## Ousting lexical categories from *both* the lexicon and syntax:

A label-less approach to English plurals and present tense

1. Neo-constructionist approaches: Lexical categories only partially ousted. Neo-constructionist approaches like Borer's (2005a,b) Exo-skeletal Model, amongst others, assume that all (non-functional) lexically listed items (listemes) are acategorial, meaning that the non-functional lexicon is completely void of primitive lexical categories. Nevertheless, lexical categories are still assumed to be essential elsewhere in this approach. More specifically, the functional projections which embed listemes are proposed to impart features corresponding to lexical category labels (see also e.g. Grimshaw 2000). For instance, in a plural like *cats*, the noun-category-specific functional projection CL<sup>max</sup> is assumed to be present and to impart the feature '+N(oun)' onto the listeme cat. Similarly, in a 'verb phrase' like John runs, the verb-category-specific projection E(vent) P(hrase) is posited and imparts the feature '+V(erb)' onto the listeme run. Further, functional projections like CL<sup>max</sup> and EP play central roles in deriving the semantics of 'nominal' plurality and 'verbal' eventiveness respectively. Firstly, under the assumption that each functional projection has a covert head which must be assigned range, Borer (2005a) proposes that there is an abstract head feature  $\langle div \rangle$ .  $\langle div \rangle$  assigns range to the covert head of CL<sup>max</sup>, with this range assignment equating to the superimposition of divisions onto listemes like *cat*, corresponding to a plural interpretation. In turn, all combinations of listemes and  $\langle div \rangle$  must be listed as linked to the correct phonological representation in a post-derivational phonological storage area, ensuring the correct spell-out of both regular and irregular plurals. For instance, the combination *cat* and  $\langle div \rangle$  is linked to the regular plural form *cats*, and that of ox and  $\langle div \rangle$  is instead linked to the irregular form oxen. Secondly, Borer (2005b) similarly proposes that the covert head of the verb-category-specific functional projection EP is assigned range through specifier-head agreement, with subjects like John in 'verb phrases' like John runs, resulting in a set of event entities corresponding to the correct eventive interpretation.

However, despite the clear strengths of such a neo-constructionist account, not only does the possibility of lexical category inheritance in the syntax mean that lexical categories are by no means fully ousted from the Exo-skeletal Model, but such inheritance also places a heavy onus on both functional category labels themselves and a range of related apparatus such as range assignment as a mechanism, abstract head features like  $\langle div \rangle$ , and a post-derivational phonological storage area.

**2.** Core proposals. In contrast to neo-constructionist approaches like Borer's (2005a,b), the current label-less account proposes an analysis of both plurality and eventiveness, without either primitive lexical categories or functional projections, extending on Chomsky's (1995a,b) *Bare Phrase Structure*. First, it is posited that the semantic import of all applications of Merge is one of *specification*. More concretely, I propose the novel Conceptual-Intentional interface condition *Merge as Specify* (MaS), (1).

## (1) Merge as Specify (MaS)

(2)

When any two items Merge, the item  $\alpha$  Merges with  $\beta$  and  $\alpha$  specifies  $\beta$  in meaning.

MaS posits that the item which Merges – the Merger  $\alpha$  – must always specify (i.e. narrow down the meaning of) the item with which it is Merged – the Mergee  $\beta$ . Such a semantic import is clearly visible with some of the most rudimentary cases of Merge, such as compounds like those in (2a/b).

## a. A book park b. A park book

In (2a), the Merger book specifies the Mergee park, returning a book-like park (e.g. a park for books). In contrast, with park as Merger and book as Mergee in (2b), it is instead the former which specifies the latter, returning a park-like book (e.g. a book about parks). Second, it is assumed that there is a single pre-syntactic lexicon for both what are traditionally classified as 'lexical' and 'functional' items (e.g. Chomsky 1995b), in which – radically – items can only be specified for either conceptual content and/or one of two entity denotations: finite, singleton ( $\{e\}$ ) and infinite, non-singleton ( $\{\dots, e, e, e, \dots\}$ ), which correspond to a singularity and plurality of divisions respectively (see also Harbour 2014).

**3.** Label-less plurality. To begin, the regular plural suffix *-s* is posited to be an item specified for an infinite, non-singleton set of entities only and thus inherently division-expressing, whilst, following Borer (2005a,b), 'lexical' items like *cat* are assumed to express conceptual content only. In turn, I posit that regular plurals like *cats* are formed from the simple Merger of *cat* with *-s* without the intervention of either lexical or functional categories, as illustrated in the label-less structure in (3).



In (3), the Merger, *cat*, is expected to superimpose its conceptual content onto the division-expressing *-s* through MaS, just like in the compound cases in (2a/b), resulting in a *cat*-like set of divisions, and deriving the correct interpretation of a plurality of *cats*, entirely parallel to Borer (2005a). Likewise, irregular plurals like *oxen* are posited to differ only minimally in being inherently specified for both conceptual content *and* an infinite, non-

singleton set of entities, equally straightforwardly deriving the correct plural interpretation. Indeed, such a label-less approach not only does not need to assume multiple lexical storage areas, but can also be shown to require fewer lexical specifications compared with an account like Borer's (2005a).

**4.** Label-less event semantics and the English present tense. Similarly, 'verb phrases' like *Cats run* and *John runs* are posited to have the label-less structures shown in (4a) and (4b) respectively.





In both cases, these involve the 'subject' (i.e. *cats/John*) Merging with (a complex syntactic object) containing the listeme *run*. Just like in (2a/b) and (3), MaS dictates that – as Merg*ers* – these subjects should superimpose their lexical properties onto the Merg*ee*, *run*. Further, as the bare plural 'subject' *cats* in (4a) is specified for both conceptual content and an infinite, non-singleton set of entities, it will superimpose both these properties onto *run*, resulting in a *cat*-like infinite, non-singleton set of *run* entities. This a desirable outcome given that 'verb phrases' are assumed to denote sets of entities. In addition, I posit that this set of entities is specifically interpreted as a set of *event* entities, given that MaS dictates that the Merg*ee run* is primary in meaning (see also *park* in (2a) and *book* in (2b)), and under the assumption that an event is the only interpretation world knowledge makes possible based on such combinations. Moreover, following and extending on Paddock (1990), such a derivation correctly derives the primary, habitual aspectual interpretation of the English present tense, which expresses a "general states of affairs" (Carlson 2012: 828), or – more concretely, and crucially – a *plurality* of events

The next question arising is: Does the Merger of non-plural 'subjects' like *John* in (4b) return a parallel interpretation, and why is the so-called 'verbal' agreement suffix -*s* found only with such third-person singular subjects in English? Here, following and building on Kayne (1989, a. o.), it is proposed that not only bare plurals like *cats* but *all* non-third-person singular subjects in English are effectively 'plural', denoting an infinite, non-singleton set of entities. In contrast, third-person singular subjects like *John* are proposed to be 'singular', denoting a finite, singleton set of entities. Accordingly, if *John* were to Merge with *run* alone, the result determined by MaS would only be a *John*-like *finite, singleton set of run* entities, i.e. a single running event. Yet, if – albeit controversially – the 'verbal' agreement suffix -*s* is taken to be one-and-the-same as the 'plural' suffix -*s*, then when *John* instead Merges with *runs* in (4b), the result is correctly predicted to be a plurality of events, also yielding the required habitual aspectual interpretation. Indeed, numerous pieces of evidence will be presented for the identity of these two suffixes, a position which in fact follows Chomsky (1957; see also Paddock 1990). Moreover, possible suggested extensions to *do*-support, further interpretations of the English present tense, and languages with more complex plural and 'verbal' agreement markers will also be presented.

Selected references: • Borer, H. 2005a. Structuring sense volume I: In name only. Oxford University Press. • Borer, H. 2005b. Structuring sense volume II: The normal course of events. Oxford University Press. • Carlson, G. 2012. "Habitual and generic aspect." In: R. I. Binnick (Ed.), The Oxford handbook of tense and aspect (pp. 828–851). Oxford University Press. • Chomsky, N. 1957. Syntactic structures. Mouton & Co. • Chomsky, N. 1995a. "Bare phrase structure." In: H. Campos, and P. Kempchinsky (Eds.), Evolution and revolution in linguistic theory (pp. 51–109). Georgetown University Press. • Chomsky, N. 1995b. The minimalist program. The MIT Press. • Grimshaw, J. 2000. "Locality and extended projection." In: P. Coopmans et al. (Eds.), Lexical specification and insertion (pp. 115–133). John Benjamins. • Harbour, D. 2014. "Paucity, abundance, and the theory of number." Language 90(1), 185–229. • Kayne, R. S. 1989. "Notes on English agreement." Reprinted in: Kayne, R. S. 2000. Parameters and universals (pp. 187–205). Oxford University Press. • Paddock, H. 1990. "On explaining macrovariation in the sibilant and nasal suffixes of English." Folia Linguistica Historica 9(1), 235–269.