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

SPECIAL CASES
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Chomsky 1981, 1986: structural vs. non-structural Cases. The notion of **syntactic Case** (vs. morphological cases)

- ➢ What is Case?

- ➢ How does Case assignment to predicates work?

- ➢ What is the relation between syntactic Case and morphological cases?

- ➢ Why do structural, inherent and lexical cases coincide, i.e., why can accusative be assigned not only by v^0, but also by prepositions or to some adverbials?

- ➢ What is the relation between Case and prepositions?

This story is a rearrangement of pieces:

(i) There are no special Case features. Instead, Case corresponds to uninterpretable counterparts of interpretable features (cf. Pesetsky and Torrego 2001, 2004, in print, Pesetsky 2008, Bailyn 2004)

(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: 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

(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.

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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:

a. Chomsky 1981, Vergnaud 1982: *NP if NP is overt and has no Case

b. Chomsky 1986, 1993, Chomsky and Lasnik 1993: Case is required to render an NP visible for theta-role assignment

c. Chomsky 2000: Case is an uninterpretable feature, which is checked in the course of φ-feature valuation of a higher head (the probe). Unvalued Case features is what makes an xNP visible for agreement

(a) and (b) do not account for case-marked xAP predicates. (a) and (c) can be fixed to include xAPs for Case-agreement (Chomsky 2001) but have problems with locality and φ-features.

2. 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
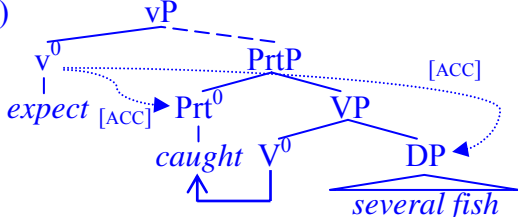*I believe her to be a teacher.*

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

Technical problem: requires probing by a non-head or a different mechanism of agreement

Bailyn 2001, Chomsky 2001: there is **no agreement in Case-agreement**; the two targets get Case separately

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

(6)   = [expect there to have been caught several fish]

When the matrix v^0 (or T^0) is merged, it first probes Prt^0 (which has by then agreed with the object DP and thus has φ-features) and values its Case. Then, since Prt^0 is not φ-complete (no person), v^0 probes again and values the case of the object DP
NB: We set aside here the interaction with the expletive and with Phase Theory

Such sequential feature-checking cannot work for small clauses, because the subject is or can be higher than the predicate (can be remedied by assuming that Case is assigned to PredP) and because the predicate may have the full set of φ-features (if it is an xNP)

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

(7)
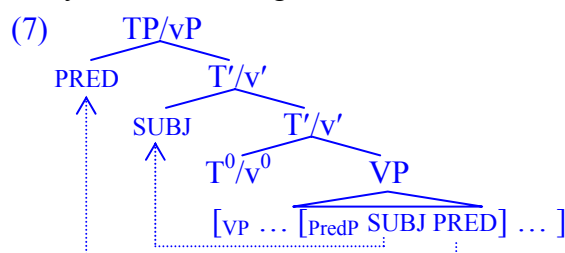
Requires the assumption that multiple feature checking is the default setting, does not explain why such multiple feature checking is not possible for several arguments (Pereltsvaig 2001)

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

(8) 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.

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 φ-features of the subject and the predicate are not the same**:

(9) 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.

It can, of course, be argued either that nominal predicates have no or deficient φ-features or that Case-assignment is not to the predicate itself but to the entire PredP, but the former runs into problems with predicate-internal concord and the latter is worse than my alternative

2.1. My alternative

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

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(10)   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 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.

## 2.2. The target of Case-assignment

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):

(11) Ngada mungurru, [maku-ntha   yalawu-jarra-ntha yakuri-naa-ntha   Kayardild
      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.

(12) 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.

This looks like concord, except it isn't in an xNP. Since verbs are also Case-marked, it seems the simplest hypothesis to assume that Case here is assigned to the entire CP and percolates

2.3. 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:

(13)
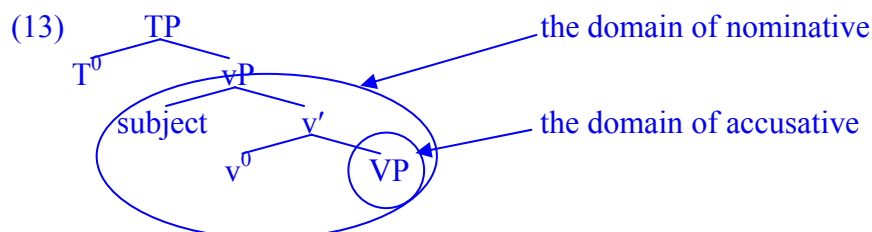
If v^0 does not assign Case, the object receives nominative (as with passives or raising verbs)

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.

Small clause Case-agreement:

(14) a.
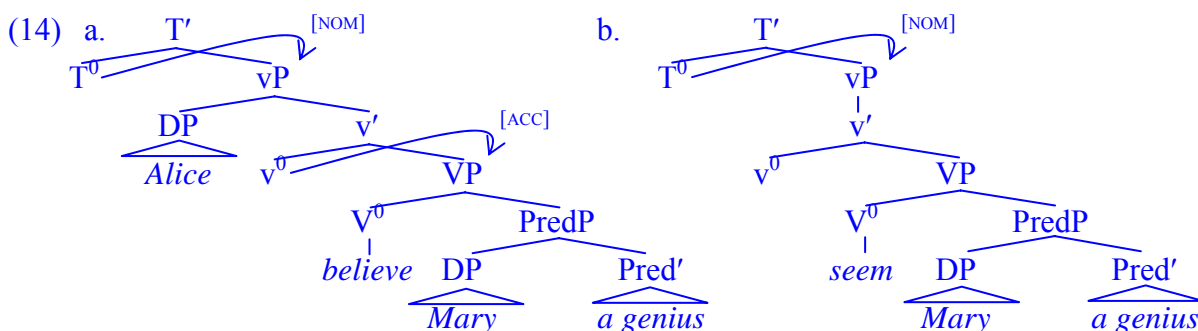
NB: It's a standard assumption that raising and passive v^0 does not assign Case

Case-agreeing depictives and semi-predicates are dealt with if they are merged to a position just below their controller (as adjuncts should) and therefore get the same bundle of Case-features as their Case-controller does. Some of them are remnants and floating quantifiers.

Case-agreement in control infinitives is treated in the same manner by assuming that a control infinitive is merged in the same Case domain as its controller and therefore receives the same Case. Control infinitives that receive their own Case (e.g., dative in Russian and nominative in Icelandic) have been assumed to have a special C (see Landau 2007 for discussion), which may assign additional Case-features.

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 is really enough to just talk about agreement there.

3.   PREDICATE CASE ASSIGNMENT

I have so far been unable to find an "ideal" predicate case (i.e., a case that marks predicates in any position). The following states of affairs are attested:

- Predicates are marked with a special case, except in the present tense, where they receive nominative (Russian, Arabic)

- Predicates are Case-marked differently depending on whether the embedding verb involves change of state (Finnish (Fong 2003), Hungarian, Estonian). This is a special case of a more general phenomenon:

- Predicates are marked with a special Case in some environments and show Case-agreement in others (Georgian, Serbo-Croatian), e.g., only secondary predicates agree in case.

In this section we will discuss two special cases: Russian and Finnish

3.1.   The presence of the verb: Russian

Russian predicate Case-marking is the minimal departure from the ideal:
- ➢   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): $Pred^0$

(15)

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              VP
         /          \
    V⁰              PredP  = small clause
    |            /         \
 consider    DP           Pred′
             |          /        \
            Mary     Pred⁰        xNP
                    [INSTR]      a genius
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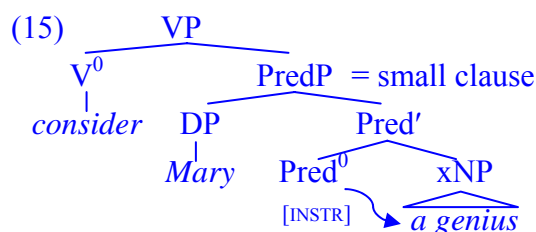
The head of the small clause, $Pred^0$, is the source of the instrumental case. Since $Pred^0$ is the head that converts its complement into a predicate, its presence in a small clause is obligatory
NB: Note the necessity of Case-assignment to the sister!

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

(16) a. Vera assistent.
         Vera assistant-NOM
         Vera is an assistant.

     b. *Vera assistentom.
         Vera assistant-INSTR

No theory asserting that $Pred^0$ 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)
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.
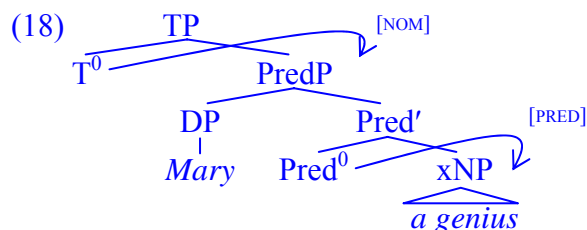
The present tense copular sentences can be shown to possess a predicative reading, as the non-predicative reading can be excluded pragmatically:

(17) 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?

         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 $Pred^0$ that assigns predicative Case**. Then what does?

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

(18)

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         TP                    [NOM]
      /      \
   T⁰         PredP
          /         \
        DP          Pred′       [PRED]
        |         /       \
       Mary    Pred⁰       xNP
                           a genius
```

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].

(19)
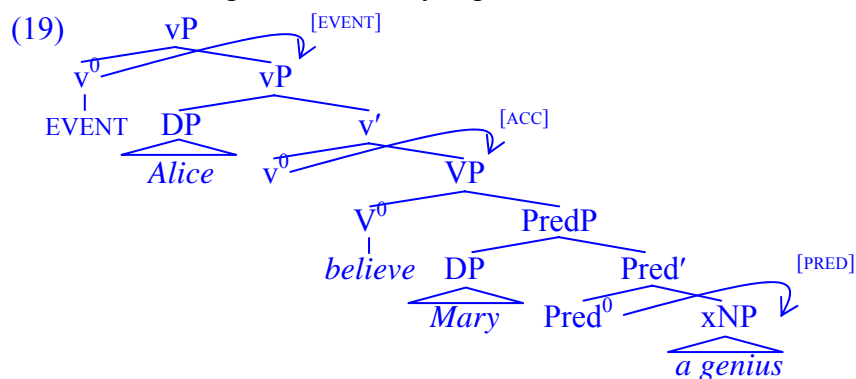
How does a complex Case-feature bundle receive a morphonological realization?

(20) 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 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 (20a) 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:

(21) 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.
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 $Pred^0$, present tense predication must involve a different $Pred^0$ 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 Case-assignment to the subject. And I shouldn't even mention φ-features…

3.2. Change of state: 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) translative case is used instead of the default predicative Case (essive).

NB: Finnish also uses nominative with *be*, but I set this aside for now.

(22) 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?

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 BECOME (23a)
 - a change-of-state verb bears an aspectual feature [BECOME] (23b).

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

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

(23) a.
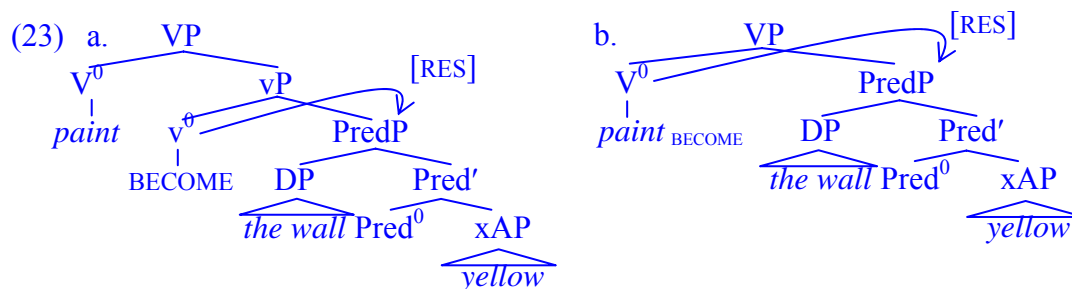
Under the assumption that Pred^0 assigns the Case feature [predicative] as before, the relevant fragment of vocabulary insertion rules for Finnish could look as follows:

(24) **Vocabulary insertion rules (a fragment):**
     [predicative, result] → TRS
     [predicative] → ESS
     [nominative] → NOM
     [accusative] → ACC

As a result, translative is more marked than essive

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

NB: 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*. If the change-of-state Pred^0 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. Assuming an additional Pred^0 head for dynamic predication is also problematic.

3.3. **Summary**

Russian facts cannot be handled on the assumption that $Pred^0$ is uniquely responsible for the assignment of predicate Case.

Finnish facts cannot be dealt with if there is only one null $Pred^0$. Actually, Finnish facts are even more complex than indicated above, since primary predication (with *be*) also involves Case alternation between nominative and essive (Stassen 2001).

There's no motivation for more than one $Pred^0$ in either language. In fact, the only motivation for $Pred^0$ here is Case-assignment, and this can be dealt with in a different way.

Multiple Case-assignment accounts for both issues with no further assumptions and permits us to treat various phenomena requiring Case-stacking (Merchant 2006, Caha 2007, Richards 2007).

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 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).

Parameterization of Case assignment to predicates results from the combination of (a) the presence of certain features on a given head, and (b) vocabulary insertion (redundancy) rules

4. 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:

(25) 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

(26) Vocabulary insertion redundancy rules:
      [MANAGE, ACC] → [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):

(27) Nam   xvataet *rabota/*rabotu/✓raboty.
      us-DAT suffices   work-NOM/ACC/GEN
      We have enough work.

(28) Vocabulary insertion redundancy rules:
      [SUFFICE] → [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.

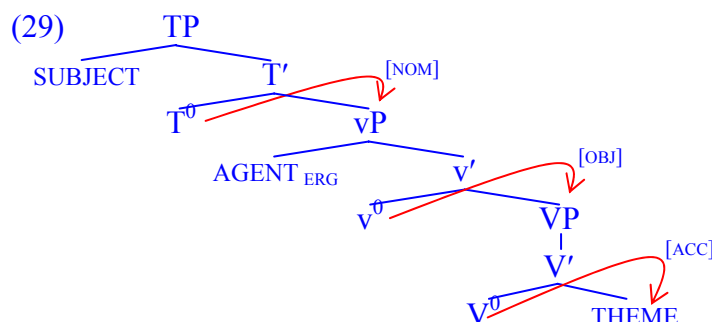## 5. THE ERGATIVE-ABSOLUTIVE CASE SYSTEMS

Multiple Case assignment deals very easily with ergative/nominative splits on the assumption (see Laughren 1989, 1992, Mahajan 1989, Harbert and Toribio 1991, Woolford 1993, 1997, 2001, 2006 and Nash 1994) that **ergative is an inherent Case**, assigned with the theta-role of an AGENT.

NB: We set aside for now the issue of how inherent Cases are assigned (see section 5.4)

Woolford 1997: there are up to four cases involved in a mixed language system:
  ➢ nominative: structural, assigned by T (Agr_s in her system)
  ➢ lexical accusative, assigned by V
  ➢ ergative: inherent, assigned with the theta-role of an agent
  ➢ structural accusative (objective): structural, assigned by v^0 (Agr_o in her system)

NB: Accusative can also be an inherent Case corresponding to the theta-role of the THEME.

(29)

Standard nominative-accusative languages turn out to involve features [nom] and [obj] (not [acc], because [acc] should persist under passivization in my system)

Ergative-absolutive systems, on the other hand, involve features [erg] and [obj]

Because multiple features are assigned to each DP, variation in their realization is predicted. Two kinds of splits are expected:
  ➢ some items can show syncretism for some features (e.g., [erg] never plays a role)
  ➢ the presence of certain functional heads in the structure affects the realization of a given feature bundle

Both kinds of splits are attested.

5.1. The nature of absolutive Case

Legate 2005, to appear: absolutive Case comes in two flavors:
  (i)   absolutive corresponds to underlying nominative Case (T^0 assigns nominative, v^0 doesn't assign case), e.g., Georgian: (a) in non-finite clauses absolutive is lost on both subjects and objects; (b) only one DP in a clause may bear absolutive case <…>

(ii)	absolutive corresponds to morphological default realization of Case features (T^0 assigns nothing, v^0 assigns accusative), e.g., Warlpiri, Niuean, Tongic and Enga: (a) in non-finite clauses, where nominative isn't assigned, absolutive Case is only available for objects, (b) more than one DP in a clause may bear absolutive, (c) there is independent evidence that absolutive functions as morphological default in split ergativity phenomena <…>

The advantage of my Case system is that it is not necessary to presuppose that nominative or accusative Cases are not assigned.

## 5.2.	Split ergativity with certain aspects or tenses: Georgian

With a sub-system of tense/aspect (usually referred to as *Series I*, present, future, imperfect, conditional present subjunctive, and future subjunctive) the subject is nominative and the object is dative/accusative, with another sub-system (Series II, the aorist and the optative), the subject is ergative and the object is absolutive:

(30)	a.	glex-i	tesavs	simind-s.	series I
		peasant-NOM	he.sows.it.I.1	corn-DAT
		The peasant is sowing corn.

	b.	glex-ma	datesa	simind-I	series II
		peasant-ERG	he.sowed.it.II.1	corn-NOM
		The peasant sowed corn.

According to Legate to appear, in Georgian absolutive corresponds to nominative.

(31)	[AGENT, S2] → ERG
	[ACC, s1] → DAT
	[NOM] → NOM

Assuming that a feature is associated with each series (s1 and s2, for the sake of simplicity), the Case pattern can be accounted for by including it in the Vocabulary insertion redundancy rules

On the assumption that tense/aspect splits are related to the presence of additional functional heads assigning additional features, taken into consideration by Vocabulary Insertion rules, all splits of this kind can be dealt along the same lines.

## 5.3.	Split ergativity with particular lexical items: Djapu

Legate to appear: in Djapu "human and higher animate nominals exhibit the full range of ergative, nominative and accusative case distinctions. … Wh-words (with the exception of *yol* 'who'), determiners/demonstratives, lower animates, and inanimates all exhibit ergative-absolutive marking. … Pronouns, on the other hand, show a nominative-accusative pattern."
NB: Importantly, in Djapu the subject can be ergative while the object remains accusative. Other such languages are Margany, Wargamay, Mpakwithi, Watjarri and Thangu (Australia), as well as Cashinawa and Kham (Legate to appear). In other words, it is simply untrue that ergative case cannot co-occur with accusative.

Legate accounts for this by assuming that Vocabulary Insertion rules do not need to specify the entire Case paradigm for certain items. For those slots that correspond to no entry of their own, the default Case exponent (or a less specified Case exponent) is used.

The same result may be achieved by an impoverishment rule, deleting certain uninterpretable features in the context of other features ([- animate], [- specific], [noun class 3], etc.) or for certain items (e.g., the demonstrative *ngunhi* 'that' in Djapu).
NB: Some instances of differential object marking (cf. Torrego 1988, Aissen 2003, De Swart 2007, among many others) can be obtained with the same algorithm.

5.4. Inherent Case assignment

In our system feature assignment is to the sister, whereas xNPs that receive inherent Cases appear in the Spec of the head assigning them the relevant theta-role

Proposal: **Inherent Cases are assigned by bar-levels**. They correspond to presuppositions on the arguments (e.g., [participant] as suggested in Adger and Harbour 2005) or just to theta-roles (if viewed as features)

NB: This assumes that presuppositions on arguments constitute some of the interpretable features

Bar-levels inherit their interpretable features from heads, just like maximal projections do. In a derivational framework, something like this has to be assumed in order to explain how XPs get features (e.g., definiteness or animacy)

It could be the case that inherent Cases are assigned by heads to their specifiers (à-la Spec-head agreement), but this solution is dispreferred from the point of view of trying to achieve some uniformity of Case assignment.

Finally, it is possible that the semantics of AGENT, EXPERIENCER, THEME, etc., itself provides the context for a given realization:

(32) [NOM] $\rightarrow$ ERG / __ [AGENT]

A similar approach can be used for predicate cases.

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 have proposed a new Case Theory and showed that it can account not only for the standard facts but also for predicate case-marking and, with some extra assumptions, for inherent cases

Case features are uninterpretable counterparts of interpretable features.

Predicate case is assigned as follows:
  ➢ 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 the predicative case feature and the case feature 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 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).

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

The **correlation between structural, inherent and lexical cases** is caused by the fact that all of them share structural Case features and sometimes, inherent Case features. This also gives us a new take on **the relation between Case and prepositions**: Case corresponds to some or all of the interpretable features of a preposition.

Feature assignment to the sister followed by percolation permits us a new (or very old) view of **Affix Hopping as Case-marking**.

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

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:

(33) 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*   locative case: locative throughout
           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.

This pattern is predicted: as featural specification for genitive includes accusative, adding an external accusative doesn't change the morphonological realization. Oblique cases, on the other hand, subsume genitive.

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

(34) 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 and is automatically consistent with numeral case-stacking facts

Paucal is known to be very similar to genitive and genitive assigned by cardinals is known to be slightly impoverished compared to genitive assigned by nouns. On the assumption that Russian cardinals are deficient nouns (Ionin and Matushansky 2006), both these facts come out right.

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 2006).

German: locative = dative, directional = accusative

(35) 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

(36) 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

(37) 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.

(38) 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

(39) 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 (39), 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 2006: 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:

(40) 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
   ➢   the directional accusative does not change to genitive under negation, nor is it sensitive to passivization
   ➢   locative PPs can also be predicates and maybe even arguments

(41) a.   Alice is **in Paris**.
      b.   Alice lives **in Paris**.

A further problem is that the phenomenon seems to be restricted to Indo-European languages. It could be that they simply have an ancient redundancy rule whereby the directional case is realized as accusative.

NB: One way of achieving this would be to introduce an impoverishment rule ([locative] → ø / [directional]). The default realization of the remnant will then correspond to an accusative. Since the [directional] Case-feature still remains, rendering this "accusative" Case oblique, it will not be subject to the Genitive of Negation rule.

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:

(42) 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 other cases assigned by prepositions (e.g., genitive or dative) *not* alternate?

To be continued…

9.   BONUS TRACK 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

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

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

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

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