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On two types of silent objects

Within the literature on phonologically null objects, at least two varieties seem to be firmly established in the typology: **generic null objects (GNO)**, originally described in Rizzi 1986 and exemplified by the Italian version of *Good music reconciles___ with oneself*, and **indefinite null objects (INO)**, discussed most notably by Chomsky (1964), Bresnan (1978), and Levin (1993) in relation to English sentences such as *I ate___*. GNO were syntactically analyzed as pronouns (Rizzi 1986, Authier 1992), consisting of a set of ϕ-features and of a D-feature/head (Landau 2010). INO, on the other hand, were argued to be represented only in the lexicon, either in the form of detransitivizing rules that operate on individual predicates, cf. (1-a), or as two separate predicates, a transitive and an intransitive one, that are linked by a predicate-specific meaning postulate, cf. (1-b).

(1)   a.   argument structure conversion (Bresnan 1978): x EAT y $\rightarrow$ ($\exists$y) x EAT y

        b.   inference rules for two lexical predicates (Fodor & Fodor 1980): x EAT $\equiv$ ($\exists$y) x EAT y

On the basis of novel data from Czech, a Slavic language that has both GNO and INO, I show that while the main distinction between syntactically represented GNO and syntactically non-present INO holds, their analysis has to be much more fine-grained. I argue that Czech GNO have in fact an extremely impoverished syntax, corresponding to a bare nominal head, but are deprived of number, person and D features. Czech INO, on the other hand, although not being syntactic arguments per se, have to be derived by a general, syntax-sensitive rule of interpretation, and not as a result of lexical, item-specific rules if we want to account for their systematic, aspect-sensitive distribution.

I. GNO. On a par with their Italian counterparts, GNO in Czech are always human-denoting. They control into infinitival clauses (2), bind reflexives (3), and function as subjects of argument small clauses (4-a). According to Rizzi (1986), all of these are evidence for their presence in syntax.

(2)   Šikovný učitel   přiměje___$_i$ [PRO$_i$ chodit na hodinu včas a připraven-ý/$^{C\#}$-á/$^{??}$-í].
        skilled teacher makes   go to class on-time and prepared-SG.MASC/SG.FEM/PL
        'A skilled teacher makes (one) come to classes on time and well prepared.'

(3)   Ani   nejlepší ochranka neochrání___$_i$ před   sebou$_i$ sam-ým/$^{C\#}$sam-ou/$^{??}$sam-ými.
        neither best   security not-protects before self alone-SG.MASC/alone-SG.FEM/alone-PL
        'Not even the best security guard protects (one) from oneself.'

(4)   a.   Požívání marihuany dělá   ___ otupěl-ým   / *otupěl-ého
            Intake   marijuana makes   dull-INST.SG.MASC dull-ACC.SG.MASC

        b.   Požívání marihuany dělá člověk-a   otupěl-ým   / otupěl-ého
            Intake   marijuana makes human-ACC.SG.MASC dull-INST.SG.MASC   dull-ACC.SG.MASC
            'Regular consumption of marijuana makes one dull.'

The agreement markers on adjectives bound by GNO directly, as in (3), or indirectly via PRO, as in (2), reveal that GNO are specified for masculine gender, which is pragmatically neutral in the sense that it subsumes both male and female individuals. Feminine gender is accepted only in contexts where the generalization is meant to apply exclusively to women (I mark this by 'C#' in the examples). The same pragmatic neutrality of masculine gender is generally attested also in the case of overt nouns denoting humans and human-like entities in Czech:

(5)   *ředitel-∅* 'principal-MASC.SG (male or female)' × *ředitel-ka* 'principal-FEM.SG (female only)'

(Non-human nouns are specified for gender idiosyncratically, and the default gender in Czech is neuter, found e.g. in impersonal constructions.) On the other hand, GNO are not specified for number, as are overt [+hum] nouns, where SG is used to refer to atomic human-like beings, and PL is used for sets of atoms with cardinality >1 (Link 1983). But adjectives agreeing with GNO always have the default singular value, see (2) and (3), no matter how much we play with the context. In addition, the data in (4) show that GNO do not allow case agreement, in sharp contrast to their overt counterpart, a generically interpreted noun *člověk*. I explain this mismatch as a result of the missing number projection in the internal structure of GNO, i.e. KaseP selects at least NumP, not a bare NP. Finally, none of the possible combinations of person features [±Participant] and [±Author] is applicable to GNO – they are more like regular nouns in not having the person features at all. Both of these facts, missing NumP and no person features, lead to the conclusion that DP is missing altogether in

GNO. (It also fits in with the recent research on Slavic languages, pointing towards no DP layer in their nominals in general, cf. Dayal 2004, Bošković 2007, Despić 2009.) The syntax of GNO could be simply captured as [$_{NP}$ e$_N$] where e$_N$ has only the pragmatically determined gender feature which is associated with a lexical semantic feature [+hum]. It was argued by Panagiotidis (2002), following Postal (1969), that a conceptually empty "pronominal noun" is present inside every pronoun: it is either null (e$_N$), or overt (e.g. *one* in *the tall one*). GNO can be thus viewed as a structurally minimal intersection between regular, concept-denoting nouns and purely referential pronouns, rather than as a full-fledged member of any of these two categories.

II. **INO.** Czech is much more generous than English in allowing null objects that could be paraphrased as 'something' or 'someone'. They don't pass the tests for being syntactic arguments but they have several syntactically relevant properties that call for explanation. Here I focus on the fact that they productively combine with imperfectives (which have either a continuous, progressive-like meaning or a habitual meaning in Czech) but are disallowed with the corresponding perfectives:

(6) Táta často vyřezává___ / zrovna teď vyřezává___ / zítra   *vyřeže___.
  Daddy often carves.IMPF / right now carves.IMPF / tomorrow carves.PF
  'Daddy often carves / is carving right now / will carve out tomorrow.'

Importantly, (im)perfectivity is a grammatical category determined in the aspectual head (Asp) that is located above VP. Moreover, it has been argued (Ramchand 2004, Svenonius 2004) that the so-called 'secondary imperfectives', often marked by the suffix *-va-* and exemplified also by the verb *vyřezá-vá* above, are derived syntactically, presumably in Asp. It is hard to imagine how listing predicates with existentially quantified arguments in the lexicon would account for this sort of data without losing the generalization. To overcome this issue, I propose that INO of the type in (6) are a result of a low-scope existential closure that applies at a VP-level to resolve a type mismatch. Transitive predicates inserted in V that have no syntactic (internal) argument to merge with are shifted from binary relations of individuals and events to sets of events (VP's standard denotation), i.e. $\lambda x \lambda e[\text{VERB}(e) \wedge \text{Theme}(e,x)]$ shifts to $\lambda e \exists x[\text{VERB}(e) \wedge \text{Theme}(e,x)]$. A similar local $\exists$-closure was proposed by Chierchia (1998:(31)) to resolve the type mismatch between predicates in episodic contexts that combine with kind-denoting bare plural and mass nouns (BP&M). It follows from Chierchia's account that BP&M in English should allow only the narrowest scope, in contrast to indefinite singular nouns that have the semantics of regular quantified phrases (the contrast observed in Carlson 1977). A parallel contrast can be found in the case of INO: while overt indefinite phrases such as *něco* 'something' can be interpreted with either a high or a low scope with respect to other quantified phrases, INO allow only the narrow scope (data not presented here for the sake of space).

Going back to the issue of aspect, we find yet another parallel between BP&M and INO: not only INO but also indefinite BP&M are incompatible with [+PF] verbs in Czech. (Note that morphologically bare BP&M in Czech are ambiguous between the indef. and the def. interpretation but the latter is the only one allowed for BP&M as direct objects of perfectives, cf. Krifka 1992.) The failure of INO as well as of indef. BP&M to combine with perfectives in episodic contexts can be explained if we acknowledge that neither INO nor indef. BP&M represent a syntactic constituent (semantically corresponding to an individual variable) that can move out of VP to Spec,Asp to satisfy its quantificational requirements, associated with [+PF] aspect value: INO are not represented in syntax at all, BP&M are represented only as predicates/kinds as argued for by Chierchia; cf. the proposal along the same lines by Giorgi & Pianesi who explain the ban on indef. BP&M as direct objects of perfective verbs as a consequence of their non-referentiality and inability to move out of VP.

(Note: there are several perfectives in Czech that do allow silent objects; I assume those to be true idiomatized cases.)

Selected references • Authier, J.-M. 1992. A parametric account of V-governed arbitrary null arguments. *NLLT* **10**(3):345–374. • Chierchia, G. 1998. Reference to kinds across languages. *NLS* **6**(4):339–405. • Giorgi, A. & Pianesi, F. 2001. Ways of terminating. In: *Semantic interfaces: reference, anaphora, and aspect.* Stanford, CA: CSLI, 211–277. • Landau, I. 2010. The explicit syntax of implicit arguments. *LI* **41**(3):357–388. • Panagiotidis, P. 2002. *Pronouns, clitics and empty nouns.* John Benjamins. • Rizzi, L. 1986. Null objects in Italian. *LI* **17**(3):501–557.