Generative Grammar

Academia Grammaticorum Salensis Quinta

Salų dvaras, Salos, Lithuania, August 4-8, 2008

Paweł Rutkowski

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

Day 3:
Current Syntactic Theory

August 6, 2008

Paweł Rutkowski

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

---

The Determiner Phrase (DP) hypothesis

Abney (1987): what has traditionally been assumed to be the highest layer in the nominal structure (the NP) is in fact dominated by functional material, headed by the D(eterminer).
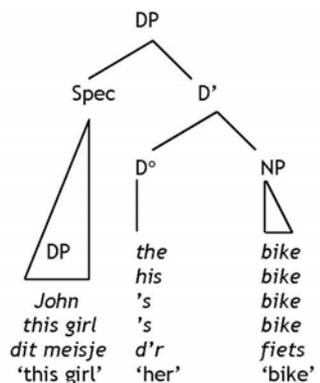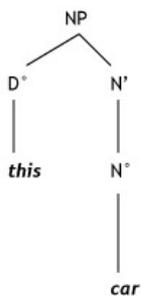
The noun is the semantic/lexical nucleus of the nominal complex; the DP layer plays a syntactic/regulating/configurational role.

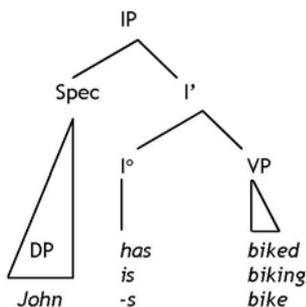Abney, Steven (1987), *The English noun phrase in its sentential aspect*, PhD diss., MIT.

3

The DP hypothesis:

4
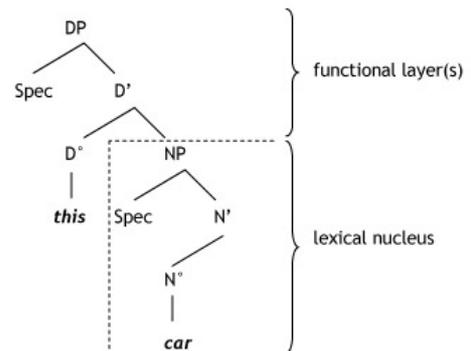
The traditional NP structure:

5

6

1

Analogy between nominal and sentential structures:

IP
Spec I'
DP I° VP
John has biked
      is biking
      -s bike

Since the late 1980's, many linguists have agued that Abney's D is not the only functional category associated with the lexical category N.

On the basis of data from a variety of unrelated languages, Picallo (1991), Ritter (1991), Shlonsky (1991), Santelmann (1993), Li (1998), Benmamoun (1999), Bhattacharya (2000), among others, argue that the structure of nominal expressions is (at least) three-layered.

All of them postulate a functional projection between NP and DP (labels include:
QP – Quantifier Phrase, GenP – Gender Phrase, NumP – Number Phrase).

Another important development in the late 80's was the VP-internal subject hypothesis.

Late 1980s: the structure in which the sentential subject occupies the specifier of IP is derived from the underlying structure in which the subject is VP-internal (cf. Sportiche 1988).
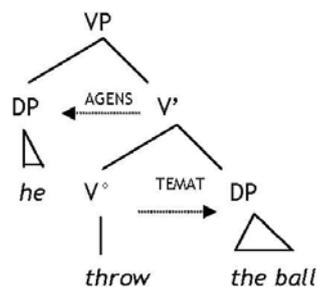
Thanks to this assumption, we can view VP as the generative equivalent of the predicate-argument structure (since it consists of a lexical verb and its arguments – both internal and external).

VP could also be where semantic roles (Theta-roles), such as *Agent*, *Theme*, etc., are assigned.

The VP-internal subject hypothesis:

Stage 1: Theta-role assignment

VP
DP ←AGENS V'
he V° →TEMAT DP
    throw   the ball

Stage 2: Creating a sentence – TP + VP merge

TP
T'
T° VP
DP ←AGENS V'
he V° →TEMAT DP
    throw   the ball
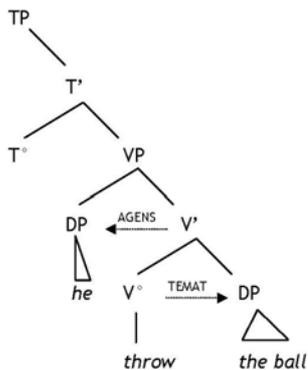
Stage 3: VP-internal subject → sentential subject

TP
DP T'
he_i T° VP
      will DP ←AGENS V'
            t_i V° →TEMAT DP
                 throw   the ball

The above model seems to be supported by the syntax of so-called **floating quantifiers** (cf. Puskas 2002, Bobaljik 2003):

(i) *Tous les architectes ont réalisé un projet.*
     all the architects have realized a project
(ii) *Les architectes ont tous réalisé un projet.*
     the architects have all realized a project

Sportiche (1988) accounts for the above data by arguing that quantifiers such as *tous* 'all' are always base-generated in the DP-**initial** position.

As the subject moves up from its base position it leaves traces. Sportiche (1988) interprets the phenomenon of Q-float as the stranding of the quantifier in a position adjacent to the trace of the subject DP.

Example:

(i) *All the boys have left the party.*
(ii) *The boys have all left the party.*

A more complex example:

(i)   *All the boys would have been sleeping.*
(ii) *The boys would all have been sleeping.*
(iii) *The boys would have all been sleeping.*
(iv) *The boys would have been all sleeping.*

This kind of analysis could also be used to account for the phenomenon of *sam*-float in Polish.

Let's assume that the intensifier *sam* 'himself' is always generated as a modifier of the subject noun (hence the adjectival agreement). Subsequently, the subject moves from its base (VP-internal) position to SpecIP:

(i) <u>*Sam*</u> *Chomsky będzie mógł zjeść banana.*
himself Chomsky will be able to eat banana
'Chomsky himself will be able to eat a banana.'

(ii) *Chomsky będzie* <u>*sam*</u> *mógł zjeść banana.*
Chomsky will himself be able to eat banana
'Chomsky will himself be able to eat a banana.'

(iii) *Chomsky będzie mógł* <u>*sam*</u> *zjeść banana.*
Chomsky will be able himself to eat banana
'Chomsky will be able to eat a banana himself.'
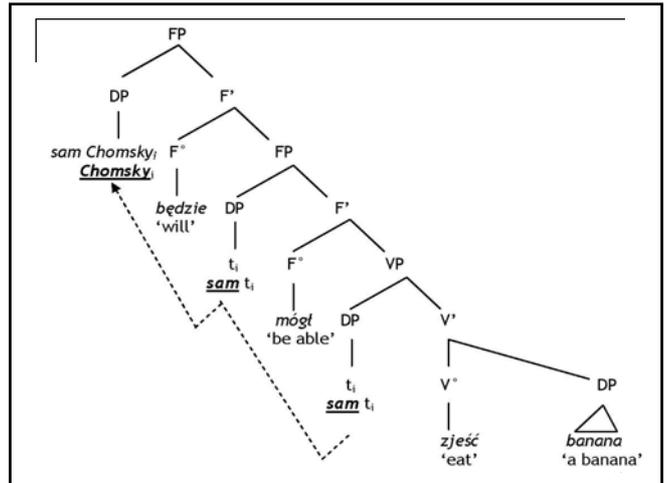
Additionally, it is possible to rephrase the above Sportiche-type analysis in terms of Fanselow and Ćavar's (2002) theory of **partial deletion**.

They adopt the **copy and deletion** approach to movement (Chomsky 1995) but they argue that it is not always the lower copy that must be deleted as a result of a movement operation.

According to them, deletion "may affect *both* the upstairs *and* the downstairs copy, but in a **partial** way."

Following this proposal, we might analyze the structures in which *sam* is floated as resulting from partial deletion.

Sample derivation – Stage 1:

_{VP} *sam Chomsky jadł banana.*
alone Chomsky eat banana

(base generation:
VP only; *sam Chomsky* is the VP-internal subject)

Sample derivation – Stage 2:

_{TP} *będzie* _{VP} *sam Chomsky jadł banana.*
will   alone Chomsky eat banana

(base generation – TP merged)

Sample derivation – Stage 3:

_{TP} *sam Chomsky będzie* _{VP} *sam Chomsky jadł banana.*
alone Chomsky will   alone Chomsky eat banana

(two copies:
VP-internal subject → sentential subject)

Sample derivation – Stage 4a:

_TP_ *sam Chomsky będzie* _VP_   *jadł banana.*
  alone Chomsky will   eat banana

(first option:
deletion of the lower copy)

Sample derivation – Stage 3:

_TP_ *sam Chomsky będzie* _VP_ *sam Chomsky jadł banana.*
  alone Chomsky will   alone Chomsky eat banana

(two copies)

Sample derivation – Stage 4b:

_TP_   *Chomsky będzie* _VP_ *sam*   *jadł banana.*
      Chomsky will   alone   eat banana

(second option:
partial deletion)

The phrase *sam Chomsky* 'Chomsky himself' is base generated VP-internally.

Subsequently, it is raised (copied) to Spec-TP.

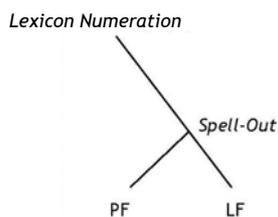Normally, its lower copy would be deleted.

However, in some cases, parts of both the lower and upper copy are subject to ellipsis.

Minimalism (the Minimalist Program): the 90's

Main idea: let's simplify the whole thing!

The structure of grammar in minimalism:

Lexicon Numeration

Spell-Out

PF   LF

Major principles: *economy of derivation* and *economy of representation*!

Two representations that make it possible to interpret syntax: *Phonetic Form* (PF) and *Logical Form* (LF)

PF – interface to the articulatory-perceptual system (A-P)

LF – interface to the conceptual-intentional system (C-I)

Numeration (first stage of derivation): lexical elements that will be used to construct a centence.

The distinction between deep structure and surface structure has been abandoned.

Syntactic structure can be built in two ways:

- *Merge*

- *Move*

Merge: a function that merges two objects (<u>a</u> and <u>b</u>) into an unordered set with a label (either <u>a</u> or <u>b</u>) which identifies the structure derived in this way:

Merge (a, b) → {a, {a, b}}
Merge (a, b) → {b, {a, b}}
Merge (kill, Bill) ? {kill, {kill, Bill}}

31

Bare Phrase Structure: a theory that contrasts with the classical X-bar model because it is fully derivational (structure is built in a bottom-up manner). X-bar theory argued for a preconceived syntactic structure, that wasn't derived step by step. Such structure was subject to lexical insertion. In minimalism, new structure can't be built unless there are new elements that can be merged.

BPS also does away with X' levels in the syntactic structure.

32

Syntax = the derivation process between the mental lexicon and LF (it produces interpretable senteces).

Spell-Out = phonological features associated with syntactic information are sent to PF (syntactic structure receives a phonetic interpretation)

Before *Spell-Out*: overt syntax.

After *Spell-Out*: covert syntax (whatever happens is not 'visible' phonetically).

33

Numerations can result in many different derivations. The most economical derivation wins.

Lexical items enter numeration inflected (inflectional forms are not dependent on the derivation process):

Numeration (a) = {T, Agr, *Mary*, *killed*, *him*}
*Numeration (b) = {T, Agr, *Mary*, *killed*, *him*}

Only numeration (a) result in a grammatical derivation (*Mary killed him*), so it wins with numeration (b). Apart from lexical items, numeration also includes functional elements, such as T (*Tense*) and Agr (*Agreement*).

34

- A lexical element is a bundle of features (phonological, semantic, and formal), e.g. *case* is a formal feature, whereas *animacy* is a semantic feature.

- Syntactic derivation (structure building) requires formal features to be 'checked'.

- Checking: two elements have the same feature. Checking could be viewed as 'eliminating' formal features from the derivation.

35

- Only uninterpretable features must be checked (i.e. those that do not contribute to semantic interpretation); for instance, the case of a noun is uninterpretable, whereas the number of a noun is interpretable.

- Movements are driven by the necessity to check features.

- Feature checking is one of the most important tenets of minimalism (e.g. a tensed VP must be checked by a T head, etc.).

- Two elements can't create a syntactic structure unless they can check each other's features.

36

6

- Derivation before *Spell-Out* affects phonological features, which means that when an element moves, its phonological features move as well.

- After *Spell-Out*, phonological features are no longer there, which means that movement affects only formal features – this is called *LF movement*. Formal features can be checked at LF.

- There is no contact between PF and LF.

- The above model results in very abstract analyses! (How do we know what happens at LF???)

Minimalism has developed many abstract theories, for instance wrt the mechanism of feature checking (cf. Lasnik's *Greed, Enlightened Self-Interest, Virus Theory etc.*).

Lasnik (1995): *Procrastinate* – a principle that says that LF movement is better than overt movement.

The relation between syntax and phonetic realization: syntactic structure should be pronounced only if necessary. The production of sound is costly, so an ideal language could have no phonetic representations.

Minimalism distinguishes two kinds of features: strong and weak (this distinction has nothing to do with the interpretable/uninterpretable dichotomy). Strong features must be checked overtly (before Spell-Out), weak features may wait till LF.

This means that in the case of weak features, movements driven by feature-checking needs cannot be 'seen'.

Syntactic differences between languages may result from the fact that the same feature is strong in one language, and weak in another.

In this way one can explain different adverb placement in English and French:
(i)   *John often kisses Mary.*
(ii)   **John kisses$_i$ often* t$_i$ *Mary.*
(iii) **Jean souvent embrasse Marie.*
(iv)   *Jean embrasse$_i$ souvent* t$_i$ *Marie.*

English: IP/TP is associated with a weak V feature, so the verb that checks that feature is not overtly raised (checking takes place at LF).
French: IP/TP is associated with a strong V feature, so the verb that checks that feature is overtly raised to I°/T°, hence it must precede the adverb in surface syntax.

Thank you!

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