

Agreement and case: Patterns, interactions, and implications

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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'vi¹
 - 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
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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):

“ φ -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 φ -features of (at least) one nominal argument in the clause

where: ◦ TAM = tense/aspect/mood
◦ φ -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.
 - see Kratzer (2009), Reuland (2011), Rooryck & Vanden Wyngaerd (2011), Zeijlstra (2004), among others
- ✦ Since these are by and large attempts to reduce new empirical domains to the behavior of φ -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:
- (1) 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.

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

For example:

- (7) [A Ehiztari-ak] [P otso-a] harrapatu du (Basque)
 hunter-ART_{sg} wolf-ART_{sg} caught AUX(have)
 ‘The hunter has caught a/the wolf.’
- (8) [S Otso-a] etorri da.
 wolf-ART_{sg} arrived AUX(be)
 ‘The wolf has arrived.’ [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 rat] x- ϕ -aw-etzela-j [P ri achin] (Kaqchikel)
 you(sg.) PRFV-3sg.ABS-2sg.ERG-hate-ACT the man
 ‘You(sg.) hated the man.’
- b. [A ri achin] x-a-r-etzela-j [P rat]
 the man PRFV-2sg.ABS-3sg.ERG-hate-ACT you(sg.)
 ‘The man hated you(sg.).’
- (10) a. [S ri achin] x- ϕ -uk’lun
 the man PRFV-3sg.ABS-arrive
 ‘The man arrived.’
- b. [S rat] x-at-uk’lun
 you(sg.) PRFV-2sg.ABS-arrive
 ‘You(sg.) arrived.’
 (ϕ = 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 ϕ on the verb, as is a 3sg **P**
 - in contrast to a 3sg **A**, which is represented by -r-

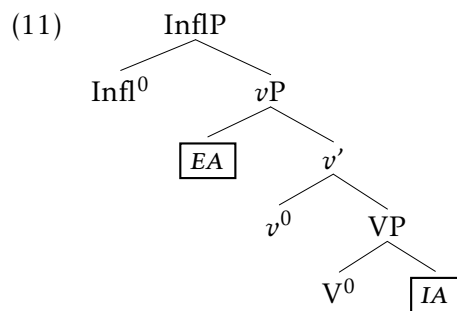
3. A Puzzle Hidden in Plain Sight: Why doesn't English have an Ergative Agreement Alignment?

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* Infl⁰:



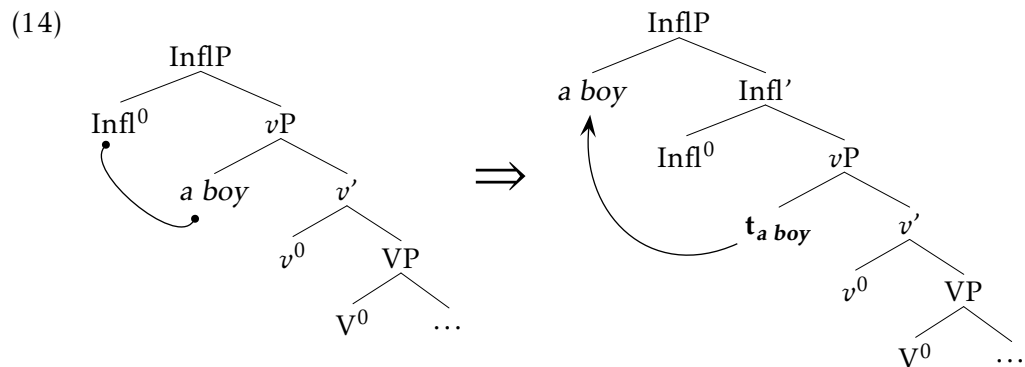
- this move had a degree of theoretical/conceptual appeal
 - e.g. in completing the bifurcation of thematic positions vs. “case positions”, and thus bringing *active* and *passive* derivations onto par
- in addition, it provided certain concrete empirical benefits
 - for example, in capturing the distribution 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:



⇒ thus bringing agreement in examples like (12) and (13) onto a par²

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)?

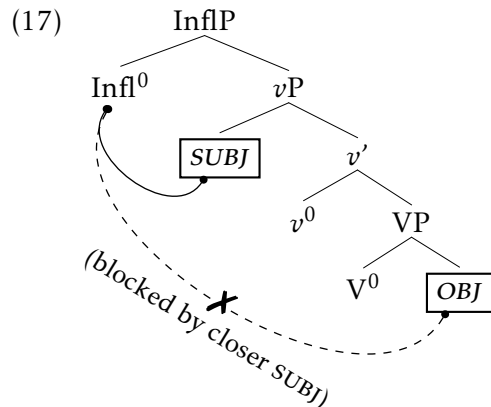
- (15) English
- a. [This child] likeses television.
 - b. [These children] like television.
- (16) English'
- a. The baby hateses [this mouse].
 - b. The baby hate [these mice].

²There 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)

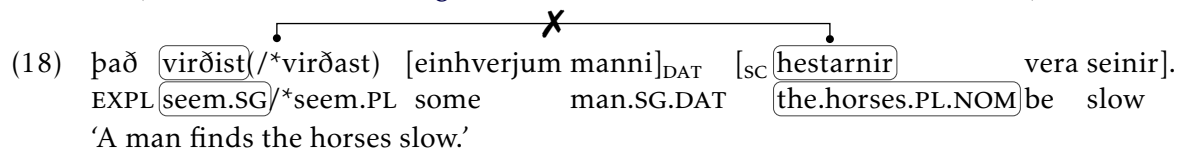


⇒ by *locality / Closest / Relativized Minimality / etc.*: Infl^0 can only target the SUBJ

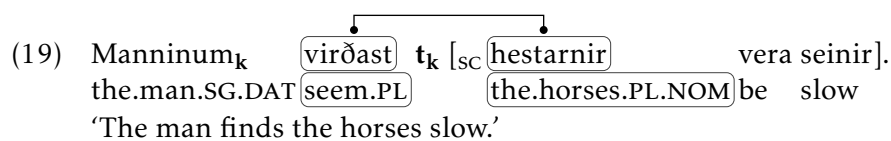
Elegant as this explanation might seem... **it is demonstrably wrong.**

- 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):

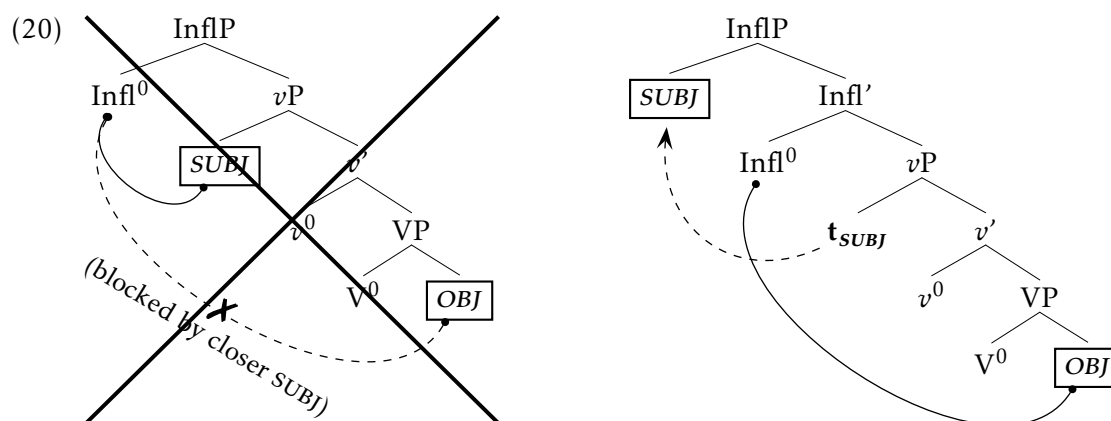


- In (18), the DATIVE experiencer intervenes in the relation between the finite verb *virðist* (“seem”) and the NOMINATIVE *hestarnir* (“the.horses.PL.NOM”)



- 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:



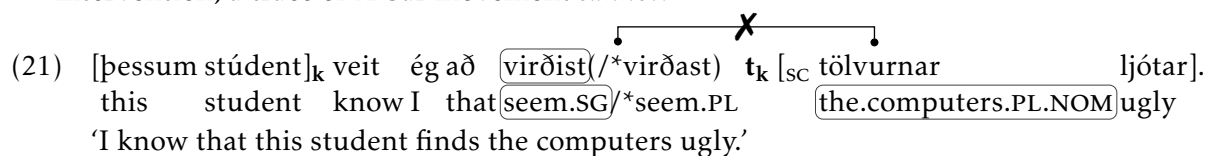
- The ability to agree across a displaced intervener suggests that English Infl^0 should be able to agree with the OBJ (contra to fact, of course)

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

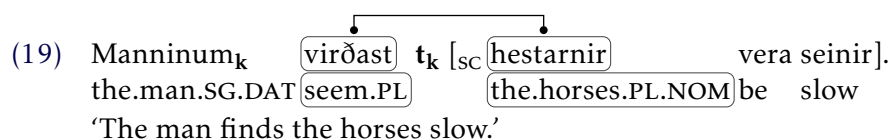
- Suppose we stipulate that in English, probing by Infl^0 happens *before* movement of the SUBJ
 - This means that when Infl^0 probes, it is not seeing a trace(/lower copy) of the SUBJ in [Spec, vP], but rather the SUBJ itself
- ⇒ we can once again appeal to *locality / Closest / Relativized Minimality / etc.*
- To put this another way: English doesn’t have an ergative agreement alignment because Infl^0 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-movement³ can be ignored for the purposes of intervention, a trace of A-bar movement *cannot*:



o cf. (19), repeated here:

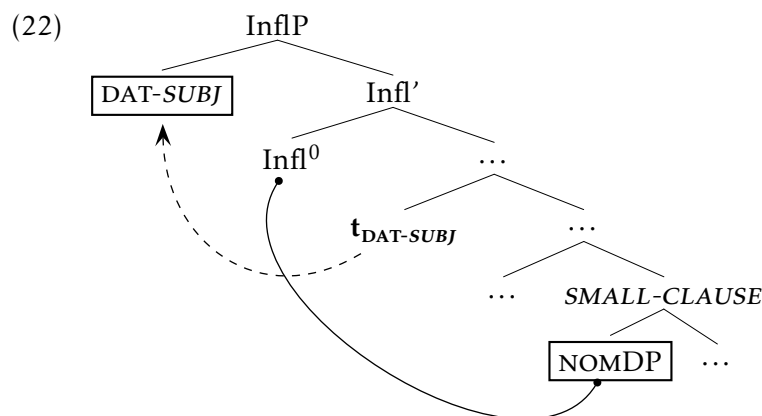


³At least, of movement to canonical subject position.

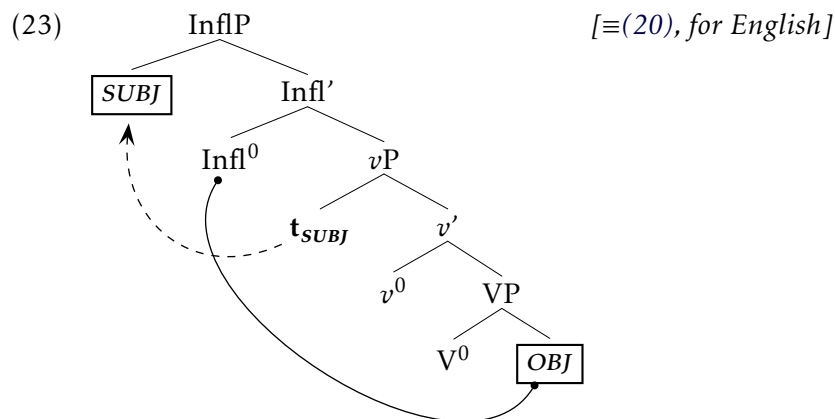
- It is tempting to account for this using the same kind of “fine timing”:
 - in a sentence where the DATIVE experiencer moves to subject position (e.g. (19), above), this movement happens *before* Infl^0 probes for φ -agreement purposes
 - allowing φ -agreement between the finite verb and the lower plural NOMINATIVE
 - but the head(s) responsible for A-bar dislocation (of the kind in (21), for example) is/are clearly located *above* $\text{Infl}(\text{P})$
 - 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.
- ⇒ at the point at which Infl^0 attempts to establish φ -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 φ -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) φ -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:



- But in “core” finite transitives, the verb agrees with the SUBJ, not the OBJ:

- (24) a. Hann_k hefur(/*hafa) t_k séð þá.
 he has.SG/*have.PL seen them
 ‘He has seen them.’
- b. þeir_k hafa(/*hefur) t_k 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. φ -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 φ -agreement (by Infl⁰)
 - in Icelandic: because of the possibility of φ -agreement across an A-moved DATIVE (e.g. (19), above), we must assume that movement to subject position happens *before* φ -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/ φ -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
 - if English has the same “fine timing” as Icelandic, the trace of the A-moved SUBJ should not intervene between Infl⁰ and the OBJ, and we should see an ergative agreement alignment in English (contra to fact);
 - 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

- 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
 - given that A-traces are “skippable” for φ -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

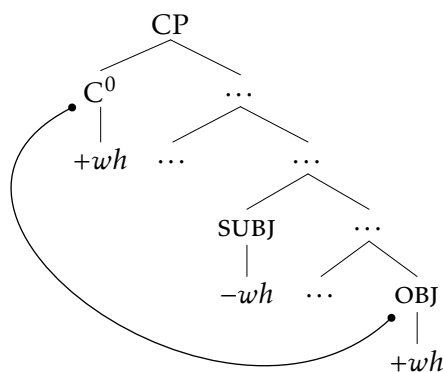
Given a probe H^0 , and a set of possible goals $G = \{\alpha, \beta, \dots\}$, *goal filtering* refers to any restriction $f_H: G \rightarrow \{True, False\}$, such that H^0 can only target a given goal $x \in G$ if $f_H(x) = True$

- For the current purposes (namely, preventing an ergative agreement alignment in English), we want to plug in some f_{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

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. [$DP_{<+wh>}$ **Which student**] did [[$DP_{<-wh>}$ this professor] meet $t_{DP_{<+wh>}}$]?
 b.



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

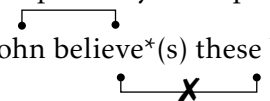
$$(27) f_{C_{<+wh>}}(x) = \begin{cases} True & x \text{ is a } wh\text{-phrase} \\ False & \text{otherwise} \end{cases}$$

- **The question is then the following:** What is the property f_{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, \dots)
- (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 believe*(s) 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:
 - “Infl⁰ can only agree with *subjects* because only *subjects* are *subjects*”
- We are left with (iii) — *case*; concretely, Infl⁰ must be able to discriminate among potential agreement targets based on the case they bear

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

⇒ **NOTICE:**

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

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

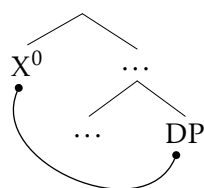
Recall:

- (1) 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)

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)



(where X^0 is a case-assigner, and the case on the DP is determined by the identity of X^0)

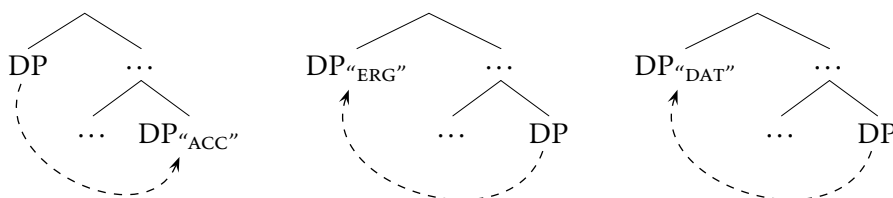
Let us refer to this notion of case-assignment as *head case*.

- Can *head case* be the only notion of case necessary to compute φ -agreement?

5.2. Unpacking *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 φ -agreement must make reference to case computed using the *case-competition calculus* (Marantz 1991)
 - 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 *m-case* is computed post-syntactically, so must φ -agreement be computed post-syntactically
 - Again, we are faced with a theory of case—this time, the *case-competition* theory—that comes prepackaged with an additional claim
 - in particular, the claim that the relevant computations occur post-syntactically
 - but the latter is a logically separable claim
- ⇒ 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:

(31)



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

6. 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) Chomskyan *abstract case*, assigned to a DP by virtue of entering into a φ -agreement relation with a designated syntactic head (T^0 , D^0)
 - which is, B&V claim, how NOMINATIVE and GENITIVE work in Sakha
 - (ii) *dependent case* (Marantz 1991), assigned to a DP by virtue of the presence of another DP within a designated locality domain
 - 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)

- You will notice, by now, that (i) is patently incompatible with our current results
 - since it involves φ -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 is 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 φ -agreement between this head and the DP
 - b. not conditioned by such φ -agreement

6.1. *Head case* in Sakha: Is there evidence implicating φ -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 φ -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-kin [B&V:637]
 you win-PTPL AUX-PTPL-2sgS
 ‘The result is that you won.’
- b. en süüj-büt-kün e-bik
 you win-PTPL-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-kün e-bik-kin [B&V:637]
 you win-PTPL-2sgS AUX-PTPL-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) φ -agreement cannot target phrases lacking such a diacritic (hence the *activity/inactivity* metaphor)

⇒ B&V’s conclusion:

φ -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 T^0* 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. [B&V:602]
 Masha porridge-ACC quickly eat-PAST.3sgS
 ‘Masha ate the porridge quickly.’
- 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(***Iy**) destruction of Carthage_{GEN}
 b. Rome’s vicious(**Iy**) destroying Carthage_{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 θ -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
 dje-ni (***bütünnüü/*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 argument⁶

- 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);
- compare this with Agent-less nominalizations in Sakha:

(42) Ynax-(*y) 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.’

- 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*
 - 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 v^0 system:**

(43) Keskil [Aisen-y]_i [t_i kel-bet dien] xomoj-do.
 Keskil Aisen-ACC come-NEG.AOR.3sgS that become.sad-PAST.3sgS
 ‘Keskil became sad that Aisen is not coming.’ [Vinokurova 2005:366]

- 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*

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

(44) Masha [Misha-ny]_i [t_i kel-ie dien] djie-ni xomuj-da.
 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 [B&V:631]
 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 [B&V:631]
 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 [B&V:626]
 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 subject⁷

- 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 subjects⁸ inside participial relatives**

⁷This 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).

⁸At 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 φ -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 φ -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 φ -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 φ -agreement, the proponents of such an approach have to posit covert φ -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 “ φ -agreement-based case” alongside “morphological case”;
- but rather, for the co-existence of two kinds of structural configurations under which case can be assigned:

(49) STRUCTURAL CONFIGURATIONS FOR CASE-ASSIGNMENT

(based on Baker & Vinokurova’s 2010 analysis of Sakha)

- i. case that is dependent on the presence of another DP within a given locality domain
 - ⇒ *In Sakha*:
 - ACCUSATIVE (depends on higher nominal in domain above vP and below CP)
 - DATIVE (depends on lower nominal in domain below vP)
- ii. case that is dependent on the presence of a designated “case-assigning” syntactic head
 - ⇒ *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 *fed-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] atyylas-pyt at-a [B&V:626]
 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 D^0 (“possessive agreement”) element:
- (51) * [Masha aqa-ty-(n)] atyylas-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 D^0 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)

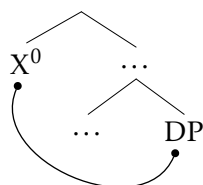
unmarked case « *dependent case (competitor case)* « *lexical/inherent case*

- 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:

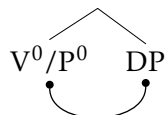
- *competitor case* is assigned in syntax, just like *head case*, and (52) is an artifact of how arguments are introduced:
 1. If the head that introduces a given DP into the structure is equipped to assign it *head case* (e.g., it is a V^0 that assigns quirky case to its complement), this will happen 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)



(where X^0 is a case-assigner, and the case on the DP is determined by the identity of X^0)

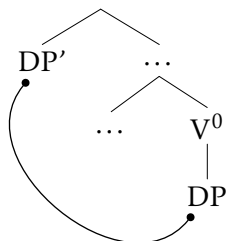
(53)



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:

(54)



(where DP' and DP enter into a competitor case relation, whose direction depends on the language-specific parameter, as in Marantz 1991)

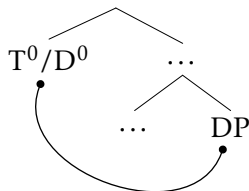
NOTE:

- 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*:

(55)



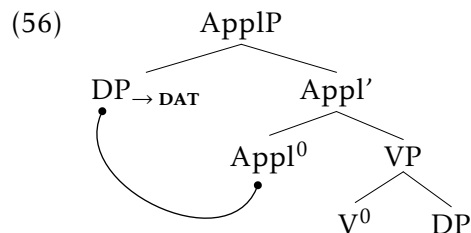
⇒ The *disjunctive case hierarchy* is just an artifact of the following:

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?

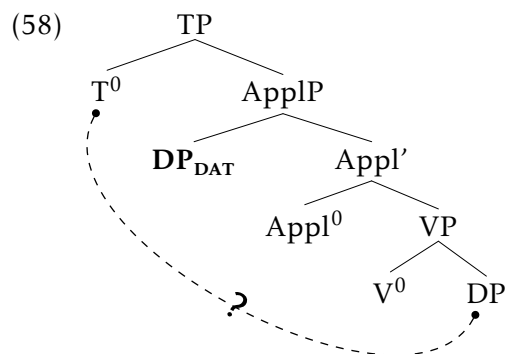
- A potential problem with the system sketched in §7.1 has to do with intervention
- Suppose that Appl^0 in a given language/construction is an assigner of *head case* to the very argument it introduces (i.e., quirky case):



- If this is an Icelandic DATIVE-subject verb, the DP born in $[\text{Compl}, \text{VP}]$ 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

(57) það virðist (/ *virðast) [einhverjum manni]_{DAT} [_{SC} hestarnir vera seini].
 EXPL seem.SG / *seem.PL some man.SG.DAT the.horses.PL.NOM be slow
 ‘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?



⇒ **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 ABSOLUTE can be conclusively shown to come from a high functional projection (e.g., T^0)
 - for example, due to the unavailability of ABSOLUTE in infinitives/small-clauses (Aldridge 2004, Legate 2008)

- This seems to be a fundamental difference between *case* and φ -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
 - φ -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 φ -agreement target (“visibility”)
 - i.e., whether it is the case that we never find the head that probes for φ -agreement located below (and therefore, derivationally earlier than) a functional assigner of *head case* to the DP targeted for this φ -agreement
- ... this remains to be seen, I think.

References

- Aldridge, Edith. 2004. *Ergativity and word order in Austronesian languages*. Doctoral dissertation, Ithaca, NY: Cornell University.
- 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.
- 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.
- Burzio, Luigi. 1986. *Italian syntax: a Government-Binding approach*. Dordrecht: Reidel.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. 1986. *Knowledge of language*. New York, NY: Praeger Publishers.
- 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.
- Comrie, Bernard. 1978. Ergativity. In *Syntactic typology: studies in the phenomenology of language*, ed. Winfred P. Lehmann, 329–394. Austin, TX: University of Texas Press.
- Den Dikken, Marcel. 1995. Binding, expletives, and levels. *Linguistic Inquiry* 26:347–354.
- Dixon, R. M. W. 1979. Ergativity. *Language* 55:59–138.
- Dixon, R. M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Frampton, John. 1991. Relativized minimality: a review. *The Linguistic Review* 8:1–46.
- Fukui, Naoki & Margaret Speas. 1986. Specifiers and projections. In *Papers in theoretical linguistics*, MIT Working Papers in Linguistics 8, Cambridge, MA: MITWPL.
- George, Leland & Jaklin Kornfilt. 1981. Finiteness and boundedness in Turkish. In *Binding and filtering*, ed. Frank Heny, 105–129. Cambridge, MA: MIT Press.
- Holmberg, Anders & Þorbjörg Hróarsdóttir. 2003. Agreement and movement in Icelandic raising constructions. *Lingua* 113:997–1019, DOI: 10.1016/S0024-3841(02)00162-6.
- Kitagawa, Yoshihisa. 1985. Small but clausal. In *Proceedings of the 21st annual meeting of the Chicago Linguistic Society (CLS 21)*, Chicago, IL: University of Chicago, 210–220.
- Kitagawa, Yoshihisa. 1986. *Subjects in Japanese and English*. Doctoral dissertation, Amherst, MA: University of Massachusetts.
- Koopman, Hilda & Dominique Sportiche. 1991. The position of subjects. *Lingua* 85:211–258, DOI: 10.1016/0024-3841(91)90022-W.
- Kratzer, Angelika. 2009. Making a pronoun: fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40:187–237.

- 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.ei.ehu.es/p289-content/eu/contenidos/informacion/grammar_euskara/en_doc/index.html>.
- Lasnik, Howard & Mamoru Saito. 1991. On the subject of infinitives. In *Proceedings of the 27th annual meeting of the Chicago Linguistic Society (CLS 27)*, eds. Lise M. Dobrin, Lynn Nichols & Rosa M. Rodriguez, vol. 1: The General Session, Chicago, IL: University of Chicago Press, 324–343.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39:55–101, DOI: 10.1162/ling.2008.39.1.55.
- 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.
- Müller, Gereon. 2009. Ergativity, accusativity, and the order of merge and agree. In *Explorations of phase theory: features and arguments*, ed. Kleanthes K. Grohmann, 269–308. Berlin: Mouton de Gruyter.
- Nevins, Andrew Ira. 2004. Derivations without the Activity Condition. In *Perspectives on phases*, eds. Martha McGinnis & Norvin Richards, MIT Working Papers in Linguistics 49, 287–310. Cambridge, MA: MITWPL.
- Postal, Paul M. 1974. *On raising: one rule of grammar and its theoretical implications*. Cambridge, MA: MIT Press.
- Preminger, Omer. 2010. Failure to agree is not a failure: φ -agreement with post-verbal subjects in Hebrew. In *Linguistic Variation Yearbook*, eds. Jeroen van Craenenbroeck & Johan Rooryck, vol. 9, 241–278. Amsterdam: John Benjamins, DOI: 10.1075/livy.9.07pre.
- Preminger, Omer. 2011. *The nature of syntactic computation: evidence from agreement*. Paper presented at LUCL Syntax Lab, Leiden.
- Reuland, Eric. 2011. *Anaphora and language design*. Cambridge, MA: MIT Press.
- Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.
- Rooryck, Johan & Guido Vanden Wyngaerd. 2011. *Dissolving binding theory*. Oxford: Oxford University Press.
- Sener, Serkan. to appear. Non-canonical case marking is canonical: accusative subjects in Turkish. *Natural Language & Linguistic Theory*.
- Sportiche, Dominique. 1988. A theory of floating quantifiers and its corollaries for constituent structure. *Linguistic Inquiry* 19:425–449.
- Vergnaud, Jean Roger. 2006. Letter to Noam Chomsky and Howard Lasnik, in 1977. In *Syntax: critical concepts in linguistics*, eds. Robert Freidin & Howard Lasnik, vol. 5, 21–34. London: Routledge.
- Vinokurova, Nadya. 2005. *Lexical categories and argument structure: a study with reference to Sakha*. Doctoral dissertation, Utrecht: LOT Dissertation Series: UiL-OTS.
- Zeijlstra, Hedde. 2004. *Sentential negation and negative concord*. Doctoral dissertation, Amsterdam: University of Amsterdam.

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