

## Generative Grammar

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Paweł Rutkowski  
Department of General Linguistics  
and Baltic Studies  
University of Warsaw  
p.rutkowski@uw.edu.pl  
www.pawel-rutkowski.ling.pl

## Day 4: Case Study: the Nominal Syntax of Polish

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Paweł Rutkowski  
Department of General Linguistics  
and Baltic Studies  
University of Warsaw  
p.rutkowski@uw.edu.pl  
www.pawel-rutkowski.ling.pl

### The DP debate in Slavic linguistics:

The D° position is typically assumed to be occupied by articles. Whether the **articleless** Slavic languages (such as Polish) project DPs on top of NPs has been subject to much debate among generative linguists (e.g., Zlatić (1997), Progovac (1998), Willim (2000), Trenkic (2004), Bošković (2005)). Some of them argue that the DP projection is **universal** (because it is necessary for argumenthood), others suggest that the presence of DP is subject to cross-linguistic **parameterization**.

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There seem to be good reasons to assume that Polish (a language without articles) may be analyzed as projecting the **DP layer** on top of the nominal structure. Furthermore, it may be argued that there are **other functional extensions** of the noun located in the region between NP and DP. The DP analysis of Polish may be supported by certain DP-internal **word order facts** - in particular, a number of **noun/pronoun asymmetries**.

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### Personal pronouns/nouns + adjectives:

**[Sam profesor]** czytał mój artykuł.  
himself-ADJ professor read my article  
'The professor himself read my article.'

**[On sam]** czytał mój artykuł.  
he himself-ADJ read my article  
'He himself read my article.'

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### Indefinite pronouns/nouns + adjectives:

**[Inteligentny lingwista]** czytał mój artykuł.  
intelligent linguist read my article  
'An intelligent linguist read my article.'

**[Ktoś inteligentny]** czytał mój artykuł.  
somebody intelligent read my article  
'Somebody intelligent read my article.'

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Personal pronouns/nouns + quantifiers:

**[Wszyscy lingwiści]** czytali mój artykuł.

all linguists read my article  
'All linguists read my article.'

**[Wy wszyscy]** czytaliście mój artykuł.

you all read my article  
'All of you read my article.'

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Personal pronouns/nouns + numerals:

**[Trzej lingwiści]** czytali mój artykuł.

three linguists read my article  
'Three linguists read my article.'

**[My trzej]** czytaliście mój artykuł.

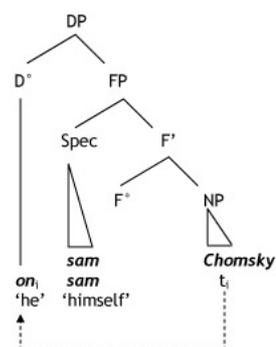
we three read my article  
'The three of us read my article.'

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Progovac (1998) argues that the DP hypothesis provides an **elegant explanation** for similar noun/pronoun asymmetries in Serbian, if we assume that personal pronouns reside in the D° node, whereas nouns occupy the N position (this idea stems from Postal (1969)). Cardinaletti (1993) and Progovac (1998) also suggest that personal pronouns are actually **generated in N°** (similarly to regular nouns) but move to D° in overt syntax for referential reasons.

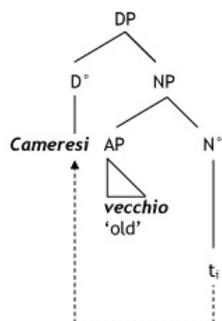
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N°-to-D° movement of personal pronouns:



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Analogy: Longobardi's (1994) account of the syntax of proper names in Italian



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Evidence for pronouns being generated in N°:

**[Pięciu lingwistów]** czytało mój artykuł.

five linguists:**GEN** read my article  
'Five linguists read my article.'

**[Nas pięciu]** czytało mój artykuł.

us:**GEN** five read my article  
'The five of us read my article.'

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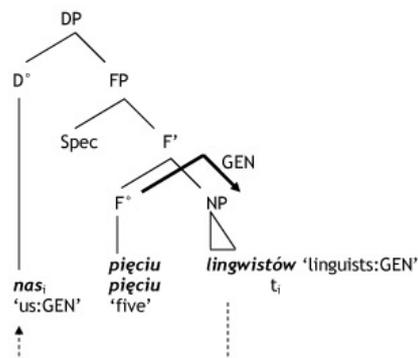
Personal pronouns/nouns + numerals:

[*Trzej lingwiści*] czytali mój artykuł.  
three linguists:**NOM** read my article  
'Three linguists read my article.'

[*My trzej*] czytaliście mój artykuł.  
we:**NOM** three read my article  
'The three of us read my article.'

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N°-to-D° movement in numeral constructions:



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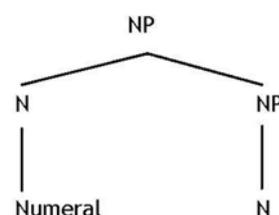
The above analysis **crucially** depends on the presence of the N°-to-D° movement of pronouns. Without postulating such a movement, the fact that the element that **precedes** the numeral has a genitive marking could not be explained.

To summarize the discussion so far: the DP layer must be postulated in Polish in order to account for the **initial** position of personal pronouns (which are assumed to occupy D°).

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The syntax of numerals:

Corver and Zwarts (2006), and Ionin and Matushansky (2005) have argued that numerals are **nominal** rather than functional heads,



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This could mean that in languages such as Polish, there is **no need** to postulate functional projections above the noun.

However, this approach does not find support in the syntax of Polish **Q-numerals**.

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Three classes of Polish numerals:

- 1-4 (*A-numerals*) are adjectival and always agree in case with the quantified noun
- high cardinalities, such as 'thousand' or 'million' (*N-numerals*) behave like nouns: they always assign genitive to the quantified noun
- others (*Q-numerals*) assign genitive to the noun in structural-case contexts, however, they agree with the noun in oblique-case contexts.

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Q-numeral syntax:

*Zobaczyłem [pięć lingwistek].*

I saw five:ACC linguists:GEN

'I saw five linguists.'

(*zobaczyć* assigns accusative, a structural case)

*Ufałem [pięciu lingwistkom].*

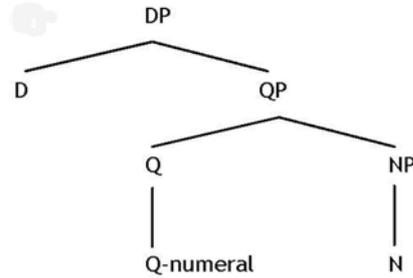
I trusted five:DAT linguists:DAT

'I trusted five linguists.'

(*ufać* assigns dative, a lexical case)

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Proposal: Q-numerals should be analyzed as heads of **functional** phrases, projected in the region between DP and NP (labelled QP).



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By providing a **structural distinction** between Q-numerals (hosted in Q°) and N-numerals (hosted in N°), we account for the fact that their syntactic properties differ considerably.

Note also that Q-numerals **cannot** be analyzed as nouns because they have actually **evolved** from nouns in the diachronic sense - Rutkowski (2007a).

**Old Polish** cardinals were **regular nouns**. They assigned genitive case to the quantified noun in all syntactic contexts.

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| Case         | Old Polish   | Modern Polish                             |
|--------------|--|---|
| Nominative   | pięć lat<br>five-NOM years- <u>GEN</u>                 | pięć lat<br>five-ACC years- <u>GEN</u>    |
| Genitive     | pięci lat<br>five-GEN years- <u>GEN</u>                | pięciu lat<br>five-GEN years-GEN          |
| Dative       | pięci lat<br>five-DAT years- <u>GEN</u>                | pięciu latom<br>five-DAT years-DAT        |
| Accusative   | pięć lat<br>five-ACC years- <u>GEN</u>                 | pięć lat<br>five-ACC years- <u>GEN</u>    |
| Instrumental | pięci <sup>2</sup> lat<br>five-INSTR years- <u>GEN</u> | pięcioma latami<br>five-INSTR years-INSTR |
| Locative     | pięci lat<br>five-LOC years- <u>GEN</u>                | pięciu latach<br>five-LOC years-LOC       |

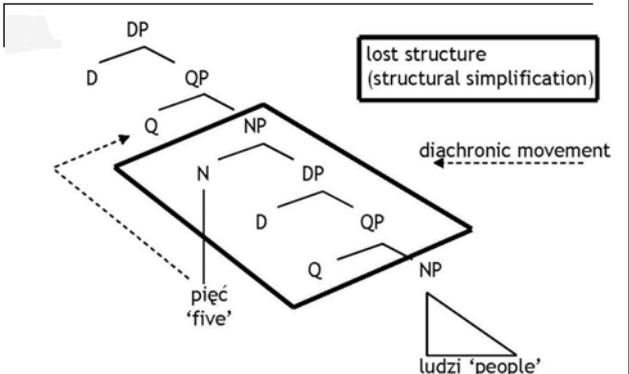
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Proposal: the historical development of Q-numerals is an example of the **reanalysis** of a lexical head as a functional head.

Roberts and Roussou (1999):  
grammaticalization means structural simplification

In the history of Polish, a complex expression consisting of two separate extended projections (the DP hosting the numeral and the quantified DP) gets reanalyzed as a single nominal construction.

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Conclusion:

Corver and Zwarts's (2006) and Ionin and Matushansky's (2005) approach would not explain why and how the syntax of Polish cardinals has changed between the Old Polish period and today.

The assumption that Polish **does** project functional layers above the NP lets us account for the unusual syntax of Q-numerals.

The syntax of adjectives:

Two types of adjectival modifiers in Polish:

- **qualifying** adjectives describe the entity;
- **classifying** adjectives categorize the entity as belonging to a certain class/type/kind.

Classifying vs. qualifying adjectives:

*green tea* [classifying]  
*green trousers* [qualifying]

The distinction is conveyed by means of syntax (**different** word order):

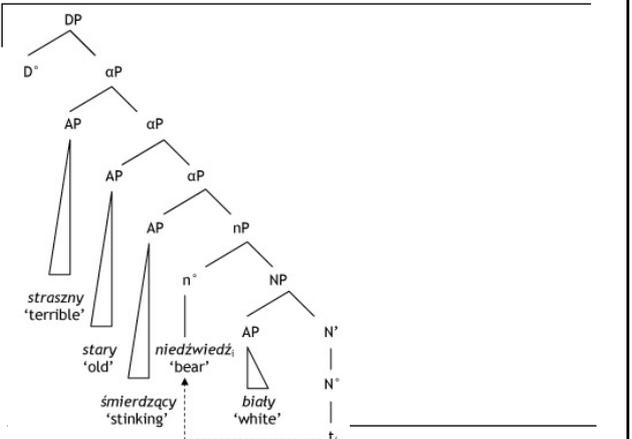
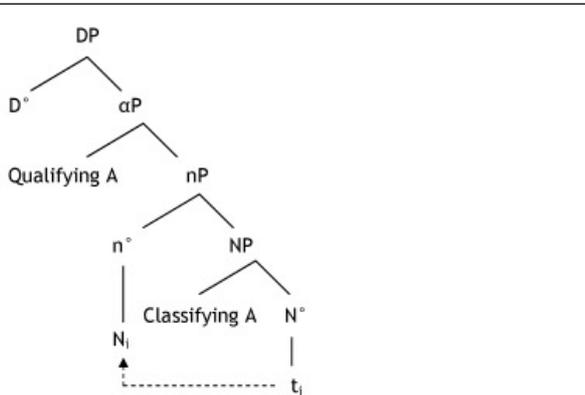
*niedźwiedź biały* [classifying]  
 bear white  
 'a polar bear' ('Ursus maritimus')

*biały niedźwiedź* [qualifying]  
 white bear  
 'a white bear'  
 ('a bear that happens to be white')

Proposal (Rutkowski and Progovac 2005):

- classifying adjectives are base generated in the **specifier** of NP (see also Bosque and Picallo 1996);
- regular qualifying adjectives are located in **iterative functional projections** above NP, labelled **αPs** (see also Pereltsvaig (2007));
- classifying expressions involve N-movement to a functional projection located above NP, labelled nP.

I refer to that functional projection as nP, in order to remain neutral with respect to its semantics.



It may be argued that nP is activated syntactically in many different ways. It is involved in the following structures (see Rutkowski (2007b)):

- classifying adjectival expressions in languages such as Polish;
- pseudo-partitive constructions in languages such as Greek;
- numeral structures with classifiers in languages such as Japanese;
- diminutive phrases in languages such as German.

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If present, the n head hosts a classifying/individuating feature (*n-feature*) that can be checked in one of the following ways:

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

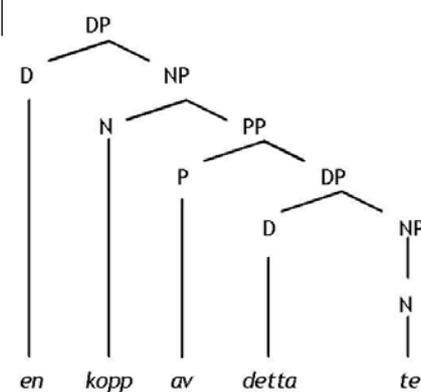
Possibly, there are other n-related constructions.

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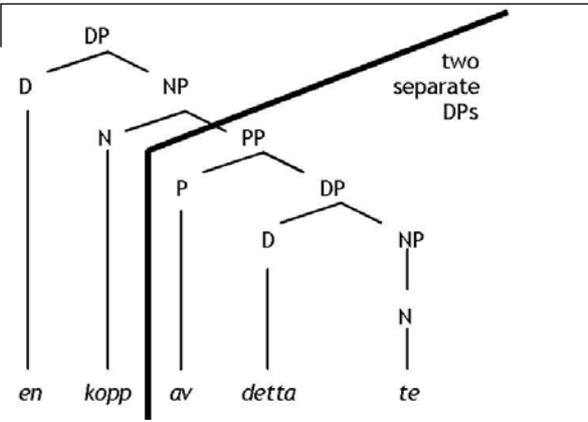
Example:  
Languages such as Swedish differentiate partitives from pseudo-partitives (cf. Stickney 2004, Koptjevskaja-Tamm 2001, Rutkowski 2007):

|                            |                    |
|----------------------------|--------------------|
| <i>en kopp av detta te</i> | [partitive]        |
| a cup of this tea          |                    |
| 'a cup of this tea'        |                    |
| <i>en kopp te</i>          | [pseudo-partitive] |
| a cup tea                  |                    |
| 'a cup of tea'             |                    |

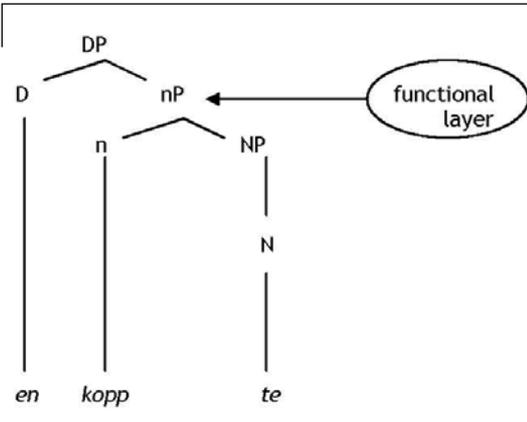
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Being base generated immediately above NP, the pseudo-partitive measure element cannot be followed by other functional elements (such as prepositions or determiners):

partitive:           D N P D N  
 pseudo-partitive:   D n P D N

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Stavrou (2003) points out that only classifying adjectives can intervene between two nouns in pseudo-partitive constructions in Greek:

*ena paketo elafria tsigara* [classifying]  
 a pack light cigarettes  
 'a pack of light cigarettes'  
 \**ena paketo frixta tsigara* [qualifying]  
 a pack terrible cigarettes  
 'a pack of terrible cigarettes'

This can be accounted for if the pseudo-partitive head of nP (*paketo*) is assumed to select an NP complement: only classifying adjectives are NP-internal.

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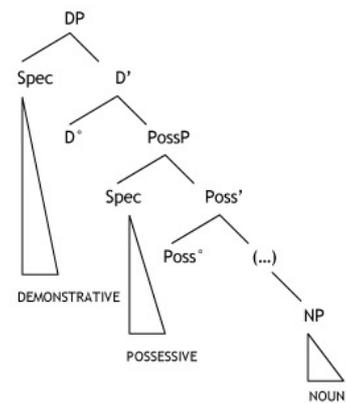
### The Syntax of Demonstratives and Possessives:

Polish demonstratives and possessives are **adjectival** elements: they agree in case, gender and number with the modified noun. They do **not** compete for the same syntactic slot.

*ta moja siostra*  
 this:FEM,SING,NOM my:FEM,SING,NOM sister  
 'this sister of mine'

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Their surface syntactic position:



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The relative ordering of demonstratives and possessives with respect to numerals:

*te trzy siostry*  
 these three sisters  
 'these three sisters'

*moje trzy siostry*  
 my three sisters  
 'my three sisters'

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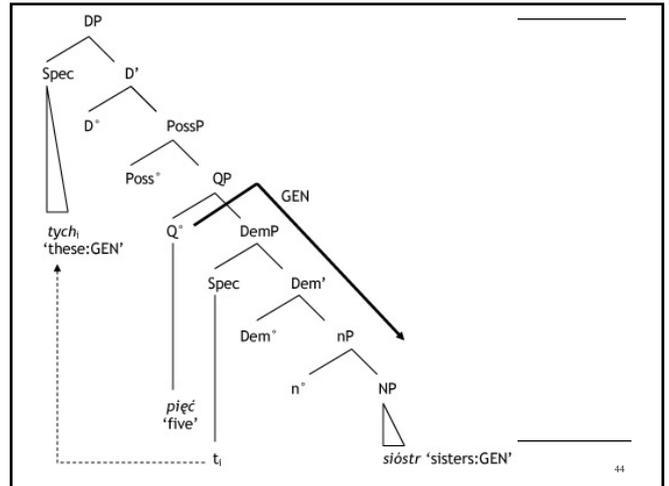
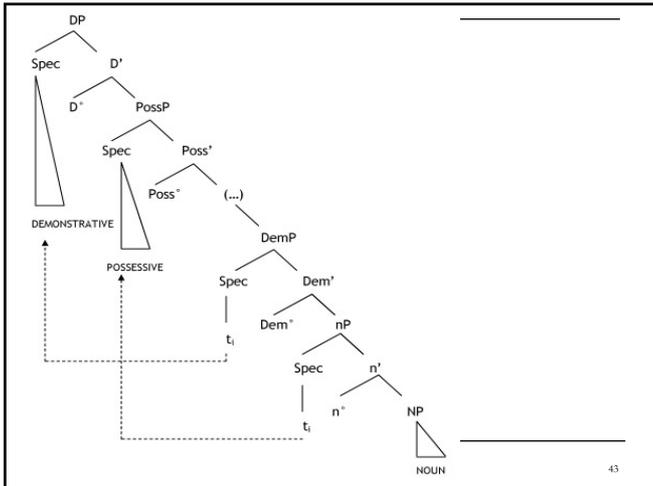
Problem: case marking with Q-numerals!

*tych pięć siostr*  
 these:GEN five sisters:GEN  
 'these five sisters'

*moich pięć siostr*  
 my:GEN five sisters:GEN  
 'my five sisters'

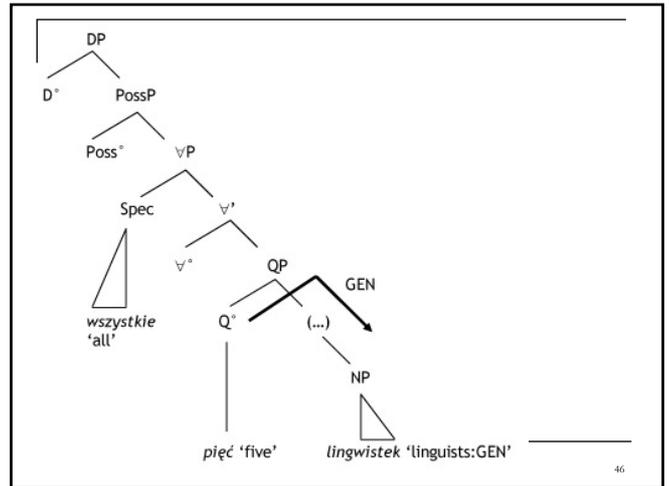
Proposal: demonstratives and possessives are base generated relatively low in the nominal complex (in DemP and nP, respectively).

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Note that the above analysis does not apply to general quantifiers. When combined with Q-numerals, they do not take genitive morphology. This means they cannot be base generated below QP. Therefore, another functional projection must be postulated in the Polish nominal structure:  $\forall P$ .

\**wszystkich*<sub>i</sub> *pięć* *t<sub>i</sub>* *lingwistek*  
 all:GEN five linguists:GEN  
 'all five linguists'



**Conclusion:**

The DP approach seems to be applicable to Polish nominals. The following syntactic architecture could be proposed:

DP > PossP >  $\forall P$  > QP >  $\alpha P^*$  > DemP > nP > NP

\* iterative

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Thank you!

p.rutkowski@uw.edu.pl  
www.pawel-rutkowski.ling.pl

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