

Ora Matushansky, CNRS/Université Paris-8

email: matushan@univ-paris8.fr

homepage: <http://mapage.noos.fr/matushansky/>

**THE REMARKABLE CASE OF PREDICATES**  
**Workshop GGCxG, FU Berlin, October 26-27, 2007**

## 1. INTRODUCTION

Standard view of Case in the generative theory: Case is a relation between a head and a noun phrase

Problems:

1. **predicate Case** (see below)
2. inherent and semantic Case
3. non-verbal Case assignment
4. obligatory correlation between Case and agreement/position (see Zaenen, Maling and Thráinsson 1985 for the relevant counter-examples), and lack of a connection to morphological case marking (see Marantz 1991)

What is Case anyway?

Pesetsky and Torrego 2001, 2004: Case is the expression of tense on xNPs. However, as a result tense becomes a somewhat abstract notion

Proposal: **Case is the expression of the featural makeup of a head on (some terms of) its complement.** A Case feature is thus always uninterpretable and more than one Case feature can be assigned to a given term. The surface case marking on a term reflects this combination of Case features.

Plan:

- Case assignment to predicates in the current Case theory
- Case Theory, Mark II

Issues to be mostly left out here:

- Barriers to Case-assignment
- Parameterization: which heads assign Case and how it is realized in the surface representation

Big claim: **Constituent structure and morpho-syntactic derivation are obligatory for the formalization of Case.**

## 2. THE BIG PICTURE

At least the following patterns of Case-marking on non-verbal predicates are observed:

- Default or undetectable case (putative lack of case), as in (1)
- Case-agreement (the predicate is marked with the same case as the subject), as in (2)
- Dedicated predicative case(s), as in (3) and (4)
- A combination of the above

- (1) *hommish-níi barána gáarii.* Harar Oromo (Owens 1985 via Comrie 1997)  
*harvest-NOM this.year good.CIT*  
*The harvest is good this year.*

NB: The citation case in Harar Oromo is also used for direct objects; nominative case is morphologically marked

---

**Acknowledgments:** Many thanks to Morris Halle, Hilda Koopman and Eddy Ruys for their suggestions and comments. I am also grateful to Liina Pykkänen and Elsi Kaiser for the discussion of Finnish data.

The full title of the GGCxG workshop is “Comparing languages and comparing theories: Generative Grammar and Construction Grammar”.

- (2) a. Ciceronem clarum habent. Latin: Case-agreement  
Cicero-ACC famous-ACC consider/hold  
*They consider Cicero famous.*  
b. Cicero clarus habetur.  
Cicero-NOM famous-NOM consider/hold-PASS  
*Cicero is considered famous.*
- (3) a. Ja sčitaju ee lingvistkoj. Russian: predicative case  
I consider her-ACC linguist-INSTR  
*I consider her a linguist.*  
b. Ona vernulas' krasavicej.  
she came back beauty-INSTR  
*She came back a beauty.*
- (4) a. Toini on sairaa-na. Finnish: multiple predicative cases  
Toini.NOM be.3SG ill-ESS  
*Toini is ill.*  
b. Toini tul-i sairaa-ksi.  
Toini.NOM become-PAST.3SG ill-TRA  
*Toini became ill.*

The standard Case Theory has little to say about Case on predicates:

- (i) Chomsky 1981, Vergnaud 1982: \*NP if NP is overt and has no Case
- (ii) Chomsky 1986, 1993, Chomsky and Lasnik 1993: Case is required to render an NP visible for theta-role assignment
- (iii) Chomsky 2000: Case is an uninterpretable feature, which is checked in the course of  $\phi$ -feature valuation of a higher head (the probe). Unvalued Case features is what makes an xNP visible for agreement

(i) and (ii) do not account for case-marked xAP predicates. (iii) can be fixed to include non-xNPs for Case-agreement (Chomsky 2001) but has problems with locality and  $\phi$ -features

### 3. CASE AGREEMENT

In a number of languages, the predicate shows the same case as the subject (Latin, Icelandic, Modern Greek, Albanian, Serbo-Croatian...):

- (5) a. Hún er kennari/\*kennara. Maling and Sprouse 1995 : Icelandic  
he is teacher-NOM/ACC  
*He is a teacher.*  
b. Ég taldi hana/\*hun vera kennara/\*kennari  
I believed her-ACC/NOM to-be teacher-ACC/NOM  
*I believe her to be a teacher.*

Chomsky 2001: Case-agreement results from **sequential** multiple feature-checking

Bailyn 2001: Case-agreement results from **simultaneous** multiple feature-checking

Neither story cannot work for **Case-agreement in control infinitives**:

- (6) a. Ego iubeo te esse bonum Cecchetto and Oniga 2004: Latin  
I order you-ACC be-INF good-ACC  
*I order you to be good.*  
b. Quietto tibi licet esse.  
quiet-DAT you-DAT licit-is be-INF  
*You are allowed to stay quiet.*

NB: While the mechanism I will propose works for control Case-agreement, I have nothing to say at this point about Case assignment to PRO. See Sigurðsson 1991, Landau 2004, Boeckx and Hornstein 2006, among others.

Neither story works if **the  $\phi$ -features of the subject and the predicate are not the same**:

- (7) a. Puellam consulem facit. active  
 girl-ACC consul-ACC make-3SG  
*S/he makes the/a girl consul.*
- b. Puella fit consul. passive  
 girl-NOM is.made-3SG consul-NOM  
*The/a girl is made consul.*

Basic intuition behind both stories: there is no agreement in Case-agreement; the two targets get Case separately

Standard view: the subject and the predicate enter a relation resulting in Case-agreement

Frampton and Gutmann 2000: Case-agreement is “feature coalescence”: features that have agreed, whether valued or not, become the same entity. Once the subject and the predicate have agreed, their Case-features are valued at once

### 3.1. My alternative

**Case-agreement is just like concord**: it results from Case assignment to the constituent that contains both “agreeing” items (cf. Stowell 1981)

#### (8) Case Theory, Mark II

- (i) Case features are assigned by a head to its complement
- (ii) → More than one Case feature can be assigned to a given term.

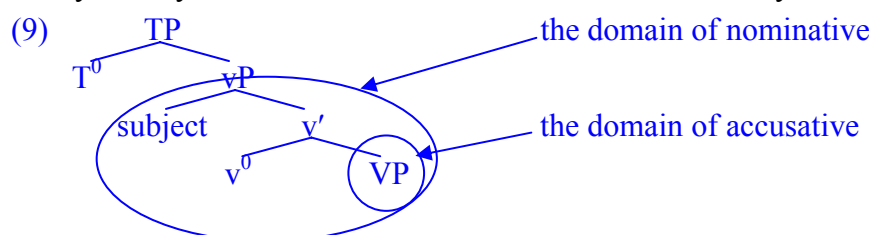
Nominative is assigned by  $T^0$  to vP (or AspP, or ModP...) and accusative is assigned by  $v^0$  to VP. All constituents that can bear Case (and have not received Case from some other source, an issue to be clarified) are Case-marked by percolation

NB: I will not treat inherent Case assignment here, but see Koopman 2006, Svenonius to appear) for arguments that Icelandic “inherent” Case is actually structural (i.e., reflects a dependency on a functional projection in the extended verbal phrase)

**Case is viewed as a property of a domain rather than an xNP**, which therefore entails a purely structural view of Case.

### 3.2. Standard structural Case

Because of the structural positions of  $T^0$  and  $v^0$ , the predictions of the new Case Theory are nearly exactly the same as those of the standard Case Theory:



If  $v^0$  does not assign Case, the object receives nominative (as with passives or raising verbs)

If a Case-assigning  $v^0$  is present, nominative is still assigned below it. However, the resulting bundle of Case-features will always be more complex than just nominative. As a result, we correctly predict that accusative Case is featurally more complex than nominative.

Further advantages:

- No functional heads need to be stipulated to account for Case-assignment by non-verbal lexical heads or by prepositions
- Straightforward treatment of multiple Case-assignment (e.g., in Japanese)

### 3.3. Case-barriers

Some notion of a **barrier to Case assignment** becomes imperative. Empirically:

- the sister of  $P^0$  is not transparent to external Case-assignment if  $P^0$  itself assigns Case
- the sister of  $C^0$  is not transparent to external Case-assignment. [Spec, CP] may be assigned Case from outside in some constructions; may not be assigned Case in others
- the sister of  $A^0$  is not transparent to external Case-assignment, but the sister of  $A^0$  is either a PP or receives Case from (within the extended projection of)  $A^0$
- the sister of  $N^0$  is not transparent to external Case-assignment, but the sister of  $N^0$  is either a PP or receives Case from (within the extended projection of)  $N^0$
- the sister of  $v^0$  is not transparent to external Case-assignment, unless  $v^0$  is a weak phase (this is how we get Case agreement in small clauses; such vP is permeable to nominative)
- the sister of  $D^0$  is transparent to external Case-assignment. [Spec, DP] may or may not be accessible

Importantly, some notion of a barrier to Case-assignment is already operative in the standard Case Theory (and it's called *a phase*)

**The (internal domain of a) phase** seems like exactly the notion we need, but I will leave the issue aside here because it does not affect case-assignment to predicates

It might also be the case that barriers to Case-assignment are not absolute, or that some cases behave differently from others

## 4. RUSSIAN PREDICATE CASE

I have so far been unable to find an “ideal” predicate case (i.e., a case that marks predicates in any position). Russian is a compromise.

**The puzzle** that interests me is twofold:

- Russian xNP and xAP predicates are marked with instrumental case
- except in the present tense primary predication, where they must be nominative

NB: It seems that the same pattern obtain in Arabic, where the predicative case is accusative, but in the present tense nominative is obligatory (Maling and Sprouse 1995, fn.4)

Empirical generalization: **Russian predicates are case-marked in the presence of an overt verb; otherwise they receive the default case (nominative)**

### 4.1. The head of the small clause

With an overt *be*, the post-copular xNP (or xAP) can be inflected with either nominative or instrumental:

NB: It must be noted that for xNP predicates instrumental is preferred in most configurations (see Wierzbicka 1980, Geist 1998, 1999, Matushansky 2000, Madariaga in progress, among others), but nominative is generally

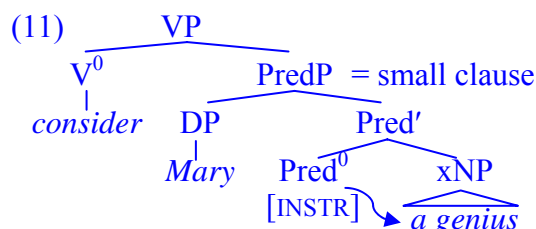
grammatical even though pragmatically restricted. For primary xAP predicates nominative seems the preferred option (Madariaga in progress)

- (10) a. Puškin byl velikij poët.  
Pushkin was great poet-NOM  
b. Puškin byl velikim poëtom.  
Pushkin was great poet-INSTR  
*Pushkin was a great poet.*

Only instrumental marking corresponds to semantic predication (Rothstein 1986, Bailyn and Rubin 1991, Bailyn and Citko 1999, Pereltsvaig 2001, among others).

So Russian xNP and xAP predicates receive Case. How?

Standard view (Bailyn and Rubin 1991, Bailyn and Citko 1999, Pereltsvaig 2001, Bailyn 2001, 2002, etc., all based on Bowers 1993): Pred<sup>0</sup>



The head of the small clause, Pred<sup>0</sup>, is the source of the instrumental case. Since Pred<sup>0</sup> is the head that converts its complement into a predicate, its presence in a small clause is obligatory  
NB: Note the necessity of Case-assignment to the sister!

## 4.2. Predication without instrumental

In the present tense in Russian the copula is null and post-copular xNPs and xAPs cannot be marked instrumental:

NB: Instrumental is marginally possible without an overt verb if the xNP predicate is interpreted as a temporary capacity and a locative is present, as well as on the few NP predicates with the meaning of ‘cause, reason’ and in a particular tautological construction (Nichols 1981, Bailyn and Rubin 1991). These are probably irrelevant.

- (12) a. Vera assistant.  
Vera assistant-NOM  
*Vera is an assistant.*  
b. \*Vera assistentom.  
Vera assistant-INSTR

No theory asserting that Pred<sup>0</sup> is the source of instrumental marking on the predicate predicts that it should depend either on the tense or on the overtness of the copula (with the latter itself probably dependent on the former)

Why is (12a) possible and why is (12b) disallowed?

Possibility 1: **Predication copula is not available in the present tense.** What we see is the other Russian copula (tentatively, the *sortal* copula), the one co-occurring with nominative.

This theory is implausible: why should predication be excluded in the present tense?

It is also factually incorrect: the present tense copular sentences can be shown to possess a predicative reading.

A non-predicative reading can be excluded pragmatically:

(13) a. Context: And how did they earn their living?

Iisus byl \*plotnik/✓plotnikom, a Magomet byl \*kupec/✓kupcom.  
Jesus was carpenter-NOM/INSTR and Mohammed was merchant-NOM/INSTR  
*Jesus was a carpenter and Mohammed was a merchant.*

b. Context: And how do they earn their living?

Magdalena prostitutka, a Iisus plotnik.  
Magdalen prostitute and Jesus carpenter  
*Magdalen is a prostitute and Jesus is a carpenter.*

Since a predicative reading is available, PredP must be present even in absence of the copula – but instrumental may not be assigned. Why not?

Possibility 2: **It is not Pred<sup>0</sup> that assigns predicative Case.** Then what does?

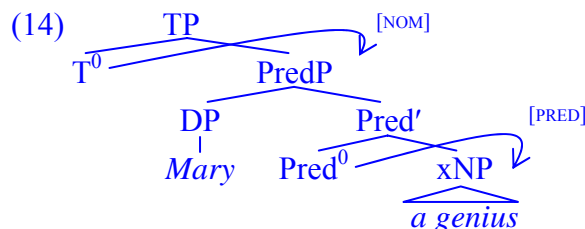
**Proposal:** The functional head that assigns Case to the small clause predicate has nothing to do with predication

### 4.3. The syntax/morphology interface in Case assignment

There is a head that appears only in the presence of a verb and assigns instrumental Case to the small clause predicate. This means that in the present tense primary predication, there is one head less

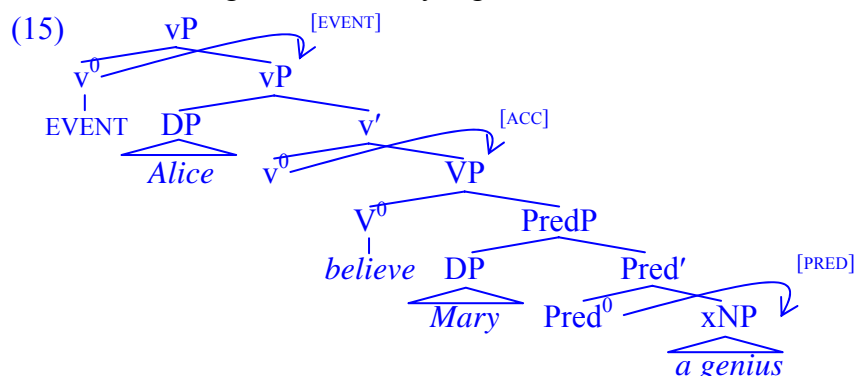
What is this head?

Bailyn and Rubin 1991, etc.: in the absence of an overt copula the small clause merges as the complement of T:



The small clause subject is in the domain of T only, while the small clause predicate is in the domain of both T<sup>0</sup> and Pred<sup>0</sup>. As a result, in the present tense copular sentence the predicate receives two Case features: [nominative] (from T<sup>0</sup>) and [predicative] (from Pred<sup>0</sup>).

With a verb, the Case-featural bundle becomes more complex. The Case feature assigned by the v<sup>0</sup> introducing the eventuality argument of the verb will be dubbed [eventive].



How does a complex Case-feature bundle receive a morphonological realization?

#### (16) The Morphology of Case

- a. The underlying morphological case is a combination of (privative) features rather than a single feature (cf. Jakobson 1936/1971, Neidle 1982, Halle 1994, Halle and Vaux 1997)
- b. The PF realization of a given bundle of Case features (the surface case) is resolved by language-specific vocabulary insertion rules, whose key properties are impoverishment and underspecification (see Halle and Marantz 1993, 1994).

NB: Maling and Sprouse 1995 also suggest that (26a) applies in syntax, but the details of their proposal are completely different. The hypothesis that Case corresponds to an uninterpretable counterpart of an interpretable feature is also found in Pesetsky and Torrego 2001, 2004, in print and Bailyn 2004.

The predicate case pattern in Russian can be resolved by the following vocabulary insertion rules:

#### (17) Vocabulary insertion rules (a fragment):

- [nominative] → NOM
- [accusative] → ACC
- [predicative, eventive] → INSTR

NB: The labels ACC, NOM, etc., should be taken as referring to the actual lexical entries – as vocabulary insertion rules for those are considerably more complex due to the interaction with gender and number, and also subject to impoverishment, I use simplified representations here.

The standard Case Theory has little to say on the subject:

- if Case can be assigned to the complement and instrumental is assigned by  $\text{Pred}^0$ , present tense predication must involve a different  $\text{Pred}^0$  or none at all (see below)
- if Case cannot be assigned to the complement, locality issues arise: the subject of a small clause, being structurally higher than its predicate, necessarily intervenes. If instrumental is assigned to the entire small clause, it would interfere with Case-assignment to the subject

The proposed system crucially makes use of the notion of **morpho-syntactic derivation**

#### 4.4. Summary

It seems that both Case-agreement and predicative Case assignment can be handled by the standard Case Theory if Case-assignment to a complement (i.e., feature-checking at MERGE) is permitted. However, even with this assumption there is a heavy price to pay:

- Checking of two bundles of uninterpretable features against each other should be allowed
- Relativized Minimality should be revised to block intervention from the small clause subject (if Case is assigned directly to the small clause predicate) or from the small clause itself (if it receives Case)

Unfortunately, even in this case the standard Case Theory is unable to deal with languages where more than one Case can be assigned to a small clause predicate

#### 5. FINNISH

Stassen 2001, Fong 2003: Finnish has semantically determined Case-marking on predicates: in resultatives and with change-of-state verbs (*become*, *remain*, and naming verbs) translocative case is used instead of the default predicative Case (essive).

NB: Finnish also uses nominative with *be*, but arguably this is not predication

- (18) a. Toini on sairaa-na. Finnish  
 Toini.NOM be.3SG ill-ESS  
*Toini is ill.*
- b. Me maalas-i-mme seinä-n keltaise-ksi.  
 we paint-PST-1PL wall-ACC yellow-TRS  
*We painted a/the wall yellow.*

How is translative assigned?

### 5.1. Change of state

It is clear that in the structure of a change-of-state verb **an aspectual component (BECOME) must be present**.

Hypothesis: The element with the change-of-state meaning is responsible for translative case assignment.

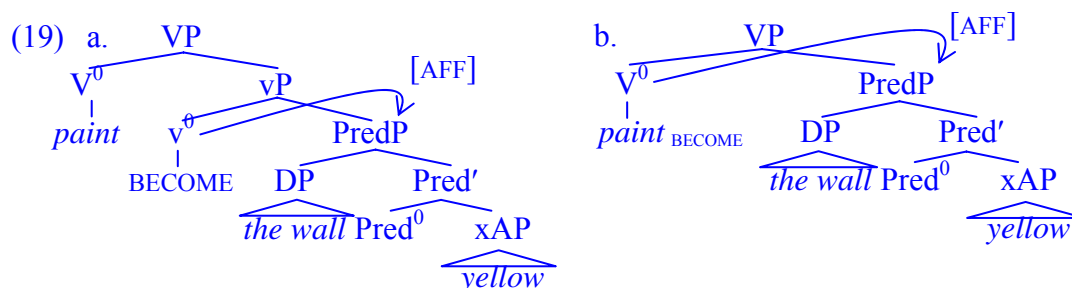
Where in the structure is this element?

Two possibilities:

- the complement of a change-of-state verb contains an aspectual  $v^0$  head BECOME (19a)
- a change-of-state verb bears an aspectual feature [BECOME] (19b).

The BECOME component is responsible for the assignment of the [affected] Case feature.

NB: To simplify the representations, the causative component of such structures is set aside here.



Under the assumption that  $\text{Pred}^0$  assigns the Case feature [predicative] as before, the relevant fragment of vocabulary insertion rules for Finnish could look as follows:

(20) **Vocabulary insertion rules (a fragment):**

- [predicative, affected] → TRS
- [predicative] → ESS
- [nominative] → NOM
- [accusative] → ACC

As a result, translative is more marked than essive

The presence of the [affected] feature does not affect the realization of the direct cases

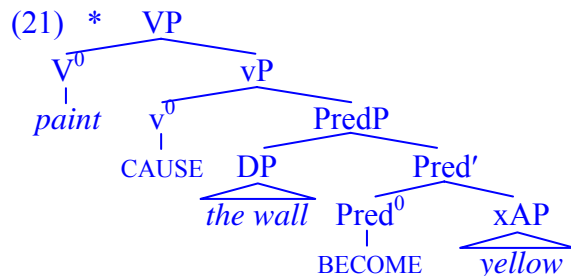
### 5.2. The BECOME $\text{Pred}^0$

Two possible alternatives:

- change-of-state verbs c-select a special  $\text{Pred}^0$ , which assigns [translative] and has the semantics of BECOME
- change-of-state verbs c-select a special  $\text{Pred}^0$ , which assigns [translative] and has the regular small clause semantics (brute force approach)



Can BECOME be the head of the **change-of-state small clause**:



If the verb *become* itself projects the BECOME component inside its small clause complement, then *become* has no semantics at all and cannot be differentiated from *be*.

NB: If the change-of-state Pred<sup>0</sup> incorporates into a (light) matrix verb, with the resulting complex spelled out as *become* (or *make*), extending this view to *remain* and naming verbs and to the resultative construction seems to be problematic.

For the resultative construction, it means encoding the change-of-state semantics twice: once in lexical entry for the embedding verb and once inside the small clause. In essence, it would mean replicating on Pred<sup>0</sup> the intuitive distinction between the “dynamic” verbs in the *elect*, *nominate*, *make*, etc., class and the “static” verbs in *seem*, *consider*, etc., class.

Conclusion: this structure is dispreferred for semantic reasons as well.

### 5.3. Overt predictors

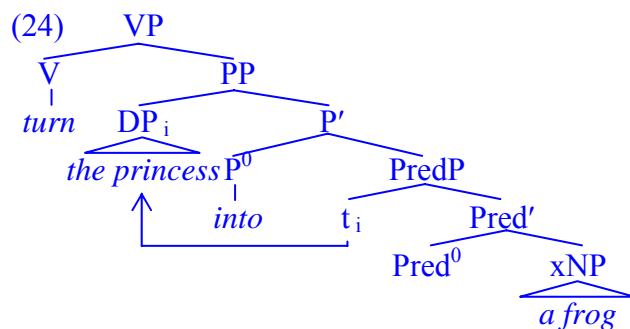
Aarts 1992, Bowers 1993, Bailyn 2001, 2002, den Dikken 2006b, etc.: the head of the small clause (Pred<sup>0</sup>) may be overt:

- (22) a. They regarded the proposal **as** foolish.  
 b. The little girl was treated **like** a VIP.  
 c. Abby was promoted **to** chairman.  
 d. Claire took Diana **for** an idiot.  
 e. The magician turned the princess **into** a frog.

Change-of-state in particular co-occurs with a directional preposition, which plays an active semantic role – it seems that in English, a directional preposition is used only if the meaning of the main verb is not itself compatible with propositional content:

- (23) a. The queen made her lover (**#into/\*to**) a treasurer.  
 b. Lou became (**\*into/\*to**) a professor.

Therefore, the directional preposition is not the head of the small clause, but rather takes the small clause (denoting the final state of affairs) as a complement, with subsequent movement of the subject (Sportiche 1995, Starke 1995):



We conclude that “overt predictors” do not disprove our analysis.

## 6. CONCLUSION

The standard Case Theory is extremely restricted in its scope and has nothing to say about the vast majority of Case phenomena.

I proposed a new Case Theory and showed that it can account not only for the standard facts but also for predicate case-marking:

- Case-agreement results from Case-assignment by  $v^0$  or  $T^0$  to its complement
- Predicative case feature is assigned by the head of the small clause
- Change-of-state case is a combination of predicative case and the case assigned by the BECOME component
- The surface case is determined by language-specific vocabulary insertion rules and may not reflect all the case-features assigned to the term (syncretism)

The proposal that syntactic Case can be decomposed permits to reconnect the syntactic Case Theory to morphological case feature systems (Jakobson 1936/1971, Halle 1994, Halle and Vaux 1997). Combined with standard DM assumptions about vocabulary insertion, the new Case Theory lends further support to the elimination of paradigms (Bobaljik 2002).

**Parameterization of Case assignment to predicates** results from the combination of (a) the ability of a given head to assign Case, and (b) vocabulary insertion rules

Importantly, the proposed Case Theory crucially relies on the hierarchical nature of language: case assigned to a given maximal projection is a reflection of the structure embedding it.

We also obtain a principled view of Case-marking as a redundancy-increasing method of marking the derivational history of a tree on its leaves, which makes it clearer why Case-marking may be absent or underspecified

Case-assignment to missing arguments ceases to be a problem

I leave inherent Case out of the picture, but there exists a simple adjustment to the theory that permits us to account for it without any additional stipulations

## 7. BONUS TRACK 1: CASE-STACKING

Mel'čuk 1985, Babby 1987, Franks 1994, etc.: Case marking in a Russian **xNP containing a cardinal** depends on the case assigned to that xNP:

- (25) a. *tridcat' šagov* direct case: genitive under cardinal  
thirty NOM/ACC steps GEN
- b. *tridcat'ju šagami* instrumental case: instrumental throughout  
thirty INSTR steps INSTR
- c. *v tridcati šagax*  
in thirty LOC steps LOC

If the xNP is assigned nominative or accusative, the lexical NP is case-marked by the cardinal (usually genitive); if the xNP is assigned an oblique case, the lexical NP is marked with that case.

**Genitive of negation** (Babby 1980, Pesetsky 1982, etc., etc.): roughly, for indefinite direct objects and some subjects accusative/nominative changes to genitive under negation:

- (26) a. *Moroz ne čuvstvovalsja.*  
frost-NOM.M.SG NEG be.felt-M.SG  
*The frost was not felt.*

- b. Moroza ne čuvstvovalos'.  
frost-GEN.M.SG NEG be.felt-N.SG  
*No frost was felt (there was no frost).*' (Babby 1980:59)

If structural case is assigned in a certain configuration, how is this assignment overridden in the standard Case Theory? The stacking approach advocated here offers a natural algorithm

## 8. BONUS TRACK 2: DIRECTIONAL AND LOCATIVE CASES

The Case assigned by certain prepositions depends on whether the preposition is interpreted as directional or locative (Bierwisch 1988, Zwarts 2005, 2006, den Dikken 2006a).

German: locative = dative, directional = accusative

- (27) a. Alex tanzte in das Zimmer. German (Zwarts 2006)  
Alex dance-PST in the-ACC room  
*Alex danced into the room.*  
b. Alex tanzte in dem Zimmer.  
Alex dance-PST in the-DAT room  
*Alex danced in the room.*

Latin: locative = locative, directional = accusative

- (28) a. Sub imperium Romanum Gallia cecidit. Latin  
under rule-ACC Roman-ACC Gaul fall-PRET  
*Gaul fell under the Roman rule.*  
b. Multos annos Gallia sub imperio Romano fuit.  
many years Gaul under rule-LOC Roman-LOC be-PRET  
*For many years Gaul was under Roman rule.*

NB: In general, the locative in Latin is realized as ablative, but for some words a dedicated form exists

Russian: locative = locative (prepositional) or instrumental, directional = accusative

- (29) a. Marina sprjatala knigu pod stol. Russian  
Marina hid book under table-ACC  
*Marina hid the book under the (surface of the) table.*  
b. Marina sprjatala knigu pod stolom.  
Marina hid book under table-INSTR  
*Marina hid the book (somewhere) under the table.*  
(30) a. Marina bežit v gorod.  
Marina runs in city-ACC  
*Marina is running to the city.*  
b. Marina bežit v gorode.  
Marina runs in city-LOC  
*Marina is running in the city.*

How are the different cases assigned?

Can it be accidental homophony?

- There are ten or so prepositions involved in German
- In Latin, the same split is observed in the verbal domain

- (31) a. Caesar nuntium misit Athenas.  
Caesar messenger sent Athens-ACC  
*Caesar sent a messenger to Athens.*

- b. Aristophanes natus est Athenis.  
Aristophanes born is Athens-LOC  
*Aristophanes was born in Athens.*

The standard story whereby Case is assigned by some head or another fares pretty badly with respect to these facts even if we assume (with Svenonius 2003) that it is not  $P^0$  that assigns Case, but the functional head taking PP as the complement (because verbs do this too)

### 8.1. Paths

Bierwisch 1988, Koopman 2000, Tungseth 2003, Zwarts 2005, among others: directional PPs are more complex (semantically and/or syntactically)

Bierwisch 1988: directional prepositions are specified [+ dir]

Koopman 2000: for directional interpretation, a locative PP must be contained in the functional projection PathP

Zwarts 2005: directional PPs contain a Path function, in addition to the location

Problems with these stories:

- Standard Case Theory: if P assigns Case, how can the directional accusative ever be assigned?
- New Case Theory: **the more marked case appears in a less complex structure**

Zwarts 2006: dative is a *less* marked case inside German PPs: it is more frequent and more heterogeneous in its meaning.

- This cannot be true for Russian locative: though locative can *only* be used inside PPs, the case that appears with most prepositions is genitive. In fact, accusative of direction alternates not only with the locative case (*v* 'in', *na* 'on') but also with the instrumental case (*pod* 'under' and *za* 'behind')
- In view of the same pattern of case marking attested for Latin verbs in (31), this hypothesis is dubious. It also excludes a general markedness ranking for Cases in a given language, and the fact that we have the same Case markings inside and outside PPs becomes accidental.

### 8.2. Places

den Dikken 2006a: a locative PP is contained in the projection of a PlaceP, while a directional one is contained in a PathP

Kracht 2002: a locative PP is semantically decomposed into the structure [M [L DP]], where M specifies the mode (stative, co-initial, co-final, transitory or approximative) and [L DP] denotes the location

The new Case Theory is fully compatible with these stories: either P assigns no Case and it is the outer functional layer that does, or P assigns a Case and it combines with whatever Case is assigned by the outer functional layer, or [...]

Problem with these stories: **why are some prepositional cases more marked than others?**

### 8.3. Adjuncts

Directional PPs are less marked than locative ones: **directional PPs must be arguments**

Tungseth 2003: directional PPs are complements of V, while locative PPs are adjoined to vP

Kracht 2002: directional PPs can appear DP-internally only with event-denoting nominals; no such restriction is placed on locative PPs

Possible proposal: non-directional locative PPs are introduced by a functional projection that makes them modifiers rather than predicates. It is the head of this projection that assigns the

Case features that in combination with the Case features assigned within the locative PP yield the surface dative/locative/instrumental

Confirmation: the two complex locative prepositions in Russian:

- (32) a.    *iz*            *korobki*  
         out of/from box-GEN  
         *out of/from the box*
- b.    *pod*        *korobku/korobkoj*  
         under box-ACC/box-INSTR  
         *under the box*
- c.    *za*          *korobku/korobkoj*  
         behind box-ACC/box-INSTR  
         *behind the box*
- d.    *iz- pod*    *korobki/\*korobku/\*korobkoj*  
         from under box-GEN/box-ACC/box-INSTR  
         *from under the box*
- e.    *iz- za*      *korobki/\*korobku/\*korobkoj*  
         from behind box-GEN/box-ACC/box-INSTR  
         *from behind the box*

The Case assigned by the complex prepositions *iz-pod* ‘from under’ and *iz-za* ‘from behind’ is that assigned by the preposition *iz* ‘from’ and it is genitive (which might be more marked than accusative but less marked than instrumental). This suggests that locative cases are not assigned by the locative preposition

NB: Russian also has the archaic complex preposition *po-nad* ‘lit., over-on’, which assigns the same case as its second member (instrumental), despite the fact that the first member assigns a less marked case (dative). I have no idea what this preposition really means in modern Russian, but it feels more like asyndetic coordination than stacking

Since **the locative/directional case split can occur outside PPs** (in Latin), the intuition that the preposition is not entirely to blame for locative case assignment seems sound. Moreover, the fact that **the case assigned in argument/directional PPs is accusative** suggests that it is assigned by the verb

Problems with this story:

- the case assigned depends on the preposition in locative PPs but not in directional PPs: this means that the directional accusative might be a complex case
- locative PPs can also be predicates and maybe even arguments

- (33) a.    *Alice is in Paris.*  
      b.    *Alice lives in Paris.*

A completely different approach would be that case features assigned by a preposition can be overridden by the external domain. Some such assumption would be necessary to deal with English pseudo-passives:

- (34) a.    *Beth was taken advantage of.*  
      b.    *The bed wasn’t slept in.*

Finally, why do some prepositions show no case alternation (e.g., *pered* ‘before, in front of’ with instrumental)? Why do most prepositional cases (e.g., genitive or dative) *not* alternate?

To be continued...

## 9. REFERENCES

- Aarts, Bas. 1992. *Small clauses in English: The nonverbal types*. Berlin: Mouton de Gruyter.
- Babby, Leonard H. 1980. The syntax of surface case marking. In *Cornell Working Papers in Linguistics 1*, ed. by Wayne Harbert and Julia Herschensohn, 1-32.
- Babby, Leonard H. 1987. Case, pre-quantifiers, and discontinuous agreement in Russian. *Natural Language & Linguistic Theory* 5.
- Bailyn, John. 2001. The syntax of Slavic predicate Case. *ZAS Papers in Linguistics* 22, 1-26.
- Bailyn, John. 2002. Overt Predicators. *Journal of Slavic Linguistics* 10, 23-52.
- Bailyn, John. 2004. The Case of Q. In *Formal Approaches to Slavic Linguistics 12: The Ottawa Meeting*, ed. by Olga Arnaudova, Wayles Browne, Maria-Luisa Rivero and Danijela Stojanovic. Ann Arbor, Michigan: Michigan Slavic Publications.
- Bailyn, John, and Barbara Citko. 1999. Case and agreement in Slavic predicates. In *Formal Approaches to Slavic Linguistics 7: The Seattle Meeting*, ed. by Katarzyna Dziwirek, Herbert S. Coats and Cynthia Vakareliyska, 17-37. Ann Arbor, Michigan: Michigan Slavic Publications.
- Bailyn, John, and Edward J. Rubin. 1991. The unification of Instrumental case assignment in Russian. In *Cornell Working Papers in Linguistics 9*, ed. by A. Toribio and Wayne Harbert, 99-126. Ithaca, New York: Department of Modern Languages and Linguistics, Cornell University.
- Bierwisch, Manfred. 1988. On the grammar of local prepositions. In *Syntax, Semantik und Lexikon*, ed. by Manfred Bierwisch, Wolfgang Motsch and Ilse Zimmermann. *Studia Grammatica* XXIX, 1-65. Berlin: Akademie.
- Bobaljik, Jonathan David. 2002. Syncretism without paradigms. Remarks on Williams 1981,1994. In *Yearbook of Morphology 2001*, ed. by Geert Booij and Jaap van Marle, 53-85. Dordrecht: Kluwer.
- Boeckx, Cedric, and Norbert Hornstein. 2006. Control in Icelandic and theories of control. *Linguistic Inquiry* 37, 591-606.
- Bowers, John. 1993. The syntax of predication. *Linguistic Inquiry* 24, 591-656.
- Cecchetto, Carlo, and Renato Oniga. 2004. A challenge to null Case theory. *Linguistic Inquiry* 35, 141-149.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam. 1986. *Knowledge of Language*. New York: Praeger.
- Chomsky, Noam. 1993. A minimalist program for linguistic theory. In *The View from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. by Kenneth Hale and Samuel Jay Keyser. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels and Juan Uriagereka. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: a Life in Language*, ed. by Michael Kenstowicz, 1-52. Cambridge, Mass.: MIT Press.
- Chomsky, Noam, and Howard Lasnik. 1993. The theory of principles and parameters. In *Syntax: an international handbook of contemporary research 1*, ed. by Joachim Jacobs, Arnim von Stechow, Wolfgang Sternefeld and Theo Vennemann, 506- 569. Berlin: W. de Gruyter.
- Comrie, Bernard S. 1997. The typology of predicate case marking. In *Essays on Language Function and Language Type Dedicated to T. Givón*, ed. by Joan Bybee, John Haiman and Sandra A. Thompson, 39-50. Amsterdam: John Benjamins.
- den Dikken, Marcel. 2006a. On the functional structure of locative and directional PPs. Ms., CUNY Graduate Center.
- den Dikken, Marcel. 2006b. *Relators and linkers: The syntax of predication, Predicate Inversion, and copulas*. Cambridge, Massachusetts: MIT Press.
- Fong, Vivienne. 2003. Resultatives and depictives in Finnish. In *Generative Approaches to Finnic and Saami Linguistics*, ed. by Diane Nelson and Satu Manninen. Stanford: CSLI.
- Frampton, John, and Sam Gutmann. 2000. Agreement is feature sharing. Ms., Northeastern University.

- Franks, Steven. 1994. Parametric properties of numeral phrases in Slavic. *Natural Language & Linguistic Theory* 12, 597-674.
- Geist, Ljudmila. 1998. Kopulaverben und Prädikativkonstruktionen: ein deutsch-russischer Vergleich, MA thesis, Humboldt Universität zu Berlin
- Geist, Ljudmila. 1999. Kopula *byt'* (sein) eine funktionale und/oder eine lexikalische Kategorie? *ZAS Papers in Linguistics* 14, 1-39.
- Halle, Morris. 1994. The morphology of numeral phrases. In *Annual Workshop of Formal Approaches to Slavic Linguistics: The MIT Meeting*, ed. by Sergey Avrutin, Steven Franks and Ljiljana Progovac, 178-215. Ann Arbor, Michigan: Michigan Slavic Publications.
- Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The View from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. by Kenneth Hale and Samuel Jay Keyser, 111-176. Cambridge, Mass.: MIT Press.
- Halle, Morris, and Alec Marantz. 1994. Some key features of Distributed Morphology. In *Papers on phonology and morphology*, ed. by Andrew Carnie and Heidi Harley. *MIT Working Papers in Linguistics* 21, 275-288. Cambridge, Mass.: MIT, Department of Linguistics and Philosophy, MITWPL.
- Halle, Morris, and Bert Vaux. 1997. Theoretical aspects of Indo-European nominal morphology: the nominal declensions of Latin and Armenian. In *Mír Curad: Studies in Honor of Calvert Watkins*, ed. by Jay Jasanoff, H. Craig Melchert and Lisi Oliver, 223-240. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- Jakobson, Roman. 1936/1971. Beitrag zur Allgemeinen Kasuslehre. Gesamtbedeutungen der Russischen Kasus. In *Selected Writings* 2, 23-71. The Hague: Mouton.
- Koopman, Hilda. 2000. Prepositions, postpositions, circumpositions, and particles. In *The Syntax of Specifiers and Heads*, ed. by Hilda Koopman, 204-260. London: Routledge.
- Koopman, Hilda. 2006. Agreement configurations: In defense of "Spec head". In *Agreement Systems* ed. by Cedric Boeckx. *Linguistik Aktuell/Linguistics Today* 92, 159-199. Amsterdam: John Benjamins.
- Kracht, Marcus. 2002. On the semantics of locatives. *Linguistics and Philosophy* 25, 157-232.
- Landau, Ilan. 2004. The scale of finiteness and the calculus of control. *Natural Language & Linguistic Theory* 22, 811-877.
- Madariaga, Nerea. in progress. New Case Relations in Old and Present-day Russian (and the role of peripheral-core syntactic interactions in grammar change), Doctoral dissertation, University of the Basque Country. Vitoria-Gasteiz.
- Maling, Joan, and Rex A. Sprouse. 1995. Structural case, specifier-head relations, and the case of predicate NPs. In *Studies in Comparative Germanic Syntax*, ed. by Hubert Haider, Susan Olsen and Sten Vikner, 167-186. Dordrecht: Kluwer.
- Marantz, Alec. 1991. Case and licensing. In *Proceedings of ESCOL '91*, ed. by German Westphal, Benjamin Ao and Hee-Rahk Chae, 234-253. Columbus, Ohio: Department of Linguistics at OSU.
- Matushansky, Ora. 2000. The instrument of inversion: Instrumental case in the Russian copula. In *Proceedings of the 19th West Coast Conference on Formal Linguistics*, ed. by Roger Billerey and Brook Lillehaugen, 101-115. Somerville, MA: Cascadilla Press.
- Mel'čuk, Igor. 1985. *Poverxnostnyj sintaksis russkix chislitel'nyx vyraženij*. Wiener slawistischer Almanach. Sonderband 16. Vienna: Institut für Slawistik der Universität Wien.
- Mel'čuk, Igor. 1986. Toward a definition of case. In *Case in Slavic*, ed. by Richard D. Brecht and James S. Levine, 35-85. Columbus, Ohio: Slavica.
- Neidle, Carol. 1982. Case agreement in Russian. In *The mental representation of grammatical relations*, ed. by Joan Bresnan. Cambridge, Massachusetts: MIT Press.
- Nichols, Johanna. 1981. *Predicate nominals: A partial surface syntax of Russian*. Berkeley: University of California Press.
- Owens, Jonathan. 1985. *A Grammar of Harar Oromo (northeastern Ethiopia)*. Kuschitische Sprachstudien 4. Hamburg: Helmut Buske.

- Pereltsvaig, Asya. 2001. On the Nature of Intra-Clausal Relations: A Study of Copular Sentences in Russian and Italian, Doctoral dissertation, McGill.
- Pesetsky, David. 1982. Paths and Categories, Doctoral dissertation, MIT.
- Pesetsky, David, and Esther Torrego. 2001. T-to-C movement: causes and consequences. In *Ken Hale: a Life in Language*, ed. by Michael Kenstowicz, 355-426. Cambridge, Mass.: MIT Press.
- Pesetsky, David, and Esther Torrego. 2004. Tense, case, and the nature of syntactic categories. In *The Syntax of Time*, ed. by Jacqueline Guéron and Jacqueline Lecarme. Cambridge, Massachusetts: MIT Press.
- Pesetsky, David, and Esther Torrego. in print. The syntax of valuation and the interpretability of features. In *Phrasal and Clausal Architecture: Syntactic derivation and interpretation*, ed. by Simin Karimi, Vida Samiian and Wendy K. Wilkins. *Linguistik Aktuell/Linguistics Today* 101, 262-294. Amsterdam: John Benjamins.
- Rothstein, Robert A. 1986. Equation and ascription: the Nominative/Instrumental opposition in West Slavic. In *Case in Slavic*, ed. by Richard D. Brecht and James S. Levine, 312-322. Columbus, Ohio: Slavica.
- Sigurðsson, Halldór Á. 1991. Icelandic Case-marked PRO and the licensing of lexical arguments. *Natural Language & Linguistic Theory* 3, 327-363.
- Sportiche, Dominique. 1995. French predicate clitics and clause structure. In *Small Clauses*, ed. by Anna Cardinaletti and Maria-Teresa Guasti. *Syntax and Semantics* 28, 287-324. New York: Academic Press.
- Starke, Michal. 1995. On the format of small clauses. In *Small Clauses*, ed. by Anna Cardinaletti and Maria-Teresa Guasti. *Syntax and Semantics* 28, 237-269. New York: Academic Press.
- Stassen, Leon. 2001. Nonverbal predication in the Circum-Baltic languages. In *Grammar and Typology* 2, ed. by Östen Dahl and Maria Koptjevskaja-Tamm, 569-590. Amsterdam: John Benjamins.
- Stowell, Timothy A. 1981. Origins of Phrase Structure, Doctoral dissertation, MIT.
- Svenonius, Peter. 2003. Limits on P: Filling in holes vs. falling in holes. In *Proceedings of the 19th Scandinavian Conference of Linguistics*, ed. by Anne Dahl, Kristine Bentzen and Peter Svenonius. *Nordlyd* 31.2, 431-445. Tromsø: University of Tromsø.
- Svenonius, Peter. to appear. Case alternations in the Icelandic passive. In *Passives and Impersonals in European Languages*, ed. by Satu Manninen, Diane Nelson, Katrin Hiietam, Elsi Kaiser and Virve Vihman. Amsterdam: John Benjamins.
- Tungseth, Mai. 2003. Two structural positions for locative and directional PPs in Norwegian motion constructions. In *Proceedings of the 19th Scandinavian Conference of Linguistics*, ed. by Anne Dahl, Kristine Bentzen and Peter Svenonius. *Nordlyd* 31.2, 473-487. Tromsø: University of Tromsø.
- Vergnaud, Jean-Roger. 1982. Dépendances et niveaux de représentation en syntaxe, Thèse de doctorat d'état, Université de Paris VII.
- Wierzbicka, Anna. 1980. *The Case for Surface Case*. Ann Arbor, MI: Karoma.
- Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language & Linguistic Theory* 3, 441-483.
- Zwarts, Joost. 2005. The case of prepositions: Government and compositionality in German PPs. Paper presented at *Israel Association for Theoretical Linguistics* 21, The Technion, Haifa.
- Zwarts, Joost. 2006. Case marking direction: The accusative in German PPs. Paper presented at *CLS* 42, Chicago.

