

Deducing the structural/inherent/quirky case distinction from competing theories of case

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1 Introduction

Decades of empirical work, in particular comparative work on the Germanic languages, has established a distinction between (at least) two different types of case:

Structural case: determined by and sensitive to the configurational syntactic environment in which a DP appears and nothing else

Inherent case: determined by and sensitive to semantic and lexical factors (in addition to configurational ones)

Decades of theoretical work has produced two rather distinct approaches to case that have emerged as alternatives to standard case theory:

M-case: Case is morphological, assigned based on the output of the syntax, but too late to affect the syntactic derivation (e.g. Marantz 1991, Harley 1995, McFadden 2004, Sigurðsson 2009).

KP: Cases are not just features on N or D, but represent their own syntactic projections (Bittner and Hale 1996, Neeleman and Weerman 1999, Caha 2009).

- ☞ M-case and KP would seem to be incompatible, but in this talk I'm going to explore the (not completely original) idea that the best theory would incorporate them both.
- ☞ Rather than deciding between them, we should employ them both, mapping them onto the divide between structural and inherent cases.

2 Crash course on structural vs. inherent (vs. quirky) case

Let's review the main empirical differences, based on examples from German.

1. Inherent case is thematically and lexically restricted, while structural case is assigned purely on the basis of structural configuration.

- Dative is assigned to the thematically restricted ‘indirect object’ of ditransitives, the object of specific transitives like *helfen* ‘help’, *gehorschen* ‘obey’, *folgen* ‘follow’, and the object of specific Ps like *aus* ‘out’, *mit* ‘with’, *zu* ‘to’.
- Accusative is assigned (roughly) to any DP that is c-commanded by a distinct structural case-marked DP in the same clause. This includes the (thematically unrestricted) object of the open class of transitive verbs...

- (1) Der Metallurge mag/bekommt/klaut/verbrennt **den Cricketschläger**.
the metallurgist likes/receives/steals/burns the cricket-bat.ACC

... the (thematically unrestricted) ‘direct object’ of ditransitive verbs...

- (2) Der Metallurge gab/klaut/schnitzte/zerstörte/gönnte/beneidete
the metallurgist gave/stole/whittled/destroyed/not-begrudged/envied
dem Dekan **den Cricketschläger**.
the dean the cricket-bat.ACC

‘The metallurgist gave the dean the cricket bat, stole it from him, whittled it for him, destroyed it on him, didn’t begrudge him it, envied him it’

... and the (thematically unrestricted) subject of any verb embedded under causative *lassen* ‘let’ or perception verbs *hören* ‘hear’ and *sehen* ‘see’:

- (3) Der Dekan ließ **den M.en** verlieren/töten/den Cricketschläger klauen.
the dean.NOM let the m.ACC lose/kill/the cricket-bat.ACC steal
‘The dean let the m. lose, had him killed, had him steal the cricket bat.’

2. When both could be assigned, inherent case takes precedence over structural.

- E.g. the highest DP under causative *lassen* is assigned structural accusative, as we saw in 3 above. But in 4 this is superseded on ‘the metallurgist’ by the inherent dative assigned by the verb *helfen*:

- (4) Der Dekan ließ **dem M.en/*den M.en** helfen.
the dean.NOM let the m.DAT/*ACC help
‘The dean had the metallurgist helped.’

3. Structural cases alternate under A-movement and in argument structure alternations (5), while inherent ones do not (6).

- (5) a. Der Metallurge hat **den Cricketschläger** geklaut.
the metallurgist.NOM has the cricket-bat.ACC stolen
‘The metallurgist stole the cricket bat.’
b. **Der Cricketschläger** wurde geklaut.
the cricket-bat.NOM was stolen
‘The cricket bat was stolen.’

- (6) a. Der Metallurge hat **dem Dekan** nicht gehorcht.
 the metallurgist.NOM has the dean.DAT not obeyed
 'The metallurgist didn't obey the dean.'
 b. **Dem Dekan** ist nicht gehorcht worden.
 the dean.DAT is not obeyed become
 'The dean was not obeyed.'

4. In some languages, inherent case blocks certain movement processes and relations associated with subjecthood (like being controlled PRO). This happens in German:

- (7) Der Metallurge hofft [PRO unterstützt zu werden]
 the metallurgist hopes [PRO supported to become]
 'The metallurgist hopes to be supported.'
 (8) * Der Metallurge hofft [PRO geholfen zu werden]
 the metallurgist hopes [PRO helped to become]
 'The metallurgist hopes to be helped.'

...but not in Icelandic. When it doesn't, we call it quirky case.

- (9) Henni leiðist bókin.
 her.DAT bores book-the.NOM
 'She finds the book boring.'
 (10) Hún vonast til [að PRO leiðast ekki bókin.]
 she.NOM hopes for [to PRO bore not book-the.NOM]
 'She hopes not to find the book boring.'

5. Whether a nominal has inherent or structural case can affect the structural case assigned to another nominal below it.

- So with dyadic verbs in German and Icelandic, if the higher argument gets structural case, the lower argument will get structural accusative, as in 11a.
- But if the higher argument gets an inherent case, like the dative in 11b, the lower argument will get structural nominative.

- (11) a. Der Metallurge verehrt **den Cricketschläger**.
 the metallurgist.NOM worships the cricket-bat.ACC
 'The metallurgist worships the cricket bat.'
 b. Dem Metallurgen gefällt **der Cricketschläger**.
 the metallurgist.DAT likes the cricket-bat.NOM
 'The metallurgist likes the cricket bat.'

6. Inherent case-marked nominals are often blocked from triggering agreement, while structural case-marked ones are not.

- (12) a. Den Metallurgen **ist** geholfen worden.
 the metallurgists.DAT is.3SG helped become
 'The metallurgists were helped.'
- b. Die Metallurgen **sind** unterstützt worden.
 the metallurgists.NOM were.3PL supported become
 'The metallurgists were supported.'

3 Two alternatives to standard Case theory

The standard view in GB and Minimalism has been that cases are **features**, assigned to (or checked on) DPs in the course of the **syntactic** derivation.

- These features can potentially influence the course of the derivation, thus case has been implicated in phenomena like A-movement, passivization and control.

The two alternative approaches to case we'll be considering here move in different directions from this, each modifying a different bit in boldface above:

M-case moves case from the (narrow) syntax into the morphological or PF component, arguing that case essentially interprets the structure output by the syntax rather than playing an active role in its derivation.

KP reifies cases more substantially in the syntax as (a series of) heads rather than just (a series of) features on other heads.

Let's begin with what led to the proposal of our two alternatives to standard Case theory.

3.1 The motivation for M-case

The big idea of classic Case theory (going back to Vergnaud 1977) is as follows:

- Every DP needs Case in order to be licensed to appear overtly.
- If it cannot get Case in some position, it must either move to another position where it can, or remain silent (i.e. as PRO).

However, there are systematic mismatches between case and positional licensing (Marantz 1991, and much subsequent work). The argument boils down to four main points:

1. The relationship between final A-positions and morphological cases is not one-to-one, but many-to-many. E.g. surface subject position can have inherent datives and structural nominatives, both of which can also appear in surface object position:

- (13) Henni hefur alltaf þótt Ólafur leiðinlegur.
 her.DAT has always thought Olaf.NOM boring
 'She has always found Olaf boring.'

2. Case can be assigned when no overt DP is licensed (Sigurðsson 1991):

- (14) Að PRO/*barninu batna veikin einum er erfitt.
 to PRO.DAT/*the-child.DAT recover the-disease alone.DAT.MASC is difficult
 'To recover from the disease alone is difficult.'

3. DPs can be licensed where they are not assigned case (Schütze 2001):

- (15) Der/*Dem Hans, mit dem spreche ich nicht mehr.
 the-NOM/*DAT Hans with him-DAT speak I not more
 'Hans, I don't speak with him anymore.' (German)

- Nominative here is supplied as a default. But something assigned by default can't be involved in licensing, since it would make the Case Filter vacuous.

4. The assignment of some cases involves a dependency relationship with an additional DP, which cannot be straightforwardly implemented in terms of standard narrow syntactic operations like Agree (see below and especially Baker to appear).

Moving case-assignment into the PF branch allows us to make sense of this cluster of facts and avoid making problematic predictions (McFadden 2004).

3.2 The motivation for KP

Several different kinds of arguments have been adduced for KP (see e.g. Lamontagne and Travis 1987, Bittner and Hale 1996, Neeleman and Weerman 1999, Asbury 2008).

- Early arguments based on an ECP account of word-order facts of DPs without overt case suffer from serious theoretical and empirical problems so I will set them aside.
- More promising are arguments based on the morpho-syntactic properties of case-markers in some languages, which show behavior parallel to other syntactic heads like Ps in the relevant languages (see also Asbury 2008).
- Perhaps the most interesting, however, are ones presented by Caha (2009), involving evidence reported by Blake (2001) for a hierarchy of cases, roughly as follows:

(16) **Simplified Blake/Caha hierarchy**

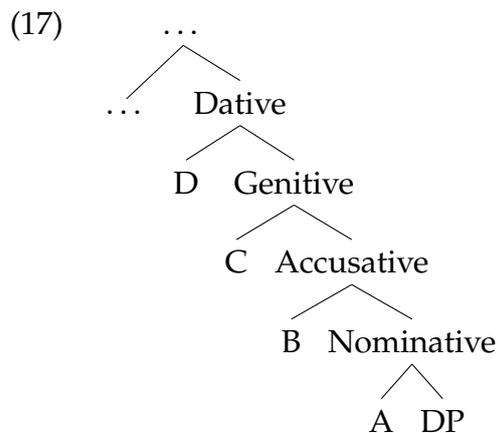
Nominative < Accusative < Genitive < Dative < Instrumental < Comitative

This hierarchy seems to be relevant for at least two sets of facts cross-linguistically:

1. If a language has a given case, it will also have all of the cases to the left in 16.
2. Within a single language, syncretisms predominantly involve contiguous regions of the hierarchy.

Caha proposes a theory that expands on KP to yield a principled account of these facts:

- Case categories represent hierarchical structures, with each case corresponding to a distinct collection of functional heads:



- The structure of each case crucially contains that of the next case down on the hierarchy, deriving markedness relationships (and ultimately inventory effects).
- This can also derive the patterns of syncretism: an underspecified item capable of spelling out both Dative and Accusative would automatically also cover Genitive.

3.3 We want to have our cake and eat it too

Both M-case and KP are thus well motivated by the sets of facts that they can handle better than standard Case theory and other competitors.

⇒ So we would like to incorporate them into our theory.

However, the two are incompatible with each other:

- ☞ It is incoherent to say that a DP simultaneously has no case in the syntax, and is embedded in an exploded KP which is the syntactic representation of its case.

On the other hand, we don't really want to adopt one of the two approaches to the exclusion of the other, since each one has non-trivial problems on its own:

M-case has a limited ability to deal with the consistent cross-linguistic patterns of syncretism and case inventories discussed by Caha:

- See e.g. McFadden (2007) for an arguably representative failed attempt to deal with syncretism in an insightful way within the M-case approach.

It also has relatively little to offer in dealing with the morphological, syntactic and semantic details of inherent cases, especially the more semantically contentful ones:

- With these it's very hard to argue that nothing syntactic is involved.

- McFadden (2004), Baker (to appear) and other essentially M-case approaches thus posit (null) P heads to deal with (at least some) inherent cases.

KP makes predictions for certain case categories that do not seem to hold up:

- If each case corresponds to a chunk of syntactic structure, we expect there to be some consistent semantic contribution from each of those chunks.
- This may be right at a suitable level of abstraction for upper parts of the case hierarchy – but it doesn't seem right for the lower parts – especially for the heads responsible for nominative and accusative.

KP also suffers from the same difficulties of other syntactic approaches in accounting for the distribution of nominative and accusative case on DPs.

- E.g. Caha (2009)'s 'peeling' theory, while a significant departure from traditional assignment theories, still incorporates the problematic idea that the structural cases are associated with distinct, dedicated syntactic positions.

4 Proposing a synthesis

We're left with a bit of a puzzle. But there's a clear angle from which to approach it.

- ☞ The thing to note is that the areas where the two approaches do well and do poorly are (at least approximately) complementary.
- ☞ M-case does well with the structural cases. It has little to offer for the inherent cases aside from the idea that they must be different.
- ☞ KP does well with the inherent cases, but seems ill-suited for the structural ones.

I thus propose the following conjecture, the consequences of which I will explore in the remainder of the talk:

- (18) The distinction between structural and inherent cases results from a distinction in the structure of nominal phrases:
- Nominal phrases bearing structural case are simply DPs, with the distinctions among specific structural cases determined in the morphological component.
 - Nominal phrases bearing inherent/oblique case are exploded KPs, with distinct cases corresponding to distinct amounts of structure within KP.

This is by no means a novel idea:

- ☞ E.g. Emonds (1987), Nikanne (1993), Bittner and Hale (1996), Asbury (2008), Baker (to appear) all propose that some cases involve KP/PP while others don't.

The novel contribution I want to make here is:

- To argue that this split becomes especially attractive given recent advances in both M-case and KP approaches
- And to show that mapping M-case/KP onto the structural/inherent case divide lets us derive differences between the two that have previously been stipulated

I would also like to suggest that this is a natural application of an idea that has become popular for dealing with what we might call minor category differences:

- Often we find two syntactic objects which seem to belong to the same broad syntactic category, but differ in a number of their detailed properties.
- A promising approach is to say that these objects correspond to differing amounts of structure in containment relationships (e.g. Wurmbrand 2001).
- The approach being considered here just extends this logic to the structure of nominal phrases with different cases.

4.1 KP for the inherent cases

As a starting point, we simply follow Caha (2009) on the treatment of the inherent cases.

- A nominal phrase bearing an inherent case will be a DP with additional functional heads on top determining the specific case involved.
- These functional heads can be expected to have clear effects on both the syntax and the semantics of the phrase in question – determining e.g. the contexts in which it will appear and the structurally relevant aspects of its interpretation.
- And we should expect these heads to be universal in their broad outlines, the main cross-linguistic differences coming from how the material is treated by movement and Spell-out, so where one language has inherent case, another will have a PP.
- Crucially, though, Caha's theory gives us the means to say that inherent case-marked nominals are intermediate to prototypical DPs and PPs.

4.2 M-case for the structural cases

For the structural cases I propose that any actual case marking that appears results from mechanisms at or after Spellout.

- ☞ I assume that this primarily involves instances of what have been called dependent case and unmarked or default case.

The basic idea of dependent case is given in 19, from Baker (to appear, ch. 5):

- (19) If a category XP bears c-command relationship R to another category ZP in domain W, then assign Case C to XP.

- Baker argues that this template can characterize the assignment of (many instances, in many languages, of) accusative, ergative, dative and other cases, if we vary the precise categories, c-command relationship and locality domain.
- So e.g. typical accusative is assigned to a DP c-commanded by another DP in the domain of the CP phase, while (one variety of) dative is assigned to a DP that c-commands another DP in the domain of the *v*P phase.
- Languages differ in which instantiations of 19 they use, yielding e.g. the difference between accusative and ergative languages, DOM and non-DOM languages.

DPs that do not meet the criteria for any dependent case may then receive unmarked or default case:

- I use ‘unmarked case’ here to refer to cases that are assigned to any DP not yet bearing another case within a specific domain. The genitive in many languages can be characterized as the unmarked case within DP.
- By ‘default case’ I mean what appears as a last resort on any DP that has failed to receive case by any other means. This may be better understood (sometimes?) as the complete lack of case (Kornfilt and Preminger to appear, McFadden 2014)

One brief remark about the timing of M-case assignment:

- ☞ The precise point at which the mechanisms described above operate is not so important for present purposes, nor is a determination of whether they are ‘syntactic’ or ‘morphological’ or ‘at PF’, which would be largely terminological.
- ☞ Indeed, there is real disagreement on these points among those who make use of dependent and default case (Marantz 1991, McFadden 2004, Baker and Vinokurova 2010, Baker to appear, Kornfilt and Preminger to appear)
- ☞ What matters is that they apply relatively late, given the arguments that structural case reflects rather than driving the structure-building aspects of the derivation.
- ☞ What seems most plausible is Baker (to appear)’s proposal that they are part of the mechanism of Spellout, given that they have a lot in common with principles of linearization according to something like Kayne (1994)’s LCA.

5 Advantages of the synthesis

Recall the set of differences between structural and inherent case that we reviewed in our crash course at the beginning of the talk.

- ☞ I’m now going to go through them in turn, arguing that our synthesis can account for each of them in at least as insightful a way as previous theories.

1. Inherent case is thematically and lexically restricted, while structural case is assigned purely on the basis of structural configuration.

The account here gives a straightforward characterization of what the difference between structural and inherent case is, reducing it to something that we have need for elsewhere:

- Structural case-marked nominal phrases are just DPs, whereas inherent case-marked ones involve additional syntactic structure above the DP.
- We already need larger nominal extended projections to deal with traditional prepositional phrases, so we're making use of existing tools to deal with the distinction, rather than positing structural or inherent case as theoretical primitives.

Modelling the distinction in this way automatically accommodates the relevant semantic/thematic differences between the two types of case. The extra heads above the DP in inherent case-marked nominals will have consequences:

- ☞ These heads can be expected make some consistent, if not entirely straightforward, contribution to the semantics.
- ☞ Thus nominals in a particular inherent case should have some kernel of common semantics, appearing only in contexts where such semantics is appropriate.
- ☞ This yields their basic thematic restrictions, but also their ability to sometimes appear in contexts (e.g. adjuncts) more characteristic of traditional PPs than NPs.

Note that under this view, inherent case is never really 'assigned', i.e. it isn't determined in the course of the derivation, but really is inherent to the phrase on which it appears.

- Unlike features, we don't normally think of bits of syntactic structure being 'assigned' or created as a result of interactions with other bits of structure.

Rather, since each distinct inherent case in a language corresponds to a different structure, with a different syntactic head at the top, the determination of inherent cases on argument nominals just boils down to c-selection.

- ☞ If Y is the head that defines Datives, and X the head that defines Genitives, we can say that a verb or preposition that takes an inherent Dative object selects for YP, while one that takes an inherent Genitive object selects for XP.
- ☞ Exemplified with some German verbs, we get the following:

Verb	Gloss	'Assigns'	Selects
<i>tragen</i>	'carry'	Acc	DP
<i>helfen</i>	'help'	Dat	YP
<i>gedenken</i>	'commemorate'	Gen	XP

- ☞ I contend that this is a welcome result, since inherent case assignment by verbs seems to have the level of moderate predictability punctuated by exceptions and surprises that is characteristic of other instances of c-selection.

Structural case-marked nominals, lacking such heads, will be different:

- They will have no consistent unifying semantics, beyond that which all DPs have in common – hence the well-known lack of generalizations about the meaning of the nominative or the accusative.
- They will also have the distribution of DPs and not of PPs or any other category.
- Their specific cases will not be visible to selection, because they are all DPs. Hence there are no verbs that select for nominative objects.

2. When both could be assigned, inherent case takes precedence over structural.

- ☞ Again, inherent case is not something assigned to a nominal phrase in the course of the derivation.
- ☞ Rather, it characterizes how certain nominal structures are built up **before** being merged into a larger context, and in those contexts these (larger) structures are selected over the (smaller) structures of structural case.
- ☞ Since inherent case in a sense belongs to an earlier stage of the derivation, it gets the first crack before structural case.
- ☞ In some languages, dependent case can be assigned on top of inherent in such contexts (Pesetsky 2013), but in most structural case does not apply to DPs that already bear case. We'll come back to this below.

3. Structural cases alternate under A-movement and in argument structure alternations, while inherent ones do not.

The standard take on this since the 80s is essentially definitional:

- ☞ Inherent case is assigned to a nominal in its first-merge position. Subsequent steps of the derivation obviously cannot undo this first Merge, and are thus irrelevant.
- ☞ Structural case, on the other hand, can be assigned whenever a nominal gets into the right structural relationship with a case assigner.

We can do better now though, because the difference between structural and inherent case has to do with the presence of syntactic structure on the relevant nominal.

- Actual syntactic heads can't be created or destroyed by movement, or affected by the presence or absence of DPs elsewhere in the structure (causatives, passives).
- We also don't expect that a DP would be able to move into a KP, since this would require internal Merge to a complement position, which is standardly ruled out.
- Movement out of a KP may be possible, but should be quite rare, since it would essentially amount to preposition stranding.

- Thus movement is not expected to either trigger or obviate inherent case.

The situation with structural case, is of course quite different:

- Movement absolutely can affect c-command relationships between DPs, and move them into or out of particular locality domains.
- Since structural case is established in the course of the derivation on the basis of such factors, it will indeed be sensitive to A-movement, passivization, etc.

4. In some languages, inherent case blocks certain movement processes and relations associated with subjecthood. When it doesn't, we call it quirky case.

The synthesis proposed here doesn't immediately explain the quirky/inherent distinction, but it does provide a plausible framework for understanding it.

- ☞ Since structural and inherent case-marked nominals belong to distinct syntactic categories, but involve the same extended projection, we can expect them to have related but different treatments by movement and other phenomena.

But there is a good bit of room for variation and parametrization here. Take movement to a derived subject position like Spec-TP:

- If this is driven specifically by a D feature, then we only expect it to apply to structural case-marked nominals, not inherent ones.
- But it could also apply to the latter if the inherent case heads happen not to create any locality boundaries, so that the DP contained within could be targeted for movement, pied-piping the whole KP.
- Alternatively, in some languages the movement could be triggered not by a D feature per se, but by something that characterizes nominal extended projections, so the KPs of inherent case-marked nominals would be equally good candidates.
- In the end, this is analogous to saying that languages can differ in the extent to which they will tolerate PPs in subject position, which we already know is correct.

5. Whether a nominal has inherent or structural case can be relevant for the structural case assigned to another nominal below it.

- The basic fact in a typical nominative-accusative language is that when two DPs occur in the same minimal domain, the lower one is assigned accusative, but only when neither of them bears inherent case.
- All DPs not bearing inherent case, which don't get accusative in this way, end up nominative. Thus we get the following patterns, where square brackets delineate the relevant minimal domains:

- (20) a. [DP] → [DP_{NOM}]
 b. [DP DP] → [DP_{NOM} DP_{ACC}]
 c. [DP_{INH} DP] → [DP_{INH} DP_{NOM}]
 d. [DP DP_{INH}] → [DP_{NOM} DP_{INH}]
 e. [DP_{INH} DP_{INH}] → [DP_{INH} DP_{INH}]

☞ The fact that only DPs without inherent case are targets for dependent case assignment is not surprising: if inherent case is determined in the first-merge position of a DP, it will always precede and typically supersede dependent case.

☞ But why is it that DPs with inherent case don't count as triggers for dependent case on a lower DP?

Note that our explanation of this pattern in German and Icelandic had better not be too good, since languages like Faroese famously go the other way.

- Here verbs with quirky dative subjects take structural accusative objects, i.e. an inherent case DP **can** trigger dependent case:

- (21) Siggu dámar bókina/*bøkur
 Siggu.NOM likes.3s book-the.ACC/*NOM
 'Siggu likes the book.'

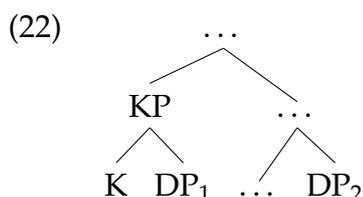
Again, taking inherent case-marked nominals to involve structure above the DP of structural case-marked ones provides a framework for dealing with this (see Richards 2010, Baker to appear, for related discussion):

- The most obvious instantiation of the template in 19 for dependent accusative would fix the two relevant categories as DPs, i.e. accusative is assigned to a DP c-commanded by another DP within a local domain.
- This will apply straightforwardly when we have two DPs, neither of which has inherent case, assigning accusative to the lower.

But it will plausibly **not** apply when the higher nominal bears inherent case:

☞ The entire nominal phrase will be some sort of KP, not a DP, so won't satisfy the conditions as a whole.

☞ Of course that KP will contain a DP, but this won't actually c-command out of the containing structure. E.g. DP₁ contained within KP doesn't c-command DP₂ in 22:



It will also plausibly not assign dependent case to a lower nominal with inherent case:

- If the inherent case rule applies specifically to a pair of DP (perhaps as an effect of Richards (2010)'s Distinctness), a lower KP will not be directly eligible.
- In languages that allow case-stacking, presumably the rule is not specific to DPs but applies to nominal projections of any size.

What about languages like Faroese?

- Again, if we think of 19 as a template for language-specific dependent case rules, we can easily parametrize this particular point.
- Specifically, we can assume that in Faroese, the bit specifying the properties of the c-commanding phrase does not restrict it to DPs, but to extended nominal projections more generally.
- The entire inherent case-marked nominal phrase will then satisfy the conditions, and since KP in 22 **does** c-command DP₂, dependent accusative will be assigned.

6. Inherent case-marked nominals are often blocked from triggering agreement, while structural case-marked ones are not.

- The standard story about this is that agreement and case-assignment are parasitic on one another. They are two sides of a single Agree relationship which values the ϕ -features on a functional head while valuing the case feature on a DP.
- Since inherent case is assigned upon a DP's first merge in its thematic position, that DP is rendered inactive for any later potential Agree relationships with the functional heads where verbal agreement is realized.

However, this co-dependency of case and agreement has come under serious attack:

- For several languages, evidence has accumulated that e.g. nominative case (probably the most relevant one) is **not** tied to agreement in the way that it should be.
- E.g. McFadden and Sundaresan (2010, and citations there) argue that nominative is independent of agreement in a series of languages. Baker (to appear) discusses several distinct relationships between case and agreement that seem to be attested.
- Agreement does seem to depend on case in many languages, but if that dependency doesn't go both ways, then we still need something to explain it.

Fortunately, an attractive explanation has been proposed by Řezáč (2008), and our current analysis allows us to adopt it.

- ☞ Řezáč also argues that inherent case-marked nominals include additional structure above the DP level (he assumes that they are PPs).

- ☞ He points out that if this additional structure creates a phase boundary, then the ϕ -features on the DP contained within will be inaccessible to functional heads at the clause level due to the PIC.
- ☞ Structural case-marked DPs, on the other hand, will lack this structure and thus be accessible to Agree relations from outside.

6 Challenges

The proposal in 18 is a large-scale conjecture at this stage, not a full-blown theory, raising lots of questions I haven't even touched on here, let alone solved.

- ☞ The purpose of this talk has been to lay out the potential it has, to maybe convince (some of) you that it has enough advantages to justify trying to solve the problems.
 - ☞ I would like to close now by mentioning a few of the big issues that will eventually have to be dealt with.
1. How do we decide in a principled way which cases within a particular language are structural, and which are inherent? This is particularly interesting in some languages for dative, genitive and ergative.
 2. How do we handle phenomena that cross the line between structural and inherent case? Here we can put apparently inherent uses of typically structural cases, like inherent accusatives in German and Icelandic, and patterns of syncretism that include both structural and inherent cases.
 3. What are the mechanics of dependent case? Where exactly does it apply, and what does it actually do – assign features, add some sort of structure (think DM-style dissociated morphemes) or something else entirely? Our answer here might help with the previous question (or also make things worse).

References

- Asbury, Anna. 2008. The morphosyntax of case and adpositions. Doctoral Dissertation, Utrecht University.
- Baker, Mark. to appear. *Case: Its principles and its parameters*. Cambridge: CUP.
- Baker, Mark, and Nadya Vinokurova. 2010. Two modalities of Case assignment: Case in Sakha. *Natural Language and Linguistic Theory* 28:593–642.
- Bittner, Maria, and Ken Hale. 1996. The structural determination of case and agreement. *Linguistic Inquiry* 27:1–68.
- Blake, Barry. 2001. *Case*. Cambridge University Press, second edition.
- Caha, Pavel. 2009. The nanosyntax of case. Doctoral Dissertation, CASTL, University of Tromsø.
- Emonds, Joseph. 1987. The invisible category principle. *Linguistic Inquiry* 18:613–632.

- Harley, Heidi. 1995. Subjects, events and licensing. Doctoral Dissertation, MIT.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press.
- Kornfilt, Jaklin, and Omer Preminger. to appear. Nominative as *no case at all*: an argument from raising-to-accusative in sakh. In *Proceedings of the 9th Workshop on Altaic Formal Linguistics*. Cambridge, MA: MITWPL.
- Lamontagne, Greg, and Lisa Travis. 1987. The syntax of adjacency. In *Proceedings of WCCFL*, 6, 173–186.
- Marantz, Alec. 1991. Case and licensing. In *ESCOL '91: Proceedings of the Eighth Eastern States Conference on Linguistics*, 234–253. Republished in Reuland (2000), pp. 11–30.
- McFadden, Thomas. 2004. The position of morphological case in the derivation: a study on the syntax-morphology interface. Doctoral Dissertation, University of Pennsylvania.
- McFadden, Thomas. 2007. Default case and the status of compound categories in Distributed Morphology. In *Proceedings of the 30th Penn Linguistics Colloquium*, ed. Tatjana Scheffler, Joshua Tauberer, Aviad Eilam, and Laia Mayol, 225–238.
- McFadden, Thomas. 2014. Why nominative is special: stem allomorphy and case structures. Presented at GLOW 37, Brussels.
- McFadden, Thomas, and Sandhya Sundaresan. 2010. Nominative case is independent of finiteness and agreement. Presented at BCGL 5: Case at the interfaces.
- Neeleman, Ad, and Fred Weerman. 1999. *Flexible syntax: A theory of case and arguments*. Dordrecht: Kluwer.
- Nikanne, Urpo. 1993. On assigning semantic cases in Finnish. In *Case and other functional categories in Finnish syntax*, ed. Anders Holmberg and Urpo Nikanne, 75–88. New York: Mouton de Gruyter.
- Pesetsky, David. 2013. *Russian case morphology and the syntactic categories*. Cambridge, Mass.: MIT Press.
- Reuland, Eric, ed. 2000. *Arguments and case: explaining Burzio's Generalization*. Philadelphia: John Benjamins.
- Richards, Norvin. 2010. *Uttering trees*. Cambridge, Mass.: MIT Press.
- Schütze, Carson. 2001. On the nature of default case. *Syntax* 4:205–238.
- Sigurðsson, Halldór Ármann. 1991. Icelandic Case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory* 9.
- Sigurðsson, Halldór Ármann. 2009. The No Case generalization. In *Advances in comparative Germanic syntax*, ed. Artemis Alexiadou, Jorge Hankamer, Thomas McFadden, Justin Nuger, and Florian Schäfer, 249–280. Amsterdam: John Benjamins.
- Vergnaud, Jean-Roger. 1977. Letter to Noam Chomsky and Howard Lasnik on "Filters and Control". Published in Freidin, Robert, Carlos Otero and Maria Luisa Zubizarreta, eds. 2008. *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*. Cambridge, Mass.: MIT Press.
- Řezáč, Milan. 2008. Phi-agree and theta-related case. In *Phi theory: Phi-features across modules and interfaces*, ed. Daniel Harbour, David Adger, and Susana Béjar, 83–129. Oxford: Oxford University Press.
- Wurmbrand, Susanne. 2001. *Infinitives: restructuring and clause structure*. Berlin: Mouton de Gruyter.