1. Preliminary

Things that might be obvious — but still worthwhile saying / putting down on paper:

I. Terminology: there is almost certainly an imperfect overlay between the terminology I use and the terminology you use

⇒ You will use some terms I’ve never heard before, and vice versa

➻ This entire exercise will be futile if we don’t stop one another, and ask for clarification; otherwise I might as well be speaking Na’vi

II. Theoretical background: in the same spirit, there will be some things you take for granted but that I don’t actually know, and vice versa

• Again, it will almost always be in everybody’s best interests to stop and review what that background is, when confusion arises

◦ except if/when it threatens to derail the lesson plan completely—in which case we will resort to exchanging bibliographic citations, as needed

In the spirit of (I), let me be as clear as I can about what I mean when I say agreement (at least for the purposes of this class):

“$\varphi$-agreement” (or, when I’m less careful, “agreement”): the appearance of a morpheme on a verb or TAM marker, whose form co-varies with the $\varphi$-features of (at least) one nominal argument in the clause

where:

• TAM = tense/aspect/mood

• $\varphi$-features = PERSON, NUMBER, GENDER, etc.

This might seem trivial, but:

• agreement (or more accurately, the mechanisms suggested to underly it, e.g. Agree) have been invoked in relation to a wide array of phenomena: noun-modifier concord; negative concord; pronominal binding; and others.


➻ Since these are by and large attempts to reduce new empirical domains to the behavior of $\varphi$-agreement (in the narrow sense defined here), I will put these aside for now.

---

1No, I don’t actually speak Na’vi. Haven’t even seen Avatar, actually. But that’s kind of the point.
Unfortunately, when it comes to case, things will not always be so clear-cut; there are at least two notions of case that will, at times, be relevant:

- **m(orphological)-case** (Marantz 1991)
  - first approximation: “case that we see” (morpho-phonologically)
  - a more careful definition:
    
    $M$-CASE
    
    case whose mapping onto morpho-phonological expression (“case that we see”) is a function—i.e., no one-to-many mappings allowed
    
    (my definition; might not be honored at every bank)

- **abstract case** (Vergnaud 2006, Chomsky 1981)
  - any notion of case that does not necessarily obey (1)

2. A Brief Introduction to Ergativity

- Ergativity is a kind of argument alignment

- The term argument alignment refers to any situation where some linguistic phenomenon treats a subset of \{S, A, P\} the same way:

  (2) “S verbed.”
  (3) “A verbed P.”

  (where S stands for the subject of an intransitive verb; and A and P stand for the agent and patient, respectively, of a transitive verb)

  - the phenomenon in question could be: morphology, agreement, word-order, etc.

For example:

(4) [S he] arrived.
(5) [A he] met Mary.
(6) Mary met [P him].

⇒ the morphology of English pronouns treats S and A the same (e.g., he), to the exclusion of P (e.g., him)

This kind of alignment—grouping together S and A, to the exclusion of P—is known as a nominative/accusative alignment.

- But across languages/constructions, we also find another alignment pattern —
  - grouping together S and P, to the exclusion of A
    - which is known as an ergative/(absolutive) alignment

- Pioneering work on ergative alignment, in generative linguistics: Comrie (1978) and Dixon (1979) (revised as Dixon 1994)
For example:

(7) \[ A \text{ Ehiztari-ak } [P \text{ otso-a}] \] harrapatu du  
    hunter-ARTsg wolf-ARTsg caught AUX(have)  
    ‘The hunter has caught a/the wolf.’

(8) \[ S \text{ Otso-a } ] etorri da.  
    wolf-ARTsg arrived AUX(be)  
    ‘The wolf has arrived.’ \[ \text{ [Laka 1996, annotations mine]} \]

⇒ the morphology of the Basque article (or “determiner”) treats S and P the same (e.g., -a in the singular), to the exclusion of A (e.g., -ak in the singular)

Another example:

(9) a. \[ A \text{ rat } ] x-\phi-aw-etzela-j  
    you(sg.) PRFV-3sgABS-2sg.ERG-hate-ACT the man  
    ‘You(sg.) hated the man.’

 b. \[ A \text{ ri achin } ] x-a-r-etzela-j  
    the man PRFV-2sg.ABS-3sg.ERG-hate-ACT you(sg.)  
    ‘The man hated you(sg.).’

(10) a. \[ S \text{ ri achin } ] x-\phi-uk’lun  
    the man PRFV-3sg.ABS-arrive  
    ‘The man arrived.’

 b. \[ S \text{ rat } ] x-at-uk’lun  
    you(sg.) PRFV-2sg.ABS-arrive  
    ‘You(sg.) arrived.’

\( (\phi = \text{phonologically empty}) \)

⇒ the agreement-morphology on the Kaqchikel verb treats S and P the same, to the exclusion of A

- a 2sg S is represented by \( a(t) \) on the verb, as is a 2sg P  
  - in contrast to a 2sg A, which is represented by -aw-
- a 3sg S is represented by \( \phi \) on the verb, as is a 3sg P  
  - in contrast to a 3sg A, which is represented by -r-
3. A Puzzle Hidden in Plain Sight: Why doesn’t English have an Ergative Agreement Alignment?

Anachronicity Warning: The hypotheses and arguments given in this section are not necessarily presented in the order or form in which they were originally put forth by the relevant authors. In particular, adaptations have been made to reconcile original proposals with chronologically later advances.

3.1. A first step: The VP-Internal Subject Hypothesis, and agreement as uniformly “downwards”

- The VP-Internal Subject Hypothesis (Fukui & Speas 1986, Kitagawa 1985, 1986, Koopman & Sportiche 1991, Sportiche 1988, a.o.): external arguments (EAs) are base-generated in a position below Infl:

(11) InflP
  /   \InflO
  \   /vP
    /EAv
     \vO
      /VP
       \V0 I

○ this move had a degree of theoretical/conceptual appeal
  – e.g. in completing the bifurcation of thematic positions vs. “case positions”, and thus bringing active and passive derivations onto par
○ in addition, it provided certain concrete empirical benefits
  – for example, in capturing the distribution of floating quantifiers
○ importantly, for our current purposes —
  – it facilitated a unified treatment of agreement in cases like (12) and (13):

(12) A boy plays basketball in this playground every Wednesday.

(13) There seems likely to have been a boy in the garden.

  – if we didn’t adopt the VP-Internal Subject Hypothesis, then a boy in (12) would be base-generated above the finite verb (play(s))
  ⇒ meaning we would be forced into an unappealing account of agreement as going “upwards” in (12), but “downwards” in (13)
given the VP-Internal Subject Hypothesis, however, we can assume that agreement always goes downward and in particular, that in an example like (12), agreement is established between the finite inflection head and a boy when the latter is still in its lower position:

(14) $\Rightarrow$ thus bringing agreement in examples like (12) and (13) onto a par\(^2\)

3.2. The puzzle

So let us now pose the following question:

In a finite transitive clause, why does Infl\(^0\) agree with the subj, rather than the obj?

In other words, why do we observe (15), rather than (16)?

(15) English
   a. [This child] like\(_{s}\) television.
   b. [These children] like television.

(16) English’
   a. The baby hate\(_{s}\) [this mouse].
   b. The baby hate [these mice].

\(^2\)There were originally attempts to bring examples like (12) and (13) onto a par in the opposite way, by proposing that agreement is “upwards” (e.g. spec-head) in both kinds of examples (see, for example, Chomsky’s 1986 Expletive Replacement proposal). However, such approaches turned out to make spectacularly wrong predictions—in particular, when it comes to binding (Den Dikken 1995, Lasnik & Saito 1991).
There may appear to be an obvious answer to this question — 

*locality / Closest / Relativized Minimality / etc.*

- Specifically: in a structure like (17), the **SUBJ** is *closer* to Infl$^0$ than the **OBJ** (in structural/c-command terms)

(17) 

![Diagram of syntactic structure]

⇒ by *locality / Closest / Relativized Minimality / etc.*: Infl$^0$ can only target the **SUBJ**

Elegant as this explanation might seem... **it is demonstrably wrong.**

- The reason is that the **SUBJ**, at least in English, then *vacates* its intervening position;
- and crucially, we can show that this is enough—all else being equal—to allow agreement across an intervener to obtain.

Icelandic (all data from Holmberg & Hróarsdóttir 2003, unless otherwise noted):

(18) það virðist (/*virðast) [einhverjum manni]$_{DAT}$ [sc hestarnir]$_{pl}$ vera seinir].

'A man finds the horses slow.'

- In (18), the **DATIVE** experiencer intervenes in the relation between the finite verb *virðist* ('seem') and the **NOMINATIVE** hestarnir ('the.horses.PL.NOM')

(19) Manninum$_k$ virðast [sc hestarnir]$_{pl}$ vera seinir].

'the.man.SG.DAT seem.PL the.horses.PL.NOM be slow'

'The man finds the horses slow.'

- In (19), on the other hand, the **DATIVE** experiencer has moved across the finite verb into the matrix subject position

  - Crucially, this is enough to allow agreement between the finite verb *virðist* ('seem') and the **NOMINATIVE** hestarnir ('the.horses.PL.NOM') to obtain
    - even though this agreement is, in some sense, "across the trace of an intervener"
Returning to English, then—our previous answer turns out to be untenable:

\[ \text{(20) } \]

- The ability to agree across a displaced intervener suggests that English Infl\( ] \) should be able to agree with the OBJ (contra to fact, of course)

3.3. A possible response: The “fine timing” of the derivation

- Suppose we stipulate that in English, probing by Infl\( ] \) happens before movement of the SUBJ
- This means that when Infl\( ] \) probes, it is not seeing a trace(lower copy) of the SUBJ in [Spec,vP], but rather the SUBJ itself

⇒ we can once again appeal to locality / Closest / Relativized Minimality / etc.

- To put this another way: English doesn’t have an ergative agreement alignment because Infl\( ] \) in English is parameterized to agree with the SUBJ prior to moving it
  - this is essentially Müller’s (2009) proposal for the nature of the “ergativity parameter”

At first glance, Icelandic seems to provide some additional support for this approach —

- In Icelandic, while a trace of A-movement\(^ 3 \) can be ignored for the purposes of intervention, a trace of A-bar movement cannot:

\[ \text{(21) } \]

- cf. (19), repeated here:

\[ \text{(19) } \]

\(^ 3 \)At least, of movement to canonical subject position.
It is tempting to account for this using the same kind of “fine timing”:

- in a sentence where the dative experiencer moves to subject position (e.g. (19), above), this movement happens before Infl\(^0\) probes for \(\varphi\)-agreement purposes
  - allowing \(\varphi\)-agreement between the finite verb and the lower plural nominative
- but the head(s) responsible for A-bar dislocation (of the kind in (21), for example) is/are clearly located above Infl(P)
  - by virtue of cyclicity, such A-bar heads cannot possibly probe before Infl\(^0\)

This is made explicit by Müller (2009), who points out that parameterizing the relative order of probing among two features \(F_1\) and \(F_2\) is only possible if \(F_1\) and \(F_2\) reside on the same head \(X^0\), in the first place.

\[ \Rightarrow \] at the point at which Infl\(^0\) attempts to establish \(\varphi\)-agreement, the intervener (which will eventually be A-bar-moved) is still in situ, and therefore indeed intervenes

THE PROBLEM: Icelandic doesn’t have an ergative agreement alignment, either!

- To get \(\varphi\)-agreement to operate across the A-trace of a dative, we needed the dative in Icelandic to move before Infl\(^0\) establishes (or attempts to establish) \(\varphi\)-agreement

The very same assumptions lead to the expectation that in “core” finite transitives ([SUBJ NOM V OBJ ACC]), Icelandic would exhibit an ergative agreement alignment:

\[ \equiv (20), \text{for English} \]
But in “core” finite transitives, the verb agrees with the subj, not the obj:

    he has.SG/*have.PL seen.them
    ‘He has seen them.’

b. þeirₖ hafa(*hefur) tₖ séð hann.
    they have.PL/*has.SG seen.him
    ‘They have seen him.’

This is not some minor obstacle to the “fine timing” approach

• the whole point of that approach is to derive ergative vs. non-ergative agreement alignments from the timing of movement vs. \( \varphi \)-agreement
• insofar as this is a falsifiable theory, this is exactly how one would falsify it:
  – find a language where independently of agreement alignment (ergative/non-ergative), we have evidence for the relative ordering of movement and \( \varphi \)-agreement (by \( \text{Infl}^0 \))
    · in Icelandic: because of the possibility of \( \varphi \)-agreement across an A-moved DATIVE (e.g. (19), above), we must assume that movement to subject position happens before \( \varphi \)-agreement
  – then test the prediction generated by the given ordering, regarding ergative/non-ergative agreement alignment

⇒ Icelandic is therefore as much of a refutation as could ever exist for the “fine timing” approach to ergative agreement alignment

It could be the case, of course, that Icelandic and English still differ in the “fine timing” of their derivations, with respect to movement/\( \varphi \)-agreement;

• the point is that this is not a way around our puzzle, of why we’re not seeing ergative agreement alignment in these languages
  o if English has the same “fine timing” as Icelandic, the trace of the A-moved subj should not intervene between \( \text{Infl}^0 \) and the obj, and we should see an ergative agreement alignment in English (contra to fact);
  o if English has a different “fine timing”, we are still left with the question of why we don’t find this ergative agreement alignment in Icelandic

⇒ I will assume, for expository purposes, that the “fine timing” of English and Icelandic is the same
  o if that turns out to be false, the ensuing discussion can be redone using exclusively Icelandic as the test case

3.4. Interim summary

• We are seemingly back to square one: our theory generates the expectation that English (or, at the very least, Icelandic) would exhibit ergative agreement alignment
  o given that A-traces are “skippable” for \( \varphi \)-agreement purposes
4. Towards an answer

I don’t see, at the moment, a possibility of solving the puzzle in §3 without one form or another of what I will call goal filtering:

\[(25)\]

GOAL FILTERING

Given a probe $H^0$, and a set of possible goals $G=\{\alpha, \beta, \ldots\}$, goal filtering refers to any restriction $f_H : G \rightarrow \{\text{True, False}\}$, such that $H^0$ can only target a given goal $x \in G$ if $f_H(x) = \text{True}$

- For the current purposes (namely, preventing an ergative agreement alignment in English), we want to plug in some $f_{\text{Infl}}$ that is False for OBJs but True for SUBJs
  - this will prevent Infl$^0$ from targeting the OBJ, and in turn prevent an ergative argument alignment from arising

\[\text{NOTE: } \] There is nothing really new about goal filtering (25) itself; it is just a formalization of the “relativized” part of Relativized Minimality.

It is the same thing that allows a wh-probe to skip past a non-wh SUBJ en route to a wh-OBJ:

\[(26)\]

a. $[\text{DP}_{<+wh}> \text{Which student}] \text{ did } [[[\text{DP}_{<-wh}> \text{this professor}] \text{ meet } \text{t}_{\text{DP}_{<+wh>}}]]$? 

b. 

\[
\begin{array}{c}
\text{CP} \\
\text{C}_0 \\
+\text{wh} \\
\text{SUBJ} \\
-\text{wh} \\
\text{OBJ} \\
+\text{wh} \\
\text{...} \\
\text{...} \\
\text{...} \\
\text{...} \\
\end{array}
\]

⇒ In other words, we routinely assume goal filtering for wh-probes, such that:

\[(27)\]

$f_{C_{<+wh>}}(x) = \begin{cases} 
\text{True} & \text{x is a wh-phrase} \\
\text{False} & \text{otherwise}
\end{cases}$

\[\text{⇒ The question is then the following: What is the property } f_{\text{Infl}}?\]

i.e., what is the property of SUBJ/OBJ DPs that Infl$^0$ uses to discriminate the two?

(remember, we’ve shown that it can’t be simple locality)
I see three logical possibilities:

(i) **grammatical function** (subject, object, ...; or “who is my sister-node”: \(v', V^0, \ldots\))

(ii) **thematic role** (Agent, Theme, ...)

(iii) **case** (nominative, accusative, ...)

As you’re probably anticipating at this point, (ii) can be quite easily falsified:

(28) John believes* these boys to be mean-spirited.

- This falsifies at least (ii); it may or may not also falsify (i) — depending on whether or not you believe in raising to object position (Postal 1974)
- but if raising to object position exists, then (i) ends up being circular—since there won’t be any scenario where there is more than one accessible “subject”, in the first place⁴
  - it would amount to saying:
    “\(\text{Infl}^0\) can only agree with subjects because only subjects are subjects”

- We are left with (iii) — **case**; concretely, \(\text{Infl}^0\) must be able to discriminate among potential agreement targets based on the case they bear

(29) in English: \(\Phi_{\text{Infl}}(x) = \begin{cases} \text{True} \quad & x \text{ is NOMINATIVE} \\ \text{False} \quad & \text{otherwise} \end{cases}\)

\(\Rightarrow\) **NOTICE:**

The notion of **case** that is relevant to (29) must be computed **prior** to \(\varphi\)-agreement (!!!)

- This contrasts with a system like the one proposed by Chomsky (2000, 2001), where case/DP-licensing is a side-effect of \(\varphi\)-agreement

- This result is not entirely new:
  - Bobaljik (2008) has provided a different argument for the same conclusion, from the typology of case alignments vs. agreement alignments
  - and in Thursday’s talk, I will provide another argument against the idea that \(\varphi\)-agreement feeds case/DP-licensing⁵

---

⁴Assuming, as is usual, that finite clause boundaries as well as the boundaries of nominalizations delimit the relevant locality domain for \(\varphi\)-agreement.

⁵Though unlike these two arguments (Bobaljik’s, and the one presented here), Thursday’s argument will not provide outright support for the converse feeding relation—namely, case feeding \(\varphi\)-agreement.
5. Prepackaged, but logically separable: Theories of case

- English is not a quirky case language; morphological case in English (they/them/their) lines up rather neatly with grammatical function (subject/object/possessor)—and by extension, with a notion like abstract case

Thus, the discussion in §3–§4—while leading us to the conclusion that case is necessary to compute ϕ-agreement—did not tell us which notion of case we should be using:

- abstract case?
- m-case (defined in (1), repeated below)?
- some other notion of case altogether?

Recall:

\[
\text{(1) M-CASE} \\
\text{case whose mapping onto morpho-phonological expression ("case that we see") is a function—i.e., no one-to-many mappings allowed} \\
\text{(my definition; might not be honored at every bank)}
\]

5.1. Unpacking abstract case: Head case

- Following §3, Chomsky’s (2000, 2001) theory of abstract case is pretty much off the table since it takes such case to be a side-effect of ϕ-agreement—and as discussed in §4, the relevant notion of case must be a precursor to ϕ-agreement

- However, one could retain the structural configuration proposed by Chomsky (2000, 2001) for case-assignment, while jettisoning his ideas about the dependency of case on ϕ-agreement

⇒ We could isolate the idea that case can be assigned to a DP by a head \( X^0 \), under a particular structural configuration (sometimes referred to as “neo-government”):

(i) \( X^0 \) c-commands/m-commands DP

(ii) there is no locality condition (phases, minimality, etc.) that prevents the computation from considering \( X^0 \) and DP at once

(iii) there is no closer DP’ that satisfied (i)–(ii) with respect to \( X^0 \)

\[
(30) \\
\text{(where } X^0 \text{ is a case-assigner, and the case on the DP is determined by the identity of } X^0 \text{)}
\]

Let us refer to this notion of case-assignment as head case.

- Can head case be the only notion of case necessary to compute ϕ-agreement?
5.2. Unpacking \textit{m-case}: competitor case

- Bobaljik (2008) argues that even the purely structural notion of case given in §5.1 (which I have called head case) will not do—as \(\varphi\)-agreement must make reference to case computed using the case-competition calculus (Marantz 1991).
  
  o I will not go over his arguments here, though I find them to be rather compelling (though see Legate 2008, for a dissenting opinion).

- Bobaljik then states that since Marantz’s \textit{m-case} is computed post-syntactically, so must \(\varphi\)-agreement be computed post-syntactically.
  
  \(\Rightarrow\) Again, we are faced with a theory of case—this time, the case-competition theory—that comes prepackaged with an additional claim.
  
  o in particular, the claim that the relevant computations occur post-syntactically.
  
  \(\Rightarrow\) but the latter is a logically separable claim.

\(\Rightarrow\) We could isolate the idea that case can be assigned to a DP by virtue of another distinct DP occurring within the same locality domain:

\begin{equation}
(31)
\begin{tikzpicture}
  \node (a) {DP};
  \node (b) [below of=a] {DP\textsuperscript{"ACC"}};
  \node (c) [below of=b] {DP};
  \node (d) [below of=c] {DP\textsuperscript{"ERG"}};
  \node (e) [below of=d] {DP};
  \node (f) [below of=e] {DP\textsuperscript{"DAT"}};
  \node (g) [below of=f] {DP};
  \draw [->] (a) -- (b);
  \draw [->] (b) -- (c);
  \draw [->] (c) -- (d);
  \draw [->] (d) -- (e);
  \draw [->] (e) -- (f);
  \draw [->] (f) -- (g);
\end{tikzpicture}
\end{equation}

\textbf{Let us refer to this notion of case-assignment as competitor case.}

6. \textbf{Baker & Vinokurova (2010) on Sakha}

Baker & Vinokurova (2010) (henceforth, B&V) provide evidence that both “modalities” of case-assignment, as they call them, are operative side by side in Sakha:

(i) \textbf{Chomskyan abstract case}, assigned to a DP by virtue of entering into a \(\varphi\)-agreement relation with a designated syntactic head \((T^0, D^0)\)
  
  \(\text{– which is, B&V claim, how NOMINATIVE and GENITIVE work in Sakha}\)

(ii) \textbf{dependent case} (Marantz 1991), assigned to a DP by virtue of the presence of another DP within a designated locality domain.
  
  \(\text{– which is, B&V claim, how ACCUSATIVE and DATIVE work in Sakha}\)

(we will later see in some detail what evidence B&V provide for this)

\(\Rightarrow\) You will notice, by now, that (i) is patently incompatible with our current results
  
  o since it involves \(\varphi\)-agreement feeding case-assignment.
But as discussed in §5.1, this way of talking about head case actually conflates two kinds of questions one might ask:

(32) Q1 – Is case X assigned by virtue of:
   a. the presence of a designated head; or
   b. the presence of another DP

(33) Q2 – If the answer to Q1 is (32a), is case-assignment by the relevant head:
   a. conditioned by \( \phi \)-agreement between this head and the DP
   b. not conditioned by such \( \phi \)-agreement

6.1. Head case in Sakha: Is there evidence implicating \( \phi \)-agreement?

• B&V provide ample evidence that for NOMINATIVE and GENITIVE, the answer to Q1 is (32a) (at least in Sakha);

☆☆ While they also claim the answer to Q2 for NOMINATIVE and GENITIVE is (33a), the only argument presented to support this claim is the following:
   ○ There are certain potential hosts of \( \phi \)-agreement in Sakha that seem to alternate somewhat freely between expressing overt agreement or not;
   ○ one such example involves sequences of participial verbs:

(34) a. en süüj-büt e-bik-\textbf{kin} [B&V:637]
you win-PTPL AUX-PTPL-\textbf{2sgs} ‘The result is that you won.’
b. en süüj-büt-\textbf{kün} e-bik
you win-PTPL-\textbf{2sgs} AUX-PTPL ‘The result is that you won.’

○ Interestingly, it is nonetheless impossible to have agreement on both participles in (34), and equally impossible to have agreement on neither:

(35) a. * en süüj-büt-\textbf{kün} e-bik-\textbf{kin} [B&V:637]
you win-PTPL-\textbf{2sgs} AUX-PTPL-\textbf{2sgs}
b. * en süüj-büt e-bik
you win-PTPL AUX-PTPL

○ On the basis of these and other similar patterns in Sakha, B&V appeal to the Activity Condition (Chomsky 2000, 2001; cf. Nevins 2004) — roughly:
   (i) noun-phrases enter the derivation bearing a diacritic (which is perhaps none other than an unvalued “case feature”), indicating that they are active;
   (ii) this diacritic is removed when the noun-phrase is agreed with;
   (iii) \( \phi \)-agreement cannot target phrases lacking such a diacritic (hence the activity/inactivity metaphor)

⇒ B&V’s conclusion:
   \( \phi \)-agreement feeds the assignment of NOMINATIVE & GENITIVE in Sakha
But notice: under this account, (35a) and (35b) receive disparate explanations:

- agreement on both participles (as in (35a)) is ruled out by the Activity Condition
- agreement on neither participle (as in (35b)) is ruled out by the Case Filter

This is an unnecessarily complicated way of characterizing what is, it seems to me, an exceedingly simple pattern:

- in a structure like (34–35), agreement must happen exactly once

This pattern is totally amenable to an account where:

- exactly one agreement probe is merged
  - hardly a “stipulation”, any more than any finite clause has exactly one T₀ is a stipulation
  - that probe must agree with the visible nominal goal
    - because ϕ-agreement is obligatory—or at least, obligatory-when-possible (Preminger 2010, 2011)—again, hardly a novel premise
  - the probe can end up, in terms of the overt string, on either of the participial verbs
    - either because the base-generated order is flexible, or—more likely—due to head-movement
- this last point is, admittedly, a stipulation;
- but it strikes me as a much more straightforward one for capturing (34–35) than an Activity Condition/Case Filter “hybrid” mechanism
  - and, importantly, it is compatible with our earlier results regarding case as a precursor to ϕ-agreement
    - since it no longer requires the Chomskyan case-assignment-through-ϕ-agreement system, shown in §3–§4 to be problematic

I see no reason to opt for the more complicated “hybrid” mechanism

- especially since this “hybrid” mechanism involves ϕ-agreement feeding case, and is therefore incompatible with our (only?) solution to the puzzle presented in §3
- as well as with Bobaljik’s (2008) proposal, and also Thursday’s promised argument

6.2. Evidence for competitor case in Sakha

6.2.1. A few neutral patterns

B&V start by discussing a pair of empirical patterns in Sakha that fit well within a competitor case approach, but—as B&V fully acknowledge—can also be handled by accounts that appeal exclusively to head case.

- One such pattern is the correlation between Object-Shift and ACCUSATIVE case in Sakha (and in Turkic languages, in general)

(36) a. Masha salamaat-(y) türgennik sie-te.
   Masha porridge-ACC quickly eat-PAST.3sgs
   ‘Masha ate the porridge quickly.’
   [B&V:602]

b. Masha türgennik salamaat-(#y) sie-te.
   Masha quickly porridge-ACC eat-PAST.3sgs
   ‘Masha ate porridge quickly.’
(37) a. Min Masha-qa kinige-(#ni) bier-di-m.
   I Masha-DAT book-ACC give-PAST-1sgS
   ‘I gave Masha books/a book.’

   b. Min kinige-*(ni) Masha-qa bier-di-m.
   I book-ACC Masha-DAT give-PAST-1sgS
   ‘I gave the book to Masha.’

- per case-competition approaches:
  - ACCUSATIVE shows up exactly on those noun-phrases that have undergone
    Object-Shift because Object-Shift has moved them into the same domain as
    the (NOMINATIVE) subject
    ⇒ allowing them to receive competitor case by virtue of the existence of the
      subject DP

- but this can be handled equally well by a head case approach to ACCUSATIVE:
  - if there is a kind of $v^0$ that assigns ACCUSATIVE, then all we need to assume is that
    this $v^0$ also triggers movement of the DP it has case-marked
    - this is no different than the relation between $T^0$ and the DP to which it
      assigns NOMINATIVE, in English
    ⇒ so if you have that kind of $v^0$, you will get ACCUSATIVE and move out of VP; and if
      you have a different kind of $v^0$, you will get neither
      (assuming, of course, that “mixed” types of $v^0$ do not exist in Sakha)

- Another such pattern involves Sakha causatives:
  - Sakha exhibits the familiar pattern of [Causer$_{NOM}$ Causee$_{ACC}$] for causativized
    intransitives, and [Causer$_{NOM}$ Causee$_{DAT}$ Theme$_{ACC}$] for causativized transitives
  - but this again is not so much an argument in favor of case-competition, as much as it is
    a pattern that both case-competition and head case can handle

B&V then discuss a pattern involving the Sakha passive, which they claim favors more
strongly a competitor case account of ACCUSATIVE in Sakha

- in a nutshell, the Sakha passive—which is morphologically distinguishable from
  the Sakha anticausative—comes in two flavors:
  - one that bears all the syntactic and semantic hallmarks of having an “implicit” agent
    (e.g., allowing intentionally-type adverbs), and marks the Theme with ACCUSATIVE
  - one that bears all the syntactic and semantic hallmarks of lacking an “implicit” agent
    (e.g., allowing intentionally-type adverbs), and marks the Theme with NOMINATIVE

- While B&V take this to be an argument in favor of a competitor case account
  of ACCUSATIVE in Sakha —

- I would argue that it boils down to whether the better way to derive Burzio’s
  Generalization is the Little-\(v\) Hypothesis, or case-competition
6.2.2. Agentive nominalizations

A more striking argument that ACCUSATIVE in Sakha is competitor case and not head case comes from agentive nominalizations

- Sakha has a morpheme -AAccY that creates agentive nominalizations not unlike English -er nominalizations
- However, unlike English, the Theme in such nominalizations can bear ACCUSATIVE case:

(38) [ Terilte-ni salaj-aaccy ] kel-le.  \[B&V:602\]
    company-ACC manage-AGENTNMZ come-PAST.3sgS
    ‘The manager of the company came.’

- Normally, availability of ACCUSATIVE inside a nominalization is taken to indicate that nominalization occurs “high” in the structure
  - and therefore at least some of extended functional projection of the verb is present
    - in particular, v^0
- The problem of applying this logic to Sakha agentive nominalizations, as B&V point out, is that this “inclusion” of verbal functional projects in the nominalization normally has verb-like side effects within the noun-phrase:

(39) a. Rome’s vicious('*ly) destruction of Carthage\textsubscript{GEN}
   b. Rome’s vicious('*ly) destroying Carthage\textsubscript{ACC}
   - The point of data like (39a–b) is to show that positing v^0 does more than just capturing Burzio’s Generalization (the co-varying of ACCUSATIVE case with the availability of an Agent \(\theta\)-role):
     - it also predicts the distribution of other verbal properties, such as the ability to host adverbs vs. adjectives
   - But in Sakha, all the evidence points to the absence of verbal structure, even within those agentive nominalizations that support ACCUSATIVE:

(40) NO ADVERBS
    djie-ni (*bütünüü/*xat) kyraaskal-aaccy  \[B&V:612\]
    house-ACC (*completely/*again) paint-AGENTNMZ
    ‘the painter of the house (*completely)/(*again)’

(41) a. NO ASPECTUAL MARKERS
    * Suruj-baxt(aa)-aaccy kel-le.
      write-ACCEL-AGENTNMZ come-PAST.3sgS
      ‘A quick writer came.’

b. NO NEGATION
    * Suruj-um-aaccy kel-le.
      write-NEG-AGENTNMZ come-PAST.3sgS
      ‘The one who doesn’t write came; the non-writer came.’

c. NO VOICE MORPHOLOGY
    * tal-yll-aaccy
      choose-PASV-AGENTNMZ
      ‘the one who is chosen’
• **B&V:** in these agentive nominalizations, ACCUSATIVE indeed co-occurs with the Agent θ-role—but there is no evidence for anything verbal about the relevant structure

⇒ The ACCUSATIVE in these agentive nominalizations is competitor case

  – assigned by case-competition with the phonologically null (but syntactically present) realization of the Agent argument

  o The reason we can safely assume the Agent is syntactically realized in these constructions is that they are, in fact, agentive nominalizations (in their meaning);

  o compare this with Agent-less nominalizations in Sakha:

  (42) Ynax-(") öl-üü-*(te) miigin sohup-pat
      cow-ACC die-eventnmz-(3sgPOSS) me.ACC surprise-NEG.AOR.3sgS
      ‘The death of the cow does not surprise me.’

  o in (42), there is no Agent in the interpretation—and indeed, ACCUSATIVE case is unavailable

6.2.3. Raising-to-object

• Regardless of what one thinks about raising-to-object with English ECM verbs (mentioned in §4, the Turkic languages pretty clearly have raising-to-object

  o and it exists in a much wider array of contexts than ECM does in English (Baker & Vinokurova 2010, George & Kornfilt 1981, Sener to appear, a.o.)

⇒ What is crucial for our purposes, however, is that Sakha raising to object exhibits several properties that strongly favor a competitor case account of ACCUSATIVE

I. Sakha allows raised subjects to receive ACCUSATIVE case even in when the matrix is not supposed to have ACCUSATIVE-assigning capacities, given the ν₀ system:

      Keskil Aisen-ACC come-NEG.AOR.3sgS that become.sad-PAST.3sgS
      ‘Keskil became sad that Aisen is not coming.’ [Vinokurova 2005:366]

  o Here, we have a clearly unaccusative matrix predicate (xomoj “become.sad”), but an object raised into the matrix can still receive ACCUSATIVE

II. Sakha allows raised subjects to receive ACCUSATIVE even when the clause out of which they were raised is an adjunct

  o and moreover, the matrix contains a distinct ACCUSATIVE-marked noun-phrase which is a canonical argument of the matrix predicate

      Masha Misha-ACC come-fut.3sgS that house-ACC tidy-past.3sgS
      ‘Masha tidied up the house (thinking) that Misha would come.’ [Vinokurova 2005:368]

---

6Baker & Vinokurova (2010:614) also provide evidence that this ACCUSATIVE case is not some form of inherent case assigned by the nominal, as it is subject to the same Object-Shift/specificity alternations that affect ACCUSATIVE in the clausal domain.
6.3. Evidence for head case in Sakha: Overt subjects in participial relative clauses

- Participial clauses in Sakha can be adjoined to a noun as a relative clause:

(45) a. [cej ih-er caakky] 
   tea drink-AOR cup
   ‘a cup that one drinks tea from’

b. [aaq-ar kinige] 
   read-AOR book
   ‘a book for reading’

- Overt subjects are possible in these participial relatives, but only under the following conditions:
  (i) the subject must be bare, indefinite, and adjacent to the participial verb; and
  (ii) the participial verb must be unaccusative

(46) a. sibekki tyll-ar kem 
   flower bloom-AOR time
   ‘a time when flowers bloom’

b. oton buh-ar sir 
   berry ripen-AOR place
   ‘a place where berries ripen’

(47) * Masha cej ih-er caakky 
   Masha tea drink-AOR cup
   ‘a cup that Masha drinks tea from’

- There is, however, a way to have an overt subject that doesn’t obey these restrictions, within a participial relative clause—by having possessive agreement on the head-noun:

(48) [Masha aqa-ty-n atyylas-pyt at-a] 
   Masha father-3sgPOSS-GEN buy-PTPL horse-3sgPOSS
   ‘the horse that Masha's father bought’

- As (48) shows, this also results in the assignment of genitive case to this overt subject.

- If we take so-called “possessive agreement” to be the overt manifestation of a D₀ head:
  ⇒ this pattern can be captured by saying there must be a D₀ present to case-mark subjects inside participial relatives

---

7 This genitive noun-phrase must itself be possessed to demonstrate its genitive case overtly, because Sakha has lost its overt genitive marking in other contexts (i.e., only possessed genitives show overt genitive marking; see Baker & Vinokurova 2010).

8 At least, those subjects that do not obey the restrictions mentioned earlier.
Importantly:
- It is the case that the agreement morphology added to the head noun, in these constructions, must indeed match the $\phi$-features of the embedded subject
- B&V take this to show that this $D^0$ case-marks the subject by virtue of agreeing with it (as discussed earlier)

If, as I have argued, we must abandon this approach of $\phi$-agreement-feeding-case, and distill from it only the structural configuration I have labeled head case —
  - we must say that it is a coincidence of Sakha that this head that assigns head case to subjects also probes to establish $\phi$-agreement with that subject
    (and note that in Sakha, this is true of the other head case assigner, $T^0$, as well)

Crucially, there is reason to think this is a coincidence of Sakha:
  - Cross-linguistically, there are clear assigners of head case that show no overt agreement with the noun-phrase to which they assign case
    - e.g., prepositional-complementizer for, in English
    - but more to the point, $D^0$ in English (cf. $D^0$ in Sakha)
  - To maintain the idea that case results from $\phi$-agreement, the proponents of such an approach have to posit covert $\phi$-agreement between such heads and the noun-phrases they case-mark
    - But the existence of such empirical patterns is expected—and does not require stipulating covert agreement relations—if it is a property of some-but-not-all assigners of head case that they are also agreement probes

6.4. Summary
- Following a critical examination of B&V, we can conclude that Sakha shows evidence not for the existence of “$\phi$-agreement-based case” alongside “morphological case”;
- but rather, for the co-existence of two kinds of structural configurations under which case can be assigned:

\[
\text{(49) \hspace{1cm} STRUCTURAL CONFIGURATIONS FOR CASE-ASSIGNMENT} \\
\text{(based on Baker & Vinokurova's 2010 analysis of Sakha)}
\]

\[\text{i. case that is dependent on the presence of another DP within a given locality domain} \Rightarrow \text{In Sakha:} \]
  - ACCUSATIVE (depends on higher nominal in domain above $vP$ and below $CP$)
  - DATIVE (depends on lower nominal in domain below $vP$)

\[\text{ii. case that is dependent on the presence of a designated “case-assigning” syntactic head} \Rightarrow \text{In Sakha:} \]
  - NOMINATIVE (depends on $T^0$)
  - GENITIVE (depends on $D^0$)
I have referred to them as follows:
- the (49i) kind: competitor case (following Marantz 1991)
- the (49ii) kind: head case (because it is assigned by a head... a crazy, crazy head)

Note also that modulo certain details of implementation, head case is already invoked in Marantz’s (1991) proposal
- at least insofar as Marantz’s lexical/inherent case is head-driven

7. Towards an integrated theory of case

- Even if my argument, and Bobaljik’s (2008) earlier argument, that ϕ-agreement cannot feed case were incorrect —
  - and Baker & Vinokurova (2010) were right, that the head case observed in Sakha is of the standard Chomskyan feed-by-ϕ-agreement flavor —
- their results already necessitate some rather profound changes to the theory of case—in particular, to the modular locus of m-case

- Consider, for example, B&V’s arguments regarding GENITIVE; the form of the argument was this:
  - overt non-incorporated subjects in participial relatives require possessive agreement on the head noun, because this ϕ-agreement is what case-marks these subjects

(50) [ Masha aqa-ty-n ] attyylas-pyt at-a
Masha father-3sgPOSS-GEN buy-PTPL horse-3sgPOSS
‘the horse that Masha’s father bought’ [= (48)]

- and crucially, this same sentence is ungrammatical without a D0 (“possessive agreement”) element:

(51) * [ Masha aqa-ty-(n) ] attyylas-pyt at
Masha father-3sgPOSS-(GEN) buy-PTPL horse
‘the horse that Masha’s father bought’

- This looks like your run-of-the-mill DPs need case condition
  - without the D0 element, the DP Masha aqa-ty (“Masha father-3sgPOSS”) has no source of case, and the sentence fails

- This, in itself, is not terribly surprising—even for a Marantz-style system
  - Marantz’s (1991) paper is titled “Case and Licensing”—conceding that there is a system of DP-licensing that is separate from m-case

- But crucially, as B&V argue, some DPs in Sakha get case via case-competition (namely, the ACCUSATIVE and DATIVE ones)
  ⇒ It would be exceedingly strange to have a system of licensing (e.g., a “Case Filter”) which some DPs satisfy in syntax (NOMINATIVE/GENITIVE ones), and some DPs satisfy in morphology (ACCUSATIVE/DATIVE ones)
Moreover, how would “morphology” know to case-mark exactly those DPs that “syntax” did not case-mark?

⇒ what Marantz calls “morphology” would have to have access to the internal details of the syntactic representation

⇒ i.e., in terms of modularity, the separation of morphology from syntax would be contentless, and what Marantz considers “morphology” would collapse into syntax

So if we believe B&V’s arguments, we need an integrated theory of case-assignment, that allows head case and competitor case to be assigned in tandem—in syntax.

- Once such a theory is in place, it will also solve our problem about how case (and in particular, competitor case) can feed ϕ-agreement if ϕ-agreement is part of syntax proper

### 7.1. Marantz’s (1991) Disjunctive Case Hierarchy revisited

(52) **DISJUNCTIVE CASE HIERARCHY** (Marantz 1991)

unmarked case « dependent case (competitor case) « lexical/inherent case

- If competitor case (dependent case) is just another facet of syntactic case-assignment —

  what accounts for (52)?

  (or more accurately, for the effects that (52) was meant to account for, such as the distribution of NOMINATIVE case in Icelandic)

**THE IDEA:**

- competitor case is assigned in syntax, just like head case, and (52) is an artifact of how arguments are introduced:

1. If the head that introduces a given DP into the structure is equipped to assign it head case (e.g., it is a \( V^0 \) that assigns quirky case to its complement), this will happen first

   - because the configuration needed to discharge this head case will arise immediately upon merge—cf. (30), repeated here, of which (53) is a sub-case:

(30)

(53)
If the original head that introduced a given DP into the structure is not an assigner of head case —

2. If DPs can assign case to other DPs (competitor case), then the next opportunity for case-assignment will be when the next higher DP is merged:

\[
\text{(54)} \quad \text{(where DP' and DP enter into a competitor case relation, whose direction depends on the language-specific parameter, as in Marantz 1991)}
\]

\[
\begin{array}{c}
\text{DP'} \\
\vdots \\
\text{V}^0 \\
\text{DP}
\end{array}
\]

NOTE:

- If ACCUSATIVE is always competitor case, this might mean that a head that introduces an argument can only assign head case to that argument—ruling out assignment of ACCUSATIVE by \( v^0 \) to the Internal Argument
- This would be entirely in the spirit of the “separation of thematic positions/properties from A-related positions/properties”, that came up in the discussion of the VP-Internal Subject Hypothesis (see §3.1)

The next opportunity for case assignment is:

3. When a head that is not involved in introducing arguments—i.e., one that is merged in the functional field—is an assigner of head case:

\[
\text{(55)} \quad \text{DP}
\]

\[
\begin{array}{c}
\text{T}^0/D^0 \\
\vdots \\
\text{DP}
\end{array}
\]

⇒ The disjunctive case hierarchy is just an artifact of the following:
The head that introduces a particular DP is closer/present in the derivation earlier) than other DPs, which in turn are closer/present in the derivation earlier) than purely functional assigners of head case.
(assuming that all thematic merger precedes merger of such purely functional material)
7.2. Is case assignment subject to intervention?

- A potential problem with the system sketched in §7.1 has to do with intervention
- Suppose that Appl^0 in a given language/construction is an assigner of head case to the very argument it introduces (i.e., quirky case):

\[\text{(56)}\]

\[
\text{DP} \rightarrow \text{DAT} \quad \text{Appl'} \\
\text{Appl}^0 \quad \text{VP} \quad \text{DP} \\
\]

- If this is an Icelandic dative subject verb, the DP born in [Compl,VP] needs to get nominative case
- Our system seems well-poised to deliver this —
  - since, assuming V^0 in (56) is not quirky (i.e., not an assigned of head case), the next opportunity for case-assignment comes from functional assigners of head case (e.g., T^0)
- But there appears to be a problem concerning intervention:
  - As we can see from examples like (57)—which we have already encountered—the subject of the downstairs predicate is able to receive its nominative case even as it stays below the dative

\[\text{(57)}\]

\[\text{það [Compl,VP]} \quad \text{virðist} \quad \text{seem.} \quad \text{sg} \quad \text{seem.} \quad \text{pl} \quad \text{[einhverjum manni]_{DAT} [sc] \text{hestarnir]} \quad \text{vera seinir].} \\
\text{EXPL some man.SG.DAT the.horses.PL.NOM be slow} \\
\text{‘A man finds the horses slow.’ } [=(18)]
\]

- If nominative is head case coming from T^0, shouldn’t the dative intervene in its assignment to a lower DP?

\[\text{(58)}\]

\[
\text{TP} \\
\text{T^0} \\
\text{ApplP} \\
\text{DP_{DAT}} \rightarrow \text{DAT} \\
\text{Appl'} \\
\text{Appl}^0 \quad \text{VP} \quad \text{DP} \\
\text{V^0} \\
\]

⇒ **ANSWER:** There is evidence that unlike φ-agreement, case-assignment is not subject to defective intervention
  - i.e., it is subject to locality (e.g. don’t cross phase boundaries), and perhaps Closest (choose the closest of several accessible unmarked DPs)—but an already case-marked DP doesn’t intervene
  - The evidence comes from erg-abs languages where absolutive can be conclusively shown to come from a high functional projection (e.g., T^0)
    - for example, due to the unavailability of absolutive in infinitives/small-clauses (Aldridge 2004, Legate 2008)
This seems to be a fundamental difference between case and \(\phi\)-agreement

and in a sense, it is another reason to be skeptical of reducing one to the other (à la Chomsky 2000, 2001)

### 7.3. An Interim Summary

- We have sketched a theory of case that proceeds derivationally, and entirely within syntax
- \(\phi\)-agreement can now operate on a representation that already contains case-marking information—even for DPs marked via competitor case
- One could play with the idea that case, in this kind of a system, is a pre-condition for a DP to be an eligible \(\phi\)-agreement target (“visibility”)
  - i.e., whether it is the case that we never find the head that probes for \(\phi\)-agreement located below (and therefore, derivationally earlier than) a functional assigner of head case to the DP targeted for this \(\phi\)-agreement

\[\ldots\] this remains to be seen, I think.

### References


