

Categorizing heads are l-selectors: Idiosyncratic PP selection can vary by lexical category

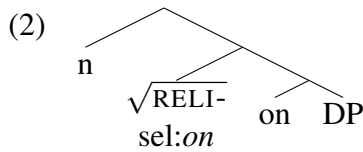
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A recent controversy has arisen over the question whether roots have selectional features and can take complements, as Harley 2014 claims (following most of syntactic tradition of the past 50 years), or not, as de Belder and van Craenenbroeck 2015 and many others (e.g., Borer 2013, Alexiadou et al. 2014, Lohndal 2014) have recently argued. I show that a new set of facts from PP selection in English (and Dutch and German, omitted here) support the modern idea that all arguments are severed from the root, and are introduced only in specifiers of functional heads that interact with the root, but these arguments are not sisters to the root.

A well-known compelling argument that roots are acategorical comes from selection: idiosyncratic selectional properties (sometimes known as ‘l(exical)-selection’, since the selected head is realized as a particular lexical item) appear to be stable across different realizations of a root:

- (1) a. They rely **on** oil.
- b. Their reliance **on** oil is well-known.
- c. They are reliant **on** oil.

Such facts indeed receive a satisfying explanation on a theory like that of Harley 2014¹ and its forerunners (see also van Craenenbroeck 2014 for discussion and references): the root itself selects for (the head of) its complement, and the root variously surfaces as a noun, verb, or adjective depending on what additional structure is added to the root (Borer 2005, 2013):



But there is a substantial class of roots (134 so far in a database I am constructing) that show idiosyncratic variable behavior across their realizations, showing mismatches in how the nominal, verbal, and adjectival forms mark internal arguments. The verb *oppose* takes a direct object, but the noun *opposition* and adjective *opposed* take a *to*P. In the worst cases, the preposition is different across all three categories, taking one preposition as a verb, another when surfacing in a noun, and yet a third in adjectival form: this holds for the root $\sqrt{\text{PRD}}$ that underlies *pride*_V *o.s.* *on*, *pride*_N *in*, *proud*_A *of*.

- (3) a. I oppose (***to**) lower taxes.
- b. My opposition {**to**/***of**} lower taxes is well known.
- c. I am very opposed {**to**/***of**} lower taxes.
- (4) a. She prides herself **on** her thoroughness.
- b. Her pride **in** her thoroughness is understandable.
- c. She is proud **of** her thoroughness.

This class of roots shows that it is not only the root that determines the head of the internal argument. It seems we would need to allow ‘joint selection’ by the root and the category node (*v*, *n*, *a*) together of the complement of the root. But such joint selection of complements is not technically feasible in the strictly bottom-up models of Merge, since Merge is conditioned on an identity between the selectional

¹Harley discusses only *study* *X*, *student of* *X*, but her point extends readily to selected PPs.

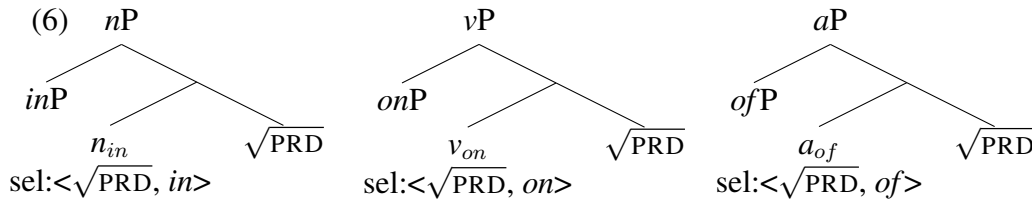
feature of the selector and the category (or head) feature of the complement. There is no way for the root $\sqrt{\text{PRD}}$ by itself to select the right preposition: only when this root combines with *n* is *in* selected (*mutatis mutandis* for *a* and *v*). We conclude that the structures in (2) are incorrect:

Further evidence that selection by categorized roots can vary by category comes from historical changes in selection. In contemporary English, the verb *lust* can take either a *for* or *after* PP, but the noun *lust* can take only a *for* PP:

- (5) a. They lust {for/after} chocolate.
b. Their lust {for/*after} chocolate was insatiable.

I show that this pattern has been stable only since about 1920; in texts from 1800, the ratio of nominal *lust_N* *for* to *lust_N* *after* is 29:71 and steadily but not monotonically increases across the 19th century; at the same time, verbal *lust_V* *for*:*lust_V* *after* (which is vastly less frequent than the noun *lust_N*, by a ratio of almost 1:99) varies from 40% to less than 5% before stabilizing between 40-50% over the past four decades. The fact that these ratios differ shows that the selectional properties of the verb and noun versions of *lust* vary independently; this fact is not consistent with putting selectional features on roots directly.

We need to list idiosyncratic selection information somewhere in the lexicon; these are not semantically conditioned alternations. The most obvious place in a Minimalist, compositional, nonlexical treatment of category that such information can be located is on the categorizing head itself:



The categorizing head thus has two selectional features: the first one for the root (its complement) and the second one potentially for a specifier which represents the first internal argument. These features are ordered, and accessed in a particular order by Merge (following Stabler, Müller, Bruening, Kobele, and Merchant).

This theory makes the correct prediction that outer categorizing heads (those heads that take already categorized heads as their complements) will never change the selection properties:

- (7) a. She exhibits great faith **in** God.
b. She is very faithful **to** God.
c. She exhibits great faithfulness {**to**/***in**} God.
(8) oppose (*to), opposition to, oppositional to, oppositionality to
(9) responder to/*of, believer in/*of, objector to/*of

The account also sheds light on Neeleman's (1997) generalizations: there can be at most one idiosyncratic PP per root, and there are no 'quirky' PP subjects; since only the categorizing head can have these features, the menagerie of little *v* that introduce other arguments will not select for PPs.

de Belder & van Craenenbroeck 2015 'How to merge a root' *LI*; **Borer** 2013 *Taking form*; **Alexiadou, Anagnostopoulou, Schäfer** 2015 *External args. in transitivity alternations*; **Harley** 2014 'On the identity of roots' *Theor. Ling.* **Neeleman** 1997 'PP complements' *NLLT*