

Pseudo-Partitives in English

Frank Van Eynde & Jong-Bok Kim
University of Leuven & Kyung Hee University

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PARTITIVES VS. PSEUDO-PARTITIVES

$N_1 - of - N_2[definite]$. Part-of interpretation.

- (1) She wished she could reach out and grab [a piece of the bread] from the table.
- (2) Eventually Tommy gave me [a box of the cards he didn't want anymore].

$N_1 - of - N_2[bare]$. Amount-of interpretation.

- (3) The priest softened [a piece of bread] in a little wine.
- (4) I found [a box of vinyl records] yesterday.

Examples are taken from the Corpus of Contemporary American English (COCA).

TWO TYPES OF PSEUDO-PARTITIVES

Type A: the NUMBER value of the NP is identical to the one of N_1 .

- (5) [A *pound* of cucumbers] yields about a pint of pickles.
- (6) [Roughly five billion *pounds* of carpet] end up in landfills each year.

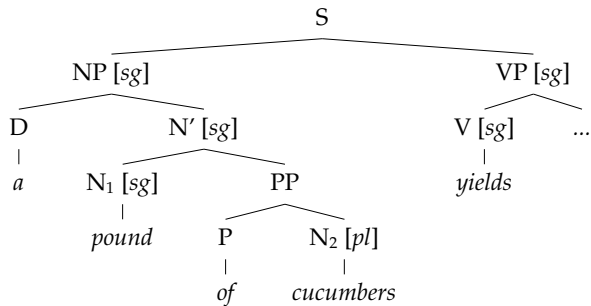
Type B: the NUMBER value of the NP is identical to the one of N_2 .

- (7) [A lot of *things*] happen and change over the years.
- (8) [Lots of *power*] is necessary to churn heavy soil.

AIM OF THE TALK

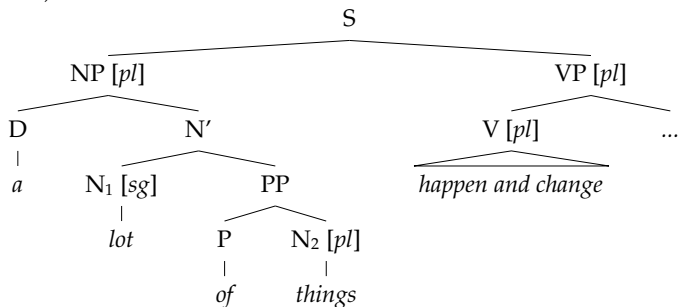
- ▶ provide an HPSG analysis of both types of pseudo-partitives
- ▶ investigate their use in COCA

TYPE A



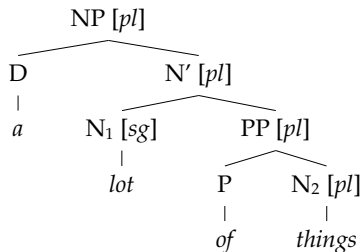
TYPE B WITH N₁ AS THE HEAD

Same structure as type A, but with “the grammatical number percolating upwards from the oblique rather than being determined by the head”
(Huddleston & Pullum, *The Cambridge Grammar of the English Language*, 2002, 352)



Sharing between a phrase (NP) and its non-head great-granddaughter

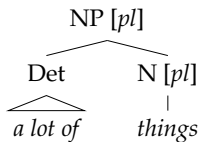
A LOCALISTIC HEAD-DRIVEN VERSION



Problems:

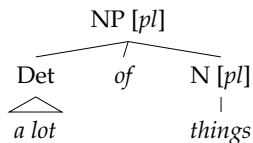
- ▶ *a* is normally incompatible with plural nominals (**a things*)
- ▶ N' normally shares the NUMBER value of its head daughter N

TYPE B WITH N₂ AS THE HEAD



Selkirk, Some remarks on Noun Phrase structure, 1977.

A VARIANT: SYNCATEGOREMATIC *of*



Jackendoff, *X-bar Syntax: a study of phrase structure*, 1977.

Keizer, *The English Noun Phrase. The nature of linguistic categorization*, 2007.

A PROBLEM WITH *of*

of forms a constituent with N₂

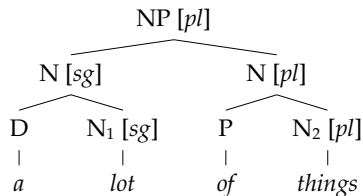
- (9) [A number of students] have complained about the assessment system.
- (10) We called a meeting of the first-year students, [of whom a number _] had complained about the assessment system.
- (11) Most students like continuous assessment but [a number _] prefer the old examination system.

Huddleston & Pullum, *The Cambridge Grammar of the English Language*, 2002, 352.

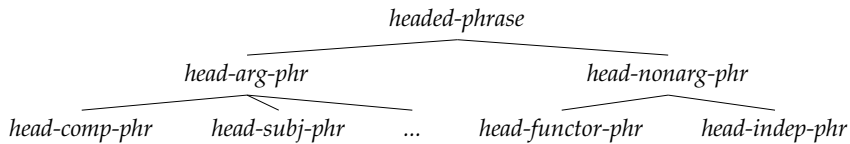
OUR PROPOSAL FOR TYPE B

An analysis

- ▶ that treats N_2 as the head of the NP, as proposed by Selkirk, Jackendoff and Keizer
- ▶ that treats *of* as forming a constituent with N_2 , as proposed by Huddleston and Pullum
- ▶ that fits in with the localist nature of HPSG



HEADED PHRASES



CONSTRAINTS ON HEADED PHRASES

$$headed-phr \Rightarrow \left[\begin{array}{l} \text{SYNSEM} | \text{LOC} | \text{CAT} | \text{HEAD} \quad \boxed{1} \textit{part-of-speech} \\ \text{HEAD-DTR} | \text{SYNSEM} | \text{LOC} | \text{CAT} | \text{HEAD} \quad \boxed{1} \end{array} \right]$$

$$hd-nonarg-phr \Rightarrow \left[\begin{array}{l} \text{SYNSEM} | \text{LOC} | \text{CAT} | \text{MARKING} \quad \boxed{1} \textit{marking} \\ \text{DTRS} \quad \left\langle \left[\text{SYNSEM} | \text{LOC} | \text{CAT} | \text{MARKING} \quad \boxed{1} \right], \boxed{2} \right\rangle \\ \text{HEAD-DTR} \quad \boxed{2} \textit{sign} \end{array} \right]$$

$$hd-functor-phr \Rightarrow \left[\begin{array}{l} \text{DTRS} \quad \left\langle \left[\text{SYNSEM} | \text{LOC} | \text{CAT} | \text{HEAD} | \text{SELECT} \quad \boxed{1} \right], \dots \right\rangle \\ \text{HEAD-DTR} | \text{SYNSEM} \quad \boxed{1} \textit{synsem} \end{array} \right]$$

A functor is a non-head daughter that lexically selects its head sister and that shares its MARKING value with the mother.

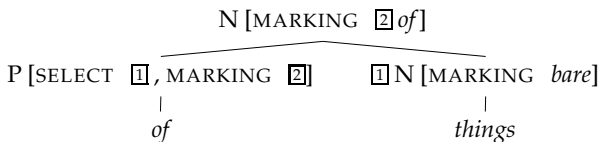
INTERNAL STRUCTURE OF THE HEAD DAUGHTER

of is not the head of a PP, but a functor. It selects a bare nominal and has the MARKING value *of*

$$\left[\begin{array}{l} \text{HEAD} \left[\begin{array}{l} \textit{preposition} \\ \text{SELECT} \mid \text{LOC} \mid \text{CAT} \left[\begin{array}{l} \text{HEAD} \textit{ noun} \\ \text{MARKING} \textit{ bare} \end{array} \right] \end{array} \right] \\ \text{COMPS} \langle \rangle \\ \text{MARKING} \textit{ of} \end{array} \right]$$

The MARKING value of the selected nominal (*bare*) captures the property which differentiates pseudo-partitives from partitives.

INTERNAL STRUCTURE OF THE HEAD DAUGHTER



OTHER FUNCTOR USES OF *of*

The *kind/sort/type* Construction (*those kind of problems*)

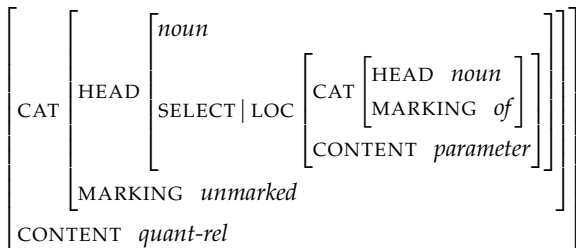
Maekawa, Agreement mismatch between *sort/kind/type* and the determiner, 2015.

The Binominal Noun Phrase Construction (*her nitwit of a husband*)

Van Eynde, Regularity and idiosyncrasy in the formation of nominals, 2018.

INTERNAL STRUCTURE OF THE FUNCTOR DAUGHTER

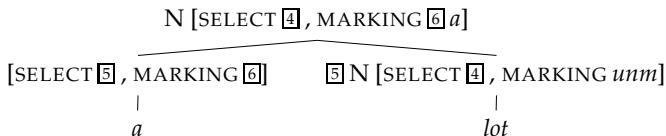
N_1 selects a nominal that is introduced by *of* and that denotes a parameter.



The selection may involve further restrictions on N_2 : *number*, for instance, only combines with a plural N_2 (*a number of examples*/**traffic*).

INTERNAL STRUCTURE OF THE FUNCTOR DAUGHTER

The indefinite article selects an unmarked singular nominal (*a lot*/**lots*, *a number*/**numbers*) and shares its MARKING value with the phrase



The quantifying noun may have its own modifiers, as in *an unusually large number of obstacles* and *a whole lot of trouble*.

a large number of insects is not the same as *a number of large insects*.

THE MARKING VALUE OF THE ARTICLE

Huddleston & Pullum, *The Cambridge Grammar of the English Language*, 2002, 350

(12) [How large [a number]] of students have enrolled, did you say?

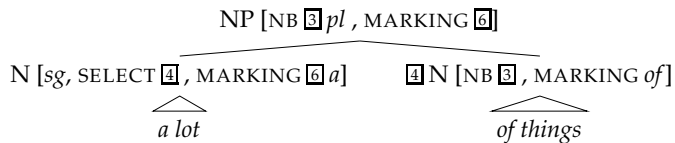
(13) [A hell [of [a lot]]] of people are going to be disappointed.

N₁ must be introduced by the indefinite article:

**how large some/any/the number of students*

**a hell of some/any/the lot of people*

THE COMBINATION AS A WHOLE



TAKING STOCK

- ▶ Pseudo-partitives of type A are headed by N_1 ; N_2 is part of its PP[*of*] dependent.
- ▶ Pseudo-partitives of type B are headed by N_2 ; N_1 is part of its functor.

USE OF THE PSEUDO-PARTITIVES IN COCA

- ▶ 450 million word corpus of contemporary American English (1990-2017)
- ▶ 5 parts: spoken language, fiction, popular magazines, newspapers, academic texts

QUANTITY NOUNS

Pseudo-partitives in which N_1 denotes a quantity (*lot, number, deal, ...*) belong to type B.

pattern	verb	#	verb	#
a lot of N-sg	V-sg	170	V-pl	0
a lot of N-pl	V-pl	1050	V-sg	1
lots of N-sg	V-sg	54	V-pl	4
lots of N-pl	V-pl	120	V-sg	4
Sum		1394		9

- (14) A lot of melanocytes means a brown eye.
- (15) Lots of vegetables is key.
- (16) ?? Lots of language use the JVM besides Java.

MEASURE NOUNS

Pseudo-partitives in which N_1 denotes a measure (*pound, inch, gallon, ...*) belong to type A. COCA yields only a small number of tokens. The main verb agrees with N_1 in 8 out of 9 tokens.

(17) A pound of muscle uses 75 to 150 cals a day.

(18) A pound of cucumbers yields about a pint of pickles.

One exception

(19) Three pounds of platinum means it's sure to sink fast.

CONCLUSION

- ▶ Pseudo-partitives are $[N_1 - of - N_2[bare]]$ sequences.
- ▶ Those of type A are headed by N_1 ; N_2 is part of its PP[*of*] dependent.
- ▶ Those of type B are headed by N_2 ; N_1 is part of its functor.
- ▶ If N_1 is a standard measure noun, the pseudo-partitive is nearly always of type A.
- ▶ If N_1 is a quantity noun, the pseudo-partitive is nearly always of type B.
- ▶ The exceptions involve the imposition of a singular interpretation on a plural NP.