The Structural/Inherent Case Distinction and the Implementation of Dependent Case

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Introduction

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

CisM: Case is morphological, based on syntactic structure, 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 (e.g. Bittner and Hale, 1996; Neeleman and Weerman, 1999; Caha, 2009).

☞ CisM and KP would seem to be incompatible, but in this talk I'm going to explore the idea that the best theory would incorporate them both.

☞ The idea is to map them onto the divide between structural and inherent cases.

☞ If we do it right, we can handle phenomena that straddle the divide and get novel insight into certain comparative and diachronic patterns.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

Crash course: structural vs. inherent case

There's a well-established distinction between two types of case (Haider, 1985; Yip et al., 1987; Sigurðsson, 1989; Freidin and Sprouse, 1991; Bayer et al., 2001, etc.):

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, potentially in addition to configurational ones

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.

- (Inherent) dative is assigned to the thematically
  restricted 'indirect object' of ditransitives, the object
  of specific transitives like helfen 'help', and the object
  of specific Ps like mit 'with'.
- (Structural) accusative is assigned (roughly) to any
  argumental 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
     the metallurgist likes/receives/steals/burns
     den Cricketschläger.
     the cricket-bat.ACC

. . . the (thematically unrestricted) 'direct object' of ditransitive verbs. . .

(2) Der Metallurge gab/klaute/schnitzte/gönnte dem
the metallurgist gave/stole/whittled/allowed the
Dekan den Cricketschläger.
dean the cricket-bat.ACC
'The metallurgist gave the dean the cricket bat,
stole it from him, whittled it for him, didn't
begrudge him it'

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

(3) Der Dekan   ließ den M.en   verlieren/töten/den
     the dean.NOM let   the m.ACC lose/kill/the
     Cricketschläger klauen.
     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 accusative assigned under causative lassen that we just saw is superseded by the inherent dative assigned by helfen:

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

3 Structural cases alternate under A-movement and when argument structure is modified, e.g. in the passive:

(5) a. Der Metallurge hat
the metallurgist.NOM has
den Cricketschläger geklaut.
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.'

Inherent ones do not alternate in this way:

(6) a. Der Metallurge   hat dem Dekan   nicht
         the metallurgist.NOM has the dean.DAT not
         geholfen.
         helped
         'The metallurgist didn't help the dean.'

     b. Dem Dekan   ist nicht geholfen worden.
         the dean.DAT is not   helped   become
         'The dean was not helped.'

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

(7)   Der M. hofft   [PRO unterstützt zu werden]
      the m. hopes [PRO supported to become]
      'The metallurgist hopes to be supported.'

(8)   * Der M. hofft   [PRO   geholfen zu werden]
      the m. hopes [PRO.DAT helped   to become]
      'The metallurgist hopes to be helped.'

↻

. . . but not in Icelandic:

(9)   Henni   leiðist bókin.
        her.DAT bores book.the.NOM
        'She finds the book boring.'

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

When blocking doesn't happen, we call it quirky case.

5 A nominal having inherent or structural case affects the case assigned to another nominal below it.

- Typically, if the higher argument of a dyadic verb 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 M.   verehrt   den Cricketschläger.
            the m.NOM worships the cricket-bat.ACC
            'The metallurgist worships the cricket bat.'
       b.   Dem M.   gefällt   der Cricketschläger.
            the m.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 generally not.

(12) a. Den Metallurgen   wurde   geholfen.
          the metallurgists.DAT became.3SG helped
          'The metallurgists were helped.'
     b. Die M.   wurden   unterstützt.
          the m.NOM became.3PL supported
          'The metallurgists were supported.'

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, and indeed case has been implicated in A-movement, passivization, control. . .

The two alternative ideas about case we'll be considering here move in different directions from this, each modifying a different highlighted bit from that definition:

CisM moves case from the syntax into the morphology, such that it 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 the two alternatives to standard Case theory (henceforth SCT).

The motivation for CisM

The big idea of SCT (going back to Vergnaud, 1977):

- DPs need Case to be licensed to appear overtly. If a
  DP can't get Case in one position, it must move to
  another where it can, or remain silent (as PRO).

- Being able to trigger clearly syntactic operations like
  movement implies that Case must be active in the
  narrow syntactic component.

However, subsequent work has turned up a series of
problems with tying the positional distribution of DPs to
the determination of Case. . .

1 The relationship between final A-positions and morphological cases is not one-to-one, but many-to-many.

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

■ Zaenen et al. (1985) demonstrate that *henni* is the subject in (13), yet it is marked dative, while the object is marked nominative.

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

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

- Sigurðsson (1991) shows that *einu* in (14) is agreeing with PRO, which thus must have been assigned dative case. Yet no overt DP is licit in that position.

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

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

■ Nominative here is supplied by default. Something assigned by default can't be involved in licensing, since it would make the Case Filter vacuous.

⇨ So contra Vergnaud (1977) we need to keep the positional distribution of overt DPs separate from the determination of morphological case.

**Struc./inh. &
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> McFadden**

Introduction

Crash course

Two alternatives
The motivation for CisM
The motivation for KP
We want to have our case
and eat it too

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

On the one hand, this means we need a different
approach to overt DP distribution.

☞ I think this should work not in terms of requirements
   associated with DPs, but requirements associated
   with A-positions.

☞ I.e. we need something like the EPP combined with
   referential restrictions (Marantz, 1991; Sigurðsson,
   2010; Sundaresan and McFadden, 2009).

☞ And we need to deal with the cross-modular
   weirdness of the EPP and how it interacts with things
   like pro-drop and COMP-trace (McFadden and
   Sundaresan, 2018a,b).

On the other hand, if case assignment isn't needed for
DP licensing, we lose the strongest motivation for it being
syntactic. And it gets worse!

1. The assignment of some cases involves a
   dependency with an additional DP, which is difficult to
   implement in terms of standard syntactic operations
   like Agree (see below and especially Baker, 2015).

2. The determination of specific cases does not inform
   the semantics as we might expect it to if it occurs in
   the syntax and thus feeds into the LF branch
   (Sigurðsson, 2012, a.o.).

Hence CisM:

☞ Moving case-assignment into the PF branch allows
us to make sense of this cluster of facts.

☞ And it equally avoids making problematic predictions.

Struc./inh. & impl. of dep. case

> **Thomas McFadden**

Introduction
Crash course
Two alternatives
The motivation for CisM
The motivation for KP
We want to have our case and eat it too
Proposing a synthesis
Applying the synthesis
Intermediate challenges
Dependent case assignment
Comparative and diachronic issues
References

The motivation for KP

Several arguments for KP are out there (Lamontagne and Travis, 1987; Bittner and Hale, 1996; Neeleman and Weerman, 1999; Asbury, 2008; Levin, 2015).

- Perhaps the most interesting 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 morphological case, it will also have all of the cases to the left in (16).

2 Within a single language, syncretisms overwhelmingly involve contiguous regions of the hierarchy. Consider Modern Greek:

	'fighters'	'fighter'	'alpha'	[not attested]
Nom	maxités	maxitís	alfa	A
Acc	maxités	maxití	alfa	B
Gen	maxitón	maxití	alfa	A

Caha thus expands on KP:

☞ Case categories constitute hierarchical structures.

☞ The structure of each case crucially contains that of the next case down on the hierarchy.

(17)
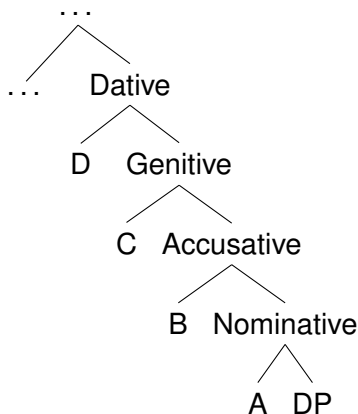
These containment relationships encode markedness.

- With suitable assumptions about morphosyntax, this can be used to derive the inventory effects.
- And it explains syncretism. An underspecified item capable of spelling out both Dative and Accusative would automatically also cover Genitive (*ABA).

The argumentation here depends crucially on cases having hierarchical structure.

☞ The simplest assumption is thus that these structures are syntactic, built up out of a series of functional heads above D.

⇨ Hence KP.

We want to have our case and eat it too

CisM and KP are each motivated by a set of facts that they can handle better than SCT. However, the two ideas are incompatible with each other:

☞ It is incoherent to say that a DP 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. . .

CisM

☞ has limited ability to deal with the syncretism and inventory patterns (see McFadden, 2007, for a failed attempt)

☞ has little to offer in dealing with the details of inherent cases, especially the more semanticky ones

**Struc./inh. &
impl. of dep. case**

> Thomas
> McFadden

Introduction

Crash course

Two alternatives
The motivation for CisM
The motivation for KP
**We want to have our case
and eat it too**

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

KP

☞ predicts that there should be some consistent semantic contribution from each case head, which is not supported, as least for the lower ones (Sigurðsson, 2012, a.o.)

☞ suffers from the same difficulties as other syntactic approaches in accounting for the distribution of nominative and accusative case

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impl. of dep. case**

**Thomas
McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Proposing a synthesis

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

☞ The areas where the two approaches do well and do poorly are (approximately) complementary, and follow the structural/inherent divide.

I thus propose to explore the following synthesis (henceforth SYNTH):

(18) The distinction between structural and inherent cases reflects a distinction in the size of the nominal phrases:

  i. Nominals bearing structural case are DPs in the narrow syntax, with distinctions among structural cases determined at or after Spellout.

  ii. Nominals bearing inherent/oblique case are larger, articulated KPs in the narrow syntax, with distinct cases corresponding to distinct amounts of structure within KP.

This is not an entirely new idea:

☞ Emonds (1987); Nikanne (1993); Bittner and Hale
   (1996); Asbury (2008); Baker (2015); Levin (2015);
   Yuan (To appear) all propose that some but not all
   cases involve KP/PP.

The novel contribution I want to make here is to argue for the following points:

- Mapping CisM/KP onto the structural/inherent case divide, especially given recent advances in both approaches, lets us derive differences that previously had to be stipulated.

- It also gives us a way to talk about intermediate cases, shedding some light on the mechanics of dependent case assignment while we're at it.

- And it allows insightful approaches to certain comparative and diachronic issues.

For the inherent cases:

- We can simply adopt Caha (2009)'s proposals as a starting point, at least as regards their structures.
- We'll have more to say regarding 'assignment' of inherent case in a bit.

For the structural cases, we need a bit more background:

☞ I propose that this primarily (perhaps exclusively) involves instances of what have been called dependent case and default or unmarked case.

The basic idea of dependent case, which goes back to
Marantz (1991), with antecendents in Yip et al. (1987)
etc., is given in (19), from Baker (2015, 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.

This parametrized template can characterize (many instances, in many languages, of) accusative, ergative, dative and other cases.

- One type of accusative is assigned to a DP c-commanded by another DP in the CP phase.
- One type of dative is assigned to a DP c-commanding another DP in the *v*P phase.
- One type of ergative is assigned to a DP c-commanding a DP in the CP phase.

See Preminger (To Appear) for insightful discussion related to this recurring "One type..." business.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Languages differ in which instantiations of (19) they use,
but also in the types of A-movement they have which can
feed or bleed them.

- (19) downward in CP will yield a consistent
  nominative-accusative pattern if objects obligatorily
  move out of the vP phase and get local to the
  subject.
- If said movement is optional, a DOM pattern will
  result, as in Sakha (Baker and Vinokurova, 2010):

(20) Masha [türgennik salamaat] sie-te
      Masha [quickly   porridge] eat-PST.3SG.S
      'Masha ate porridge quickly.'

(21) Masha salamaat-y   [türgennik t]
      Masha porridge-ACC [quickly   t]
      sie-te
      eat-PST.3SG.S
      'Masha ate the porridge quickly.'

**Struc./inh. &
impl. of dep. case**

Thomas
McFadden

Introduction

Crash course

Two alternatives

Proposing a
synthesis

Applying the
synthesis

Intermediate
challenges

Dependent case
assignment

Comparative and
diachronic issues

References

Yuan (2018, 2021) shows how variation in ergativity
patterns across varieties of Inuit can be similarly derived.

- Again, assume (19) downward in CP.
- But in these languages A-movement of the object crosses the subject, as in (23).
- So it's the subject that gets dependent case — hence we call it ergative. And it doesn't get ergative when the object doesn't move, as in (22).
- Dialects differ in the conditions on the movement, hence differ in the conditions on ergative marking.
- Crucially, the ergative marking really tracks indendent diagnostics for movement of object across subject as predicted.

(22) [$_{CP}$ Subj [$_{vP}$ Obj …]]

(23) [$_{CP}$ Obj Subj-ERG [$_{vP}$ ~~Obj~~ …]]

DPs that don't meet the criteria for any case receive default case (Schütze, 2001).

☞ This may be better understood as the complete lack of case (Bittner and Hale, 1996; McFadden and Sundaresan, 2010; Preminger, 2011; Kornfilt and Preminger, 2015; McFadden, 2018).

Applying the synthesis

I'll now go through the differences between structural and inherent case from the crash course at the beginning of the talk.

☞ I'll flesh out SYNTH by showing how it can account for each in at least as insightful a way as other theories.

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

SYNTH gives a straightforward characterization of the difference between structural and inherent case, 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 heads above the DP.
- We already need larger nominal extended projections to deal with prepositional phrases, so we apply that rather than positing structural or inherent case as theoretical primitives.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

This automatically accommodates the semantic/thematic differences between the two types of case, due to the extra heads above the DP in inherent case:

- ☞ These heads can be expected make a consistent, if not entirely straightforward, contribution to the semantics.
- ☞ This yields their basic thematic restrictions, but also their ability to appear in contexts (e.g. adjuncts) more characteristic of traditional PPs than NPs.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Note then that 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.

- Each inherent case corresponds to a different syntactic category, with a different head at the top.
- So the determination of inherent cases on argument nominals can just boil down to c-selection.

**Struc./inh. &
impl. of dep. case**

> Thomas
> McFadden

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Say Y is the head that defines Datives, and X the head that defines Genitives. We then get the following, exemplified with some Geman verbs:

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

☞ This is a welcome result, since inherent case assignment 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 have no consistent semantics beyond what all
  DPs have, hence the lack of generalizations about
  the meaning of the nominative or the accusative.
- They 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 e.g. no
  verbs that select for nominative objects.

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

Again, under SYNTH, inherent case is not assigned, but
characterizes how certain nominal structures are built up
before merging into a larger context.

☞ 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 first crack before
structural case.

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 definitional:

- Inherent case is assigned to a nominal in its
  first-merge position. Subsequent steps of the
  derivation cannot undo this, 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.

This timing difference must simply be stipulated, since
there is otherwise no inherent formal distinction in the
nature of the two types of case.

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

- Syntactic heads can't be created or destroyed by movement, or affected by the presence or absence of DPs elsewhere (as in causatives or 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.
- Movement out of a KP may be possible, but should be rare, since it would amount to something like preposition stranding.

The situation with structural case is 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 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.**

SYNTH doesn't explain the quirky/inherent distinction, but it does provide a framework for understanding it.

☞ Structural and inherent nominals are distinct syntactic categories, but in the same extended projection.

☞ So we can expect them to have similar but distinct treatments by A-movement and other phenomena.

☞ And there is a good bit of room for variation and parametrization here.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Take movement to a derived subject position:

- 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 apply to the latter if the K heads don't create locality boundaries, so that the DP contained within could be targeted, pied-piping the KP.

- Alternatively, in some languages the movement could be triggered not by a D feature, but by something that characterizes nominal extended projections, making the KPs 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.

**Struc./inh. &
impl. of dep. case**

**Thomas
McFadden**

Introduction
Crash course
Two alternatives
**Proposing a
synthesis**
**Applying the
synthesis**
**Intermediate
challenges**
**Dependent case
assignment**
**Comparative and
diachronic issues**
References

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

- Typically, when two DPs are in the same domain in a nom.-acc. language, the lower gets accusative, but only when neither bears inherent case.

- All non-inherent DPs which don't get accusative end up nominative. Thus we get the following patterns:

a. $[\text{DP}]$ $\rightarrow$ $[\text{DP}_{NOM}]$
b. $[\text{DP DP}]$ $\rightarrow$ $[\text{DP}_{NOM} \text{DP}_{ACC}]$
c. $[\text{DP}_{INH} \text{DP}]$ $\rightarrow$ $[\text{DP}_{INH} \text{DP}_{NOM}]$
d. $[\text{DP DP}_{INH}]$ $\rightarrow$ $[\text{DP}_{NOM} \text{DP}_{INH}]$
e. $[\text{DP}_{INH} \text{DP}_{INH}]$ $\rightarrow$ $[\text{DP}_{INH} \text{DP}_{INH}]$

? Why don't DPs with inherent case trigger dependent case on a lower DP?

Note that our explanation of this pattern in German and Icelandic had better not be too good. Faroese famously goes the other way:

(24) Siggu   dámar   bókina/*bøkur
      Sigga.DAT likes.3S book-the.ACC/*NOM
      'Sigga likes the book.'

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

What's worse, Tamil shows both patterns, with the variation depending on the specific verb (Baker, 2015).

☞ One set of verbs combines dative subjects with nominative objects, like German and Icelandic, (25).

☞ Another set combines dative subjects with accusative objects, like Faroese, (26).

(25) En-akkŭ andæ pustagam/*pustagatt-æ
      me-DAT that book.NOM/book-ACC
      irŭ-kk-ŭ.
      be-PRES-3SN
      'I have that book.'

(26) En-akkŭ andæ pustagatt-æ piḏi-kk-ŭdŭ.
      me-DAT that book-ACC   like-PRES-3SN
      'I like that book.'

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impl. of dep. case**

> Thomas
> McFadden

Introduction
Crash course
Two alternatives
**Proposing a
synthesis**
**Applying the
synthesis**
**Intermediate
challenges**
**Dependent case
assignment**
**Comparative and
diachronic issues**
References

Again, the assumption of heads above DP in inherent
case-marked nominals provides a framework for dealing
with this (largely following Richards, 2010; Baker, 2015):

- The simplest instantiation of the template in (19) for
  dependent accusative fixes 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.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

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

☞ The entire nominal will be a KP, not a DP, hence
won't satisfy the input conditions itself.

☞ Of course that KP will contain a DP, but this won't
actually c-command out of the containing structure.

☞ E.g. DP_1 contained within KP doesn't c-command
DP_2 in (27), so no dependent accusative:

(27)

**Struc./inh. &
impl. of dep. case**

> Thomas
> McFadden

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References
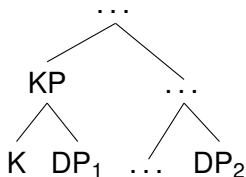
We can deal with Faroese with a different parametric
instantiation of the template in (19):

- Assume e.g. that the bit specifying the properties of
  the c-commanding phrase does not restrict it to DPs,
  but to extended nominal projections more generally.

Tamil takes a bit more work, but also fits:

- Assume a dependent accusative rule like the
  Faroese one to take care of the DAT-ACC verbs.
- Then assume that there is something different about
  the argument structure of the DAT-NOM verbs that
  prevents the application of this rule.

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 – two sides of a single Agree relationship.
- Assignment of inherent case to a DP in its first-merge position renders it inactive for later Agree 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 is not tied to agreement in the way that it should be.
- Let's consider arguments presented by McFadden and Sundaresan (2010). (See also Baker, 2015 and references in both for more evidence.)

A Tamil example from Sundaresan and McFadden (2009):

(28) [Naan   puuri   porikk-æ] Raman   maavŭ
     I.NOM poori.ACC fry-INF   raman.NOM flour.ACC
     vaangi-n-aan
     buy-PST-M.3SG
     'Raman bought flour for me to fry pooris'

☞ The embedded clause is non-finite, with no
   agreement and no plausible case assigner (like a
   prepositional complementizer).

☞ And it's an adjunct clause, so case can't be coming
   from the matrix, and anyway the embedded subject
   differs in ϕ-features from the matrix agreement.

**Struc./inh. &
impl. of dep. case**

**Thomas
McFadden**

Introduction

Crash course

Two alternatives

Proposing a
synthesis

**Applying the
synthesis**

Intermediate
challenges

Dependent case
assignment

Comparative and
diachronic issues

References

⟳ And an Icelandic paradigm from Boeckx (2000):

(29) Jóni   ?*virðist/virðast vera
      John.DAT seem.SG/PL   be
      *talið/taldir   líka hestarnir.
      believed.NT.SG/M.PL like horses.NOM.M.PL
      'John seems to be believed to like horses.'

(30) Mér   virðist/?*virðast Jóni   líka
      me.DAT seem.SG/PL   John.DAT like
      hestarnir.
      horses.NOM.M.PL
      'It seems to me that John likes horses.'

☞ You could say that hestarnir in (29) gets nominative
  via long-distance agreement with matrix T.

☞ But in (30), this agreement is clearly blocked due to
  defective intervention, yet hestarnir still shows up
  happily nominative.

Fortunately, SYNTH allows an alternative explanation:

☞ Řezáč (2008) argues that additional structure above the DP in inherent case-marked nominals (he assumes they're PPs) creates a phase boundary.

☞ Thus the ϕ-features on the DP within are inaccessible to functional heads at the clause level.

☞ Structural case-marked DPs, on the other hand, will lack this structure and thus be accessible to Agree relations from outside.

⇨ See also Yuan (2018, To appear) for the idea that anaphors in Inuit project KP structure, which blocks agreement, as an AAE-avoidance strategy.

**Struc./inh. &
impl. of dep. case**

Thomas
McFadden

Introduction

Crash course

Two alternatives

Proposing a
synthesis

Applying the
synthesis

**Intermediate
challenges**
The radical emptiness of
the nominative
The double life of the
accusative
Phenomena that straddle
the divide

Dependent case
assignment

Comparative and
diachronic issues

References

Challenges from intermediate cases

What SYNTH proposes is a clear cut-off between
structural and inherent cases, based on the presence of
syntactic heads, with no room for intermediate categories.

☞ This runs into trouble with accusatives (and some
   other cases) in most familiar languages, which show
   some hybrid behavior.

☞ Figuring out what to with these non-nominative
   structural cases is quite tricky, and at first looks like a
   big problem for SYNTH.

☞ But I will try to convince you that what we end up with
   is an unexpected argument in favor of the approach.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**The radical emptiness of
the nominative**

**The double life of the
accusative**

**Phenomena that straddle
the divide**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

The radical emptiness of the nominative

There is evidence from a completely different quarter about the presence or absence of syntactic heads corresponding to different cases.

- ☞ It's in partial agreement with what we've seen so far, but frustratingly at odds with it on some points.
- ☞ The argument starts with irregular morphological stem alternations sensitive to case.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

The radical emptiness of the nominative

The double life of the accusative

Phenomena that straddle the divide

Dependent case assignment

Comparative and diachronic issues

References

Consider the following partial paradigms:

	Tamil	Latin	Icelandic
	'tree'	'man'	'man'
Nom	mar-am	hom-ō	ma-ð-ur
Acc	mar-att-æ	hom-in-em	ma-nn
Gen	mar-att-ooɖæ	hom-in-is	ma-nn-s
Dat	mar-att-ŭkkŭ	hom-in-ī	ma-nn-i

- McFadden (2018) presents data of this type from several other languages, all repeating the same kind of weird pattern.

The empirical thrust is that, with a few principled caveats, you get this cross-linguistically consistent pattern:

(31) Nominative stem-allomorphy generalization
When there is stem allomorphy based on case, it distinguishes the nominative from all other cases.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

The radical emptiness of the nominative

The double life of the accusative

Phenomena that straddle the divide

Dependent case assignment

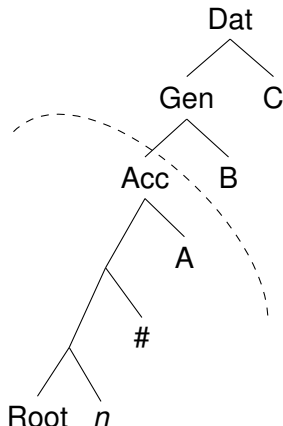**Comparative and diachronic issues**

References

The theoretical takeaway is more complicated, but here's the basic idea:

- The stem alternation can be analyzed in terms of allomorphy of a stem-forming suffix, say little *n*.
- The nominative is literally empty, corresponding to the lack of case structure above the DP, while the other cases involve Caha-like KP structures.
- The stem alternations are sensitive to the presence of the first case head above the DP, which distinguishes all other cases from the nominative.
- This head — call it A — triggers the non-nominative forms of little *n*, and it demarcates a locality boundary.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**The radical emptiness of
the nominative**

**The double life of the
accusative**

**Phenomena that straddle
the divide**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Here's how it looks:

(32)

☞ The heads above A are not visible for allomorphy of
little *n*, hence distinctions among the non-nominative
cases can have no relevance for stem alternations.

This is just part of a wider constellation of considerations that single out the nominative (or absolute) as being empty, the complete lack of case, distinct from all others.

- Again, the nominative is clearly the default, showing up in such a way that it is plausible to think it is never actually assigned (McFadden and Sundaresan, 2010; Kornfilt and Preminger, 2015; Levin, 2015).

- And cross-linguistically, it also tends to be morphologically unmarked, lacking any overt suffix or adposition.

This brings us to the following situation:

☞ Both structural/inherent considerations and stem-allomorphy ones support a distinction between cases with heads above DP and ones without.

☞ Both agree that the nominative is structureless and that prototypically oblique cases like instrumental or locative are structure-full.

☞ But they disagree on the status of other 'structural' cases like the accusative, and arguably structural uses of the genitive, dative, ergative etc.

The double life of the accusative

Cases like accusative present further problems, even for the structural/inherent divide:

- In nominative-accusative languages, the accusative is the second central structural case alternating with the nominative and the prototypical dependent case.
- However, in many such languages, it also has at least some uses that are arguably or even quite clearly inherent/oblique.

Here's some evidence for inherent accusative in German:

- There are a few verbs that assign a lexical accusative to their sole argument:

  (33) Mich   friert. Mich   dürstet. Mich
        me.ACC   freezes. me.ACC   thirsts. me.ACC
        hungert. Mich   schaudert.
        hungers. me.ACC   shudders.
        'I'm cold. I'm thirsty. I'm hungry. I'm
        shuddering.'

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction
Crash course
Two alternatives
Proposing a synthesis
Applying the synthesis
Intermediate challenges
The radical emptiness of the nominative
The double life of the accusative
Phenomena that straddle the divide
Dependent case assignment
Comparative and diachronic issues
References

■ There is also a productive durational adverbial use of the accusative, e.g. den ganzen Tag in (34). Note that it doesn't become nominative in the impersonal passive in (35).

(34) Der M. spielte den ganzen Tag.
the M. played the whole day.ACC
'The m. played the whole day.'

(35) Den ganzen Tag wurde gespielt.
the whole day.ACC was played
roughly 'They/one played the whole day.'

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**
**The radical emptiness of
the nominative**

**The double life of the
accusative**

**Phenomena that straddle
the divide**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

○

We *could* try to claim that there are two different cases
here and we're just mistaken in calling them both
'accusative'.

- But we're not dealing with a simple uniform suffix that
  attaches to all elements that can be marked for case,
  so we can't posit accidental homophony.

- Instead, we have a whole series of distinct forms of
  nouns, pronouns, determiners, demonstratives and
  adjectives, each systematically used both for the
  structural instances and for the inherent ones.

⇨ I.e. we clearly have a unified morphological category
  accusative, which is sometimes structural and
  sometimes inherent.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

The radical emptiness of
the nominative

**The double life of the
accusative**

Phenomena that straddle
the divide

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

The recognition that the accusative has some inherent/oblique uses is not new. But it's an especially tricky situation for SYNTH:

- ☞ For me, the structural/inherent divide reflects how the cases are represented, such that inherent cases involve heads not present in structural ones.
- ☞ This would imply that structural uses of the accusative have to involve a distinct syntactic structure from inherent uses.
- ☞ This looks like a very bad result, making a straightforward account of their morphological identity difficult or even impossible.

And the accusative is just the case for which it is easiest to make this point. Other non-nominative structural cases show similar kinds of splits.

**Struc./inh. &
impl. of dep. case**

> Thomas
> McFadden

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**
The radical emptiness of
the nominative
The double life of the
accusative
**Phenomena that straddle
the divide**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Phenomena that straddle the divide

A third problem comes from a closer look at certain details of the phenomena that motivated Caha (2009)'s proposal of containment structures for the various cases.

- There's no interruption in the phenomena determining the hierarchy of case categories to correspond to the structural/inherent divide.
- E.g. in Russian we find syncretisms for every adjacent pair of cases:

	window	teachers	two (m., n.)	book	100
Nom	okn-o	učitel-ja	dv-a	knig-a	st-o
Acc	okn-o	učitel-ej	dv-a	knig-u	st-o
Gen	okn-a	učitel-ej	dv-ux	knig-y	st-a
Prep	okn-e	učitel-jax	dv-ux	knig-e	st-a
Dat	okn-u	učitel-am	dv-um	knig-e	st-a
Ins	okn-om	učitel-ami	dv-umja	knig-oj	st-a

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**
The radical emptiness of
the nominative
The double life of the
accusative
**Phenomena that straddle
the divide**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Again, this is difficult to square with the idea that the
structural/inherent divide corresponds with a big
difference in how the cases are represented.

- ☞ According to SYNTH, the structural cases lack the
  kinds of syntactic heads required to make Caha's
  story about syncretism work.
- ☞ This means we have no way to account for
  syncretisms involving just one structural and one
  inherent case, because they should have nothing
  unique in common.
- ☞ So we incorrectly predict a break in syncretism
  somewhere in the inventory of cases, marking the
  structural/inherent divide.

**Struc./inh. &
impl. of dep. case**

Thomas
McFadden

Introduction

Crash course

Two alternatives

Proposing a
synthesis

Applying the
synthesis

Intermediate
challenges

**Dependent case
assignment**

Comparative and
diachronic issues

References

What is dependent case assignment?

These three challenges for my account of the structural/inherent divide all involve the non-nominative structural cases. Here's the situation:

☞ We need not just a two-way distinction between structural and inherent, but a three-way one between nominative, other structural, and inherent.

☞ Everything points to absence of heads in the nominative and presence in the inherent cases, but the non-nominative structural cases are unclear.

☞ Traditional structural/inherent considerations suggest a bare DP, but morphological stem alternations, inherent uses of structural cases, and phenomena that cross the divide go the other way.

**Struc./inh. &
impl. of dep. case**

> Thomas
> McFadden

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

Here's a question that will take us toward a solution:

? What actually happens when a dependent case is
assigned to a DP?

A simple asumption would be the assignment or valuation
of special case features on the D head.

But that actually doesn't make so much sense.

☞ It would be difficult (impossible?) to implement dependent case via Agree, the normal operation for feature valuation.

☞ Dependent case creates a distinction between two DPs, not a copying/sharing of values.

☞ Also, the featural idea runs into problems discussed above for dealing gracefully with syncretism etc. that led to the KP proposal.

So what is the alternative to implementing dependent
case in terms of features?

- Our way of thinking about syntax boils down to
  features, the bundles of features we call heads,
  hierarchical structures built out of those heads, and
  operations on all of them.

- If we can't model something in terms of features or
  syntactic operations, we're left with additional heads.

⇨ We're led to suppose that the dependent accusative,
   e.g., involves some amount of structure added on top
   of the bare DP of the nominative.

? How do we maintain our account of the
structural/inherent facts under this scenario?

? If structural accusative involves a head above DP,
how is it different from an inherent case?

Again, we need a three-way distinction:

1 The nominative

2 Other structural cases beyond the nominative

3 Inherent cases

And this is where the synthesis of KP with CisM comes in:

(36) An implementation of dependent case
The assignment of a dependent case literally
amounts to the addition of KP structure, on top of
what was a simple DP, but late in the derivation.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

Here's how that gets us our three-way distinction:

	Nom	DepAcc	InhAcc
1st Merge	DP	DP	[A DP]
Post-Spellout	DP	[A DP]	[A DP]

1 The nominative is what you get when a nominal enters the derivation as a DP and remains that way all the way to the end.

2 The other structural cases are what you get when a nominal enters the derivation as a DP but gets additional structure added on top due to the application of dependent case rules at Spellout.

3 Inherent case, including inherent accusative, is what you get when a nominal is first-merged in the larger structure with structure on top of the DP.

Let's walk through how this gives us what we want.
First the easy cases:

- The inherent cases involve structure throughout the
  syntactic derivation that can be selected for by
  specific verbs, carry non-trivial semantics, derive
  structured syncretism etc.

- The nominative lacks all such structure hence being
  unselectable and having no special semantics.

Struc./inh. & impl. of dep. case

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↻

Introduction
Crash course
Two alternatives
Proposing a synthesis
Applying the synthesis
Intermediate challenges
Dependent case assignment
Comparative and diachronic issues
References

Now the more interesting other structural cases:

- They start out as DPs just like the nominative, hence
  - ☞ cannot be selected for
  - ☞ reach Spellout and then LF sill as DPs, so no interesting semantics
- But on the way to the PF branch they get additional structure added, so
  - ☞ behave morpho-phonologically more like the inherent cases
  - ☞ and can even be morphologically identical to them

**Struc./inh. &
impl. of dep. case**

**Thomas
McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

References

The implementation of dependent case in (36) raises an important constellation of issues:

☞ It adds structure at a weird time in a weird place and in a weird way.

More specifically:

- Adding material after Spellout violates Inclusiveness.

- Adding new syntactic heads onto phrases that have already been Merged into the larger structure violates the Extension Condition and Cyclicity.

- And we still need a way to actually implement dependent case assignment using operations that fit with the rest of the theory.

Struc./inh. & impl. of dep. case

> **Thomas McFadden**

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

↻

I don't have answers, but I do have suggestions:

☞ Inclusiveness isn't really a concern if dependent case is a matter for the morphology:

■ Inclusiveness applies to the narrow syntax, not the post-Spellout PF branch (see: every realizational approach to morphology).

☞ Similar logic can plausibly be applied to the Extension Condition/Cyclicity.

■ E.g. Levin (2015) specifically proposes that KPs can be inserted above DPs in the post-syntactic component for independent reasons and similarly argues that this obviates problems with Extension and cyclicity.

Finally, if the case structures involved are KP sequences,
there's a plausible independent mechanism for managing
the addition of structure.

- Making a dependent accusative out of an unmarked
  nominative amounts to adding the next head in the
  nominal extended projection.
- So let's say that the KP addition of structural case is
  handled by the mechanism that implements
  extended projection.

Whatever this amounts to, something beyond simply
Merge and Agree seems to be required (see Adger,
2013, for discussion).

- Crucially, using it for structural case heavily restricts
  things.
- E.g. it means you can't add arbitrary structure
  anywhere you want at Spellout, but can only extend
  projections already present in the structure.

**Struc./inh. &
impl. of dep. case**

Thomas
McFadden

Introduction

Crash course

Two alternatives

Proposing a
synthesis

Applying the
synthesis

Intermediate
challenges

**Dependent case
assignment**

Comparative and
diachronic issues

References

Even finallier, a quick aside relating to the structural
conditions for the triggering of dependent case:

- Ongoing Edinburgh-Göttingen-ZAS project (LASER)
  with Kenyon Branan, Elise Newman, Sandhya
  Sundaresan, Rob Truswell and Hedde Zeijlstra on
  selective opacity, argument-adjunct distinctions etc.
- Exploring a theory of locality based on paths defined
  by selection and extended projection
- Branan (2021) argues that path-based locality can
  explain why, in some languages, adjuncts can get
  dependent case, but don't count as competitors for
  dependent case on other DPs.

Some comparative and diachronic issues

The approach developed here offers a productive basis to address some comparative and diachronic questions about case.

Inherent case, PPs and morphological variation

Syntactically speaking, the KP structures attributed to the inherent cases are essentially analogous to PPs.

- So the difference between adpositions and case markers is a (language-specific) matter of how syntactic structures are mapped onto morphophonology (McFadden, 2004; Asbury, 2008; Caha, 2009, etc.).
- Much of the syntax underlying inherent case can thus be universal, across languages with and without rich case-marking systems.
- Since the structural cases exist only on the PF branch, however, they will be subject to greater variation, and languages may lack them entirely.

**Struc./inh. &
impl. of dep. case**

Thomas
McFadden

Introduction

Crash course

Two alternatives

Proposing a
synthesis

Applying the
synthesis

Intermediate
challenges

Dependent case
assignment

Comparative and
diachronic issues

Inherent case, PPs and
morphological variation

Intermediate inherent
cases

The grammaticalization of
case marking

References

This also accords with common observations about the loss of morphological case:

☞ Oblique and inherent case marking are often replaced by PPs, while structural case marking is reduced or disappears entirely (Blake, 2001).

- If inherent case involves actual syntactic content, there will be syntactic and semantic evidence for it in the PLD, even if, say, sound changes obscure its morphological realization.

- So new generations of speakers will continue to acquire the structure even as 'case morphology' is lost, and find new means to expone it.

- Since structural case is purely morphological, if its realization is lost, it just disappears from the PLD.

- So new generations of speakers will simply fail to acquire it, and it will be lost with no dire effects.

**Struc./inh. &
impl. of dep. case**

> **Thomas
> McFadden**

Introduction

Crash course

Two alternatives

**Proposing a
synthesis**

**Applying the
synthesis**

**Intermediate
challenges**

**Dependent case
assignment**

**Comparative and
diachronic issues**

Inherent case, PPs and
morphological variation

**Intermediate inherent
cases**

The grammaticalization of
case marking

References

Intermediate inherent cases

The approach for cases that are intermediate between
the structural and inherent ideals can also accommodate
patterns like those analyzed by Anagnostopoulou and
Sevdali (2015) in Ancient Greek (AG).

- AG dative and genitive on verbal arguments look in
  some ways like typical inherent/quirky cases, e.g. in
  their clear sensitivity to thematic and lexical factors.

- However, many of them can become nominative
  under passivization, a classic hallmark of structural
  cases.

Anagnostopoulou and Sevdali (2015) analyze this by distinguishing different types of datives and genitives:

- One type involves interpretable Case features, which makes them inactive for Agree, yielding standard inherent case behavior.

- Another type involves uninterpretable Case features, which are transparent for Agree, yielding something more like limited structural case behavior.

There is diachronic support for something like this:

☞ In earlier stages of Greek, the individual cases were associated with more consistent meanings. Not coincidentally, genitives and datives did not alternate with nominatives in the passive.

☞ Over time, oblique objects came to alternate with nominatives in a way that paralleled the loss of their particular semantics.

☞ This fits in with a development of the relevant Case features from being interpretable to uninterpretable, in line with a common diachronic pattern described by van Gelderen (2011) and others.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

Inherent case, PPs and morphological variation

Intermediate inherent cases

The grammaticalization of case marking

References

A crucial idea then is that the actual case of DPs with uninterpretable Case is determined by dependent case rules operating on top of and after syntactic Agree:

- Dative and genitive, like accusative, are dependent cases, in that they depend on another c-commanding DP with structural Case.
  - ⇨ Hence they alternate with the nominative in the passive, where that c-commanding DP is suppressed.
- But they are crucially more specific than the accusative, in that they have contextual specifications for specific lexical verbs or applicative heads.
  - ⇨ This is why they take precedence over the accusative when the conditions for both are met.

We can implement this under SYNTH by recognizing a series of types of oblique case, with distinct but related structural analyses, connected by plausible diachronic development paths:

1 Properly semantic case, which involves an unselected nominal phrase (typically some kind of adjunct) in an elaborated KP structure

- The KP layer will have to provide the semantic connection to the surrounding context since there is no selecting element to do so.
- The KP will also ensure that rules of structural case assignment do not apply, hence these will not alternate with nominatives in the passive.

2 Traditional inherent case, which has essentially the same KP structure, but is c-selected in the syntax by a lexical predicate, applicative or similar

- Still being syntactic KPs, they will not alternate with nominatives in the passive, and they will have some semi-regular semantics.
- But they will also be subject to semantic irregularities due to the vagaries of selection — the KP won't bear all of the responsibility for the semantics due to the contribution of the selecting predicate.
- They plausibly develop out of semantic cases in contexts where a particular type of adjunct is especially common with particiular predicates in the PLD and is reinterpreted as an argument.

3 The structural genitives/datives of Anagnostopoulou and Sevdali (2015), which we can analyze as DPs in the syntax that are made into KPs in the morphology

- This can develop out of type 2 if the original thematic patterns become obscured and their dependence on specific predicates increasingly arbitrary.
- Learners would reanalyze the case marking as a morphological quirk required by the lexical predicate rather than a syntactic structure — with concomitant semantics — that fits with the predicate.
- They are thus syntactic DPs, subject to structural case assignment in the morphology, and predictably alternate with the nominative in passives.
- Directly translating Anagnostopoulou and Sevdali (2015), a language with such cases will have multiple versions of dependent case, some of which project extra structural layers due to lexical specifications.

The grammaticalization of case marking

The grammaticalization sources for structural case markers are typically inherent case markers.

- For us, shifting a marker from inherent to structural case amounts to having the same KP structure projected in the morphology instead of the syntax.

- This captures the observation that grammaticalization is often accompanied by semantic bleaching.

- And it explains why this pathway should be common, since the structural case is indistinguishable from an inherent one in the Morphology.

We also get an idea of why, as we have been led to
propose, the Morphology should ever come to create
what looks like syntactic structure.

- Odd bits of morphology come from generations of
  new language learners finding ways to accommodate
  the wreckage in the PLD of forms that have lost
  (some of) their syntactic/semantic motivation.
- Apparently, they deal with this mismatch fairly
  directly, by acquiring rules to project that structure in
  the Morphology, rather than the Narrow Syntax.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

Bibliography I

Adger, David. 2013. *A syntax of substance*. Cambridge, MA: MIT Press.

Anagnostopoulou, Elena, and Christina Sevdali. 2015. Case alternations in Ancient Greek passives and the typology of Case. *Language* 91:442–481.

Asbury, Anna. 2008. The morphosyntax of case and adpositions. Doctoral Dissertation, Utrecht University.

Baker, Mark. 2015. *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.

Bayer, Josef, Markus Bader, and Michael Meng. 2001. Morphological underspecification meets oblique case: syntactic and processing effects in German. *Lingua* 111:465–514.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

Bibliography II

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.

Boeckx, Cedric. 2000. EPP eliminated. Ms., University of Connecticut.

Branan, Kenyon. 2021. Paths and patterns of partial participation. Presented at NELS 52.

Caha, Pavel. 2009. The nanosyntax of case. Doctoral Dissertation, University of Tromsø.

Emonds, Joseph. 1987. The invisible category principle. *Linguistic Inquiry* 18:613–632.

Freidin, Robert, and Rex Sprouse. 1991. Lexical case phenomena. In *Principles and parameters in comparative grammar*, ed. Robert Freidin. Cambridge, Mass.: MIT Press.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction
Crash course
Two alternatives
Proposing a synthesis
Applying the synthesis
Intermediate challenges
Dependent case assignment
Comparative and diachronic issues

References

Bibliography III

van Gelderen, Elly. 2011. *The linguistic cycle: language change and the language faculty*. Oxford: Oxford University Press.

Haider, Hubert. 1985. The case of German. In *Studies in German grammar*, ed. Jindřich Toman, 65–101. Dordrecht: Foris.

Harley, Heidi. 1995. Subjects, events and licensing. Doctoral Dissertation, MIT.

Kornfilt, Jaklin, and Omer Preminger. 2015. Nominative as *no case at all*: an argument from raising-to-accusative in Sakha. 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.

Levin, Theodore. 2015. Licensing without Case. Doctoral Dissertation, MIT.

Bibliography IV

Marantz, Alec. 1991. Case and licensing. In *ESCOL '91: Proceedings of the Eighth Eastern States Conference on Linguistics*, 234–253.

McFadden, Thomas. 2004. The position of morphological case in the derivation: a study on the syntax-morphology interface. Doctoral Dissertation, UPenn.

McFadden, Thomas. 2007. Default case and the status of compound categories in Distributed Morphology. In *Proceedings of the 30th Penn Linguistics Colloquium*, 225–238.

McFadden, Thomas. 2018. *ABA in stem-allomorphy and the emptiness of the nominative. *Glossa: a journal of general linguistics* 3:8.

Bibliography V

McFadden, Thomas, and Sandhya Sundaresan. 2010. Nominative case is independent of finiteness and agreement. Presented at BCGL 5: Case at the interfaces.

McFadden, Thomas, and Sandhya Sundaresan. 2018a. Reducing pro and PRO to a single source. *The Linguistic Review* 35:463–518.

McFadden, Thomas, and Sandhya Sundaresan. 2018b. What the EPP and COMP-trace effects have in common: Constraining silent elements at the edge. *Glossa: a journal of general linguistics* 3(1):43.

Neeleman, Ad, and Fred Weerman. 1999. *Flexible syntax: A theory of case and arguments*. Dordrecht: Kluwer.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction
Crash course
Two alternatives
Proposing a synthesis
Applying the synthesis
Intermediate challenges
Dependent case assignment
Comparative and diachronic issues
References

Bibliography VI

Nikanne, Urpo. 1993. On assigning semantic cases in Finnish. In *Case and other functional categories in Finnish syntax*, ed. A. Holmberg and U. Nikanne. New York: Mouton.

Preminger, Omer. 2011. Agreement as a fallible operation. Doctoral Dissertation, MIT.

Preminger, Omer. To Appear. Taxonomies and ontologies of case. In *On the place of case in the grammar*, ed. Elena Anagnostopoulou, Dionysios Mertyris, and Christina Sevdali. Oxford: Oxford University Press.

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. 1989. Verbal syntax and case in icelandic. Doctoral Dissertation, Lund.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

Bibliography VII

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 et al. Amsterdam: John Benjamins.

Sigurðsson, Halldór Ármann. 2010. On EPP effects. *Studia Linguistica* 64:159–189.

Sigurðsson, Halldór Ármann. 2012. Case variation: Viruses and star wars. *Nordic Journal of Linguistics* 35:313–342.

Sundaresan, Sandhya, and Thomas McFadden. 2009. Subject distribution in Tamil and other languages: Selection vs. Case. *Journal of South Asian Linguistics* 2:5–34.

Struc./inh. & impl. of dep. case

Thomas McFadden

Introduction

Crash course

Two alternatives

Proposing a synthesis

Applying the synthesis

Intermediate challenges

Dependent case assignment

Comparative and diachronic issues

References

Bibliography VIII

Vergnaud, Jean-Roger. 1977. Letter to Noam Chomsky and Howard Lasnik on "Filters and Control". Published in Freidin, R. et al., 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 et al., 83–129. Oxford: Oxford University Press.

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

Yuan, Michelle. 2018. Dimensions of ergativity in Inuit: Theory and microvariation. Doctoral Dissertation, MIT.

Yuan, Michelle. 2021. Ergativity and object movement across inuit. Ms., UC San Diego.

Bibliography IX

Yuan, Michelle. To appear. Case as an anaphor agreement effect: Evidence from inuktitut. *Linguistic Inquiry* .

Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language and Linguistic Theory* 3:441–83.