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On ‘small’ structures in syntax: small clauses, nonsententials, and small nominals

Introduction

One of the major achievements of more than fifty years of syntactic research conducted within the generativist paradigm is the discovery of rich functional structure involved in linguistic expressions. Over the years investigation of empirical data from a variety of languages led syntacticians to posit a highly articulated sequence of functional categories as heads of respective projections in clauses and phrases, traditionally assumed to be headed by lexical heads (noun, verb, adjective, adverb, preposition) [Rizzi 2013].

Clauses are assumed to have a layered tripartite structure. The innermost layer is the predication core (VP headed by a lexical verb), which is included in TP, a projection of a Tense head, responsible for the temporal properties of the clause as well as the concept of subjecthood. The outermost level of organization has to do with relating the proposition to the speaker's perspective and information structure (CP headed by a Complementizer). This yields a clausal structure with the following sequence of heads: C-T-V. Each of the three layers is subject to further expansion with other heads and their projections corresponding to particular grammatical phenomena observed in the course of research [Carnie 2008]. For instance, the traditional verb phrase has a shell-like structure with an inner VP core, headed by a lexical verb, and an outer vP shell, headed by a light verb, which can be a phonologically null element. The complementizer space is also further subdivided into projections of heads such as Force, Focus or Fin(iteness). In one strand of syntactic theorizing it is postulated that the arrangement of the relevant categories is fairly uniform across languages and can be captured in terms of the so-called syntactic cartographies [Cinque and Rizzi 2010, Rizzi 1997, Rizzi 2013].

At the same time, it has been observed that a number of linguistic expressions have structures that do not necessarily conform to the above-mentioned patterns. In particular, there are expressions which are ‘defective’ in the sense that they lack some or all of the expected functional elements. These include what is usually labelled small clauses, nonsententials (sentence fragments), and small nominals. The sections below present the most important findings concerning these ‘small’ structures. This brief survey of small structures is followed by the remarks on the small-nominal status of nominals in the NPN construction, an insight stemming from the present author’s investigation of NPNs in English and Polish [Pskit 2015, 2017].

Small clauses

A small clause is conceived of as a phrase (e.g. determiner phrase (DP), adjective phrase (AP), prepositional phrase (PP)) which has its own subject and is embedded in another clause [Progovac 2006: 38], or as any construction consisting of a subject and a non-verbal predicate [Citko 2008: 262]. Thus understood small clauses roughly correspond to what is called verbless clauses among others in popular descriptive grammars of English [cf. Quirk et al. 1985].

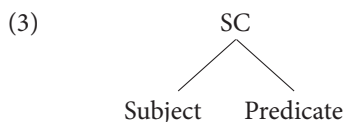
Viewing them from the perspective of theory of predication, Heycock [2013: 336] defines small clauses as “proposition-denoting constituents that do not contain a finite verb, or any verb at all, even in languages where matrix clauses normally must contain a verb”. Small clauses are exemplified by the bracketed structures, labelled SC (for small clause) in (1) below [the data from Heycock 2013: 336]:

- (1)
- a. I consider [_{SC} Julia radical]
 - b. I consider [_{SC} it obvious that she is right]
 - c. with [_{SC} the boss on holiday], her staff can do what they want
 - d. that makes [_{SC} your objections irrelevant]
 - e. they made [_{SC} him leave]

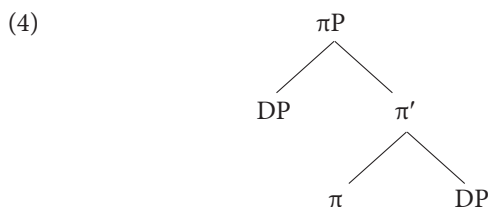
This suggests that predication structures can be subdivided into two types on the basis of their size: full finite clauses and tenseless small clauses [Heycock 2013: 336]. If one adopts the hypothesis that the clausal subject is not merged above Tense but originates inside the projection of the lexical verb (known as the ‘VP-internal subject hypothesis’), then behind every sentence there is an underlying small clause, where the subject and the predicate stand in a thematic relationship [examples from Heycock 2013: 336 and Progovac 2006: 40]:

- (2)
- a. [_{TP} Julia_i is [_{SC} t_i radical]]
 - b. [_{TP} he_i has [_{SC} t_i left]]
 - c. [_{TP} John_i is [_{AP} t_i [_{A'} clever]]]
 - d. [_{TP} they_i will [_{VP} t_i [_{V'} worry]]]

At first sight, small clauses appear to be composed of two symmetrically linked elements (subject and predicate), which can be schematically represented as follows:



However, following Bowers [2002], Citko [2008] analyses small clauses as asymmetric structures, headed by a predication functional head (π), which makes the overall structure a π P, as in (4):



Citko's [2008] proposal regarding the structure of small clauses is based on her analysis of copular sentences in Polish. There are three types of copular sentence in Polish: verbal copula sentences, pronominal copula sentences, and dual copula sentences. While the dual copula type and the pronominal copula type exhibit certain similarities in terms of category selection, case assignment, extraction possibilities, and semantic interpretation, all three types involve an asymmetric small clause structure, headed by a predication π head. The differences between verbal copula sentences and the other two types (pronominal and dual copula) depend on the status of the π head, which can be complete or defective [Citko 2008]. Elsewhere Citko [2011: 182-185] admits that in some languages there are symmetrically organized bare small clauses.

In a similar vein, Baker [2013: 17] argues that the distinction between adjectives and verbs boils down to the fact that the former are "less directly connected to their subjects" than the latter are: predicate adjective phrases require a copular verb or particle as a link with the subject, whereas verbs do not need such 'mediation' with their subjects. The two types of structure are presented in (5) below, (5a) for verbs and (5b) for predicative adjectives, where the verb *be* is the predication head (Pred) [Baker 2013: 17]:

- (5)
- a. [_{VP} We fall]
 - b. [_{PredP} We are [_{AP} fat]]

The same structure is valid even in contexts without an overt copula, as in the case of the complement of the verb *consider* in English:

- (6) [She considers [_{PredP} us Ø [_{AP} fat]]]

Importantly, the PredP in (6) is a small clause involving the subject *us* and the AP predicate, which are mediated by the phonologically empty predication head.

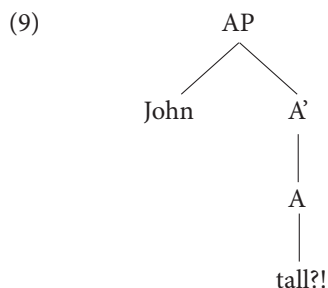
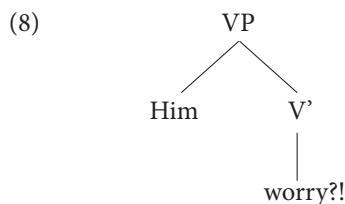
Nonsententials

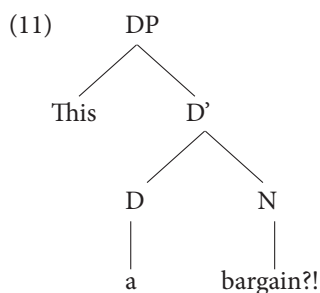
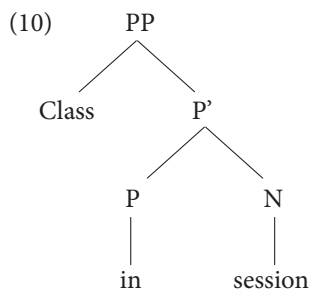
‘Small’ structures in syntax are sometimes subsumed under the label of nonsententials. Nonsententials are defined as “utterances that do not look like (full) sentences” or as “phrasal projections smaller than a sentence”, i.e. smaller than a TP [Progovac 2006: 33-34]. At least some of thus understood nonsententials include their own subjects (e.g. *Problem solved*) and they are labelled small clause nonsententials or root small clauses [examples from Progovac 2006: 35-6]:

- (7) a. Him worry?!
 b. John tall?!
 c. Class in session.
 d. This a bargain?!

Small clause nonsententials are tenseless structures, i.e. they do not have the TP layer, and their subjects are NPs rather than DPs, including the default case (NP) pronouns. The absence of the Tense head entails the absence of phenomena that rely on Tense (e.g. structural nominative case). As a result, it is not surprising that the properties of English small clause nonsententials include the default accusative case on subject pronouns, possible absence of otherwise obligatory determiners, and systematic lack of finiteness.

According to Progovac [2006], nonsententials result from selecting lexical items with unspecified/default forms of Tense and Case. If lexical items are selected without formal features, then the merge of the functional head (Tense) whose role is to value the relevant features is no longer necessary. The derivation of small clause nonsententials exemplified in (7) above results in the following respective structures proposed by Progovac [2006: 39]:





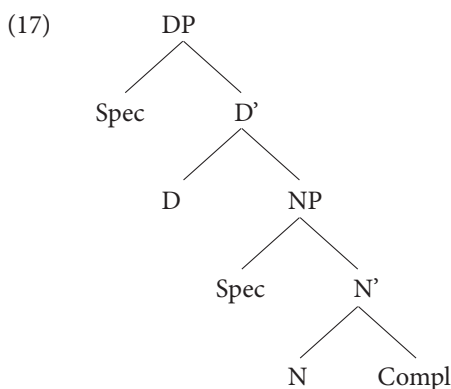
Fortin [2007] offers a different approach to nonsententials, distinguishing two types of such structures. Some nonsententials require the derivation of a full clausal structure and subsequent ellipsis of some of the material of such a full clause, whereas other nonsententials are directly generated by the syntax, i.e. they are derived as sub-sentential XP objects, without being embedded in a larger structure. The latter include bare unergative VPs (12b), adjunct adverbials (13b), interjection phrases (14b), NPs lacking structural Case (e.g. vocatives) (15), PPs (16b) [Fortin 2007: 73].

- (12) a. What did you do last night?
 b. Read.
- (13) a. Do you want to go to the movies?
 b. Absolutely.
- (14) a. Hey, you just spilled your coffee on your keyboard.
 b. Oops.
- (15) (to get someone's attention) Brian.
- (16) a. Have you seen my book?
 b. On the desk.

While they are structurally ‘defective’, the subsentential XPs contain no unvalued features, which makes them eligible for Spell-Out, i.e. being sent to the relevant interfaces (PF and LF).

Small nominals

Since 1980s research in generative syntax has been motivated, among other things, by a desire to seek parallels between the verbal/clausal domain and the nominal domain. Thus, following the discovery of a number of functional projections within the structure of sentences, the traditional noun phrases were also assumed to contain their own functional layer(s). This culminated in the DP-hypothesis developed by Abney [1987], which boils down to the idea that nominal expressions are DPs rather than NPs. The lexical projection NP does not enclose the functional projection (ArtP/DP) in its specifier position. Instead, the functional projection DP encloses the lexical projection NP, as in (17):



Just as TP and CP are the extended verbal projections, DP is the extended nominal projection above NP. An important conceptual advantage of this approach is that the category D is no longer defective with respect to the X-bar format of phrases: like other lexical and functional heads, it can take a complement and a specifier.

This important development was followed by subsequent proposals for more functional categories (e.g. Number, Gender, Kase) corresponding to inflectional properties of nouns. Further exploration of the cross-categorial symmetry between the clausal and nominal domains involves postulating shell-like organization of nominal expressions, modelled on the same phenomenon earlier identified within the verbal domain. Thus, nominals comprise an outer nP shell headed by a light noun and an inner NP core headed by a lexical noun [cf. Radford 2000, Alexiadou et al. 2007]. The outer nP shell itself is the complement of a higher functional head (e.g. Number or Gender). The presence of the functional n head is also motivated by the current thinking in the recent approach to morphological theory known as Distributed Morphology [Halle and Marantz 1993; Embick and Noyer 2007], where traditional lexical categories enter

the derivation as a-categorial roots and become categorially specified once they merge with 'light' functional heads (n, v, a, p). In the light of the above, the derivation of the English nominal expression *John's book* would involve the merger of functional heads D and n as well as movement operations. This would result in the following representation of the relevant structure [Alexiadou et al. 2007: 562]:

$$(18) \quad [_{DP} \text{John's}_k [_{D} 0] [_{NP} t_k [_{n} \text{book}] [_{NP} [_{N} t_j]]]]$$

Given so many parallels between clauses and nominals and the existence of 'small' structures within the clausal domain, one would expect that there are also small nominals. Indeed, this idea is explored in Pereltsvaig [2006], where small nominals are defined as nominal expressions which lack the DP projection and possibly other functional projections identified for the nominal domain too¹. Small nominals are then bare NPs and QPs.

According to Longobardi [1994], only argumental nominal expressions project DP. Arguments are interpretable at LF only if they are assigned structural Case and case assignment is associated with the presence of a D head, commonly assumed to host Case features, or alternatively with the presence of a separate Kase head. Phonologically overt determiners constitute valid evidence that an NP projects a DP. English nonargument NPs (e.g. predicates, vocatives) can occur without determiners [Progovac 2006: 46], which makes them candidates for small nominals.

On the other hand, Pereltsvaig [2006] argues that small nominals can appear in argument positions. What distinguishes small nominals from DPs is the that the former are non-referential, in the sense of lacking individual reference. Based on a detailed analysis of mainly Russian data, Pereltsvaig [2006: 494] concludes that the following properties of small nominals make them distinct from DPs:

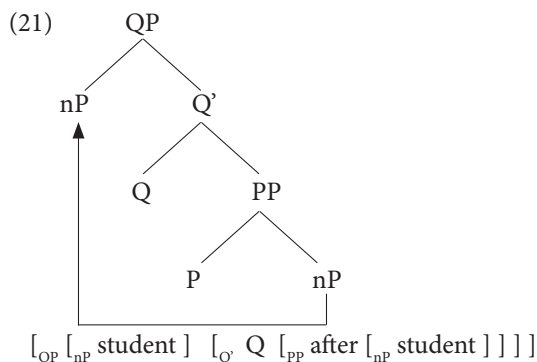
- (19) Small Nominals cannot
- a. have an individuated interpretation;
 - b. be specific;
 - c. have a partitive interpretation;
 - d. take non-isomorphic wide scope;
 - e. serve as controllers of PRO;
 - f. bind reflexives and reciprocals;
 - g. trigger external agreement;
 - h. small Nominals can participate in Approximative Inversion in Russian, and can be replaced by pro-QP elements, but not pro-DP elements.

¹ This is related to the ongoing debate on the (non-)universality of DP, i.e. the question whether the DP layer is cross-linguistically valid. However, this issue goes beyond the scope of this paper and the reader is referred to the relevant literature, e.g. Bošković 2012; Longobardi 1994; Pereltsvaig 2007; Progovac 1998; Willim 1998, 2000.

What has remained unnoticed by other authors is the small-nominal status of the NPN construction with two identical nouns (e.g. *day by day*, *student after student*). While the construction itself is discussed in a number of studies [e.g. Haïk 2013; Jackendoff 2008; Travis 2001], resulting in diverging accounts of NPNs, for example with respect to their categorial status [cf. Pskit 2012, 2015], no attempt has been made to analyse them as an instance of small nominal. There are compelling reasons to view NPNs as small nominals. English NPNs exhibit a number of properties which suggest that while these expressions belong to the nominal domain (e.g. they can be arguments or adjuncts), they lack the DP-layer. First of all, the construction seem to tolerate only singular countable nouns (uncountable nouns (20a) and plurals (20b) are excluded), and the nouns appear without determiners (20c). These constraints suggest that the nominals inside the NPN construction are defective.

- (20) a. *water after water, *dust for dust
 b. *men for men, *books after books, *weeks by weeks
 c. *the man for the man, *a day after a day, *some inch by some inch

Travis [2001] proposes that NPNs are derived by the mechanism of syntactic (iterative) reduplication, where a reduplicative head (Q) merges with a PP and triggers the reduplication of the nominal which is the complement of the preposition, i.e. the nominal is copied without being deleted in the original position and the copy is moved to the position of specifier of the Q head. Adopting this reduplication mechanism and assuming the defective character of the nominals, the structure of English NPNs could be as follows:



English NPNs are 'small' in two ways. In the light of Pereltsvaig's [2006] definition the whole NPN structure qualifies as a small nominal as it does not project the DP layer. At the same time, there are two construction-internal nominal expressions (nPs) which also lack the DP projection expected for countable singular nouns – they are small nominals as well. It remains to be seen whether the findings concerning English NPNs are confirmed by the grammatical behaviour of the corresponding expressions in other languages².

² Some preliminary research on Polish NPNs is presented in Pskit (2015). Further cross-linguistic investigation by the present author is underway (Pskit, in preparation. 'Small nominals in NPN structures').

Conclusion

This paper discusses 'small' syntactic structures such as small clauses, nonsententials and small nominals. It is stressed the existence of such 'small' expressions in both the clausal and the nominal domains adds up to the assumed structural symmetry between the two domains. Small clauses and small nominals lack the relevant functional heads and their projections, at least T and D respectively. Thus, 'smallness' in syntactic structure results from missing functional heads.

It is also shown that English NPNs are small in two respects: the nominals that precede and follow the prepositional head are small nominals in the sense of being nPs rather than DPs, the whole structure (though apparently nominal) is a small nominal as it lacks the DP projection either.

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On 'small' structures in syntax: small clauses, nonsententials, and small nominals

Abstract: This paper is concerned with various dimensions of the 'smallness' of syntactic structures. Grammatical constructions selected to illustrate the apparent smallness in syntax include small clauses, nonsententials and small nominals. The 'smallness' of small clauses (e.g. *We consider him very silly*) has recently drawn the attention of researchers, leading to various

accounts of their internal composition and derivation. As regards small nominals, they are discussed on the basis of Pereltsvaig [2006]. It is also proposed that NPN structures (e.g. *day after day*) constitute an instance of 'small' structure. Recent developments in syntactic theory (e.g. Citko 2008; Haik 2013; Progovac et al. 2006; Travis 2001; Pskit 2012, 2015) demonstrate that behind the surface 'smallness' of the above-mentioned types of expressions there are complex syntactic mechanisms.

Key words: small clause, small nominal, non-sentential, structure, syntax