behaviour. I believe that the perspective in question is the following:

(2) A [V] feature forces an extending-into-time perspective at LF; an [N] feature forces an extending-into-space perspective at LF.

This is very close to the view Uriagereka (1999) puts forward and can also be taken to inform Pesetsky & Torrego (2004; 2005).

Once we conceive nouns as extending into space and verbs as extending into time we can capture the fact that nouns are better suited to have concepts denoting *objects* as well as *substances* mapped onto them: objects and substances saliently occupy space. Similarly, events typically contain verbs, because a verb is a perspective over a concept as something extending into time. The importance of the different perspective ‘making’ a noun or a verb, a perspective encoded in [N] or [V], rather than an inherent property of the concept itself, becomes clearer when we attempt to account for the elusive difference between *deny* and *denial*, for instance. Although both are clearly derived from the same root, we can be *in denial* partly because *denial* is conceived as something extending into space, like *Romania* or *a room*, due to all these bearing an [N] feature. A similar state of affairs is observable with verbs, where the [V] feature forcing a perspective on a concept as extending into time becomes evident in verbs’ biunique relation with Tense cross-linguistically.

Given the above considerations, we can argue along with the category-less model that all categorization takes place in syntax, eliminating the necessity for categorial features to combine with roots in the lexicon (pace Don 2004 and his evidence to the contrary for German and Dutch). We can further claim that [N] and [V], interpretable categorial features, are the distinctive features of *n*, the nominaliser, and *v*, the verbaliser, respectively. This would effectively entail that there are just *one* lexical noun, *n*, and *one* lexical verb, *v*, available from UG, with the remainder of the analysis in Marantz (2000; 2006) carrying over in its entirety.

With the above in mind, we can now attack a serious problem inherent in the treatment of nouns and verbs as objects constructed by syntax (as opposed to coming prefabricated from a lexicon): Marantz (2000; 2006) argues that nP and vP should be lowest *phases*. Therefore only the edges of nP and vP should be visible to outside elements and operations. However, this does not explain the lack of compositional meaning within these lowest phases, what Panagiotidis (2005) treated as the ‘predictability’ problem: all phases are impenetrable (according to the Phase Impenetrability Condition), but no other phase is *canonically* non-compositional – unlike nP and vP (‘nouns’ and ‘verbs’). I now wish to propose a path to solve this serious problem along the following lines: the special non-compositional status of the nP and vP phases results from their phase heads bearing a categorial feature forcing a fundamental interpretive perspective on them – as in (2). In other words, a syntactic projection, the lowest nP and vP containing underspecified roots and other material, cannot be assigned a ‘meaning’ until it has been combined with a categorial-feature bearing head.