

## A Syntactic Approach to Indefinite Null Objects

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**Background.** Non-overt direct objects with an existential interpretation, as in *He reads\_\_ / He is reading\_\_*, have been the topic of linguistic discussions since Chomsky introduced the transformational rule of ‘Unspecified object deletion’ (1962). In the English-oriented literature, they are usually assumed to be represented lexically, either in the form of de-transitivizing rules that operate on individual predicates, cf. (1-a), or as two separate predicates, transitive and intransitive, linked by a predicate-specific meaning postulate, cf. (1-b).

- (1) a. argument structure conversion:  $x \text{ EAT } y \rightarrow (\exists y) x \text{ EAT } y$  (Bresnan 1978, Dowty 1978)  
 b. inference rules for two lexical predicates:  $x \text{ EAT } \equiv (\exists y) x \text{ EAT } y$  (Fodor and Fodor 1980)

Recently, this view has been challenged by Alexiadou *et al.* (2014), who argue for a syntactic re-interpretation of Bresnan’s rule of **existential closure (EC)** in (1-a), such that it applies to any predicate with an unsaturated internal argument:  $\llbracket \text{EC} \rrbracket = \lambda f_{(e, \text{st})} \lambda e_s \exists x [f(x)(e)]$  (see Babko-Malaya 1999 and Martí 2011 for related proposals).

**Overview.** In my presentation, I utilize data from Czech, a Slavic language with a morphologically marked category of grammatical aspect, to provide two additional arguments for the analysis of **indefinite null objects (INOs)** as a result of generalized EC, applying at the *v*-node (understood as a categorizer, separate from agent-introducing Voice; Marantz 2007, 2013). They are based on INOs’ occurrence with the so-called secondary imperfectives and on the role of context in INO licensing. I also address the long-standing issue of INO’s incompatibility with perfective verbs in Slavic languages (Franks 2005, Ruda 2016, a.o.), showing once again how only a syntactic but not lexicon-based derivation of INOs can explain it. Finally, I point to some shortcomings of Alexiadou *et al.*’s proposal and I amend it, employing the syntactic event structure decomposition.

**Analysis.** As in English, INOs in Czech introduce a new discourse entity, which can be subsequently referred to with a pronoun (as in *John was eating\_\_. It was delicious*), but they should not be represented as independent syntactic entities/arguments, as confirmed by their inability to control, serve as binders for Conditions A, B, or C, and become small clause subjects (examples not provided for the sake of space). INOs’ inertness with respect to other quantifiers, including negation, shows that they must be derived by an  $\exists$ -closure with the narrowest possible scope:

- (2) J. překládá něco všude.  $\times$  J. překládá\_\_ všude.  
 ‘J. translates sth. everywhere.’  $\forall \gg \exists, \exists \gg \forall$  ‘J. translates everywhere.’  $\forall \gg \exists, \# \exists \gg \forall$

One of the arguments for locating INO-deriving EC in syntax in Czech is that many imperfective verbs that can have INO in lieu of their complements are the **secondary imperfectives (SIs)**:

- (3) Jan vyřezá-va-l\_\_ / zapiso-va-l\_\_ / přerovná-va-l\_\_ / rozdá-va-l\_\_ / oslavo-va-l\_\_.  
 Ian carve-IPF-PST note-IPF-PST reorganize-IPF-PST give away-IPF-PST celebrate-IPF-PST  
 ‘Ian was carving / making notes / reorganizing / giving away / celebrating.’

It has been extensively argued that SIs are derived morphosyntactically, by affixation (*-va-*) in the head Asp, from the common, often prefixed verbal stem that they share with perfectives (Ramchand 2004, Romanova 2004, Jabłońska 2007), so they are in a way similar to progressive *-ing* forms in English. The internal structure of SI could be schematically captured as  $[_{\text{TP}} -l [_{\text{VoiceP}} (\text{NP}_{\text{Agent}}) [_{\text{AspP}} -va- [_{\text{vP}} (\text{NP}_{\text{Theme}}) [v + \sqrt{\quad}]]]]]$ . The morphologically simpler, perfective counterparts of the verbs in (3), however, are ungrammatical with INO, despite having identical lexical semantics:

- (4) Jan \*vyřeza-l\_\_ / \*zapsa-l\_\_ / \*přerovna-l\_\_ / \*rozda-l\_\_ / \*oslavi-l\_\_.  
 Ian carved.PF made notes.PF reorganized.PF gave away.PF celebrated.PF

The EC associated with individual lexical predicates would have a hard time deriving the difference between (3) and (4), since the forms in (3) do not even exist in the lexicon (unless we lose the important generalizations about their derivational productivity and semantic predictability). By contrast, if EC operates on the *v*-projection before the Asp-head even merges, as captured in (5), the existence of INOs is expected for all eventive argument-taking verbal stems.

- (5) **Intransitivization rule:** If  $\llbracket v \rrbracket \in D_{(e, \text{st})}$ , then  $\llbracket v_{\text{Intr}} \rrbracket = \lambda e_s \exists x [\llbracket v \rrbracket (x)(e)]$

The rule in (5) also has the advantage of allowing the systematic explanation of INOs' incompatibility with perfective verbs, cf. (4) and (6-b), namely as a result of INOs' inability to satisfy an unvalued EPP-like feature constituting perfective Asp (loosely modeled after  $\text{Asp}_Q$  in Borer 2005). Simplifying somewhat, the direct object of monotransitive perfective verbs must move from its base-generated position in  $\text{Spec},vP$  to  $\text{Spec},\text{Asp}_Q$ , to satisfy  $\text{Asp}_Q$ 's quantificational requirements. Since INOs are not represented syntactically, they do not have the capacity to do this, hence the ungrammaticality of (4) and (6-b). In fact, INOs are not alone in this deficiency, being accompanied by low-scope indefinite **bare plural and mass nouns (BP&MN)**, which cannot serve as direct objects of perfective verbs in Czech either (cf. Krifka 1992). It has been argued that BP&MN are underlying kinds/properties and their existential interpretation results from a local type-adjusting operation with no reflex in syntax (Chierchia 1998:364). A BP/MN that merges as the direct internal argument, and becomes existentially closed-off within a  $vP$  as a result of Chierchia's type-adjusting mechanism, is consequently unable to move higher up in the structure, including the movement to  $\text{Spec},\text{Asp}_Q$  (see Giorgi and Pianesi 2001 for a related proposal for BP&MN in Italian). Under the syntactic account, the parallel between INOs and indefinite BP&MN is thus completely expected.

More support for INOs' productive, syntax-based derivation comes from their context-related behavior. In contrast to definite null objects (sometimes ranked among 'null complement anaphors', cf. Williams 2012), INOs do not refer to a unique individual familiar to the discourse participants. Still, only some predicates combine with INOs out of the blue, while many others allow INOs only in the contexts that supply (linguistically or extra-linguistically) the property/kind instantiated by a given INO; cf. the contrast between the imperfective verbs *číst* 'read' and *sbírat* 'collect' below.

- (6) a. Jan čte\_\_ × ??Jan sbírá\_\_.      b. \*Jan přečte\_\_ – \*Jan sebere\_\_.  
       Ian reads.IPF      Ian collects.IPF      Ian will read.PF      Ian will collect.PF

- (7) Do večera musíme mít deset košů švestek. Proto Jan od rána sbírá\_\_.  
       Before evening must have ten buckets plums so Ian from morning collects.IPF  
       'We have to have ten buckets of plums before evening. That's why Ian is picking from the morning.'

Moreover, context also influences the INO meaning in the case of verbs like 'read' that allow what could be called the 'default' or 'prototypical' INO (Rice 1988, Cote 1996). While it is not clear how these restrictions should be embedded in the lexicon (cf. Haegeman 1987), I show that they can be elegantly encoded as a presupposition for the application of (5). What makes read-type verbs special is that they are pragmatically associated with objects belonging to a single natural kind or class of entities so the context of the verb itself can supply the kind that INO instantiates.

It has been noted that English has a number of predicates, such as *break*, *open* or *destroy*, that never allow INO. Stemming from Rappaport Hovav & Levin (2001), Alexiadou *et al.* attempts to explain this by stipulating that verbs with a simple lexical conceptual structure (LCS), whose object is a direct argument of the root, as in (8-a), allow EC, but those with a complex LCS, as in (8-b), do not, since the "Become-subevent has to be identified by an argument in syntax".

- (8) a. *I swept (it)*: [x ACT ⟨sweep⟩ y]      b. *I broke \*(it)*: [[x ACT] CAUSE [y BECOME ⟨broken⟩]]

One of the problems with this proposal is that nothing prevents the application of EC to the unsaturated argument of Become-event semantically. I propose instead to capture the split in (8) in terms of different internal  $vP$  structures (Marantz 2007, 2013), whereby the internal argument of INO-allowing verbs merges with a verbalized root, i.e. *after* the merger of  $v + \sqrt{\quad}$ , while the roots of INO-disallowing verbs have to merge with an NP *before* (event-introducing)  $v$  does. We could then employ (5) to derive English data without further stipulations since it applies only at the  $v$ -node.

**Selected references** • Alexiadou, A. et al. 2014. Delimiting Voice in Germanic: on object drop and naturally reflexive verbs. In *Proceedings of NELS 44*; 1–14; • Babko-Malaya, O. 1999. *Zero morphology: a study of aspect, argument structure, and Case*. • Borer, H. 2005. *Structuring sense; Vol. 2*. • Giorgi, A. & Pianesi, F. 2001. Ways of terminating. In: *Semantic interfaces: reference, anaphora, and aspect*; 211–277. • Martí, L. 2011. *Implicit indefinite objects: grammar, not pragmatics*.