Privativity in Syntax

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Introduction

Central thesis

- There are several classes of expressions that are traditionally thought of as *one member in a set of "possible feature values"* —

  - *3rd person*   (the presumed set: $\{$1st, 2nd, 3rd$\}$)
  - *singular*   (the presumed set: $\{$sg., pl.$\}$)
  - *nominative*   (the presumed set: $\{$NOM, ACC, DAT, . . . $\}$)

    etc.

- — but actually correspond to *the outright <u>absence</u> of valued features* of the relevant class

  - ↪ at the level of syntactic computation.

Central thesis *(cont.)*

- Privativity has been argued to exist in other modules of grammar, of course
  - most famously, perhaps, in phonology (see, e.g., Clements 1985, Archangeli 1988)
  - but also in morphology (see Forchheimer 1953 on person features; Harley & Ritter 2002 on nearly all φ-features)

- What I want to argue today is that this kind of privativity —
  - where certain things we're used to thinking of as "possible values" for a given feature are actually the <u>absence</u> of values
  - — is common in **syntax** as well.

Super-Duper-Important Reminder. . . !

- In a **realizational** model of morphology (e.g. Distributed Morphology), the absence of a feature can still be associated with an overt exponent
  - ○ this would just reflect the most underspecified insertion rule applicable to given node
    - – which kicks in in the absence of more specified feature values

  - ○ cf. English /-z/
    [NON-PAST, FINITE, 3rd person, singular(, non-auxiliary?)]

⇒ *The claims in this talk are <u>not</u> about null*ness!

This talk is not about "defaults"

- The argument here is <u>not</u> that *3rd person* / *singular* / *nominative* / etc. are "defaults"

- Default values are still extant values;
↣ Whereas I will defend the thesis that these categories represent *the absence of any feature values whatsoever*

- I hope to show you that this distinction is not some notational nicety;
↣ It has testable empirical consequences.

The traditional model

"Multiple-choice"

- In number-agreement:

(1)



finite verb   *nominal argument*

○ singular

○ plural

$\Rightarrow$ leading to:

(2)

finite verb   *finite verb*

singular   ***or***   plural
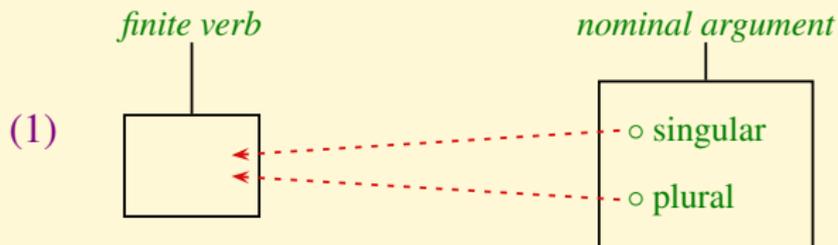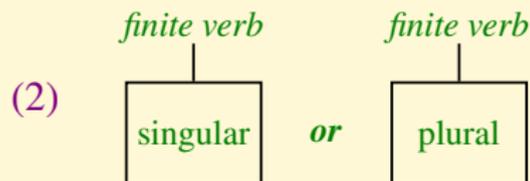
- depending on which feature value the *nominal argument*, above, actually carried

"Multiple-choice" *(cont.)*

- In case-assignment:

(3)

nominal   *functional head*

- ○ "NOM" (T^0)
- ○ "ACC" (v^0)
- ○ ...

$\Rightarrow$ leading to:

(4)

nominal   *nominal*   *nominal*

"NOM"   *or*   "ACC"   *or*   ...
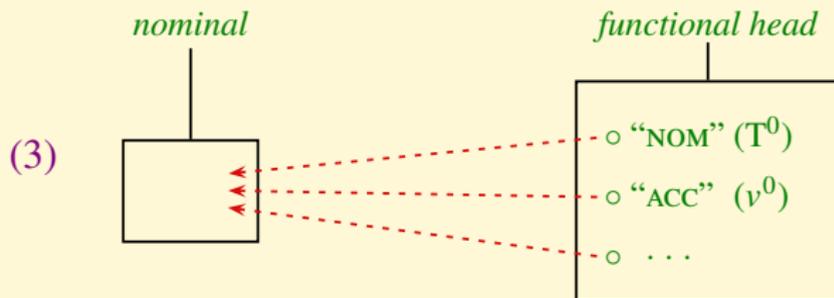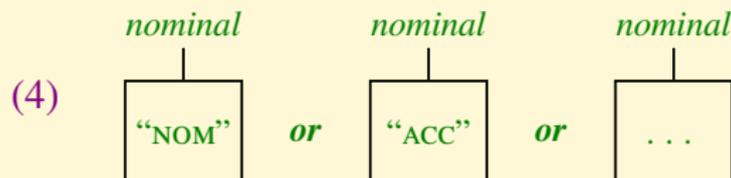
- depending on which feature value the *functional head*, above, actually carried

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Valuation ≠ "multiple-choice": case study #1

The K'ichean languages

- Part of the Mayan language family
- Spoken in Guatemala
- Narrowly construed, the K'ichean group consists of:
  Kaqchikel, K'iche', Tz'utujil, and Achi
- Approx. 3 million speakers in total

- I cannot possibly do justice to the substantial (and still evolving) knowledge we have about the grammar of these languages
- ↬ Instead, I'm going to zoom in on a particular corner of the grammar of these languages

The K'ichean languages: the *Agent-Focus* construction

- These languages have a construction known as *Agent-Focus*(=AF)

    (Aissen 1999, 2011, Campbell 2000, Coon et al. 2014, Craig 1979, Davies & Sam-Colop 1990, Dayley 1978, 1985, López Ixcoy 1997, Mondloch 1981, Norman & Campbell 1978, Preminger 2014, Pye 1989, Sam-Colop 1988, Stiebels 2006)

- As a rough approximation, AF serves to circumvent the ban on extracting transitive subjects in K'ichean

- <u>However</u>, neither the "purpose" of AF nor its precise distribution are our primary interest here;

↦ Instead, I will treat the existence of AF as a given, and concentrate on the behavior of agreement *in those clauses where AF arises*.

The K'ichean languages: the *Agent-Focus* construction *(cont.)*

(5) SMALL CAPS OMNIVOROUS AGREEMENT   [*Nevins 2011*]

A descriptive term, referring to agreement patterns where a given verbal marker reflects the presence of a particular feature [F] on the SUBJECT *or* on the OBJECT (or both).

- K'ichean AF exhibits omnivorous agreement

(6) a. ja   **yïn** x-**in**-ax-an   ri   achin   (Kaqchikel)
        FOC **me** COM-**1sg**-hear-AF the man
        'It was me that heard the man.'

     b. ja   ri   achin x-**in**-ax-an   **yïn**
        FOC the man   COM-**1sg**-hear-AF **me**
        'It was the man that heard me.'

   NB: While clefts are used in translations of AF, the construction itself is
       decidedly *monoclausal* (see, e.g., Aissen 2011, Preminger 2014).

The K'ichean languages: the *Agent-Focus* construction *(cont.)*

- The previous examples showed omnivorous agreement for PERSON;
- But it is also attested for NUMBER:

(7) a. ja **rje'** x-**e**-tz'et-ö   rja'
        FOC **them** COM-**3pl**-see-AF him
        'It was them who saw him.'

    b. ja rja' x-**e**-tz'et-ö   **rje'**
        FOC him COM-**3pl**-see-AF **them**
        'It was him who saw them.'

A brief note on "salience hierarchies" *et al.*

- These omnivorous agreement effects in K'ichean AF have often been described in terms of a "salience hierarchy" — along the lines of (8):

(8) 1st/2nd person ≫ 3rd person plural ≫ 3rd person singular

  ○ see, e.g., Dayley 1978, Mondloch 1981, Norman & Campbell 1978, Smith-Stark 1978

- The idea is that the grammar consults (8) to determine which argument will be the target of agreement in a given AF clause

A brief note on "salience hierarchies" *et al.* *(cont.)*

- These omnivorous agreement effects in K'ichean AF have often been described in terms of a "salience hierarchy" — along the lines of (8):

(8)   1st/2nd person ≫ 3rd person plural ≫ 3rd person singular

- ↪ While (8) might be a useful shorthand for thinking about these effects, it is quite clear that this is <u>not</u> actually how the grammar works
    - ○ there are quite a few arguments against treating (8) as the mechanism behind omnivorous agreement in K'ichean AF
        - – see Preminger (2014:123–128) for five such arguments

⇒ In what follows, I'm going to take it for granted that omnivorous agreement is a syntactic phenomenon that has nothing to do with "salience" (at least not synchronically).

And now back to our regularly scheduled programming. . .

Viable and non-viable agreement targets in AF

- CLAIM:

(9) *3rd person singular* noun phrases are not viable targets for agreement in K'ichean AF.

  ○ to be precise, (9) actually follows from two slightly stronger claims, (10a–b):

  (10) a. *3rd person* noun phrases are not viable targets for PERSON agreement in K'ichean AF.

  b. *singular* noun phrases are not viable targets for NUMBER agreement in K'ichean AF.

  ○ but for the sake of simplicity, we'll stick to *3rd person singular* ones

Viable and non-viable agreement targets in AF *(cont.)*

- CLAIM:

(9) *3rd person singular* noun phrases are not viable targets for agreement in K'ichean AF.

- Suppose (9) were wrong —
  - let H^0 be the probe in a given AF agreement relation;
  - since K'ichean exhibits the usual subject-object asymmetries (e.g. with respect to reflexives), it follows that:
    - either the subject will be unambiguously closer to H^0 than the object is, or vice-versa
      - depending on where H^0 is relative to the subject

Viable and non-viable agreement targets in AF *(cont.)*

- CLAIM:

(9) *3rd person singular* noun phrases are not viable targets for agreement in K'ichean AF.

- for expository purposes, let's assume that H^0 is above both the subject and the object, and so the subject is closer

(11)
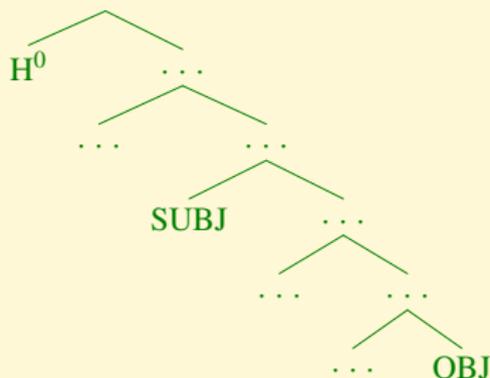
(this is likely the correct structure anyway; see Aissen 1992, *a.o.*)

Viable and non-viable agreement targets in AF *(cont.)*

- **CLAIM:**

(9) *3rd person singular* noun phrases are not viable targets for agreement in K'ichean AF.

  ○ consider now an AF clause with a *3sg* subject —

  – H^0 would encounter the subject prior to encountering the object

  ↦ if (9) were wrong, and *3sg* nominals were viable targets,
  3sg agreement would be possible in such a case — but it is not:

(12) a. * ja   **ri   achin** x-**Ø**-ax-an   <u>yïn</u>
        FOC **the man**   COM-**3sg**-hear-AF <u>me</u>
        'It was the man that heard me.'

   b. * ja   **rja'** x-**Ø**-tz'et-ö   <u>rje'</u>
        FOC **him** COM-**3sg**-see-AF <u>them</u>
        'It was him who saw them.'

Excursus: *Multiple Agree?*

- Suppose that *3sg* nominals are somehow "viable-but-insufficient" agreement targets —
  - they carry feature values, but those values are not enough to completely satisfy the needs of the probe
  - the probe then proceeds to search <u>past</u> the initial *3sg* target
    - entering into a second agreement relation with a different, more specified target
      - · i.e., one bearing a value like *1sg* or *3pl*

↦ OBSERVE:

  (i) this would already be a departure from the "multiple-choice" model
    - since different features values are no longer equivalent to one another, in the syntactic behavior they induce
      - e.g. *3sg* is fundamentally different from *1sg* or *3pl* in the syntactic behavior it induces

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Excursus: *Multiple Agree*? *(cont.)*

(ii) this predicts something should go wrong (an "undervalued" probe?) if <u>both</u> the subject and object are of the 'insufficient' kind (i.e., *3sg*) . . .

. . . but nothing does:

(13) ja **ri xoq** x-Ø-tz'et-ö **ri achin**
FOC **the woman** COM-3sg-see-AF **the man**
'It was the woman who saw the man.'

- And just to remind you: if we relax the assumption that *3sg* targets are themselves 'insufficient', we falsely rule in *3sg* agreement in exx. like:

(12) a. * ja **ri achin** x-Ø-ax-an <u>yïn</u>
FOC **the man** COM-**3sg**-hear-AF <u>me</u>
'It was the man that heard me.'

b. * ja **rja'** x-Ø-tz'et-ö <u>rje'</u>
FOC **him** COM-**3sg**-see-AF <u>them</u>
'It was him who saw them.'

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Non-valuation as a possible grammatical outcome

Overall, our interim conclusion is this:

- *valuation*, in the sense used to describe e.g. (14a) or (14b) —

(14) a. ja   **yïn** x-**in**-ax-an   ri   achin   *[=(6a)]*
        FOC **me** COM-**1sg**-hear-AF the man
        'It was me that heard the man.'

   b. ja   rja' x-**e**-tz'et-ö   **rje'**   *[=(7b)]*
        FOC him COM-**3pl**-see-AF **them**
        'It was him who saw them.'

— could not have taken place in an example like (13), repeated here:

(13) ja   **ri xoq**   x-Ø-tz'et-ö   **ri   achin**
        FOC **the woman** COM-3sg-see-AF **the man**
        'It was the woman who saw the man.'

Non-valuation as a possible grammatical outcome *(cont.)*

- Before moving on, let's compare the state of affairs we've just seen with probe-goal relations involving *wh*-phrases

(15) a. $\big[$C^0 [who]$_{<+wh>}$ gave [this dish] to [Bob]$\big]$

   $\longrightarrow$ $\big[$**C^0 [who]**$_{<+wh>}$ gave [this dish] to [Bob]$\big]$

   $\longrightarrow$ Who gave this dish to Bob?

   b. $\big[$C^0 [John] gave [what]$_{<+wh>}$ to [Bob]$\big]$

   $\longrightarrow$ $\big[$**C^0** [John] gave **[what]**$_{<+wh>}$ to [Bob]$\big]$

   $\longrightarrow$ What did John give to Bob?

   c. $\big[$C^0 [John] gave [this dish] to [who]$_{<+wh>}$$\big]$

   $\longrightarrow$ $\big[$**C^0** [John] gave [this dish] to **[who]**$_{<+wh>}$$\big]$

   $\longrightarrow$ Who did John give this dish to?

Non-valuation as a possible grammatical outcome *(cont.)*

(15) a. Who gave this dish to Bob?

    b. What did John give to Bob?

    c. Who did John give this dish to?

↣ In contrast to (15a–c), there really don't seem to be probe-goal relations in natural language that target exclusively <u>non</u>-*wh*-phrases

   ○ there are probes that just don't care about *wh*-features —

(16) a. This reporter thinks that [this promise]$_1$ was broken t_1.

    b. Which reporter thinks that [which promise]$_1$ was broken t_1?

   — but there really don't seem to be any probes that can be satisfied *only* by non-*wh*-phrases.

Non-valuation as a possible grammatical outcome *(cont.)*

- A reasonable approach to these facts would be to say that there really aren't such things as "+*wh*" and "−*wh*"
  - there's just [wh], vs. the absence thereof

- ➹ Assume you can't probe for the *absence* of something
  - ⇒ you can probe for [wh], or you can probe for something else —
    - but there's no way to probe exclusively for non-*wh*-phrases

- That is an added assumption, of course —
  - but it's hard to see how to derive the non-*wh*-phrases probing gap without it

Non-valuation as a possible grammatical outcome *(cont.)*

- If you find this treatment of *wh*-probing reasonable — *and I hope that you do!* — then consider:

(17)

omnivorous probing for...	✓	✗
wh	*wh*-phrases	non-*wh*-phrases
NUMBER	plural	singular
PERSON	1st /2nd	3rd

⇒ So, by the same logic, we can conclude:
- ○ there is no such thing as "singular" (in syntax)
  - – just [plural] vs. the absence thereof
- ○ there is no such thing as "3rd person" (in syntax)
  - – just [participant] vs. the absence thereof

Non-valuation as a possible grammatical outcome *(cont.)*

- If you find this treatment of *wh*-probing reasonable — *and I hope that you do!* — then consider:

(17)

omnivorous probing for...	✓	✗
wh	*wh*-phrases	non-*wh*-phrases
NUMBER	plural	singular
PERSON	1st /2nd	3rd

- At the very least:
  - anyone who wishes to *deny* these conclusions concerning the representations of NUMBER and PERSON in syntax (as well as *wh*) —
    - is on the hook to provide an <u>alternative</u> explanation for (17).

Non-valuation as a possible grammatical outcome *(cont.)*

- <u>On the view proposed here:</u>
  - ○ in a sentence like (13), there really hasn't been *valuation* at all:

(13) ja **ri xoq** x-**Ø**-tz'et-ö **ri achin**
    FOC **the woman** COM-**3sg**-see-AF **the man**
    'It was the woman who saw the man.'

  - ○ the relevant probe (call it H^0) has scanned the structure for constituents bearing [plural] and/or [participant]
    - ↦ and has found no such constituents.

  - ○ consequently, at the end of the derivation, H^0 still does not bear any [plural] or [participant] values of its own
    - ⇒ the characteristic exponent associated with this *elsewhere* condition arises

      (which, in this language family, <u>happens</u> to be null)

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A privative representation for φ-features in syntax

- These results suggest a syntactic representation of φ-features along the same lines proposed by Harley & Ritter (2002) for morphology
  - examples:
    - "3rd person singular" = ∅
    - "3rd person plural" = {plural}
    - "1st person singular" = {participant, author}
    - "1st person plural" = {participant, author, plural}
      . . .

A privative representation for φ-features in syntax *(cont.)*

- These results suggest a syntactic representation of φ-features along the same lines proposed by Harley & Ritter (2002) for morphology

  - **NB:** Since Harley & Ritter's (2002) paper, there has been work showing that the privative treatment of PERSON features may not be correct *for the morphological component* (Nevins 2007).

    - but note that, unless the syntactic representation of PERSON is indeed privative, as proposed here —

      - we lose our account for the typology of omnivorous probing:

(17)

omnivorous probing for…	✓	✗
wh	*wh*-phrases	non-*wh*-phrases
NUMBER	plural	singular
PERSON	1st / 2nd	3rd

Valuation ≠ "multiple-choice": case study #2

Case & finite agreement in Sakha

- Sakha (Turkic), like many other NOM-ACC languages, generally allows finite agreement with NOM noun phrases only

(18) a. oloppos-tor aldjat-ylyn-ny-**lar**   [*Sakha; B&V:637*]
     chair-PL   break-PASV-PST-**3pl.SUBJ**
     'Chairs were broken.'

   b. oloppos-tor-**u** aldjat-ylyn-na
     chair-PL-**ACC** break-PASV-PST(**3sg.SUBJ**)
     'Chairs were broken.'

(19) a. * oloppos-tor-**u** aldjat-ylyn-ny-**lar**
     chair-PL-**ACC** break-PASV-PST-**3pl.SUBJ**

   b. * oloppos-tor aldjat-ylyn-na
     chair-PL   break-PASV-PST(**3sg.SUBJ**)

Case & finite agreement in Sakha *(cont.)*

- There is, however, one class of exceptions to this **NOM** ⇔ **finite agr** correlation —

(20) a. min ehigi$_1$-**ni** [bügün t_1 kyaj-yax-**xyt**   ] dien erem-mit-im
    I   you-**ACC** today   win-**FUT**-**2pl.SUBJ** that hope-PST-1sg.SUBJ
    'I hoped you would win today.'

   b. ehigi bihigi$_1$-**ni** [t_1 kyajtar-dy-**byt**   ] dien xomoj-du-gut
     you we-**ACC**   lose-PST-**1pl.SUBJ** that become.sad-PST-2pl.SUBJ
     'Y'all were disappointed that we lost.'   [*V05:369, annotations added*]

- Importantly, (20a–b) are instances of *raising*
  - i.e., the relation between the embedded subject position and the overtly ACC-marked nominal in the matrix clause is one of movement

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Case & finite agreement in Sakha *(cont.)*

- Evidence for movement (B&V:616–617):
  - ○ the Sakha NPI *kim daqany* ("who PCL") is only licensed by clausemate-or-higher negation;
  - ⇒ an example like (21), where the ACC nominal is base-generated outside the clause that contains negation, is ungrammatical:

(21) *** min kim-ŋe daqany** [*pro* kel-**bet**] dien
     I **who-DAT PCL** come-**NEG**.AOR(3sg.SUBJ) that
     et-ti-m
     tell-PST-1sg.SUBJ
     Intended: 'I told no one that he should come.'

Case & finite agreement in Sakha *(cont.)*

- But a similar example involving one of the matrix predicates in (20), *eren* ("hope"), is <u>grammatical</u>:

(22) min **kim-i** **daqany**$_1$ [t_1 kyaj-**ba**-ta] dien
  I **who-ACC** **PCL** win-**NEG**-PST(3sg.SUBJ) that
  eren-e-bin
  hope-AOR-1sg.SUBJ
  'I hope that nobody won.'

  ⇒ *raising*.

Case & finite agreement in Sakha *(cont.)*

- Let's get back, then, to the raising-based exception to **NOM** ⇔ **finite agr**:

(20) a. min ehigi$_1$-**ni** [bügün t_1 kyaj-yax-**xyt**] dien erem-mit-im
    I   you-**ACC** today   win-FUT-**2pl.SUBJ** that hope-PST-1sg.SUBJ
    'I hoped you would win today.'

    b. ehigi bihigi$_1$-**ni** [t_1 kyajtar-dy-**byt**] dien xomoj-du-gut
      you we-**ACC**   lose-PST-**1pl.SUBJ** that become.sad-PST-2pl.SUBJ
      'Y'all were disappointed that we lost.'   [*V05:369, annotations added*]

- An appealing way to reconcile (20a–b) with the **NOM** ⇔ **finite agr** generalization that holds throughout the rest of the language:

(23) The raised subject *was* nominative at the point in the derivation when it was targeted for agreement.

◁ □ ▷ ◁ 🗗 ▷ ◁ 🗏 ▷ ◁ 🗏 ▷ 🗏 ⟳ ९ ⟲   38

How do you change your case?

⇒ If we accept this, it leads to the following question:

> **Q:** *How can a noun phrase go from nominative to accusative in the course of the derivation?*

- Note that this is <u>not</u> about structural vs. inherent cases;
  - ○ both NOM and ACC are structural.

<u>An attempt:</u> case-stacking (B&V:603)

- The idea is that case can be assigned to a single nominal multiple times
  - ○ each case "stacking" outside of the previously assigned one
    - – e.g.:
  - (24) [[[DP]-NOM]-ACC]
  - ○ this is inspired by a particular analysis of suffixation patterns in Korean (Yoon 1996, 2004, Levin 2016 *a.o.*)

Case-stacking in Sakha?

- <u>Kornfilt & Preminger (2015):</u>
  This case-stacking approach won't work for Sakha.

- To see why, we have to first acknowledge that ACC in Sakha cannot be
  assigned by a functional head like v^0 (cf. Chomsky 2000, 2001)

  - evidence (B&V:617–619):

    (i) ACC can be assigned to raised subjects even if the raised-to clause
    is anchored by an unaccusative verb

(25) Masha Misha$_1$-**ny** [t_1 yaldj-ya   ] dien <u>*tönün*</u>-ne
     Masha Misha-**ACC**   fall.sick-FUT.3sg.SUBJ   that <u>*return*</u>-PAST.3sg.SUBJ
          'Masha returned (for fear) that Misha would fall sick.'

          [B&V:618]

    – note: the matrix verb in (25) is the intrans. member of a classic
      transitivity alternation (*tönün* "return" ∼ *tönnör* "make return")   40

Case-stacking in Sakha? *(cont.)*

– and, as you might expect, the intransitive member of a
transitivity alternation in Sakha does <u>not</u> allow its sole argument
to bear ACC:

(26) a. min   oloppoh-**u** aldjat-ty-m   b. caakky(*-**ny**) aldjan-na
    I(NOM) chair-**ACC** break-PAST-1sg.SUBJ   cup(*-**ACC**)   break-PAST.3sg.SUBJ
    'I broke the chair.'   'The cup broke.'   [*B&V:608*]

$\Rightarrow$ the source of ACC in an example like (25) cannot be the verb
or v^0

(25) Masha Misha$_1$-**ny** [t_1 yaldj-ya   ] dien *tönün*-ne
    Masha Misha-**ACC**   fall.sick-FUT.3sg.SUBJ that *return*-PAST.3sg.SUBJ
      'Masha returned (for fear) that Misha would fall sick.'

                                  [*B&V:618*]

– ACC can, however, be *dependent case* (Bittner & Hale 1996,
Marantz 1991, Yip et al. 1987)

    · assigned by virtue of structural proximity to the other noun   41

Case-stacking in Sakha? *(cont.)*

(ii) ACC can be assigned to raised subjects even if the raised-to clause already contains another ACC-marked argument:

(27) Masha Misha$_1$-**ny** [t_1 kel-ie   dien] djie-**ni**   xomuj-da
     Masha Misha-**ACC**   come-FUT.3sg.SUBJ that house-**ACC** tidy-PAST.3sg.SUBJ
     'Masha tidied up the house (thinking) that Misha would come.'

[*V05:368*]

– crucially, it cannot be the case that the verb or v^0 can simply assign multiple instances of ACC in Sakha;

– since that would falsely predict the existence of —

· ACC-ACC case patterns with dyadic verbs

· NOM-ACC-ACC case patterns with triadic verbs

(neither of which is attested)

Case-stacking in Sakha? *(cont.)*

↠ <u>Conclusion:</u> ACC in Sakha *dependent case*.

⇒ Next question: Do already-case-marked noun phrases count for the calculation of *dependent case*?

- <u>K&P:</u> If we allow already-case-marked noun phrases to participate in *dependent case* relations —
  - ○ we predict that any noun phrase scrambled past the subject would result in ACC marking *on the subject*;
  - ○ this does not happen:

(28) deriebine-ni$_1$ orospuonnjuk-tar t_1 xalaa-byt-tar   [*B&V:604*]
  village-ACC   robber-PL(**NOM**)   raid-PRT-3pl.SUBJ
       'Some robbers raided the village.'

REMEMBER: We cannot say NOM on the subject is what blocks it from later getting ACC; how NOM noun phrases turn into ACC ones is our very explanandum!

In search of an alternative

➻ We can conclude that Sakha does <u>not</u> have case-stacking, at least not of ACC over NOM.

⇒ Consequently, that cannot be the account of our central explanandum, repeated here:

(20) a. min ehigi$_1$-**ni** [bügün t_1 kyaj-yax-**xyt**　　　] dien erem-mit-im
　　　I　you-**ACC**　today　　win-FUT-**2pl.SUBJ**　that hope-PST-1sg.SUBJ
　　　'I hoped you would win today.'

　　b. ehigi bihigi$_1$-**ni** [t_1 kyajtar-dy-**byt**　　] dien xomoj-du-gut
　　　you　we-**ACC**　　　lose-PST-**1pl.SUBJ**　that become.sad-PST-2pl.SUBJ
　　　'Y'all were disappointed that we lost.'　　　[*V05:369, annotations added*]

In search of an alternative *(cont.)*

- Let's review where we are:
    - **(i)** ACC in Sakha is *dependent case*
    - **(ii)** already-case-marked noun phrases do not count for subsequent *dependent case* relations

⇒ **It follows that the raised subjects in (20a–b) were <u>caseless</u>, prior to receiving ACC case under case competition with the matrix subject.**

(20) a. min ehigi₁-**ni** [bügün t_1 kyaj-yax-**xyt**   ] dien erem-mit-im
    I   you-**ACC** today   win-FUT-**2pl.SUBJ** that hope-PST-1sg.SUBJ
    'I hoped you would win today.'

    b. ehigi bihigi₁-**ni** [t_1 kyajtar-dy-**byt**   ] dien xomoj-du-gut
    you we-**ACC**   lose-PST-**1pl.SUBJ** that become.sad-PST-2pl.SUBJ
    'Y'all were disappointed that we lost.'   [*V05:369, annotations added*]

In search of an alternative *(cont.)*

⇒ Consequently, we can categorically rule out the idea that agreement results in the assignment of case

- that's because the noun phrases in question were agreed with in the embedded clause (before raising)
- and yet, they were subsequently candidates for the assignment of *dependent case*
  - which, we already know, cannot be assigned when the noun phrases entering into the relation are already case marked

NOM as caselessness

- Interim summary:
    - **(i)** prior to raising-to-ACC, the raised noun was <u>caseless</u>
    - **(ii)** agreement does <u>not</u> result in the assignment of case

⇒ The **NOM ⇔ finite agr** generalization cannot have anything to do with case *assignment*
    - ○ since at least some of the noun phrases involved *have not been assigned case at all*

- How can the **NOM ⇔ finite agr** generalization be captured, then?

    ➡ PROPOSAL:

    (29) only caseless noun phrases can be targeted for agreement (in Sakha)

NOM as caselessness *(cont.)*

➥ PROPOSAL:

(29) only caseless noun phrases can be targeted for agreement (in Sakha)

- If true, this entails that even in a simple example like (30) —

(30) Masha türgennik salamaat sie-te.
     Masha quickly   porridge eat-PST.3sg.SUBJ
     'Masha ate porridge quickly.'   [*B&V:625*]

— the "nominative" (and agreed with) phrase *Masha* is actually...
  ... **caseless**.

A privative representation for case in syntax

- Here, we don't have the precise counterpart of Harley & Ritter 2002 as a model for our syntactic representations

↝ However, recent work by Zompí (2016) and others may provide exactly what we're looking for

  ○ Zompí takes, as his target of explanation, Caha's (2009) results concerning attested and unattested patterns of case syncretism

    – and their account in terms of containment relations among different kinds of case

  ○ he shows that Caha's results can be recouped using a simpler containment schema

    – based on Marantz's (1991) categories of case

(31) [[[UNMARKED] DEPENDENT] LEXICAL]   [*Zompí 2016*]

A privative representation for case in syntax *(cont.)*

(31) [[[UNMARKED] DEPENDENT] LEXICAL]   [*Zompí 2016*]

- If you are unfamiliar with how Marantz's (1991) case system works, here are the basics

    - LEXICAL: case assigned to a noun phrase by virtue of the lexical identity of the head that selects it

        (exx.: *instrumental*, *locative*)

    - DEPENDENT: case assigned to a noun phrase by virtue of structural proximity to another, as-of-yet caseless noun phrase

        (exx.: *accusative*, *ergative*)

    - UNMARKED: *elsewhere*   (exx.: *nominative*, *absolutive*)

- And note: once again, "UNMARKED" ≠ phonologically null

A privative representation for case in syntax *(cont.)*

(31) [[[UNMARKED] DEPENDENT] LEXICAL]   [*Zompí 2016*]

- ○ the same containment relations have been argued for by:
  - – Bobaljik (2015) and Smith et al. (2016)
    - · looking at attested and unattested patterns of suppletion in pronouns, in the vein of Bobaljik's 2012 work on comparatives & superlatives

  - – Demirok (2013)
    - · reinterpreting Bobaljik's (2008) observations regarding the agreement accessibility hierarchy (itself a refinement of Moravcsik 1978) in terms of containment

A privative representation for case in syntax *(cont.)*

(31) [[[UNMARKED] DEPENDENT] LEXICAL]   [*Zompí 2016*]

↔ Importantly, this proposal for containment relations is fully compatible with nominative (*viz.* UNMARKED case) being the complete absence of case values

   ○ set-theoretically, the empty set (Ø) is in a containment relation with any other set

   ⇒ the containment statements UNMARKED ∈ DEPENDENT and UNMARKED ∈ LEXICAL are trivially derived

Parallels between PERSON and case

↦ If we accept the results so far, a potentially interesting parallel arises between the structure of PERSON features and case features

- In both cases, we have:
  - a category of expressions traditionally considered a "possible value" of the relevant class of features (*3rd person*, *nominative*);
  - but which is in fact represented—at least in syntax—as the complete <u>absence</u> of feature values of the relevant class;
  - and which is part of a(n at least) 3-way containment structure

(32) $\left[\ \left[\ \left[\ \emptyset\ \right]_{\text{"3rd person"}}\ \text{participant}\ \right]_{\text{"2nd person"}}\ \text{speaker}\ \right]_{\text{"1st person"}}$

(33) $\left[\ \left[\ \left[\ \emptyset\ \right]_{\text{"nominative"}}\ \text{DEPENDENT}\ \right]_{\text{"accusative"}}\ \text{LEXICAL}\ \right]_{\text{"<various>"}}$

Probe-goal relations in a privative syntax

What needs fixing

- The *probe-goal* approach to syntactic relations (Chomsky 2000, 2001) is designed around the "multiple-choice" model of feature values

(34)
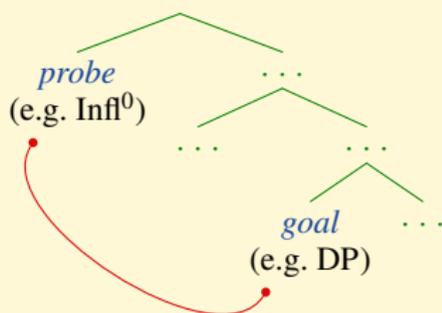
- ○ features on the *probe* come into the derivation unvalued (or unchecked, or uninterpretable, or . . .)

- ○ they can then be valued (or checked, or made interpretable, or . . .) by <u>whatever</u> is found on the *goal*

  - – incl., for example, "3rd person" / "nominative" / etc.

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What needs fixing *(cont.)*

- Given the conclusions of the last two sections, this cannot possibly be how things work
  - recall, in particular, the argument that in K'ichean AF clauses with two *3sg* nominals, there can't have been *valuation* at all —

(13) ja **ri xoq** x-Ø-tz'et-ö **ri achin**
 FOC **the woman** COM-**3sg**-see-AF **the man**

  'It was the woman who saw the man.'

  — because the relevant probes are looking for goals bearing [plural] and [participant] in particular (rather than just any nominal goal)

⇒ What we need is a framework for *probe-goal* relations where probes in syntax can (and quite often do) fail to find the features they seek —
  - resulting in what we have come to call "3rd person"; "singular"; "nominative"; and so forth

Assumptions & definitions: syntax

- **_probe_**: a syntactic element that carries a <u>syncategorematic</u> instruction to search for a valued instance of (at least one) feature $[f]$
  - the search may yield an actual instance of $[f]$, or not;
  - what is obligatory is the **search**.

- Syntax is strictly cyclic($\equiv$ _impatient_)
  - $\Rightarrow$ as soon as a probe $\mathcal{P}$ is merged, any syncategorematic instructions associated with it are immediately carried out
    - – this means that what $\mathcal{P}$ can scan is all and only the material that was already present in the derivation when it was merged
  - ↠ giving rise to the c-command condition on valuation: (cf. Béjar & Rezac 2009)
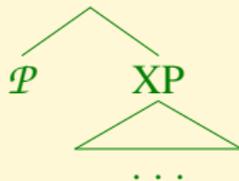
Assumptions & definitions: syntax *(cont.)*

- The <u>scanning</u> implicated in the previous definitions refers to an iterative, top-to-bottom search algorithm
  - which meets (at least) the following adequacy conditions:

(35) *adequacy conditions on Iterative Downward Search (IDS) algorithm*

    a. If y asymmetrically <u>c-commands</u> x, then IDS algorithm will encounter y before it encounters x.

    b. If y asymmetrically <u>dominates</u> x, then IDS algorithm will encounter y before it encounters x.

Assumptions & definitions: syntax *(cont.)*

- Here's an example of an algorithm that meets these adequacy criteria:

(36) a. Let $\mathcal{P}$ be a syntactic probe, and let XP be $\mathcal{P}$'s sister

b. QUERY: Is XP a viable goal? If so, **halt**, with "XP" as the search result

c. For every specifier ZP of XP:
   QUERY: Is ZP a viable goal? If so, **halt**, with "ZP" as the search result

d. QUERY: Is XP a phase? If so, **halt**, with no goal

e. QUERY: Does X^0 have a complement? If not, **halt**, with no goal

f. Return to step **(b)**, using the constituent in [Compl,X] as the new "XP"

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Assumptions & definitions: morphology

- The spellout rules that apply to $\mathcal{P}$ may include an 'elsewhere' rule
  - i.e., a spellout rule whose only specification is that it applies to $\mathcal{P}$ nodes
  - such a rule will be preempted by spellout rules that are both applicable to $\mathcal{P}$ <u>and</u> specify at least one $[f]$ in the insertion environment

  - for example: a particular language could have —
    - a non-null exponent y for number probes bearing a [plural] value
    - and another non-null exponent x for number probes generally
  - $\Rightarrow$ resulting in what we would descriptively characterize as a "plural morpheme" (y) and a "singular morpheme" (x)

Case study #1 revisited: agreement in K'ichean AF

- I will focus here on number agreement in K'ichean AF

    (the state of affairs w.r.t. person is similar, with some complications
    that ultimately prove innocuous; see Preminger 2014 for details)

- <u>RECALL:</u> It cannot be the case that K'ichean AF clauses with "3rd person
  singular agreement" involve *valuation* of φ-features

- Let $\#^0$ be the head relevant to NUMBER agreement in K'ichean AF
    - suppose that $\#^0$ bears an instruction to search for [plural]
    - and that it enters the derivation *after* both the subject and object have
      been introduced

- ⇴ On the assumptions just stated:
    - the fate of non-[plural]-bearers (a.k.a. singular phrases) should be
      identical to the fate of, e.g., non-[*wh*]-bearers w.r.t. probing for [*wh*]
        – namely, they should be <u>skipped</u>

Case study #1 revisited: agreement in K'ichean AF *(cont.)*

⇒ This derives the *omnivorous agreement* behavior exemplified in (7a–b) (repeated from earlier)

(7) a. ja **rje'** x-**e**-tz'et-ö   rja'
       FOC **them** COM-**3pl**-see-AF him
       'It was them who saw him.'

    b. ja rja' x-**e**-tz'et-ö   **rje'**
       FOC him COM-**3pl**-see-AF **them**
       'It was him who saw them.'

   NB: Assume that the Agent in (7a–b) moves to a focus position (and out of the c-command domain of #[0]) only after agreement has already taken place.

Case study #1 revisited: agreement in K'ichean AF *(cont.)*

- On the other hand, when neither the subject nor object are plural:
  - there is <u>no</u> accessible bearer of [plural] that $\#^0$ could find

$\Rightarrow$ Trivially, then, valuation could not have taken place:

(13) ja **ri xoq** x-Ø-tz'et-ö **ri achin**
     FOC **the woman** COM-3sg-see-AF **the man**
     'It was the woman who saw the man.'

↦ This is what "singular agreement" is —
  - it is the absence of valued [plural] features on a probe.

- "3rd person agreement" in K'ichean arises in essentially the same way
  - as a failure to find an accessible bearer of valued [participant]

Case study #2 revisited: case in Sakha

- <u>RECALL:</u> It cannot be that NOM noun phrases in Sakha have been *assigned case* in any meaningful sense
  - ↠ we need an account of case assignment that delivers this

Proposal: (following Levin & Preminger 2015, Preminger 2014, but modified)

- There are two kinds of case assignment (cf. Baker 2015, Baker & Vinokurova 2010, Bittner & Hale 1996, Marantz 1991, Yip et al. 1987) —

  - LEXICAL: for a designated head H^0, assign case $c(H^0)$ to the noun phrase that is closest-under-c-command and caseless
    (exx.: *"INSTR"*, *"P_{COMP}"*, *"NOM"(!) in English*)

  - DEPENDENT: for a pair of noun phrases $P = \langle\alpha, \beta\rangle$ that stand in a sufficiently local c-command relation, pick
    $dir \in \{\text{HIGHER}, \text{LOWER}\}$, and assign case $c(dir)$ to
    the *dir* member of P (exx.: *"ACC"*, *"ERG"*)

Case study #2 revisited: case in Sakha *(cont.)*

- There is no such thing as "UNMARKED case" (incl. "nominative")
  - except in the same sense as there's such a thing as "3rd person" and "singular"
  - i.e., it is simply the outright absence of valued case features

↪ Instead, noun phrases that have failed to receive LEXICAL or DEPENDENT case receive the morphology associated with the *elsewhere* case

⇒ This derives the ordering (stipulated in accounts like Marantz 1991) placing UNMARKED case after the two other types of case:

(37) UNMARKED ≫ DEPENDENT ≫ . . .

Case study #2 revisited: case in Sakha *(cont.)*

- As noted in Preminger 2014, in the special case in which LEXICAL case is assigned under sisterhood (a.k.a. "inherent case") —
  - it is predicted to preempt DEPENDENT case

- That's because, on a bottom-up model of structure building —

(38)
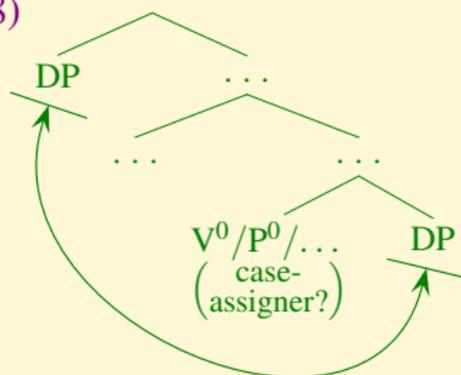
  - the sisterhood relation in question will obtain <u>before</u> the necessary configuration for DEPENDENT case assignment

Case study #2 revisited: case in Sakha *(cont.)*

⇒ This derives the ordering (again, stipulated in accounts like Marantz 1991) placing INHERENT/OBLIQUE case before DEPENDENT case

  ○ and, by extension, before UNMARKED case as well

(39) UNMARKED ≫ DEPENDENT ≫ INHERENT/OBLIQUE

Case study #2 revisited: case in Sakha *(cont.)*

Overall, this provides a picture of what "nominative" in Sakha is, such that:

- **(i)** we still have a way of capturing the **NOM** ⇔ **finite agr** generalization

(29) only caseless noun phrases can be targeted for agreement (in Sakha)

- **(ii)** but we can also account for how noun phrases go from being "nominative" to being accusative —

  (20) a. min ehigi$_1$-**ni** [bügün t_1 kyaj-yax-**xyt**   ] dien erem-mit-im
  I   you-**ACC** today   win-FUT-**2pl.SUBJ** that hope-PST-1sg.SUBJ
  'I hoped you would win today.'

      b. ehigi bihigi$_1$-**ni** [t_1 kyajtar-dy-**byt**   ] dien xomoj-du-gut
  you we-**ACC**   lose-PST-**1pl.SUBJ** that become.sad-PST-2pl.SUBJ
  'Y'all were disappointed that we lost.'

  [*V05:369, annotations added*]

  - namely, they are caseless nominals ("nominative") that are subsequently assigned DEPENDENT case (accusative) by virtue of their structural proximity to the matrix subject

What (else) privativity can do for you

The lay of the land so far

- We've seen that adequate accounts of K'ichean AF and raising in Sakha require privative models of φ-features and case, respectively

- The way I see it, these are existence 'proofs' that such representations are necessary

↝ If this is correct, it means well-formed sentences in which some instance of *valuation* failed to occur could be lurking all over the place

- This, in turn, opens up analytical possibilities that were unavailable in the traditional, "multiple-choice" model of valuation
  - in particular: a kind of <u>bleeding</u>

Bleeding-like interactions in syntax

- Suppose that some operation $\mathbb{O}$ depends on *valuation* culminating successfully, in order to furnish its input

- Then, if there is a sentence where valuation could not have possibly culminated successfully —
  - ○ but the sentence only has a parse in which $\mathbb{O}$ <u>has</u> applied —
    - ➥ we expect ungrammaticality to arise.

- *In light of this, consider...*

Bleeding-like interactions in syntax *(cont.)*

(40) PATTERNS OF CASE-DISCRIMINATION IN φ-AGREEMENT VS. MOVEMENT TO CANONICAL SUBJECT POSITION (MTOCSP)

a. Hebrew: candidates for MtoCSP: {NOM}   =   candidates for finite φ-agreement: {NOM}

b. Icelandic: candidates for MtoCSP: {NOM, ACC, DAT, ... } $\supsetneq$ candidates for finite φ-agreement: {NOM}

c. ***unattested**:   **candidates for MtoCSP:** **{NOM}** $\subsetneq$ **candidates for finite φ-agreement:** **{NOM, ACC}**

⇒ movement to subject position can do only one of two things:
  – grab the closest nominal regardless of case (40b)
  – grab that nominal which was targeted for φ-agreement (40a)

Bleeding-like interactions in syntax *(cont.)*

↔ This, I have argued, provides an explanation for why intervention by dative nominals yields ungrammaticality in some languages (e.g. Icelandic) —

  ○ but a morphological 'default' in others (e.g. French)

• Icelandic:

(41) [Einhverjum stúdent]$_1$ finnast t_1 [$_{sc}$ tölvurnar ljótar].
   some   student.DAT find.PL   computers.the.NOMugly
   'Some student finds the computers ugly.'

(42) það   finnst(/*finnast) [einhverjum stúdent]$_{DAT}$ [$_{sc}$ tölvurnar ljótar].
   EXPL find.SG/*find.PL some   student.DAT   computers.the.NOMugly
   'Some student finds the computers ugly.'   [*H&H:999–1000*]

Bleeding-like interactions in syntax *(cont.)*

- In Icelandic, no other operation depends on φ-feature valuation to furnish its input
- As argued earlier, failed valuation is a perfectly acceptable outcome for this particular operation
  - ⇒ dative intervention does nothing but interrupt what would otherwise be successful φ-feature valuation;
    - ○ but other than that, everything else proceeds normally

Bleeding-like interactions in syntax *(cont.)*

- Cf. French(/ Mod. Greek / . . .):

(43) * Jean$_1$ semble [à Marie]$_{DAT}$ [t_1 avoir   du talent].
     Jean seems   to Marie   have.INF of talent
     'Jean seems to Marie to have talent.'   [*Anagnostopoulou 2003:38*]

  ○ French is a language in which movement to subject is set to:
    grab the nominal that has been targeted for φ-agreement

  ○ but (43) only has a parse in which movement to subject <u>has
    successfully applied</u>;

  ↠ the grammar could never generate this string, since this input to
    movement to subject was not available

    ⇒ hence, ungrammaticality arises.

Bleeding-like interactions in syntax *(cont.)*

- I've shown you this not because it's necessarily the right analysis of dative intervention in particular —

  (though I think that it is)
- — but because I think it's a model for the interaction of syntactic operations that is underutilized / underexplored.

Conclusion

Conclusion

- At least some of what are traditionally considered "feature values" actually represent the wholesale <u>absence</u> of values
  - at least as far as syntax is concerned

- This includes, at the very least:
  - "3rd person"
  - "singular"
  - "nominative"

- This is not the (familiar) claim that these values are *defaults*; rather, it is the claim that <u>there is no value there</u> in the syntactic computation
  - with attendant consequences that are unavailable on a simple *defaults*-based view
    - incl.: agreement in K'ichean AF, case in Sakha, dative intervention cross-linguistically

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References

Aissen, Judith. 1992. Topic and focus in Mayan. *Language* 68:43–80.

Aissen, Judith. 1999. Agent focus and inverse in Tzotzil. *Language* 75:451–485.

Aissen, Judith. 2011. On the syntax of agent focus in K'ichee'. In *Proceedings of FAMLi: formal approaches to Mayan linguistics*, eds. Kirill Shklovsky, Pedro Mateo Pedro & Jessica Coon, MIT Working Papers in Linguistics 63, Cambridge, MA: MITWPL, 1–16.

Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: evidence from clitics*. Berlin: Mouton de Gruyter.

Archangeli, Diana. 1988. Underspecification in phonology. *Phonology* 5:183–207, DOI: <10.1017/S0952675700002268>.

Baker, Mark C. 2015. *Case: its principles and its parameters*. Cambridge Studies in Linguistics 146, Cambridge: Cambridge University Press.

Baker, Mark C. & Nadya Vinokurova. 2010. Two modalities of Case assignment: Case in Sakha. *Natural Language & Linguistic Theory* 28:593–642, DOI: <10.1007/s11049-010-9105-1>.

Béjar, Susana & Milan Rezac. 2009. Cyclic Agree. *Linguistic Inquiry* 40:35–73, DOI: <10.1162/ling.2009.40.1.35>.

Bittner, Maria & Ken Hale. 1996. The structural determination of Case and Agreement. *Linguistic Inquiry* 27:1–68.

References *(cont.)*

Bobaljik, Jonathan David. 2008. Where's phi? Agreement as a post-syntactic operation. In *Phi Theory: phi-features across interfaces and modules*, eds. Daniel Harbour, David Adger & Susana Béjar, 295–328. Oxford: Oxford University Press.

Bobaljik, Jonathan David. 2012. *Universals in comparative morphology: suppletion, superlatives, and the structure of words*. Cambridge, MA: MIT Press.

Bobaljik, Jonathan David. 2015. Suppletion: some theoretical implications. *Annual Review of Linguistics* 1:1–18.

Caha, Pavel. 2009. *The nanosyntax of case*. Doctoral dissertation, Tromsø: University of Tromsø.

Campbell, Lyle. 2000. Valency-changing derivations in K'iche'. In *Changing valency: case studies in transitivity*, eds. R. M. W. Dixon & Alexandra Y. Aikhenvald, 236–381. Cambridge: Cambridge University Press.

Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step: essays on minimalist syntax in honor of Howard Lasnik*, eds. Roger Martin, David Michaels & Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: a life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.

Clements, George N. 1985. The geometry of phonological features. *Phonology Yearbook* 2:225–252.

References *(cont.)*

Coon, Jessica, Pedro Mateo Pedro & Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: evidence from Mayan. *Linguistic Variation* 14:179–242, DOI: <10.1075/lv.14.2.01coo>.

Craig, Colette Grinevald. 1979. The antipassive and Jacaltec. In *Papers in Mayan linguistics*, ed. Laura Martin, 139–165. Columbia, MO: Lucas Bros. Publishers.

Davies, William D. & Luis Enrique Sam-Colop. 1990. K'iche' and the structure of antipassive. *Language* 66:522–549.

Dayley, Jon P. 1978. Voice in Tzutujil. *Journal of Mayan Linguistics* 1:20–52.

Dayley, Jon P. 1985. *Tz'utujil grammar*. University of California Publications in Linguistics 107, Berkeley, CA: University of California Press.

Demirok, Ömer. 2013. Agree *as a unidirectional operation: evidence from Laz*. Master's thesis, Istanbul: Boğaziçi University.

Forchheimer, Paul. 1953. *The category of person in language*. Berlin: Walter de Gruyter.

Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: a feature-geometric analysis. *Language* 78:482–526, DOI: <10.1353/lan.2002.0158>.

Holmberg, Anders & þorbjörg Hróarsdóttir. 2003. Agreement and movement in Icelandic raising constructions. *Lingua* 113:997–1019, DOI: <10.1016/S0024-3841(02)00162-6>.

References *(cont.)*

Kornfilt, Jaklin & Omer Preminger. 2015. Nominative as *no case at all*: an argument from raising-to-ACC in Sakha. In *Proceedings of the 9th Workshop on Altaic Formal Linguistics (WAFL 9)*, eds. Andrew Joseph & Esra Predolac, MIT Working Papers in Linguistics 76, Cambridge, MA: MITWPL, 109–120.

Levin, Theodore. 2016. Successive-cyclic case assignment: Korean nominative-nominative case-stacking. *Natural Language & Linguistic Theory*, DOI: <10.1007/s11049-016-9342-z>.

Levin, Theodore & Omer Preminger. 2015. Case in Sakha: are two modalities really necessary?, *Natural Language & Linguistic Theory* 33:231–250, DOI: <10.1007/s11049-014-9250-z>.

López Ixcoy, Candelaria Dominga. 1997. *Gramática K'ichee'*. Guatemala City: Cholsamaj.

Marantz, Alec. 1991. Case and licensing. In *Proceedings of the 8th Eastern States Conference on Linguistics (ESCOL 8)*, eds. German Westphal, Benjamin Ao & Hee-Rahk Chae, Ithaca, NY: CLC Publications, 234–253.

Mondloch, James L. 1981. *Voice in Quiche-Maya*. Doctoral dissertation, Albany, NY: State University of New York.

Moravcsik, Edith A. 1978. Agreement. In *Universals of human language IV: syntax*, ed. Joseph H. Greenberg, 331–374. Stanford, CA: Stanford University Press.

References *(cont.)*

Nevins, Andrew Ira. 2007. The representation of third person and its consequences for Person-Case effects. *Natural Language & Linguistic Theory* 25:273–313, DOI: <10.1007/s11049-006-9017-2>.

Nevins, Andrew Ira. 2011. Multiple Agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29:939–971, DOI: <10.1007/s11049-011-9150-4>.

Norman, William M. & Lyle Campbell. 1978. Towards a Proto-Mayan syntax: a comparative perspective on grammar. In *Papers in Mayan linguistics*, ed. Nora C. England, University of Missouri Miscellaneous Publications in Anthropology 6, 136–156. Columbia, MO: University of Missouri.

Preminger, Omer. 2011a. *Agreement as a fallible operation*. Doctoral dissertation, Cambridge, MA: MIT.

Preminger, Omer. 2011b. Asymmetries between person and number in syntax: a commentary on Baker's SCOPA. *Natural Language & Linguistic Theory* 29:917–937, DOI: <10.1007/s11049-011-9155-z>.

Preminger, Omer. 2014. *Agreement and its failures*. Linguistic Inquiry Monographs 68, Cambridge, MA: MIT Press, DOI: <10.7551/mitpress/9780262027403.001.0001>.

References *(cont.)*

Pye, Clifton. 1989. The focus antipassive in K'iche' Mayan. In *Studies in native american languages V*, eds. Jong-Seok Ok & Mubeccel Taneri, vol. 14, Kansas Working Papers in Linguistics 2, 88–98. Lawrence, KS: University of Kansas Linguistics Graduate Student Association.

Sam-Colop, Luis Enrique. 1988. *Antipassive and* 2-3 retreat *in K'iche'*. Master's thesis, Iowa City, IA: University of Iowa.

Smith, Peter W., Beata Moskal, Ting Xu, Jungmin Kang & Jonathan David Bobaljik. 2016. *Case and number suppletion in pronouns*. Ms. URL: <https://ling.auf.net/lingbuzz/003110>.

Smith-Stark, Thom. 1978. The Mayan antipassive: some facts and fictions. In *Papers in Mayan linguistics*, ed. Nora C. England, University of Missouri Miscellaneous Publications in Anthropology 6, 169–187. Columbia, MO: University of Missouri.

Stiebels, Barbara. 2006. Agent Focus in Mayan languages. *Natural Language & Linguistic Theory* 24:501–570, DOI: <10.1007/s11049-005-0539-9>.

Vinokurova, Nadya. 2005. *Lexical categories and argument structure: a study with reference to Sakha*. Doctoral dissertation, Utrecht: UiL-OTS. LOT dissertation series.

Yip, Moira, Joan Maling & Ray Jackendoff. 1987. Case in tiers. *Language* 63:217–250.

References *(cont.)*

Yoon, James. 1996. Ambiguity of government and the chain condition. *Natural Language & Linguistic Theory* 14:105–162, DOI: <10.1007/BF00133404>.

Yoon, James. 2004. Non-nominative (major) subjects and case-stacking in Korean. In *Non-nominative subjects*, eds. Peri Bhaskararao & K. V. Subbarao, vol. 2, 265–314. Amsterdam: John Benjamins.

Zompí, Stanislao. 2016. *Case decomposition meets dependent-case theories*. Master's thesis, Università di Pisa.