Is nP Part of Universal Grammar?*

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Abstract

Rutkowski & Progovac (2005) propose to analyze the postnominal placement of classifying adjectives in Polish as resulting from N-movement. Rutkowski (2007a) modifies this account by arguing for a special structural layer (nP) projected immediately above NP, whose head (n°—‘little’ or ‘light’ N) attracts the noun in classifying structures. The goal of the present paper is to discuss the status of nP in more detail and to extend the nP analysis to other nominal constructions—both in Polish and crosslinguistically.

Keywords: nP, little/light N, classifying adjectives, indefinite pronouns, pseudopartitives, classifiers, diminutives

* This paper presents some aspects of the syntactic model put forward in my doctoral dissertation, defended in 2007 at the University of Warsaw and published in Polish as Rutkowski (2009). For useful comments on various versions of the present analysis, I am grateful to Guglielmo Cinque, Gisbert Fanselow, Jadwiga Linde-Usiekniewicz, David Pesetsky, Ljiljana Progovac, Helen Trugman, Corey Yoquelet, and the audience of the 2nd Annual Meeting of the Slavic Linguistics Society in Berlin, Germany.
1. The nP Layer in Classificatory Adjectival Structures

It is a well-known fact that the semantic interpretation of adjectival modifiers in Polish is related to their syntactic position (see e.g., Willim 2000). This is illustrated below with examples taken from Rutkowski (2007a):

(1) a. krzywa linia
curve-ADJ line
‘a curved line’ (a line that happens to be curved)

b. linia krzywa
line curve-ADJ
‘a curve’ (a type of line)

(2) a. maly pancernik
small armadillo
‘a small armadillo’ (an armadillo that happens to be small)

b. pancernik maly
armadillo small
‘a dwarf armadillo’ (a representative of the species Zaedyus pichiy)

Note that the same adjectival lexeme can refer either to an accidental feature of the noun (as in (1a) and (2a)), or to a permanent characteristic that defines the class/category/type that the denoted entity belongs to (as in (1b) and (2b)). As shown above, the difference in interpretation derives from syntax, and in particular from word order: qualifying/descriptive adjectives

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1 In glosses of examples from languages other than English, I use the following abbreviations: ACC—accusative, ADJ—adjective, ANIM—animate, CL—classifier, COMP—compound, DAT—dative, DIM—diminutive, GEN—genitive, NOM—nominative, TOP—topic
precede the head noun, whereas classifying ones appear in postposition. Note that the relation in question is a unidirectional dependency: the postnominal placement of an adjective implies the classificatory interpretation, and not vice versa (i.e., some adjectives with classificatory semantics may appear prenominally in certain structures—see Cetnarowska et al. 2011). Rutkowski & Progovac (2005) account for this phenomenon by proposing that classifying structures of the type illustrated in (1b) and (2b) result from N-raising. The analysis in question relies on the assumption that classifying APs are base generated in the specifier of NP, whereas qualifying APs are merged in dedicated functional projections in the region between DP and NP (in the spirit of Cinque 1994).

Following the labeling adopted by Julien (2002)

(iiia) a. Starkbier  
strong-beer  
‘strong beer’ (a type of beer)  
b. starkes Bier  
strong beer  
‘strong beer’ (beer that happens to be strong)

---

2 A different analysis based on overt N-raising was proposed by Willim (2000, 2001).
3 As pointed out by David Pesetsky (personal communication), the idea that classifying adjectives are NP-internal is supported by the fact that complexes consisting of a classifying adjective and a noun seem to form closer syntactic units than complexes which involve a qualifying adjective—see e.g., the structure of compounds in English:

(i) tea-drinker
(ii) a. green-tea-drinker  [green—classifying AP]
   b. *good-tea-drinker  [good—qualifying AP]

The contrast between (iia) and (iib) can be explained in a principled way if we assume that compounds such as (iia) have the following structure: NP-N (and not DP-N). This would explain why the presence of a classifying (i.e., NP-internal) adjective is more acceptable in this context. Possibly, this type of analysis could be extended to German nominal compounds of the type illustrated in (iiiia). It seems that adjectives which appear in such compounds necessarily receive a classifying interpretation (as opposed to those that are compound-external (cf. (iiiib))):
and Pereltsvaig (2007), I will refer to those functional phrases as αPs and assume that the αP layer can iterate freely. This phrasal model corresponds to the phrase-marker in (3).4

The availability of compounding could be assumed to be limited to NPs in German, which would mean that compounds can consist of NP-internal elements only (i.e., no qualifying adjectives should be allowed in such structures).

4 The tree in (3) is not meant as a complete structure of the Polish DP. The αP layer is definitely not the only functional projection in the region between $D^o$ and $N^o$, since at least several other functional layers must be assumed in order to account for the syntax of demonstratives, cardinal numerals, quantifiers, and possessives (cf. Rutkowski 2009).
The head noun in Polish is always base-generated in N° and it normally remains there at least until Spell-Out. However, in classifying structures the functional extension of the head noun includes a special projection (labeled “ClassP” in Rutkowski & Progovac (2005) and “nP” in Rutkowski (2007a)), whose head is associated with the strong feature [+class] that needs to be checked by the noun. Therefore, the noun overtly moves to Class°/n°. A consequence of this movement is that, being located in SpecNP, the classifying adjective necessarily follows the noun in surface syntax. This could be illustrated with examples such as (4), in which it is only the classifying adjective (and not the qualifying ones) that follows the head noun:

(4) **groźny stary brązowy pancernik mały**

dangerous old brown armadillo small
‘a dangerous old brown dwarf armadillo’

According to the model outlined above, the syntactic derivation of example (4) may be illustrated by the diagram in (5).
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(5) DP
   \[ D^\circ \]
   \[ \alpha P \]
   \[ AP \]
      \[ \alpha' \]
         \[ \alpha^\circ \]
            \[ \alpha P \]
               \[ AP \]
                  \[ \alpha' \]
                     \[ \alpha^\circ \]
                        \[ \alpha P \]
                           \[ N^\circ \]
                              \[ NP \]
                                 \[ n^o \]
                                    \[ AP \]
                                       \[ \alpha' \]
                                          \[ \alpha^\circ \]
                                             \[ N^\circ \]
                                                \[ AP \]
                                                   \[ \alpha' \]
                                                      \[ \alpha^\circ \]
                                                         \[ AP \]
                                                            \[ \alpha' \]
                                                               \[ \alpha^\circ \]
                                                                  \[ AP \]
                                                                     \[ \alpha' \]
                                                                        \[ \alpha^\circ \]
                                                                           \[ AP \]
                                                                              \[ \alpha' \]
                                                                                 \[ \alpha^\circ \]
                                                                                    \[ AP \]
                                                                                       \[ \alpha' \]
                                                                                         \[ \alpha^\circ \]
                                                                                             \[ AP \]
                                                                                               \[ \alpha' \]
                                                                                                \[ \alpha^\circ \]
                                                                                                     \[ AP \]
                                                                                                       \[ \alpha' \]
                                                                                                           \[ \alpha^\circ \]
                                                                                                                \[ AP \]
                                                                                                                   \[ \alpha' \]
                                                                                                                     \[ \alpha^\circ \]
                                                                                                                                          \[ AP \]
                                                                                                                                             \[ \alpha' \]
                                                                                                                                                \[ \alpha^\circ \]
                                                                                                                                                    \[ AP \]
As shown in Rutkowski (2007a), the Polish classificatory structure could be viewed as a subcase of a broader cross-linguistic syntactic configuration that involves the presence of nP, a phrasal layer that is characterized by being the (unique) immediate functional extension of NP. As opposed to ‘ClassP’ used by Rutkowski & Progovac (2005), the label ‘nP’ does not presuppose any semantic interpretation of the projection in question (i.e., it is not necessarily linked to the notion of classification). The nP layer is proposed for purely syntactic reasons and defined in terms of its syntactic location (immediately above NP). The nP structure is provided by Universal Grammar and can be associated with various strong or weak formal features (such as [+class] in Polish) that regulate the syntactic interpretation of the NP complement of the n° head. As proposed in Rutkowski (2007a), the classificatory adjectival construction of the Polish type should be treated as one of many possible instantiations of the nP configuration. The idea of extending the nP hypothesis to other nominal constructions (and other languages) will be discussed in the remaining part of this paper.

2. The nP Layer in the Construction ‘Indefinite Pronoun’ + AP

The classifying structure exemplified in (1b) and (2b) seems strikingly similar to the structure of expressions such as (6a-c):

(6) a. ktoś interesujący
    somebody interesting
    ‘somebody interesting’

Note that a version of the N-movement analysis illustrated in (5) can also be applied to classificatory expressions with adjectives in other languages, for example Serbian or Lithuanian (cf. Rutkowski & Progovac 2005, 2006).
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b. nikt interesujący
nobody interesting
‘nobody interesting’

c. ktokolwiek interesujący
anybody interesting
‘anybody interesting’

However, the postpositional placement of the adjective in the construction headed by an indefinite pronoun is not a phenomenon restricted to Polish, as the following English examples show:

(7) a. somebody interesting  
b. something interesting  
c. anyone interesting  
d. someplace interesting

Abney (1987) proposes that indefinite pronouns consist of a determiner (every, some or any) and a noun (thing, place, one, and so on). He derives the surface word order by N°-to-D° movement.
In more recent analyses, it is often assumed that N-raising in structures of the type illustrated in (7) does not actually target D°, but rather a functional position located below the DP level. Kishimoto (2000) refers to the projection that contains that position as NumP (Number Phrase). He proposes the following derivation:

\[
\begin{array}{c}
\text{DP} \\
\mid \\
\text{D°} \\
\mid \\
\text{NumP} \\
\mid \\
\text{Num°} \rightarrow \text{NP} \\
\mid \\
\text{AP} \\
\mid \\
\text{N°}
\end{array}
\]

The above analysis is clearly analogous to the one presented in (5). It should be noted that both in (9) and in (5), the postnominal adjective is necessarily interpreted as a classifying modifier (in expressions with indefinite pronouns, it defines the class of things/people that possess a given characteristic). Therefore, it seems justifiable to propose a unified syntactic structure for the two constructions in question. I assume that the construction Indefinite Pronoun + AP is a subcase of the nP configuration outlined in section 1 of the present paper. The relevant derivation would, therefore, look as follows:
The above model accounts for the syntax of examples such as (6a-c), i.e., structures involving the indefinite pronoun *ktos* ‘somebody’ (or other pronouns derived from it). However, Polish has another type of expressions with indefinite pronouns:

(11) a. *cos interesującego*
    *something-NOM interesting-GEN*
    ‘something interesting’

       b. *nic interesującego*
    *nothing-NOM interesting-GEN*
    ‘nothing interesting’

       c. *cokolwiek interesującego*
    *anything-NOM interesting-GEN*
    ‘anything interesting’

As opposed to the structure exemplified in (6a-c), the above
construction does not involve case agreement between the head pronoun and the adjective. Note the difference in case marking between (11a) and (6a), repeated here as (12):

(12) 
\[
\begin{array}{ll}
\text{ktoś} & \text{interesujący} \\
\text{somebody-NOM} & \text{interesting-NOM} \\
\end{array}
\]

‘somebody interesting’

The genitival form of the adjective in (11a) can only be triggered by the indefinite pronoun \(\text{coś} \) ‘something,’ otherwise there is no reason for (11a) to be different from (12). Therefore, it must be assumed that indefinite pronouns of the type illustrated in (11a-c) act as case-assigners:\(^6\)

(13)

The above derivation should be understood in the following way: first, the pronoun \(\text{coś} \) ‘something’ is raised from its base

\(^6\) It should also be noted that their case assigning properties are limited to certain syntactic contexts, which makes them very similar to numerals such as \(\text{pięć} \) ‘five.’ This similarity falls beyond the scope of the present paper, but has been discussed for example in Rutkowski & Szczegot (2001).
position in $N^{°}$ to $n^{°}$ (in order to check a formal feature associated with the latter), and then it assigns the genitive case to its complement (i.e., the NP). Note that it is marginally acceptable not to raise the indefinite pronoun in the structure shown in (13). However, if the indefinite pronoun is not raised, the AP which accompanies it does not appear in the genitive case:

(14) a. interesujące coś
   interesting-NOM something-NOM
   ‘something interesting’

   b. *interesującego coś
   interesting-GEN something-NOM

The above examples seem to provide additional evidence for the derivation proposed in (13): as the AP in (14a) is not a complement of the pronoun coś, it cannot be assigned the genitive case.

As shown in Rutkowski & Progovac (2005), one of the arguments for treating classifying APs in structures such as (1b) and (2b) as specifiers of NP is the fact that Polish classificatory expressions admit only one adjective. If a noun needs to be classified with two different adjectives, they will typically be compounded:

(15) a. gramatyka transformacyjno-generatywna
    grammar transformational-COMP-generative
    ‘transformational generative grammar’

   b. *gramatyka transformacyjna generatywna
   grammar transformational generative

The ungrammaticality of (15b) finds a principled explanation if
we assume that only one specifier position is available in a single NP, which means that only one (simplex or compounded) AP can function as a classifying modifier:

(16)

\[
\begin{array}{c}
\text{DP} \\
\text{D°} \\
\text{nP} \\
\text{n°} \\
\text{NP} \\
\text{AP} \\
\text{N°} \\
\end{array}
\]

\text{gramatyka,} \\
\text{‘grammar’} \\
\text{transformacyjno-generatywna} \\
\text{‘transformational generative’}

It is worth noticing that the above observation holds as well for the Indefinite Pronoun + AP construction:

(17) a. \text{coś} \quad \text{transformacyjno-generatywnego} \\
\text{something-NOM} \quad \text{transformational-COMP-generative-GEN} \\
\text{‘something transformational generative’}

b. *\text{coś} \quad \text{transformacyjnego \ generatywnego} \\
\text{something-NOM} \quad \text{transformational-GEN generative-GEN}

There is a possibility of using more than one AP in the construction in question but it requires the presence of the conjunction \textit{i ‘and’}:
However, the above example could not be treated as counterevidence to the structure proposed in (13) because even in this case the head of the whole expression (*coś* ‘something’) is modified with a single phrase, namely a Conjuntion Phrase that consists of two APs:

To conclude, I assume that there are convincing arguments for analyzing the structure Indefinite Pronoun + AP as analogous to the classificatory adjectival structure shown in (5). Therefore, I argue that both of them involve the presence of nP, a functional
layer projected immediately above the main NP.

3. The nP Layer Crosslinguistically

An important question that should be addressed now is whether the nP layer that I am proposing for Polish is also activated in other languages. It seems plausible to assume that another type of nominal structure that may involve the presence of the nP projection is the classifier construction found, for example, in Japanese, Korean or Chinese. Many researchers assume that numeral classifiers reside in a functional phrase located above NP, usually referred to as Classifier Phrase, ClP (cf. Cheng & Sybesma 1999, Li 1999, Guéron 2006, Sio 2006, Watanabe 2006). This kind of approach is illustrated in (20) with the Korean example *tu malieuy koyangi* ‘two cats’ (after Guéron 2006).

\[
\begin{array}{c}
\text{DP} \\
\text{D°} \\
\text{NumP} \\
\text{Num°} \\
\text{CIP} \\
\text{Cl°} \\
\text{tu} \\
\text{‘two’} \\
\text{mali-euy} \\
\text{CL-ANIM-GEN} \\
\text{koyangi} \\
\text{‘cat’} \\
\text{NP} \\
\end{array}
\]

The structure in (20) reflects the fact that adnominal classifiers are typically adjacent to the counted noun, i.e., that their structural relation with the head noun must be very strong. I follow this line of reasoning but propose to eliminate the label ClP (postulated
solely for the sake of analyzing classifier structures), and instead to assume that the structure presented in (20) is a subcase of the nP configuration argued for in the previous part of this paper. Therefore, I argue that expressions with classifiers instantiate the following pattern:

\((21)\)

I assume that a classifier is merged in \(n^o\) in order to check a formal feature that is associated with that position in certain numeral constructions.

It has been noted in the literature (see Chierchia 1998, Hankamer & Mikkelsen 2008) that expressions containing numeral classifiers seem parallel to so-called pseudopartitives, which can be found in languages that do not have classifiers. The pseudopartitive construction can be exemplified with the following phrase from Swedish (after Koptjevskaja-Tamm 2001):

\((22)\)  
\[
\begin{array}{c}
en \quad kopp \quad te \\
a \quad cup \quad tea
\end{array}
\]

‘a cup of tea’

Note that Watanabe (2006) opposes the idea of drawing a parallel between classifiers and pseudopartitives. He argues that
container nouns in Japanese should not be treated as classifiers because, when counted, they are themselves accompanied by a classifier:

(23) *Roger-wa donburi-ni yon-hai-no gohan-o tabeta.*
    Roger-TOP big.bowl-dat 4-CL-GEN rice-ACC ate
    ‘Roger ate four big bowls of rice.’

The classifier *hai* that appears in the above example combines exclusively with nouns denoting containers used for serving food and drinks. Therefore, the appearance of *hai* cannot be triggered by the measured noun (*gohan* ‘rice’). The fact that the container element *donburi* ‘big bowl’ requires a special classifier means that it functions as a regular noun, projecting its own functional extensions, i.e., that it cannot be treated as a functional extension of the head noun. However, Watanabe’s (2006) observation does not imply that pseudopartitives should never be treated as classifiers. To account for the fact that they seem to head their own extended projections (DPs) in Japanese, it is enough to assume that Japanese simply does not have real pseudopartitives, i.e., structures in which the measure head is a functional element. Note that, crosslinguistically, pseudopartitives should be distinguished from regular partitives. The latter could be exemplified with the following expression from Swedish:

(24) *en kopp av detta te*
    a cup of this tea
    ‘a cup of this tea’

The structures in (22) and (24) differ with respect to interpretation: the pseudopartitive denotes an amount/measure/quantity of some nonspecific entity/substance, whilst the partitive indicates a particular subpart/subset of a specific entity/substance (cf. Koptjevskaja-
This difference in semantics is accompanied by a difference in syntactic complexity. The partitive construction in (24) consists of two separate DPs (one of them being introduced by a preposition), whereas the pseudopartitive (22) has only one determiner and could be treated as one extended nominal projection in the sense of Grimshaw (1991, 2005). This structural contrast is illustrated below:

(25) a. partitive: [DP D N P [DP D N]]
    b. pseudopartitive: [DP D N N]

Therefore, the element kopp ‘cup’ cannot have a uniform syntactic interpretation in these two cases. In (24) its status is quite clear: it must be treated as a regular noun, and not as a classifier. It seems that the Japanese examples discussed by Watanabe (2006) belong to this structural type. The structure in (23) includes two nouns within a single DP. However, the semantic content of one of these nouns (the container noun) seems to be reduced to the notion of a measure unit. Therefore, the status of the container noun resembles that of a functional head in the extended projection of the measured noun. Stickney (2004, 2007) proposes that measure elements in pseudopartitive constructions should be analyzed as residing in the head of MP (Measure Phrase), a functional layer located in the region between DP and NP. However, the label MP can be eliminated by using the nP model and assuming that the measure/container noun in the pseudopartitive configuration occupies the n° head:

7 It is worth noticing that this analysis is in line with Hankamer & Mikkelsen’s (2008) account of what they call Direct Partitive Construction (DPC) in Danish.
This structural interpretation accounts for the fact that pseudopartitives differ syntactically from regular partitives. As shown in Rutkowski (2007b), pseudopartitives could actually be treated as grammaticalized partitives, i.e., structures in which a regular noun has been reanalyzed as a functional element. Such a reanalysis leads to syntactic ‘simplification’ (one DP instead of two). The pseudopartitive structure is ‘lighter’ than its partitive counterpart because it contains only one lexical element (the measured noun). The partitive-to-pseudopartitive grammaticalization process could be illustrated in the following way:
Being base generated in n° (i.e., immediately above the NP), the pseudopartitive measure element cannot be followed by other functional elements (such as prepositions or determiners):

(28) a. partitive: \[D \ N \ P \ D \ N\]
   b. pseudopartitive: \[D \ n \ P \ D \ N\]

We may hypothesize that the fact that the diachronic reanalysis shown in (27) can, in principle, take place in natural languages is related to the availability of nP in Universal Grammar.

As shown by Wiltschko (2006), the nP layer may play an important role in accounting for another puzzling syntactic phenomenon, namely the individuating function of diminutive suffixes. She points out that German diminutive suffixes regularly turn mass nouns into count nouns:

(29) a. \[\text{viel} \quad \text{Wein}\]
    much \quad wine
    ‘much wine’

   b. \[\text{viele} \quad \text{Weinchen}\]
    many-PL \quad wine-DIM
    ‘many little (good) wines’

The situation in which a diminutive marker affects the mass/count interpretation of the noun that it is attached to can be attested in many natural languages (cf. Jurafsky 1996). Wiltschko (2006) proposes that such diminutive affixes are best analyzed as classifiers, i.e., that they are independent syntactic elements, residing in a functional projection above NP. She tentatively assumes nP to be the projection in question. According to this analysis, an uncountable noun can be interpreted as countable if it moves to n° (as long as the latter is filled with a diminutive suffix that the noun can adjoin to). Thus, words such as \textit{Weinchen} ‘little
(good) wine’ should be analyzed as derived syntactically, along the following lines:⁸

\[
\text{(30)}
\]

\[
\text{DP}
\]

\[
\text{D}^\circ
\]

\[
\text{nP}
\]

\[
\text{n}^\circ
\]

\[
\text{NP}
\]

\[
\text{Wein}_i - \text{chen} \quad \text{N}^\circ
\]

\[
\text{‘wine’} \quad \text{DIM}
\]

\[
\text{ti}
\]

Wiltschko (2006) points out that the syntactic status of the diminutive affix resembles that of classifiers such as \textit{Glas} ‘glass’ in \textit{2 Glas Schnaps} ‘two glasses of vodka’ or \textit{Stück} ‘piece’ in \textit{12 Stück Vieh} ‘12 pieces of cattle’:

\[
\text{(31)}
\]

\[
\text{DP}
\]

\[
\text{D}^\circ
\]

\[
\text{nP}
\]

\[
\text{n}^\circ
\]

\[
\text{NP}
\]

\[
\text{Glas}
\]

\[
\text{‘glass’}
\]

\[
\text{N}^\circ
\]

\[
\text{Schnaps}
\]

\[
\text{‘vodka’}
\]

⁸ Wiltschko (2006) describes this derivation as an instance of compounding.
This proposal predicts complementary distribution of nP-related constructions. We should not have structures in which the n° head is filled with a functional element and functions as the landing site for N-raising at the same time. Wiltschko (2006) shows that this prediction is borne out:

(32) a. 2 Glas Schnaps
    2 glass vodka
    ‘2 glasses of vodka’

b. *2 Glas Schnapserl
    2 glass vodka-DIM

The ungrammaticality of (32b) follows from the fact that the n° head is occupied by the element Glas ‘glass’ and, therefore, cannot be targeted by N-raising (which is the only way of combining a noun with a diminutive affix). However, due to the suffixal status of the diminutive marker, it is possible to combine the diminutive with the pseudopartitive element:

(33)
Wiltschko’s (2006) analysis shows that there can be various ways in which the n° position can be activated (filled). N-raising and merging a functional element (classifier) seem to be the two most obvious options. Interestingly, they appear in complementary distribution, which shows that the nP layer is not iterative (there is only one n° position available).

4. Conclusions

The nP hypothesis offers a unified syntactic analysis of a number of, prima facie, unrelated nominal constructions which seem to involve a functional layer projected immediately above NP. If present, the n° head hosts a formal feature that can be checked in one of the following ways:

- by N-raising in classifying adjectival structures,
- by raising an indefinite pronoun,
- by merging a classifier,
- by merging a pseudo-partitive head,
- by N-raising in diminutive constructions.

The nP configuration is likely to be involved in other nominal constructions but this issue requires further research. The model outlined above relies on the assumption that the n° head is not associated with any fixed semantic value. This makes the proposed analysis less language-specific than the ClassP account proposed by Rutkowski & Progovac (2005). Thanks to subsuming a variety of nominal constructions under one label, the nP model avoids unnecessary proliferation of functional layers in the region between DP and NP.
References


