

TOOLS IN NANOSYNTAX

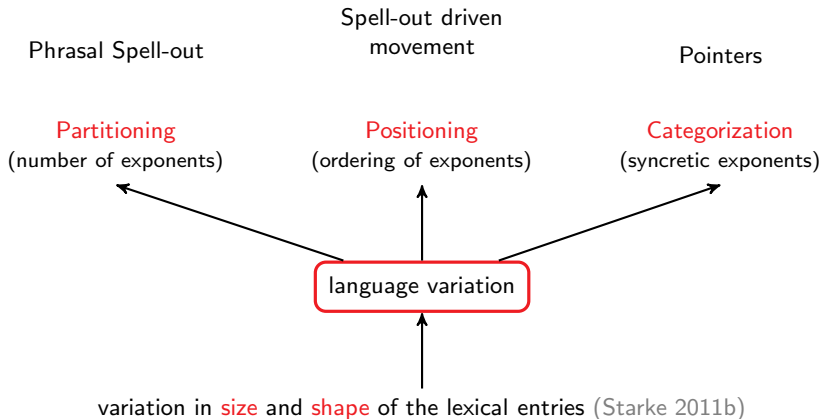
PAVEL CAHA AND MARINA PANTCHEVA

CASTL

DECENNIUM: THE FIRST TEN YEARS OF CAST

SEPTEMBER 12-14, 2012

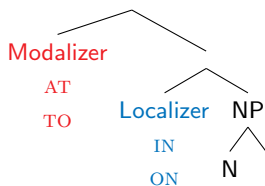




Empirical domain and assumptions

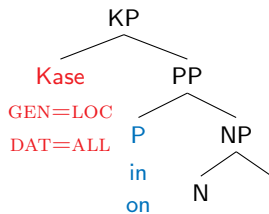
Semantic structure

based on Kracht (2002)



Syntactic structure

Caha (2011), Pantcheva and Caha (2011)



K and P may be decomposed into more projections.

Partitioning

Type 1 languages

NP-*(P)-DAT

- (1) kəatlu-*(vu)-n
house-in-DAT
'into the house'
(Lak, Murkelinskij 1967)

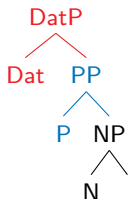
Type 2 languages

NP-DAT

- (2) naan t.ɪffuur-*kkə* pooyi
I Trichur.DAT went
'I went to Trichur.'
(Malayalam, Asher and Kumari 1997)
- (3) Mun manan Kárašjohk-*ii*
I go.1SG Karasjok-DAT
'I go to Karasjok.'
(North Saami, Ritva Nystad, p.c)

Phrasal Spell-out

The underlying syntactic structure is:



Where is P in Type 2 languages?

- P is missing
- P is there *but it is spelled out together with some other head.*

Uniformity Principle (Chomsky 2001)

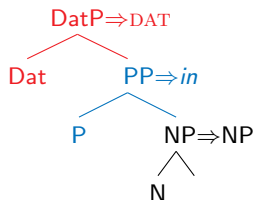
In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.

Phrasal Spell-out

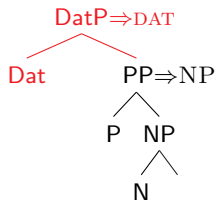
Lexical entries can spell out phrasal nodes.

Phrasal Spell-out

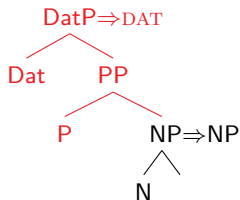
Type 1



Type 2a



Type 2b



Where is P in Type 2 languages?

- P is missing.
- P is there, but it is spelled out together with some other head.

Uniformity Principle (Chomsky 2001)

In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.

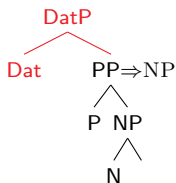
Phrasal Spell-out

Lexical entries can spell out phrasal nodes.

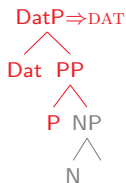
Predictions

According to the theory, the NP-DAT type is the result of the P head being spelled out together with NP or with Dat.

We expect consequences from the different lexicalizations.



Type 2a

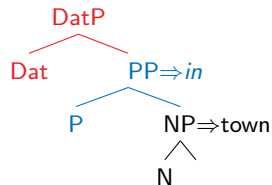
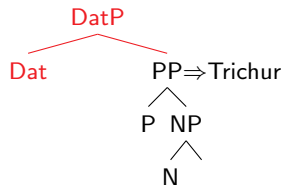


Type 2b

- | | |
|---------------------------------------|---------------------------------------|
| ● sensitivity to the type of nouns | ● no sensitivity to the type of nouns |
| ● AP intervention effect | ● no AP intervention effect |
| ● no sensitivity to dative allomorphs | ● sensitivity to dative allomorphs |

Noun dependency in Type 2a

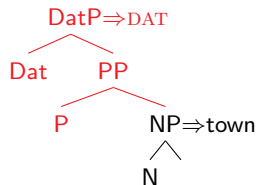
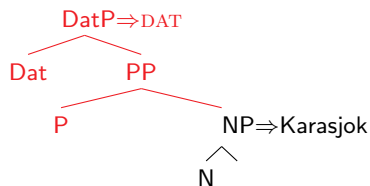
- (4) naan tɪffuʊr-**kkə** pooyi
I Trichur.DAT went
'I went to Trichur.'
(Malayalam, Asher and Kumari 1997)
- (5) *naan pattaṇatt-**il-eekkə** pooyi
I town-**in**-DAT go-PAST
'I went to town.'



No noun dependency in Type 2b

data from North Saami, Ritva Nystad p.c

- (6) Mun manan Kárášjohk-ii
I go.1SG Karasjok-DAT
'I go to Karasjok.'
- (7) Mun manan gávpag-ii
I go.1SG town-DAT
'I go to town.'



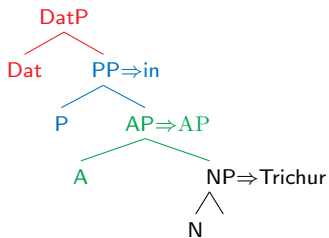
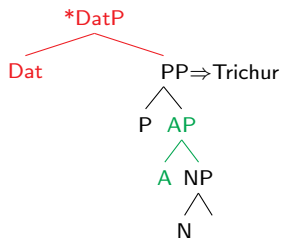
Intervention effect in Type 2a

(data from K. Jayaseelan, p.c.)

- (8) *naan tɪffuʊr-kkə pooyi*
I Trichur.DAT went
'I went to Trichur.'

(Malayalam, Asher and Kumari 1997)

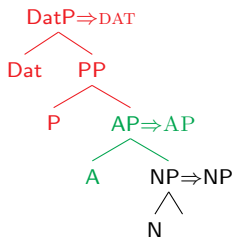
- (9) **naan nammuDe aa pazhaya tɪffuʊr-il-eekkə pooyi*
I our that old Trichur-in-DAT went
'I went to our old Trichur.'



No intervention effect in Type 2b

data from North Saami, Ritva Nystad p.c

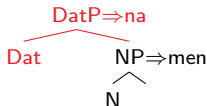
- (10) Mun manan Kárášjohk-ii
I go.1SG Karasjok-DAT
'I go to Karasjok.'
- (11) Mun manan čáppa Kárášjohk-ii
I go.1SG pretty Karasjok-DAT
'I go to the pretty Karasjok.'



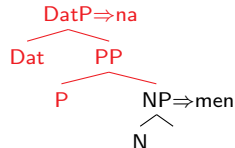
Sensitivity of Dative allomorphs in Type 2b

Bulgarian *na* ⇔ [DatP Dat [PP P]]

- (12) Dade knigata *na* men.
gave.3SG book.the DAT me
 'He gave the book to me.'

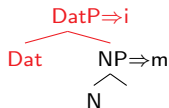


- (13) Slozhi knigata *na* men.
put.3SG book.the DAT me
 'He put the book on me.'

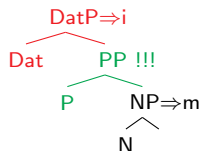


Bulgarian *-i* ⇔ [DatP Dat]

- (14) Dade m-*i* knigata.
gave.3SG 1SG-DAT book.the
 'He gave the book to me.'



- (15) Slozhi m-*i* knigata.
put.3SG 1SG-DAT book.the
 *'He put the book on me.'



Positioning

Variation in the markers' position with respect to the NP:

- Prepositional language:

- (16) *na kaj parkot*
DAT at the.park
'to the park'
(Macedonian, Eva Piperevska, p.c)

- Postpositional language:

- (17) *kəatlu-vu-n*
house-in-DAT
'into the house'
(Lak, Murkelinskij 1967)

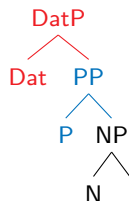
- Mixed language:

- (18) *xlán gbó jí*
DAT trash on
'onto the dumpster'
(Gungbe, Aboh 2010)

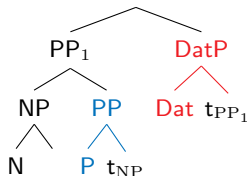
Spell-out driven movement

We assume a universal right-branching structure.
The variation is the result of **movement**.

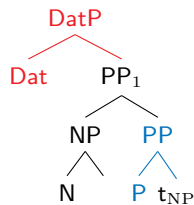
Prepositional:



Postpositional:



Mixed:



Why do these movements happen?

Spell-out driven movement

Evacuation movement creating the right configuration for lexical insertion

Trigger? The particular shape of the lexical entry

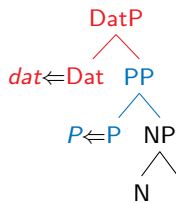
Timing? Lexical access after each Merge (Cyclic Spell-out)

Different shapes of entries \Rightarrow different morpheme orderings

Prepositional order

dat \Leftrightarrow <Dat>

P \Leftrightarrow <P>

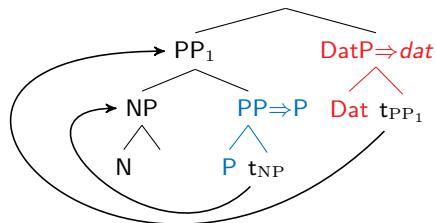
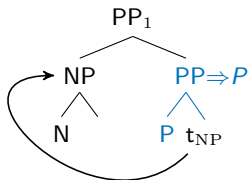


Different shapes of entries \Rightarrow different morpheme orderings

Postpositional order

dat \Leftrightarrow \langle DatP \rangle
|
Dat

P \Leftrightarrow \langle PP \rangle
|
P

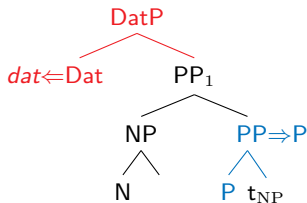
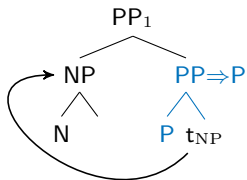


Different shapes of entries \Rightarrow different morpheme orderings

Mixed order

dat \Leftrightarrow <Dat>

P \Leftrightarrow < PP >
 |
 P



Categorization

In some languages: DAT=ALL, in other languages: not.

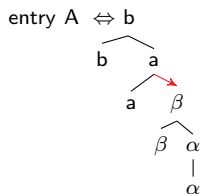
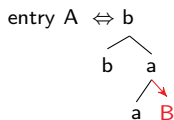
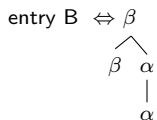
(19) North-Eastern Basque vs. Central/Western Basque (Etxepare and Oyharcabal to appear:ex.1a,6a,7a)

- a. Jonek **Mikel-i** eskutitz bat bidali dio.
Jon.ERG Mikel-DAT letter one.ABS sent AUX
'Jon sent a letter to Mary [sic].' Recipient
- b. Erretora badoa elizako atearen **gakoar-i**.
Priest.DEF goes church.GEN door.GEN lock-DAT
'The priest goes to the door-lock of the church.' Goal [N-E]
- c. Erretora badoa elizako ate **gakoar-a**.
Priest.DEF goes church.GEN door lock-ALL
'The priest goes to the door-lock of the church.' Goal [C/W]

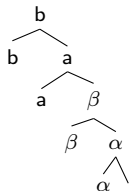
- North-Eastern Basque could be said to lack the category of the allative (and uses dative instead).
- We capture the variation in categorization using **pointers**.

Pointers

Lexical entries can contain a **pointer** to an existing lexical entry (Starke 2011a).



Entry A can lexicalize the following structures

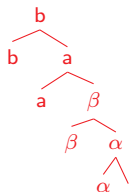


Pointers

Pointers allow for **cross-section** of two independent linear systems:

	I	II
X	a $\times \alpha$	a $\times \alpha, \beta$
Y	a,b $\times \alpha$	a,b $\times \alpha, \beta$

We already saw examples of three cross-sections:

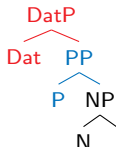


Pointers preserve contiguity in a non-linear paradigm.

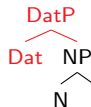
Capturing categorization

At present, we have something of a minimal cross-section, with DAT in the higher zone, and P in the lower zone.

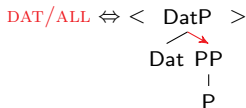
Allative structure:



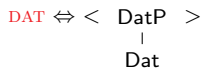
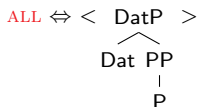
Dative structure:



- In a language with the syncretism, there is just a single entry.



- In a language without the syncretism, there are two entries.



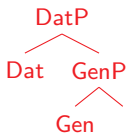
GEN=DAT

(20) Greek: DAT=GEN \neq ALL (Anagnostopoulou 2003)

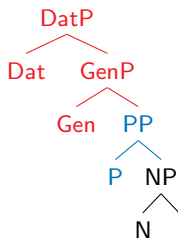
- a. I mitera **tu** Petru
the mother the.GEN Peter.GEN
 'Peter's mother' (p.24) Possessor
- b. I Maria efere **tu** Petru to grama
the Maria brought the.DAT Peter.DAT the letter
 'Mary brought Peter the letter' (p.210) Recipient

Caha (2009): GEN denotes a state (possession), DAT adds a change of state (recipient).

Updated Dative



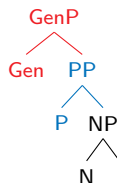
Updated Allative



Locatives

2 dimensions

	P	no P
STATE	LOC	GEN
CHANGE	ALL	DAT



Sinhala: GEN=LOC (data from Chandralal 2010)

(21) **Genitive=Locative**

- a. pot-**ee** piṭu
book-GEN book
'the pages of the book'
- b. at-**ee** booləyak tie-nəwa
hand-LOC ball be-IND
'There is a ball in (her) hand'

Possession

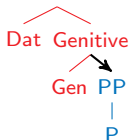
Location

Deriving straight L-syncretisms (L)

Japanese

	P	NO P
STATE	Loc: <i>-ni</i>	Gen: <i>-no</i>
CHANGE	All: <i>-ni</i>	Dat: <i>-ni</i>

Loc/All/Dat *-ni* ⇔ < Dative >



Gen *-no* ⇔ < Genitive >



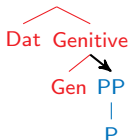
- *-ni* can spell out both spatial and non-spatial cases because of the pointer.
- *-no* can spell out just non-spatial cases and cannot spell out Dative.
- *-ni* spells out Allative, Locative, Dative.
- *-ni* loses the competition for the Genitive to *-no*, since *-no* is more specific.

Deriving inverted L-syncretisms (7): impossible

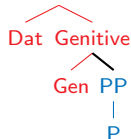
Impossible

	P	NO P
STATE	Loc: A	Gen: A
CHANGE	All: B	Dat: A

Loc/Gen/Dat A \Leftrightarrow < Dative >



All B \Leftrightarrow < Dative >



- A and B compete for the lexicalization of Locative.
- B wins by virtue of being more specific.
- Thus, the system disallows Loc=Dat syncretism to the exclusion of All.

Blansitt's (1988) Generalization

If Locative=Dative, then so must Allative.

Language variation: where do we stand?

On the surface, it looks like a mess:

- Malayalam DAT is different from North Saami DAT: both have an ALL reading, the ALL reading is restricted in Malayalam.
- Both are different from a Japanese DAT, which may also act as LOC.
- These all are distinct from Central Basque DAT, which has no ALL use.
- These are all distinct from languages where the DAT is prepositional (Macedonian, Gungbe)
- ...

“[D]escriptive linguists still have no choice but to adopt the Boasian approach of positing special language-particular categories for each language. Theorists often resist it, but the cross-linguistic evidence is not converging on a smallish set of possibly innate categories. On the contrary, almost every newly described language presents us with some “crazy” new category that hardly fits existing taxonomies.”

(Haspelmath 2007)

This is where we stand.

Universal structure, variable lexicon.

Language specific categories are distinct ways to cut up the same structure, restricted by the principles of Phrasal Spell-Out.

Thank you.

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