Correlation and causation in case & agreement

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1. Introduction

This talk addresses the issue of causality between *case* and *agreement*

- Whether such causality exists;
- And if so, which is the causer and which is the causee.

So, for example:

- In Sakha passives, the Theme can surface as either NOM or ACC —

(1) a. oloppos-tor aldjat-ylyn-ny-**lar**
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.'

(2) 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)

[*Sakha; Baker & Vinokurova 2010:637*]

— but crucially:
finite agreement with the Theme is possible *iff* the Theme is NOM.[1]

. . . . . .

⇒ What we see here is the following familiar generalization:

(3) CASE-AGREEMENT CODEPENDENCE GENERALIZATION (CACG)
case C on noun phrase x $\Longleftrightarrow$ agreement with x
where $C \in \{\text{NOMINATIVE}, \ldots\}$

SPOILER: The CACG is false; but it's too close to true for it to be an accident.

[1] Baker & Vinokurova (2010:609–610) argue that examples like (1b), but not (1a), contain a PRO subject. But as they note (633n30), even if that is the case, PRO is inaccessible to agreement in Sakha (see also Levin & Preminger 2015:6–7).

At this juncture, you might ask yourself:
What notion of *case* is (3) supposed to apply to—*abstract case* (a.k.a., "Case"), or *morphological case*?

ANSWER: I'm not going to presuppose that such a distinction exists.

And, as it turns out: if you happen to buy into a dichotomy between these two notions of case, our discussion here will have consequences for both. (Stay tuned.)

- Short of the undesirable "it's a coincidence" gambit, there are three ways one might try to explain the CACG:
  - **(i)** agreement with noun phrase x *gives rise to* case C on x
  - **(ii)** case C on noun phrase x is *a prerequisite for* agreement with x
  - **(iii)** there is some third factor F that conditions both case C on, and agreement with, noun phrase x

- Generative syntax has seen proposals that go in each of these directions:
  - **(i)** George & Kornfilt (1981), a.o.:
    agreement gives rise to (structural) case
    - finite agreement with x gives rise to nominative case on x
    - possessive agreement with x gives rise to genitive case on x
  - **(ii)** Bittner & Hale (1996), a.o.:
    (some) cases are prerequisites for (some instances of) agreement
    - accusative case on x is a prerequisite for object agreement with x
    - ergative case on x is a prerequisite for transitive-subject agreement with x
  - **(iii)** "canonical" GB (see, e.g., Chomsky 1986):
    both case and agreement are conditioned by being in (or passing through) certain structural positions
    - Infl^0 governs[2] [Spec,Infl] $\Longrightarrow$ nominative case on the noun phrase in [Spec,Infl]
    - spec-head relation between Infl^0 and [Spec,Infl] $\Longrightarrow$ finite agreement with the noun phrase in [Spec,Infl]

[2] Crucially, the structural relation relevant to government here is (what we now call) *m-command*, rather than (what we now call) *c-command*. See Chomsky (1986:8–9), following Aoun & Sportiche (1983).

- ↦ At the moment, it seems much of the field has adopted **(i)**
  - following, e.g., Chomsky (2000, 2001)[3]
- In today's talk, I will argue for a version of **(ii)**
  - in particular, I will argue that being, e.g., nominative is a prerequisite for being the target of finite agreement

2. Exceptions to the CACG

There are a few relatively well-known exceptions to the *CACG*.

2.1. *pro*-drop

- Obviously, *pro*-drop (if the language has overt *φ*-agreement, which is very often the case) furnishes what looks like agreement in the absence of an appropriately case-marked noun phrase
- But we need to posit something like $[pro]_{DP}$, if only for theta-theoretic reasons
- Once we posit $[pro]_{DP}$, we might as well assume that $[pro]_{DP}$ bears the requisite case (e.g. nominative) to bring this in line with the CACG

  ⇒ this problem dissolves.

2.2. Bearers of structural case that have not been agreed with, take 1: Icelandic

(4) Það finnst/*finnast [einhverjum stúdent]$_{DAT}$ [$_{SC}$ tölvurnar
EXPL find.SG/*find.PL some student.SG.DAT computers.the.PL.NOM
ljótar].
ugly
'Some student finds the computers ugly.'

(5) [Einhverjum stúdent]$_1$ finnast t_1 [$_{SC}$ tölvurnar ljótar].
some student.SG.DAT find.PL computers.the.PL.NOM ugly
'Some student finds the computers ugly.'
[*Icelandic; Holmberg & Hróarsdóttir 2003:999–1000*]

- The dative *einhverjum stúdent* ("some student.SG.DAT") demonstrably intervenes in the agreement relation with the nominative *tölvurnar* ("computers.the.PL.NOM")
- ↦ But the variant of (4) in which the matrix (finite) verb bears singular agreement is grammatical

  ⇒ meaning nominative on *tölvurnar* ("computers.the.PL.NOM") cannot be a result of agreement with the matrix verb
  (or the matrix $Infl^0/I^0/T^0$/etc.)

POSSIBLE RETORT:

- *tölvurnar* ("computers.the.PL.NOM") is in [Spec,TP] of its own clause

  ⇒ how can we be sure that it doesn't receive nominative via agreement with the embedded T^0?

  (I'm not saying there aren't potential reasons to doubt this alternative—e.g. the fact that the nonfinite T^0 in Icelandic does not, in fact, show any signs of agreement—but whether or not such things count as problems depends on some other assumptions.)

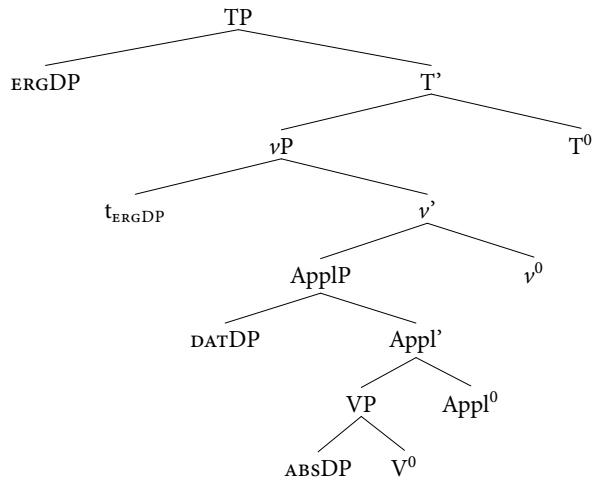
2.3. Bearers of structural case that have not been agreed with, take 2: Basque

- Long-distance agreement (LDA) in "substandard" Basque (Etxepare 2006)
  - "substandard" because of the prevailing prescriptive attitude toward these constructions;
  - and because of their distribution, which cuts across established Basque dialect boundaries (Eastern/Central/Western).

[3] See, for example, Chomsky 2000:124n81, Chomsky 2001:16.

- Some basics of Basque syntax:

(6) Basque ditransitives



(7) [Guraso-e-k]$_{\textbf{ERG}}$ [niri]$_{\textbf{DAT}}$ [belarritako ederr-ak]$_{\textbf{ABS}}$ erosi
parent(s)-ART$_{pl}$-ERG me.DAT earring(s) beautiful-ART$_{pl}$(ABS) bought
d-i-zki-da-te.
3.ABS-√-pl.ABS-1sg.DAT-3pl.ERG
'(My) parents have bought me beautiful earrings.' [*Basque; Laka 1996*]

- The datDP intervenes in agreement relations targeting the absDP
  - this is ameliorated when the datDP is clitic-doubled
    - which happens when the datDP, as an intervener, halts the probing of T^0 for person features

      (or in the terms used in my March talk:
      when the datDP halts π^0, the finite person probe—a subpart of what we have come to call "finite T^0" in Basque)

  ⇒ giving rise to the Person Case Constraint (PCC):

  You can have *plural* agreement with the absDP, but not *1st/2nd-person* agreement with it.

↦ Importantly, clitic doubling in Basque is restricted to finite clauses

⇒ in non-finite clauses, the datDP intervenes <u>even for number</u>.

(8) [[**Miren-entzat**]$_{PP}$ [**harri horiek**]$_{(ABS)}$ altxa-tze-n] probatu
Miren-BEN **stone(s)** **those$_{pl}$** lift-NMZ-LOC attempted
d-**it**-u-zte.
3.ABS-**pl.ABS**-√-3pl.ERG
'They have attempted to lift those stones for Miren.'
(subject is *pro*<3pl.ERG>)

(9) [[**Lankide-e-i**]$_{DAT}$ [**liburu horiek**]$_{(ABS)}$ irakur-tze-n]
colleague(s)-ART$_{pl}$-DAT **book(s)** **those$_{pl}$** read-NMZ-LOC
probatu d-ϕ/***it**-u-(z)te.
attempted 3.ABS-**sg/*pl.ABS**-√-3pl.ERG
'They have attempted to read those books to the colleagues.'
(subject is *pro*<3pl.ERG>)
[*Basque; Preminger 2009:640–641*]

⇒ changing a true PP in (8) into a datDP in (9) results in intervention in number agreement with the embedded absDP

- Now consider this absDP from the perspective of the CACG:
  - as these data show, the datDP in (9) (*lankide-e-i* "colleague(s)-ART$_{pl}$-DAT") intervenes in agreement relations targeting the absDP
  - nevertheless, the absDP in (9) (*liburu horiek* "book(s) those$_{pl}$") is, well, absolutive
    - <u>and note:</u> this is a full-fledged DP, replete with a demonstrative—not some kind of reduced/bare nominal

⇒ **what agreement relation could possibly have (successfully) targeted this absDP?**

  - even v^0 is already too high to successfully have agreed with the absDP;
  - given a structure along the lines of (6), one might ask whether it could be Appl^0 that assigns case-by-agreement to the absDP in (9)
    - ↦ the problem with this is that Basque has distinct abs and dat case morphology, and the absDP is unambiguously absolutive
    - Appl^0 cannot be the head that assigns abs, since:
      - (i) Appl^0 is absent in monotransitives, but those still have abs case
      - (ii) the case that monotransitives lack and ditransitives have—and thus, the case that is conceivably "added" by Appl^0—is dat

More generally, we can describe the problem these Basque data pose for the CACG as follows:

- The intervener in (9) is a *co-argument* of the ABSDP
  - the two are internal arguments of the same ditransitive verb
- Any functional head capable of assigning case-by-agreement to the ABSDP would already be higher than both arguments

  ⇒ and would thus suffer the same intervention effect demonstrated in (9).

UPSHOT:

- Absolutive in Basque arises *in the complete absence of syntactic agreement*
- Importantly, absolutive in Basque bears the hallmarks of a structural case
  - e.g. it can be overridden under raising (Artiagoitia 2001, Rezac 2008)

⇒ Structural case arises on noun phrases that have not undergone agreement.

2.4. Finite agreement with DPs that are not nominative or absolutive

- As we saw in (1–2), Sakha obeys the CACG.

↦ In light of this, the following is rather surprising:

(10) min **ehigi$_1$-ni** [$_{\overline{C}}$ t_1 bügün 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.'

(11) ehigi **bihigi$_1$-ni** [$_{\overline{C}}$ 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.'

[*Sakha; Vinokurova 2005:369; annotated following Baker & Vinokurova 2010*]

- As B&V(:616–617) show, (10–11) involve raising *per se*
  - the Sakha NPI *kim daqany* ("who PCL") can only be interpreted in the scope of negation;
  - thus, examples like (12), where the ACCDP is base-generated above the clause with negation, are ungrammatical:

(12) * min **kim-ŋe** **daqany** [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.'

  - but crucially, with a predicate like, e.g., *eren* ("hope"), a superficially similar example becomes acceptable:

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

⇒ The embedded clauses in examples like (10–11) exhibit finite agreement with a noun phrase that ultimately surfaces bearing ACC (rather than NOM)

↦ *in violation of the CACG.*

A COMMON INTUITION:

- The raised noun phrase in examples like (10–11) *was* nominative —
  (at the point at which it was targeted for finite agreement)
  — and was assigned accusative *later* in the derivation.

- B&V assume a Chomsky (2000, 2001)-style relation between finite agreement and NOM case (namely, that the former *gives rise to* the latter)
- And suggest that examples like (10–11) involve "case-stacking" (cf. Schütze 2001, Yoon 2004, on Korean; and Richards 2007, 2013, on Lardil)
  - such that ACC, assigned in the matrix clause, is "stacked" outside of NOM, which was already assigned in the embedded clause

↦ However, as Kornfilt & Preminger (2015) show, this constellation of assumptions fails on Sakha-internal grounds

  - in a nutshell, it can be shown that Sakha does not have case-stacking, not even of the covert kind.

3. Towards a solution

Let us review our desiderata so far:

(i) The *almost-entirely-true* nature of the CACG (§1)

(ii) The occurrence of structural case in the absence of agreement (§2.2–§2.3)

(iii) Finite agreement with a noun phrase that subsequently becomes, e.g., accusative (§2.4)

. . . . . .

- I have argued elsewhere that the term "*3sg* agreement morphology" is somewhat misleading—and that, in effect, it just refers to:
  - the characteristic spellout afforded to probes that have failed to locate [participant] and/or [plural] features in their local c-command domain

    (Preminger 2011, 2014; this follows Harley & Ritter's 2002 observations concerning the typology of pronoun inventories)

↦ Suppose, then, that "nominative" and "absolutive" are a similar bit of terminological equivocation—and are, in reality:
  - the characteristic spellout afforded to noun phrases that have failed to value their case features through the course of the entire derivation

(14) "nominative"/ "absolutive" ≡ *caselessness*

  - this idea can be traced (in the generative era, at least) to Bittner & Hale (1996)

  - **note #1:** this does not imply that "nominative"/ "absolutive" are necessarily *phonologically null*
    - just like "3rd person singular" is not phonologically null in every single language
    - this depends on the particular vocabulary items and/or insertion rules in the language in question

  - **note #2:** this does imply that there can be no such thing as a "Case Filter"; we'll get back to that, but not until §7.

- As we will see, if we add to (14) the assumption that finite agreement probes can only target caseless DPs —

  ↦ *we derive both the CACG and its exceptions.*

- But before showing that, I will present a case calculus that delivers (14), while remaining compatible with the other facts we have seen.

4. A syntactic, configurational calculus for case

I assume here that the empirical desiderata for the calculus of case are adequately characterized by Marantz's (1991) *disjunctive case hierarchy*:

(15) DISJUNCTIVE CASE HIERARCHY [*Marantz 1991*]
lexical/oblique case → dependent case → unmarked case

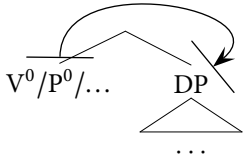
However, departing from Marantz, I will show how something like (15) can be arrived at within narrow syntax.

If you are unfamiliar with the workings of Marantz's (1991) proposal, worry not; everything you need to know about it will be touched upon in the present discussion.

Assuming a bottom-up approach to syntactic structure building:

- The first syntactic relation that a DP (once built) has an opportunity to participate in is the relation with whatever head (c-)selects it

(16) LEXICAL/OBLIQUE CASE – *CASE ASSIGNED UPON FIRST MERGER*



- If the head in question happens to be lexically specified to assign some case to its complement (think *listen* vs. *hear*):
  - the DP in a configuration like (16) will have its case features valued according to what is lexically specified on the selecting head

Importantly:
If we indeed think of this in terms of feature valuation *per se*, we derive:

(i) the fact that case assigned by a selecting head takes precedence over other kinds of case (in the same clause)

(ii) the fact that once assigned, such case cannot be overridden (in a higher clause)

- because valuation is a "one-off": once you have a value, you are no longer *un*valued, thus no longer eligible for valuation
- these are not new ideas, of course, and a lot of this borrows heavily from conventional treatments of *inherent case*

↦ where things become interesting is in contrasting this with the other two components of (15), viewed from this feature-valuation perspective

. . . . . .

- On the opposite side of the spectrum:
  - a DP that has gone through the course of the entire derivation without valuing its case features will be given the spellout characteristic of reaching PF with those features still unvalued
    - namely, as what we have come to call "nominative"/ "absolutive"
      - cf.: "3rd person singular" in the domain of φ-features

      (as noted above, this characteristic spellout may or may not be null, depending on language-specific morphological factors)
  - this is why cases like nominative *can* be overridden in the course of the derivation:
    - "nominative"/ "absolutive" ≡ a state of non-valuation

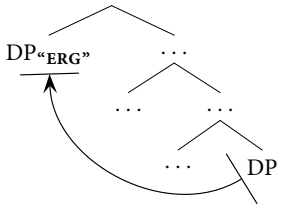
      ⇒ **subsequent valuation would change this state.**

. . . . . .

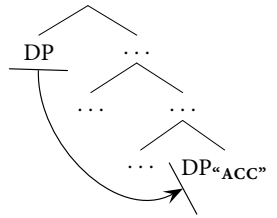
- Sandwiched between these two, in terms of the derivational sequence, is *dependent case*
  - in this system, dependent case is case that is assigned to a DP by virtue of standing in an asymmetric c-command relation with another as-of-yet-caseless DP
    - it is, in a sense, an indication that:

      "I have (been) c-commanded (by) another DP with unvalued case features in the course of the derivation."

(17) DEP. CASE: UPWARD → "ERG"



(18) DEP. CASE: DOWNWARD → "ACC"



- Like any other syntactic relation, (17–18) cannot obtain if a locality boundary intervenes between the two DPs in question
  - in particular: the boundary of a CP, PP, or other DP
- Even so, dependent case seems like an outlier in the landscape of syntax in a different sense—namely, because it is a phrase-to-phrase relation
  - as opposed to the head-to-phrase relations that we are used to
- This has led some to propose that it involves an "intermediary" —
  - implementing what looks like a phrase-to-phrase relation as two, separate *head*-to-phrase relations, with one and the same head (see, e.g., Bittner & Hale 1996)

↦ However, Sakha demonstrates quite vividly that such an approach is on the wrong track (B&V:617–619)

- as evidenced by raising-to-ACC being possible even when …
  - the raised-to clause is anchored by an unaccusative verb (which, outside of raising contexts, would not support ACC assignment)

    ~ or ~
  - the raised-to clause contain a separate, canonical argument marked ACC (alongside the raised DP)

- The same facts also rule out treating ACC as case assigned directly by a functional head (e.g. v^0)
  - since assuming that unaccusative v^0 has ACC-assigning capabilities, or that active/transitive v^0 can assign multiple instances of ACC, would wreak havoc elsewhere in the grammar

⇒ **A case like ACC is just about getting into a configuration like (18).**

NOTE: It appears, then, that dependent case is a direct relation between two phrasal categories, after all—unlike anything else we are familiar with…
(except Binding Theory!)

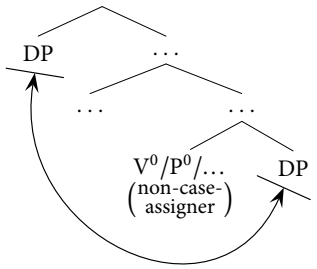
- In Marantz's system, it had to be stipulated that:
  - lexical/oblique case takes precedence over dependent case, which takes precedence over unmarked case

↦ On the current approach, this is derived from the bottom-up nature of structure building:
  - a DP will merge with the head that selects it before it ever has a chance to stand in a relation like (17–18)

  ⇒ if the selecting head is lexically specified to assign case, that will bleed dependent case assignment

  (since, as noted, valuation is a "one-off")
  - the effective configuration for dependent case assignment (abstracting away from directionality, i.e., "ACC" vs. "ERG") is therefore (19)

(19) EFFECTIVE CONFIGURATION FOR DEPENDENT CASE



  - finally, since "nominative"/ "absolutive" are, by hypothesis, labels for *non-valuation* —

  — they would be bled by either lexical/oblique case (16) or dependent case (19)

⇒ We thus derive the ordering stipulations embodied in Marantz's (1991) *disjunctive case hierarchy*

In case I haven't made it clear: this is not the analysis that Baker & Vinokurova propose for Sakha. But that's okay: as shown by Levin & Preminger (2015), the analysis presented here accounts equally well for the Sakha facts.

5. Deriving the CACG and its exceptions

5.1. The basic pattern

- Let us start with the basic pattern, as exemplified by the Sakha (20), repeated from earlier:

(20) a. oloppos-tor aldjat-ylyn-ny-**lar** (/*aldjat-ylyn-na)
chair-PL break-PASV-PST-**3pl.SUBJ** (/*break-PASV-PST(3sg.SUBJ))
'Chairs were broken.'

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

[≈(1–2)]

- Let us assume, with B&V, that examples like (20b) involve a PRO Agent
  - which participates in the case calculus, but crucially, lacks the features relevant to φ-agreement (see also fn. 1)

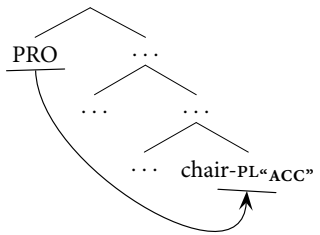
NB: These are not ad hoc assumptions put in place to derive (20a–b). They are necessary, on the configurational case model, to capture even very basic facts like (21):

(21) John tried [$\text{PRO}_{\textbf{(NOM)}}$ to meet $\text{them}_{\textbf{ACC}}$].

. . . . . .

- Thus, in (20b), the PRO Agent enters into a dependent case relation with *oloppos-tor* ("chair-PL"), valuing the case features of the latter:

(22)



- In (20a), on the other hand, there is only one noun-phrase, *oloppos-tor* ("chair-PL"), and so its case features remain unvalued

⇒ If we now add the previously noted assumption that **only caseless noun phrases can be targeted for finite agreement** —
  - in (20a): *oloppos-tor* ("chair-PL") will be agreed with, as attested
  - in (20b): *oloppos-tor-u* ("chair-PL-acc") cannot be targeted (nor, by hypothesis, can PRO)
    - but as argued extensively in my March talk (see also Preminger 2011, 2014), this does not result in a "crash" or ungrammaticality
    - rather, it results in the characteristic spellout of probes that have not found [participant] and/or [plural] features in their domain
      - a.k.a., "3rd person singular"

5.2. Structural case without agreement

- Let us now turn to the first kind of exception that we noted to the CACG
  - namely, bearers of structural case that could not have been agreed with

(23) [[**Miren-entzat**]$_{PP}$ [**harri** **horiek**]$_{(ABS)}$ altxa-tze-n] probatu
Miren-BEN **stone(s)** **those$_{pl}$** lift-NMZ-LOC attempted
d-**it**-u-zte.
3.ABS-**pl.ABS**-√-3pl.ERG
'They have attempted to lift those stones for Miren.'
(subject is *pro*<3pl.ERG>)

(24) [[**Lankide-e-i**]$_{DAT}$ [**liburu** **horiek**]$_{(ABS)}$ irakur-tze-n]
colleague(s)-ART$_{pl}$-DAT **book(s)** **those$_{pl}$** read-NMZ-LOC
probatu d-ϕ/***it**-u-(z)te.
attempted 3.ABS-**sg/*pl.ABS**-√-3pl.ERG
'They have attempted to read those books to the colleagues.'
(subject is *pro*<3pl.ERG>) *[=(8–9)]*

- On the current proposal, this kind of exception is completely unproblematic —
  - finite agreement requires that the DP target "bears structural case" (now construed as having unvalued case features)
  - but agreement itself is not implicated in any way in the case calculus (recall: §4)
  - the absolutive DP in the embedded clause in (23/24) receives neither lexical/oblique case nor dependent case ("ERG")

⇒ it therefore receives the characteristic spellout for DPs in Basque that have unvalued case features (a.k.a., "absolutive")
  - regardless of whether or not it is subsequently agreed with

- As predicted:
  - this absolutive(=caseless) DP *can* be targeted for agreement
    - as in (23)
  - unless other factors disrupt such agreement
    - e.g. a dative intervener, as in (24)

↔ but crucially, this does not affect "absolutive case" one way or another.

5.3. Finite agreement with non-{NOM, ABS} DPs

Now consider the second kind of exception—namely, agreement with a nominal that surfaces with a case other than "nominative"/ "absolutive":

(25) min **ehigi$_1$-ni** [$_{\overline{C}}$ t_1 bügün 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.'

(26) ehigi **bihigi$_1$-ni** [$_{\overline{C}}$ 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.' *[=(10–11)]*

- Assuming, as we have been, a bottom-up syntactic derivation:
  - within the embedded clauses in (25–26), there is nothing that would assign lexical/oblique case or dependent case to the bolded phrases
    - *ehigi* ("you") in (25), *bihigi* ("we") in (26)

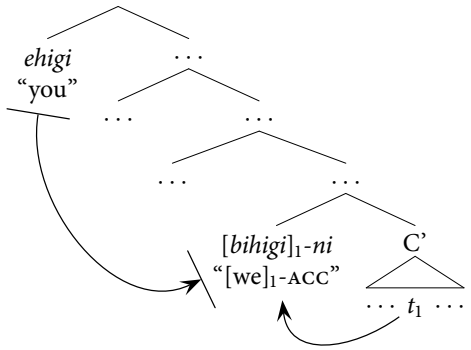
    [Even if the predicate in the embedded clause were transitive, instead of the intransitives in (25–26), that would result in dependent case on the embedded object, not on the embedded subject—since dependent case in Sakha is parameterized to downward(="ACC").]

⇒ these phrases will remain caseless (="nominative")
  - and thus, viable targets for finite agreement—as attested

- subsequently, these noun phrases raise to a position in the same case domain as the matrix subject
  - more precisely:
    they raise to a position where they are no longer separated from the matrix subject by any of the relevant locality boundaries

⇒ furnishing a representation along the lines of (27):

(27) *[≈(26)]*



6. Further advantages: noun phrases targeted for finite agreement more than once

- As noted in the Introduction, one of the proposals in the literature to account for the CACG is the one in Chomsky 2000, 2001, whereby:
  - cases like nominative/absolutive arise *as the result of* agreement
  - the assignment of case to a DP 'inactivates' it, and inactivated DPs cannot participate in further case & agreement processes
    - a.k.a., the "Activity Condition"

↦ As you may have noticed, this comes close to what I'm proposing here, in that:
  - finite agreement targets DPs that are, at the point in the derivation at which they are targeted, caseless

- A couple of differentiating predictions we've already explored:
  (i) the Chomsky 2000, 2001 approach cannot account for the Icelandic and (more acutely) Basque data we examined
    - involving structural case on noun phrases that could not have been agreed with
  (ii) it also cannot account for the Sakha data—involving targets of finite agreement that subsequently surface bearing ACC—without assuming "case-stacking"
    - which, for reasons I'm not going into in today's talk, is a problematic assumption as far as Sakha is concerned

. . . . . .

- In this section, I present another empirical pattern that is problematic for the Chomsky 2000, 2001 approach —
  - but follows straightforwardly on the approach proposed here

↦ The crucial data involve noun phrases that are targeted for finite agreement more than once.

- As shown in (28a–b), the verb in Tsez agrees—in noun-class—with the absolutive argument:

(28) a. **ziya** **b**-ik'i-s
cow.III.ABS III-go-PST.EVID
'The cow left.'
b. eniy-ā **ziya** **b**-išer-si
mother-ERG **cow.III.ABS III**-feed–PST.EVID
'The mother fed the cow.' [*Tsez; Polinsky & Potsdam 2001:586*]

↦ As Polinsky & Potsdam demonstrate, absolutive arguments in Tsez can trigger overt φ-agreement on more than one lexical verb —
  - in particular, embedded topics trigger agreement on the subordinating verb, as well:

(29) a. eni-r [**uži** ϕ-āy-ru-ɬi] ϕ-iy-xo
mother-DAT **boy.I.ABS I**-arrive-PST.PRT-NMZ **I**-know-PRES
'The mother knows that as for the boy, he arrived.'

b. eni-r [už-ā **magalu** **b**-āc'-ru-ɬi] **b**-iy-xo
mother-DAT boy-ERG **bread.III.ABS III**-eat-PST.PRT-NMZ **III**-know-PRES
'The mother knows that as for the bread, the boy ate it.'

[*Tsez, Polinsky & Potsdam 2001:606*]

- crucially, agreement on the subordinating verb does not *replace* agreement on the embedded verb; they surface alongside one another
- while such agreement on the subordinating verb is not generally obligatory in Tsez —
  - it actually *is* obligatory (alongside agreement on the embedded verb) if one forces the topichood of the embedded ABSDP
    - Polinsky & Potsdam 2001 for details.

- Now consider these facts from the perspective of the relationship between case & agreement:
  - if, as in Chomsky 2000/2001, agreement can only target caseless (read: *active*) DPs;
  - and it thereupon assigns case to (read: *inactivates*) the target DP;

  ⇒ then the second (i.e., matrix) agreement relation in (29a–b) should be impossible, contrary to fact.

  ↦ on the other hand, on the proposal advanced here, the possibility of (29a–b) follows straightforwardly:
  - to be targeted for finite agreement, a DP must be caseless(="nominative"/ "absolutive")
  - if the syntax of a language conspires to make a DP visible to agreement probes in two different clauses —

    (see Polinsky & Potsdam 2001 on how this comes about in Tsez)

    — then so long as it is caseless, it can be agreed with by probes in different clauses
    - because agreement does not alter the caselessness of its target.

7. Ramifications for Case Theory

What are the consequences of these findings for the theory of case?

- The most conservative move:
  Try and argue that what we have seen here is a matter of *morphology* (determined "at PF"), not *syntax*
  - i.e., there is some post-syntactic computation that determines the affixes that various elements (DPs, finite verbs) surface with
  - but "under the hood", Vergnaud-case is working just like GB *et seq.* told us it does

- This is not a novel idea; Jónsson (1996), for example, offers a treatment of Icelandic case along these lines (see also Merchant 2006, Svenonius 2005)
  - where "quirky case" is a superficial phenomenon masking an underlying system more or less identical to what one finds in English

- There are some conceptual problems with such a move:
  - MODULARITY: the allegedly post-syntactic computation implicated in case & agreement (§4) needs to know an awful lot about various syntactic primitives (c-command, phases, DPs vs. non-DPs)
  - DUPLICATION: why do both systems—abstract case and morphological case—even exist (esp. given that in many languages, their output ends up being identical)?

↦ But this weaker, "two systems" approach also faces empirical problems:[4]
  - the conclusions we drew from Basque LDA apply to *any notion of case that is contingent on agreement*—
    - including Chomsky's (2000, 2001) system, where [abstract] *Agree* in φ-features checks uninterpretable [abstract] Case on the DP

[4] The "two systems" approach is problematic from a typological perspective, as well; see Preminger (2014), ch. 8–9, for details.

- that's because:
  - *Agree* is subject to dative intervention
  - the embedded ABSDP in Basque LDA is lower than its dative co-argument
  - ⇒ the assignment of absolutive via *Agree* should be disrupted, which should yield a Case Filter violation (contrary to fact).

[The fact that the proposal sketched in §3–§4 makes the Case Filter unstateable is thus not necessarily a drawback; it might even be a desideratum.]

. . . . . .

INTERLUDE: What about the empirical coverage that the Case Filter did have?

- I think there are reasons to suspect that that empirical coverage has been overstated, and/or that much of that coverage is English-specific.
- Here are some of those reasons:
  - (i) we now know that the null subject of control infinitives is assigned case just like any other embedded subject would be
    - based on the behavior of emphatics and other modifiers (Andrews 1990, Sigurðsson 1991, a.o.)
  - (ii) overt nominative subjects do occur in control complements in other languages—e.g. Hungarian (Szabolcsi 2009a,b)
  - (iii) there is evidence going back to Postal 1974 (in particular, the behavior of so-called *wager*-class verbs) that the prohibition against overt subjects in English infinitives is a PF ban

This all pertains to the subject position of infinitives; what about other things the Case Filter does?

- the Case Filter also regulates the complementation possibilities of adjectives and (in English) also nouns
- ↦ but it seems to me that statements like "adjectives do not take nominal complements" can be reinterpreted as "adjectives do not take complements with unmarked case"
  - or, on the current proposal: "adjectives do not take caseless nominal complements"

. . . . . .

- Regardless of the fate of the original Case Filter's empirical coverage, however, we have seen that:
  - the bifurcation of case into 'abstract case' and 'morphological case' is not only conceptually problematic, it doesn't actually serve to rescue the *agreement-gives-rise-to-case* approach

⇒ We can therefore safely return to the (conceptually-superior) single case model:

- a single case calculus, in syntax, whose results are also morphologically faithful (up to syncretism)

- The results surveyed in §2–§6—in particular, the kinds of exceptions one finds to the Case-Agreement Codependence Generalization (CACG)—thus argue in favor of a theory where:
  - agreement operates on a post-case-assignment landscape (as argued, on different grounds, by Bobaljik 2008)
    - seeking out exactly those DPs that have been been "spared" by the case-assignment process and remain caseless
      - a.k.a., "nominative"/ "absolutive"

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8. Conclusion

- I have shown that the Case-Agreement Codependence Generalization (CACG; (30)) does not hold absolutely

(30) CASE-AGREEMENT CODEPENDENCE GENERALIZATION (CACG) *[≈(3)]*
case C on noun phrase $x \iff$ agreement with x
where $C \in \{\text{NOMINATIVE, ABSOLUTIVE}(, \dots)\}$

- it has, in particular, two kinds of exceptions:
  - instances of nominative/absolutive in the absence of agreement
  - instances of finite agreement with a DP that surfaces with some case other than nominative/absolutive

- I have suggested that we can make sense of the CACG *and* its exceptions if we adopt the following two assumptions:

(31) "nominative"/ "absolutive" ≡ *caselessness* *[=(14)]*

(32) only caseless noun phrases can be targeted for finite agreement

- I proposed a syntactic case calculus that delivers (31) as well as the results of Marantz's (1991) *disjunctive case hierarchy*
- I demonstrated a further advantage that this system has, in allowing a single DP to enter into agreement more than once (contra the Activity Condition)
- Finally, I discussed the ramifications of these results for the theory of case
  - showing that they cannot be swept completely out of narrow syntax and into the post-syntactic, morphological component
  - and arguing that the retreat to a "two system" theory of case ('abstract' and 'morphological') is unmotivated, failing to justify its steep conceptual price

  ⇒ meaning that the results surveyed here probably do tell us about the interaction of case & agreement *in syntax*
    - in particular, that agreement operates on a post-case-assignment landscape of DPs (see also Bobaljik 2008)

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References

Andrews, Avery D. 1990. Case structures and control in Modern Icelandic. In *Modern Icelandic syntax*, 187–234. San Diego, CA: Academic Press.

Aoun, Joseph & Dominique Sportiche. 1983. On the formal theory of government. *The Linguistic Review* 2:211–236.

Artiagoitia, Xabier. 2001. Seemingly ergative and ergatively seeming. In *Features and interfaces in Romance: essays in honor of Heles Contreras*, eds. Julia Herschensohn, Enrique Mallen & Karen Zagona, 1–22. Amsterdam: John Benjamins.

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>.

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

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.

Chomsky, Noam. 1986. *Barriers*. Cambridge, MA: MIT 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.

Etxepare, Ricardo. 2006. Number long distance agreement in (substandard) Basque. In *Studies in Basque and historical linguistics in memory of Robert L. Trask*, eds. Joseba A. Lakarra & Jose Ignacio Hualde, Supplements of the Anuario del Seminario de Filología Vasca Julio de Urquijo (ASJU, International Journal of Basque Linguistics and Philology) XL:1–2, 303–350.

George, Leland & Jaklin Kornfilt. 1981. Finiteness and boundedness in Turkish. In *Binding and filtering*, ed. Frank Heny, 105–129. Cambridge, MA: MIT Press.

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>.

Jónsson, Jóhannes Gísli. 1996. *Clausal architecture and Case in Icelandic*. Doctoral dissertation, Amherst, MA: University of Massachusetts.

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.

Laka, Itziar. 1996. *A brief grammar of Euskara, the Basque language*. Open-access grammar, ISBN: 84-8373-850-3, Vitoria-Gasteiz: Euskal Herriko Unibertsitatea (University of the Basque Country). URL: <http://www.ehu.eus/en/web/eins/basque-grammar>.

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>.

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.

Merchant, Jason. 2006. Polyvalent case, geometric hierarchies, and split ergativity. In *Proceedings of the 42nd annual meeting of the Chicago Linguistic Society (CLS 42)*, eds. Jackie Bunting, Sapna Desai, Robert Peachey, Chris Straughn & Zuzana Tomkova, vol. 2, Chicago, IL: Chicago Linguistic Society, 57–76.

Polinsky, Maria & Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language & Linguistic Theory* 19:583–646, DOI: <10.1023/A:1010757806504>.

Postal, Paul M. 1974. *On raising: one rule of grammar and its theoretical implications*. Cambridge, MA: MIT Press.

Preminger, Omer. 2009. Breaking agreements: distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40:619–666, DOI: <10.1162/ling.2009.40.4.619>.

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

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

Rezac, Milan. 2008. Phi-Agree and theta-related case. In *Phi Theory: phi-features across interfaces and modules*, eds. Daniel Harbour, David Adger & Susana Béjar, 83–129. Oxford: Oxford University Press.

Richards, Norvin. 2007. *Lardil 'Case Stacking' and the structural/inherent case distinction*. Ms., Cambridge, MA: MIT.

Richards, Norvin. 2013. Lardil 'Case Stacking' and the timing of case assignment. *Syntax* 16:42–76, DOI: <10.1111/j.1467-9612.2012.00169.x>.

Schütze, Carson T. 2001. On Korean 'Case Stacking': the varied functions of the particles *ka* and *lul*. *The Linguistic Review* 18:193–232, DOI: <10.1515/tlir.2001.001>.

Sigurðsson, Halldór Ármann. 1991. Icelandic case-marked PRO and the licensing of lexical arguments. *Natural Language & Linguistic Theory* 9:327–363.

Svenonius, Peter. 2005. *Case alternations in the Icelandic passive*. Ms. University of Tromsø.

Szabolcsi, Anna. 2009a. Overt nominative subjects in infinitival complements cross-linguistically: data, diagnostics, and preliminary analyses. In *Papers in syntax*, eds. Patricia Irwin & Violeta Vásquez Rojas Maldonado, NYU Working Papers in Linguistics 2, New York, NY: New York University Department of Linguistics.

Szabolcsi, Anna. 2009b. Overt nominative subjects in infinitival complements in Hungarian. In *Approaches to Hungarian 11: papers from the 2007 New York conference*, eds. Marcel Den Dikken & Robert Vago, Amsterdam: John Benjamins, 251–276.

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

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.

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