Ora Matushansky, UiL OTS/Utrecht University/CNRS/Université Paris-8 email: O.M.Matushansky@uu.nl

#### SOME CASES OF RUSSIAN FDSL 7.5, Moscow, December 6-8, 2008

Evidence for multiple Case-assignment in Russian:

- predicate case
- genitive of negation
- accusative syncretism
- case-assignment with cardinals
- locative and directional prepositions
- circumstantial cases

Morphological evidence points at the complex nature of case (Jakobson 1936/1971, etc., etc.)

How is this reflected in syntax?

**Proposal**: a rearrangement of pieces:

- (i) There are no special Case features. Instead, Case corresponds to uninterpretable counterparts of interpretable features (Pesetsky and Torrego 2001, 2004, in print, Bailyn 2004, Pesetsky 2008)
- (ii) Structural Case is assigned by a head to its sister and percolates down (cf. Stowell 1981). An xNP can thus have more than one Case (cf. Merchant 2006, Caha 2007 and Richards 2007)
- (iii) The resulting bundles of uninterpretable features are spelled out by Vocabulary Insertion rules and thus characterized by such standard effects as impoverishment and underspecification (cf. Halle and Marantz 1993, 1994)

#### **1. PREDICATE CASE**

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

Latin: Case-agreement

Russian: predicative case

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

- (2) a. Ciceronem clarum habent. 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. I consider her-ACC linguist-INSTR I consider her a linguist.

Acknowledgments: Many thanks to Morris Halle, Kyle Johnson, Hilda Koopman, David Pesetsky and Eddy Ruys for their suggestions and comments. I am also grateful to Liina Pylkkänen and Elsi Kaiser for the Finnish data, and to audiences at Paris 8, GGCxG, Paris 7, university of Nijmegen, MUST and MIT for their questions and comments.

- b. Ona vernulas' krasavicej. she came back beauty-INSTR *She came back a beauty.*
- (4) a. Toini on sairaa-na. 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.

#### **Issues:**

- How is Case-agreement achieved? What happens in languages that only manifest Case-agreement in part of the predicates (Georgian)?
- > How is predicate case assigned? What is the probe and what is the goal? Can  $\varphi$ -feature agreement realistically be involved, given that the predicate does not have a full set of  $\varphi$ -features?
- What happens in those languages where different cases are assigned to predicates in different syntactic or semantic environments (Russian, Finnish)?

#### Answer: multiple Case-assignment in syntax.

Further evidence that Case can be assigned to constituents larger than xNPs: Case-marking in Kayardild (Merchant 2006, based on Evans 2005) and Lardil (Richards 2007):

- (5) Ngada mungurru, [maku-ntha yalawu-jarra-ntha yakuri-naa-ntha I know woman-C.OBL catch-PAST-C.OBL fish-M.ABL-C.OBL thabuju-karra-nguni-naa-ntha mijil-nguni-naa-nth]. brother-GEN-INS-M.ABL-C.OBL net-INS-M.ABL-C.OBL I know that the woman caught the fish with brother's net.
  (6) Ngada kangka niween were-thuru-Ø wangalk-uru-Ø. Lardil I tell him.ACC throw-FUT-ACC boomerang-FUT-ACC
- I told him to throw the boomerang.

## Case-agreement in control infinitives:

- (7) 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. Quieto tibi licet esse. quiet-DAT you-DAT licit-is be-INF You are allowed to stay quiet.

This looks like concord, except it isn't inside an xNP. Since verbs can also be Case-marked, it seems the simplest hypothesis to assume that Case here is assigned to a constituent larger than a DP and percolates down

# 1.1. Case agreement

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

# Finnish: multiple predicative cases

(8) a. Hún er kennari/\*kennara. he is teacher-NOM/ACC *He is a teacher*.

Maling and Sprouse 1995 : Icelandic

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*.

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

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

- (i) Case features are assigned by a head to its complement
- (ii)  $\rightarrow$  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 are not separated from the assigner by a Case-barrier, an issue to be clarified) are Case-marked by percolation (unlike in Stowell's story).

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

Small clause Case-agreement:



NB: It's a standard assumption that raising and passive  $v^0$  does not assign Case

Lardil and Kayardild phenomena are treated straightforwardly.

NB: Note the appearance of the FUT marker on the adverb, suggesting that it behaves like a Case-marker. This could be a way of treating Affix Hopping for verbs.

Important: Case Theory has traditionally been drafted to account also for **the distribution of PRO**. As shown by Landau 2006, Landau 2007, PRO receives Case just like other xNPs and therefore cannot be argued to be constrained to appear in Caseless or Null-Case positions.

Case Theory has also been used to deal with **the choice of expletives** (*there* vs. *it* in English). However, it seems enough to just talk about agreement there.

#### **1.2.** Predicate case assignment

Russian predicate Case-marking depends on the presence of the verb:

Russian xNP and xAP predicates are marked with instrumental case

> except in the present tense primary predication, where they must be nominative

In Arabic, predicates are marked accusative, except in the present tense, where 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)

NB: With an overt *be*, the post-copular xNP or xAP can be either nominative or instrumental. Only instrumental marking corresponds to semantic predication (Rothstein 1986, Bailyn and Rubin 1991, Bailyn and Citko 1999, Pereltsvaig 2001, among others).

NB: It is usually claimed that Russian has not only instrumental depictives, but also Case-agreeing ones. It can be argued (Peshkovskij 1956, Pereltsvaig 2001) that agreeing "depictives" are really split xNPs

So Russian xNP and xAP predicates receive Case. How?

Usual reply (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

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

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

The present tense copular sentences can be shown to possess a predicative reading, as the non-predicative reading can be excluded pragmatically:

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

Isus byl \*plotnik/ $\checkmark$ plotnikom, a Magomet byl \*kupec/ $\checkmark$ 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?

Magdalina – 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?

Thus it is not Pred<sup>0</sup> that assigns predicative Case. Then what does? Solution: different wider syntactic environment for present tense copulas vs. elsewhere

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

(13) 
$$\begin{array}{c} TP \\ T^{0} \\ DP \\ Mary \\ Pred^{0} \\ a genius \\ \end{array} \left[ \begin{array}{c} \text{[PRED]} \\ \text{Pred} \\ \text{Pre$$

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

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



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

#### (15) The Morphology of Case

- a. The underlying morphological case is a combination of (privative) features rather than a single feature (cf. Jakobson 1936/1971, 1958/1984, Neidle 1982, Halle 1994, Halle and Vaux 1997)
- b. The PF realization of each particular 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 (15a) 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, Pesetsky 2008 and Bailyn 2004.

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

(16) Vocabulary insertion rules (a fragment): [nominative]  $\rightarrow$  NOM [accusative]  $\rightarrow$  ACC [predicative, eventive]  $\rightarrow$  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.

NB: If reduced relatives are really relatives and involve a PredP, the story incorrectly predicts that they should surface with instrumental, unless the relative  $C^0$  has particular blocking properties. But they could be attributive

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

- if Case can be assigned to the complement and instrumental is assigned by Pred<sup>0</sup>, present tense predication must involve a different Pred<sup>0</sup> or none at all
- 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 Caseassignment to the subject. And I shouldn't even mention φ-features...

The proposal that syntactic Case can be decomposed permits to reconnect the syntactic Case Theory to morphological case feature systems (Jakobson 1936/1971, 1958/1984, Halle 1994, Halle and Vaux 1997). Combined with standard DM assumptions about vocabulary insertion, the new Case Theory lends further support to the novel treatment of Case features as uninterpretable counterparts of the interpretable features of heads (Pesetsky and Torrego 2001, 2004, in print, Pesetsky 2008, Bailyn 2004).

### 2. GENITIVE OF NEGATION

**The phenomenon**: roughly, for non-specific direct objects and some subjects (the standard assumption is that the subject must be unaccusative) the accusative/nominative case changes to genitive under negation (Babby 1980, Pesetsky 1982, etc., etc.):

(17) 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:



(This tree structure corresponds to the standard assumption that genitive of negation happens only to underlying objects; there are some exceptions to this generalization)

On the assumption that genitive corresponds to the feature [Q] (Jakobson 1958/1984, Bailyn 2004), the system is rather straightforward:

(19)  $[Q] \rightarrow \emptyset / [\text{specific}][V]$ [accusative]  $\rightarrow ACC$ [Case]  $\rightarrow NOM$ 

However, accusative realization is not as simple as the syntax would lead us to assume.

#### **3.** ACCUSATIVE SYNCRETISM

Empirically: in two of the three Russian declension classes the accusative case coincides with nominative if the noun is inanimate and with genitive if it is animate.

Inanimate forms are easy to handle if nominative is the default case in Russian (cf. Jakobson 1936/1971, 1958/1984, Bobaljik 2002):

```
(20) [accusative] \rightarrow \phi / [-animate][II, III]
[Case] \rightarrow NOM
```

NB: Once again, these rules are a simplification

Jakobson 1958/1984: The six main Russian cases can be viewed as involving three features:

	Directionality	Quantification	Marginality
nominative	-	-	-
accusative	+	-	-
genitive	-	+	-
dative	+	-	+
locative	-	+	+
instrumental	-	-	+

Both nominative and accusative are **direct** cases ([-Q, -M]). Genitive and accusative are both **definite**. NB: This feature is not in Jakobson's list but he uses it nonetheless

```
(21) [directional] \rightarrow \emptyset / [-animate][II, III]
[definite] \rightarrow \emptyset / [+animate][II, III]
[+D, +M] \rightarrow LOC
[+D] \rightarrow DAT
[+M] \rightarrow INSTR
[-M] \rightarrow GEN
[Case] \rightarrow NOM
```

There cannot be anything deep here, because syncretism is not deep. In Georgian, accusative is merged with dative, so what?

Jakobson's system is insufficient, since surface accusative may correspond to more than one combination of syntactic Case features, but it gives us the first glimpse of the complexity of the problem

#### 4. CASE-ASSIGNMENT WITH CARDINALS

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:

direct case: genitive under cardinal	<i>tridcat' šagov</i> thirty NOM/ACC steps GEN	(22) a.
instrumental case: instrumental throughout	<i>tridcat'ju šagami</i> thirty INSTR steps INSTR	b.
locative case: locative throughout	<i>v tridcati šagax</i> in thirty LOC steps LOC	c.

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.

This pattern is predicted by (21):

(21) [directional]  $\rightarrow \emptyset / [-animate][II, III]$ [definite]  $\rightarrow \emptyset / [+animate][II, III]$ [+D, +M]  $\rightarrow LOC$ [+D]  $\rightarrow DAT$ [+M]  $\rightarrow INSTR$ [-M]  $\rightarrow GEN$ [Case]  $\rightarrow NOM$  As genitive is less specified than any of the other oblique cases, they take preference over it and successfully overwrite its featural specifications. Direct cases, on the other hand, do not affect the realization of the complex feature bundle involving oblique case features.

NB: This also accounts for the possibility of the approximative PP *okolo Num NP* 'about N NPs' in direct Case positions but not elsewhere (Corver and Zwarts 2004).

Unlike the genitive assigned by cardinals, genitive assigned by nouns cannot be overwritten externally. If Russian cardinals are deficient nouns (Ionin and Matushansky 2006) that do not block Case-assignment as do normal nouns, this fact can be derived.

Likewise, **paucal** is known to be very similar to genitive – if paucal numerals are even more deficient nouns (which they are, as they decline like adjectives and some of them even show agreement), the link is explained.

#### 5. DIRECTIONAL AND LOCATIVE PREPOSITIONS

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

(23)	a.	Marina sprjatala	knigu	pod	stol.		Russian
		Marina hid	book	under	table-ACC		
		Marina hid the book under the (surface of the) table.					

b.

- b. Marina sprjatala knigu pod stolom. Marina hid book under table-INSTR Marina hid the book (somewhere) under the table.
- (24) a. Marina bežit v gorod. Marina runs in city-ACC Marina is running to the city.

**German**: locative = dative, directional = accusative

- (25) a. Alex tanzte in das Zimmer. 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 NB: In general, the locative in Latin is realized as ablative, but for some words a dedicated form exists

(26)	a.	Sub imperium Romanum Gallia cecidit. 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.

How are the different cases assigned?

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)

- Marina bežit v gorode. Marina runs in city-LOC Marina is running in the city.
  - German (Zwarts 2006)

Latin

8

# 5.1. 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

Hypothesis: the surface accusative corresponds to a subset of the Case-features assigned by a directional prepositional complex:



Is there any evidence for Case-stacking here?

#### 5.2. Circumstantial cases of Russian

Can be seen with demonstratives and interrogatives (Garde 1998:265-269):

	distant ('there')	proximate ('here')	interrogative ('where)
inessive	t-am	z-des'	g-de
illative	t-udA	s'-udA	k-udA
ablative	ot-t-Uda	on-s'-Uda	ot-k-Uda
temporal	t-ogdA	tepEr'	k-ogdA

Setting aside the suppletive form *tepEr*' 'now' (Garde also puts in this cell the derived form *sejčas* 'now' (literally, 'this (very) hour')) and the irregular case endings in the inessive case (for the proximate, Garde also includes *tut* 'right here'), we are left with at least three more cases to the paradigm

NB: The main six cases are also available for these demonstratives and correspond to *to/tot* 'that', *èto/ètot* 'this' (or its archaic form *sej*) and *kto* 'who' and *čto* 'what' (and their archaic adjectival form *koj* 'which') respectively

The ablative form seems to contain the preposition *ot* 'from', which does not behave entirely like other prepositions with respect to stranding under negation. We set this "case" aside.

The noun dom 'home' also has an inessive form, doma, and an illative form, domoj.

For all other nouns the inessive is realized as accusative after the prepositions v 'in', *na* 'on', *pod* 'under' and *za* 'behind'. In Jakobson's system they clearly share the feature [directional]; the impoverishment of additional features of illative leads to this surface realization.

NB: Illative pronouns do not appear after prepositions; the only exception is the somewhat marked *v nikuda* 'in nowhere', as in 'a road to nowhere'

If inessive corresponds to a bundle of features, one of which is [directional], impoverishment of others will be sufficient to yield the surface accusative.

#### 6. LEXICAL (QUIRKY) CASES

Woolford 2006: **non-structural Cases can be lexical** (idiosyncratic, assigned by a particular lexical item) **or inherent** (associated with a particular theta-role)

In our Case Theory, lexical cases are simply **uninterpretable equivalents of specific lexical heads** (plus, potentially, everything else in the structure above them)

Example 1: Russian verbs of management assign instrumental case to their objects:

- (28) a. upravljat' \*fabriku/√fabrikoj manage-INF factory-ACC/INSTR
  - b. rukovodit' \*zavod/√zavodom direct-INF industrial plant-ACC/INSTR
  - c. pravit' \* stranu/√ stranoj rule-INF country-ACC/INSTR
- (29) Vocabulary insertion redundancy rules:  $[MANAGE, ACC] \rightarrow [INSTR]$

NB: There has to be some semantic similarity that is exploited here. Perhaps, there is a connection between the notion of management and the notion of an agent of passives.

Example 2: **the Russian verb** *xvatat*' **'to suffice'** assigns genitive to its object (and dative to its subject, but this is irrelevant here):

- (30) Nam xvataet \*rabota/\*rabotu/√raboty. us-DAT suffices work-NOM/ACC/GEN *We have enough work.*
- (31) Vocabulary insertion redundancy rules:  $[SUFFICE] \rightarrow [GEN]$

NB: As genitive is the case of quantification and part-whole relations in Russian, presumably it is this part of the meaning of the verb *suffice* that is exploited here.

In other words, if Cases are simply uninterpretable equivalents of interpretable, i.e., semantic, features, then a given root can (and perhaps must) function as a Case assigner. Depending on what vocabulary insertion redundancy rules say, some of these roots may be reflected in the surface morphological cases.

NB: In the best of all possible worlds, lexical cases are always correlated with some semantic features.

#### 7. **References**

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.
- Bowers, John. 1993. The syntax of predication. Linguistic Inquiry 24, 591-656.
- Caha, Pavel. 2007. Case Movement in PPs. In *Tromsø Working Papers on Language & Linguistics: Nordlyd 34.2, special issue on Space, Motion, and Result*, ed. by Monika Bašić, Marina Pantcheva, Minjeong Son and Peter Svenonius, 239-299. Tromsø: CASTL, University of Tromsø.
- Cecchetto, Carlo, and Renato Oniga. 2004. A challenge to null Case theory. *Linguistic Inquiry* 35, 141-149.
- 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.
- Corver, Norbert, and Joost Zwarts. 2004. Prepositional numerals. Lingua 116, 811-835.
- den Dikken, Marcel. 2006. On the functional structure of locative and directional PPs. Ms., CUNY Graduate Center.
- Evans, Nicholas. 2005. Multiple case in Kayardild: Anti-iconic suffix ordering and the diachronic filter. In *Double Case: Agreement by Suffixaufnahme*, ed. by Frans Plank, 396-428. Oxford: Oxford University Press.
- Franks, Steven. 1994. Parametric properties of numeral phrases in Slavic. Natural Language & Linguistic Theory 12, 597-674.
- Garde, Paul. 1998. *Grammaire russe: phonologie et morphologie (2nd edition)*. Paris: Institut d'études slaves.
- 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 *Mir Curad: Studies in Honor of Calvert Watkins.*, ed. by Jay Jasanoff, H. Craig Melchert and Lisi Oliver, 223-240. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- Ionin, Tania, and Ora Matushansky. 2006. The composition of complex cardinals. *Journal of Semantics* 23, 315-360.
- Jakobson, Roman. 1936/1971. Beitrag zur Allgemeinen Kasuslehre. Gesamtbedeutungen der Russischen Kasus. In *Selected Writings 2*, 23-71. The Hague: Mouton.
- Jakobson, Roman. 1958/1984. Morphological observations on Slavic declension (the structure of Russian case forms). In *Roman Jakobson: Russian and Slavic Grammar, Studies, 1931-1981*, ed. by Linda R. Waugh and Morris Halle, 105-133. Berlin: Mouton de Gruyter.
- Koopman, Hilda. 2000. Prepositions, postpositions, circumpositions, and particles. In *The Syntax of Specifiers and Heads*, ed. by Hilda Koopman, 204-260. London: Routledge.
- Landau, Idan. 2006. Severing the distribution of PRO from case. Syntax 9, 153-170.

- Landau, Ilan. 2007. Two routes of control: evidence from case transmission in Russian. Ms., Ben-Gurion University, Beer-Sheva.
- 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.
- 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.
- Merchant, Jason. 2006. Polyvalent case, geometric hierarchies, and split ergativity. In *Proceedings of the 42nd annual meeting of the Chicago Linguistics Society*, ed. by Jackie Bunting, Sapna Desai, Robert Peachey, Chris Straughn and Zuzana Tomkova. Chicago, Illinois: Chicago Linguistics Society.
- Neidle, Carol. 1982. Case agreement in Russian. In *The mental representation of grammatical relations*, ed. by Joan Bresnan. Cambridge, Massachusetts: MIT 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. 2008. Russian case morphology and the syntactic categories. Paper presented at *Midweek Syntax Utrecht Talks (MUST)*, Utrecht, May 21, 2008.
- 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.
- Peshkovskij, A. M. 1956. *Russkij sintaksis v nauchnom osveshchenii*. Moscow: Gosudarstvennoe uchebno-pedagogicheskoe izdatel'stvo ministerstva prosveshchenija RSFSR.
- Richards, Norvin. 2007. Lardil "case stacking" and the structural/inherent case distinction. Ms., MIT. Available at <u>http://ling.auf.net/lingBuzz/000405</u>.
- 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.
- 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.
- 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 2*, 473-487. Tromsø: University of Tromsø.
- Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37, 111-130.
- 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.