DERIVING CASE, AGREEMENT AND VOICE PHENOMENA IN SYNTAX

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If Dave had thought about everything I brought up at meetings with him, I think Halldór has written about everything in this dissertation on case, agreement and Voice phenomena in Icelandic. Luckily, we don't agree on various aspects. In short, a lot of what E.F. Sigurðsson derives in syntax, H.Á. Sigurðsson wants to move to the Deep PF/Morphological Component. Our long skype meetings (and in person when both of us were in Iceland) were very helpful, as well as enjoyable. I want to thank Halldór for extensive comments on all parts of the dissertation.

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Hlíf made a sacrifice when we moved to the US so I could go to grad school in linguistics. She has always been there for me, encouraging and supporting me. I'm forever grateful for having you by my side.

ABSTRACT

DERIVING CASE, AGREEMENT AND VOICE PHENOMENA IN SYNTAX

Einar Freyr Sigurðsson

Julie Anne Legate

This dissertation places case, agreement and Voice phenomena in syntax. It argues
that the derivation is driven by so-called derivational features, that is, structure-
building features (Merge) and probe features (Agree) (Heck and Müller 2007 and
Müller 2010; see also Chomsky 2000, 2001). Both types are essential in deriving case
and agreement in the clausal domain and DP-internally. Feature values assigned
by Merge take effect immediately whereas feature values assigned via Agree take
effect at Spell-Out. This has the effect that Merge can overwrite Agree relations.

I argue for a clear boundary between the syntactic and the morphological com-
ponent regarding how case is assigned and agreement derived, placing Agree, Merge
and case assignment in syntax whereas a translation of case assignment into mor-
phological case and agreement takes place in the morphological component. Case
morphology is the result of a three-step process: (i) A syntactic relationship with
a functional head (e.g., Agree with Voice); (ii) a morphological translation of that
relationship into a case feature (e.g., from syntactic STR to morphological ACC);
and (iii) a morphological realization of that feature at Vocabulary Insertion.

I argue that there are three types of syntactic case: structural, inherent and
quirky case. Structural nominative case is either the result of structural case as-
signment or the realization of unassigned case. If a DP has not been assigned case
by Spell-Out, its syntactic case is determined as STR. Structural and quirky case is
often assigned by Voice via Agree but inherent case is assigned by Appl via Merge.

Furthermore, the dissertation studies the interaction of Voice, case and implicit
arguments. It provides new analyses for various constructions in Icelandic where
the dichotomy between active and passive breaks down. As I demonstrate, passive
and active are labels for a collection of properties of VoiceP, where these properties
may vary partially independently, yielding constructions that do not fit the tra-
ditional labels. I refine and improve our understanding of the nature of implicit
arguments and how they interact with different Voice types. Following Landau's
(2010) distinction between Weak and Strong Implicit Arguments (WIA and SIA), I
extend Legate's (2014) analysis of the New Impersonal Construction to other con-
structions. I propose that WIAs are not always projected but when they are, they
bear case. Furthermore, I propose that weak implicit arguments have an overtly
realized counterpart, which I call Weak Explicit Arguments.

Contents

Abbreviations

#	number
γ	gender
π	person
1, 1st	first person
2, 2nd	second person
3, 3rd	third person
ACC	accusative
ACT	active
AUX	auxiliary
DAT	dative
DEF	definite
DET	determiner
DFLT	default morphology
DInfl	inflectional exponent
EXPL	expletive
F	feminine
GEN	genitive
INF	infinitive
M	masculine
N	neuter
nInfl	inflectional exponent
NOM	nominative
Num	number
PASS	passive
PL	plural

PRS	present tense
PST	past tense
Pn	person
POL	polite pronoun
PRF	perfect
PTCP	participle
REFL	reflexive
SG	singular
ST	*-st* morphology
STR	strong declension
STR	structural case
SBJV	subjunctive
WK	weak declension

Chapter 1

Introduction

This dissertation places case, agreement and Voice phenomena in syntax.[1] It demonstrates why this is feasible and provides ways and tools to derive these phenomena syntactically. This is important as it has been debated where in the grammar these are derived, especially case.

Obviously, case, agreement and, e.g., passives are not solely derived in syntax. The title of this dissertation is therefore not meant to state that all the important parts regarding case, agreement and Voice take place in syntax. Rather, it refers to the fact that the dissertation contributes to the ongoing discussion on what belongs to syntax in human language and the title also implies that whereas I place case, agreement and Voice in the same component of the grammar, others have argued

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[1] A distinction is often made between uppercase syntactic Case and Agree and lowercase morphological case and agreement. I do not make this distinction even though there is a clear distinction made between syntactic and morphological case and agreement in this dissertation. I do write, however, uppercase Agree and Merge when referring to the corresponding syntactic operations.

that they should be kept apart, by placing, e.g., case in PF (Phonological Form) but Voice in syntax.

It is easy to see why one might be tempted to place case and agreement in PF but Voice in syntax. While being very syntactic in nature, Voice also bears on morphology (such as passive morphology) but also on semantics (there is an implicit argument in the passive even though it is not necessarily projected in the syntax). Case, however, and even agreement do usually not have an effect on semantic interpretation but they clearly have an effect on the morphological output. Nevertheless, I am placing Voice, case and agreement in the syntax.

But what does it mean to place these in syntax? Voice is one of the projections on the clausal spine. Case being in syntax on the current approach means that at least DPs and φPs enter the derivation with unvalued case features. Functional heads like Voice or Appl can bear a case feature as well and through Agree or Merge they assign case to a DP.

It is important to note that case assigned by Voice via Agree that results in morphological dative case is syntactically different from case assigned by Appl via Merge that also results in morphological dative case. That is, even though the result is the same, syntactically they are different. The reader should keep this in mind even though I am using the notions DAT in syntax and in morphology for dative case. More abstract notions for case assignment may be warranted, such as H.Á. Sigurðsson's (2012a, 2012b) case star augmentation, but I will nevertheless use the

non-abstract terms like, e.g., DAT and GEN for dative and genitive, respectively. It should be noted, though, that I make the important case distinction between STR (for structural), on the one hand, and NOM and ACC, on the other. STR refers to syntactic case assignment; it is translated in the Morphological Component (MC) to either NOM or ACC. Also, even though they are syntactically different, syntactic DAT assigned by Voice and syntactic DAT assigned by Appl are both translated to the same morphological case feature (DAT).

Similarly, syntactic agreement refers to feature valuation via the operations Agree and Merge in syntax. Presumably, a 1st person feature in syntax needs to be translated into a 1st person feature at MC, etc., before being realized, but that is not as obvious as for different cases. The approach taken here is somewhat similar as presented in H.Á. Sigurðsson's (2006a), titled "Agree in syntax, agreement in signs".

At a broad level, the present work looks at (i) the interaction of case, Agree and Merge, (ii) Voice phenomena that are between what is traditionally called *active* and *passive* and allows a further departure from a construction-based conception of grammar, (iii) the interaction of case and Voice. I propose the following:

1. ***Syntactic case***

   There are three types of syntactic case: structural, inherent and quirky case.

   (i) Structural nominative case is either the result of structural case assignment or the realization of unassigned case. If a DP has not been assigned case by Spell-Out, its syntactic case is determined as STR.

   (ii) The locus of structural accusative case is usually Voice (cf. Legate 2014) when Voice has a filled specifier which is assigned structural case. However, Appl can in certain environments assign structural case to its complement. This is usually realized as nominative, but in some grammars it is realized morphologically as accusative.

   (iii) Inherent case is assigned by Appl via Merge.

   (iiv) Quirky case is assigned by Voice via Agree.

2. ***From syntactic case to morphological case***

   Case morphology is the result of a three-step process:

   (i) A syntactic relationship with a functional head (e.g., Agree with Voice)

   (ii) A morphological translation of that relationship into a case feature (e.g., from syntactic STR to morphological ACC)

   (iii) A morphological realization of that feature at Vocabulary Insertion in the morphological component (e.g., *-an*)

3. **_Derivational features_**

(i) The derivation is driven by two types of derivational features: structure-building features (Merge) and probing features (Agree) (Heck and Müller 2007, Müller's (2010)). Both types are essential in deriving case and agreement in the clausal domain and DP-internally. I argue that the derivation DP-internally is driven to a large extent by structure-building features (Merge) and propose a feature-sharing approach via Merge.

(ii) Feature values assigned by Merge take effect immediately whereas feature values assigned via Agree take effect at Spell-Out. That is, even though an Agree relation has been established early in the syntactic derivation, feature values are not determined until Spell-Out. This has the effect that Merge can overwrite Agree relation.

4. **_Voice phenomena_**

Passive, active, etc., are labels for a collection of properties of VoiceP, where these properties may vary partially independently, yielding constructions that do not fit the traditional labels. I demonstrate how, when and why the dichotomy between actives and passives breaks down.

5. **_Implicit arguments_**

Implicit arguments may be projected in the syntax as a bundle of φ-features (φP), or may fail to project. When they are projected syntactically, they

are assigned case, which impacts case calculations, even though they are not

DPs. φPs are not always implicit, as they can be overtly realized. Syntacti-

cally projected implicit arguments, and their explicit counterparts, contribute

the same semantically: they restrict argument positions, but do not saturate

them.

1.1   A note on the framework

In the present system, I adopt basic insights and theoretical assumptions from Dis-

tributed Morphology (e.g., Halle and Marantz 1993, Embick 2010) and Minimalism

(e.g., Chomsky 1995, 2001, 2008, 2013), where syntax is the locus of the generative

derivation; it feeds morphology/phonology and semantics. The following diagram

demonstrates this.

(1)   Syntax

                |

        Spell-Out

            ⌒

        MC   LF

            |

        PF
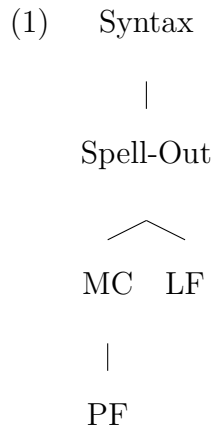
After syntax, at Spell-Out, the derivation is sent to PF (Phonological Form) and

LF (Logical Form) for pronunciation and interpretation, respectively. On the PF

branch, before the derivation reaches phonological rules, MC (Morphological Com-

ponent, which corresponds roughly to Deep PF in H.Á. Sigurðsson's (2015) layered PF) works further on the derivation where syntax left off and translates it (cf. translation of syntactic case to morphological case). That is, when the derivation is sent to MC, the derivation is still working on a syntactic structure (cf. Embick and Noyer 2001).

1.2 The syntactic derivation

The standard view of syntactic agreement used to be that it took place in Spec-Head configuration, via Merge. Chomsky (1995, 2001), however, abandoned that view, arguing that syntactic agreement should be accounted for via Agree. In this dissertation, I make use of both mechanisms.

1.2.1 Merge

When a syntactic structure is built, two objects are combined via the operation Merge, "which takes two syntactic objects (α, β) and forms K(α, β) from them" (Chomsky 2000:101). In the following, using Heck and Müller's (2007), Müller's (2010) notation, v has a Merge feature, so-called structure-building feature, which selects for a root, $\bullet\sqrt{}\bullet$. The result when these two syntactic objects merge is a new syntactic object, here v(P). The verb *cry* serves as an example.

(2)

vP

v $\sqrt{\text{CRY}}$

$[\bullet\sqrt{}\bullet]$
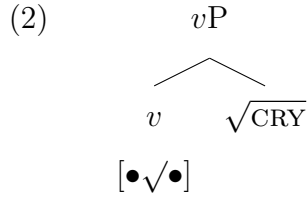
For a sentence like *John cried*, the next step in the derivation involves Voice selecting for v, i.e., $\bullet v\bullet$.

(3)

VoiceP

DP

Voice vP

John $[\bullet v\bullet]$

$[\bullet D\bullet]$ v $\sqrt{\text{CRY}}$

$[\bullet\sqrt{}\bullet]$
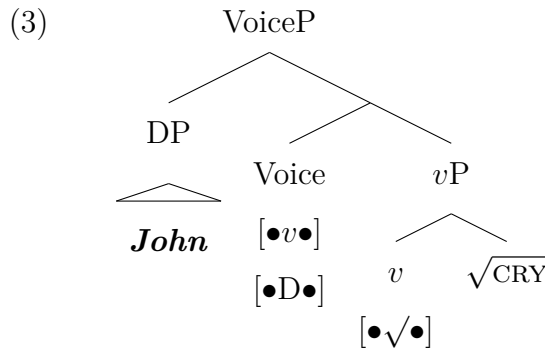
There are two structure-building features on Voice in the tree above, $\bullet v\bullet$ and $\bullet D\bullet$, where D stands for a phrase that bears a case feature (it is not limited to DPs, however). The derivation proceeds according to the order of these features; as $\bullet v\bullet$ is on top, Voice merges with v before merging with D. The derivation cannot skip features or postpone putting them into effect until at a later stage.

Structure-building features do not only put External Merge into force, as above, as they can also cause Internal Merge, i.e., Move. In English, as is well known, clausal subjects move to a position higher in the tree, they cannot stay in situ within the verb phrase. This is sometimes taken as evidence for an EPP feature or DPs moving to get case. Another formulation would be to say that a functional head higher in the tree has a structure-building feature, selecting for D, leading

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to movement of a DP lower in the tree. In the tree below, and elsewhere, I use co-indexation, such as with an index '$_i$', and also '<>' to show where an element has moved from (in some examples I will use 't', for 'trace').

(4)

TP

DP$_i$

John   [•Voice•]

[•D•]   <DP$_i$>

T   VoiceP

Voice   vP

[•v•]

[•D•]   v $\sqrt{\text{CRY}}$

[•$\sqrt{}$•]
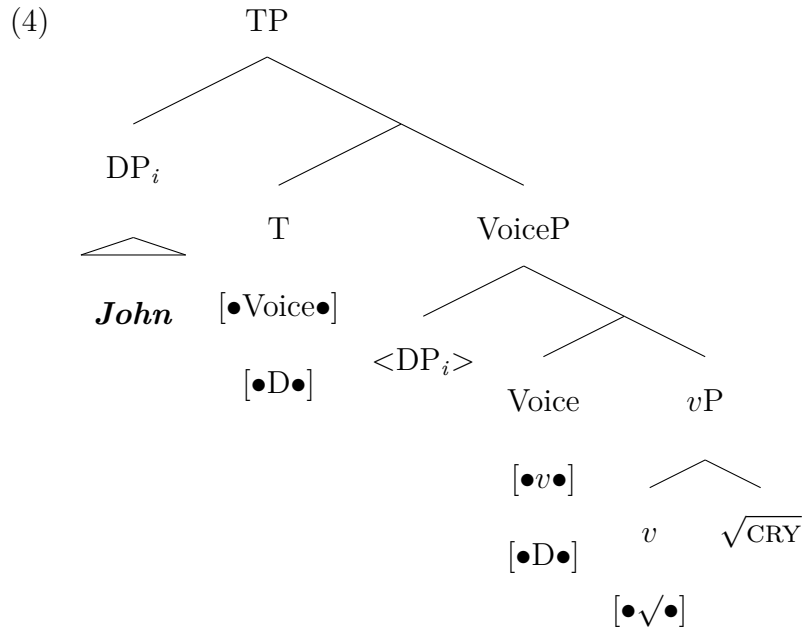
In the trees above we ignored feature valuation which we now turn to. When two syntactic elements merge via structure-building features, they instantiate a reciprocal discharging relationship. If, for example, the elements both have φ-features, valued or unvalued, such a relationship is established. This is shown below where T and DP merge, where ∘F:A∘ means that the feature F has receieved the value A from another syntactic object in the structure.

(5)   a.   John is crying.

     b.

```
                         TP
                        /  \
                       /    \
                      /      \
                    DP        \
                   [γ:M]      T     ...
                   [π:3]    [∘π:3∘]
                   [#:SG]   [∘#:SG∘]
                    /\
                   /__\
                  John
```
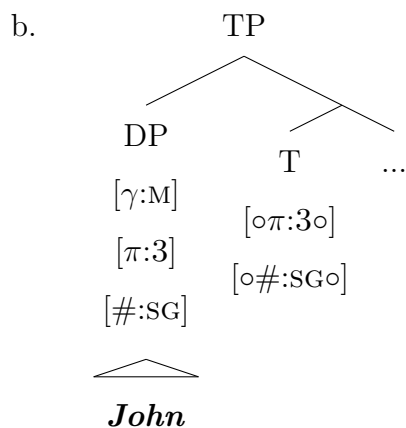
The DP *John* enters the derivation with valued φ-features, γ:M, π:3, #:SG (see, however, discussion in §3.2 on different loci of these features DP-internally). T, on the other hand, enters the derivation with unvalued φ-features, π:_, #:_. When DP and T merge, DP discharges its features onto T, resulting in T getting the values π:3, #:SG. The DP does not discharge a gender feature value onto T as the latter does not have a gender feature.

1.2.2   Agree

Probing features are another type of derivational features, which trigger the operation Agree (Chomsky 2000), which leads to a relation between a probe with an unvalued feature and a goal with a matching valued feature (feature identity; e.g., Chomsky 2000). Baker (2008) summarizes Chomsky's ideas as follows:

(6)   ***Agree***

A functional head F agrees with XP, XP a maximal projection, only if:

a.   F c-commands XP (the c-command condition)

b.   There is no YP such that F c-commands YP, YP c-commands XP, and YP has φ-features (the intervention condition)

c.   F and XP are contained in all the same phases (the phase condition)

d.   XP is made active for agreement by having an unchecked case feature (the activity condition)   (Baker 2008:40; cf. Chomsky 2000, 2001)

In this formulation, Agree works downwards only where the probe has to c-command the goal. More recently, it has been proposed that Agree is bidirectional, working also upwards (Baker 2008, Toosarvandani and van Urk 2014, Baier 2015, Ingason and E.F. Sigurðsson 2017 [forthcoming]; see also Béjar and Rezac 2009). In upward Agree, the goal must c-command the probe.

Finite T, as we have seen, enters the derivation with unvalued φ-features. T can get values from a DP in its specifier, as in (5b) above, or it can probe for a goal for valuation, as is shown for Icelandic below, where the DP stays in situ but can nevertheless value T's features.

(7)   ***Icelandic***

    a.   Það hafði   hlaupið einhver áhorfandi   inn á völlinn.
         EXPL had.3SG run   some   spectator.NOM into the.field
         'Some spectator had run into the field.'

    b.

```
                         TP
                        /  \
                       /    \
                      T      ...
                   [*φ:__*]   VoiceP
                      |       /   \
                      |      /     \
                      |____ DP   Voice  vP
                           /\            ...
                          /  \
                  einhver áhorfandi
```

'some spectator'
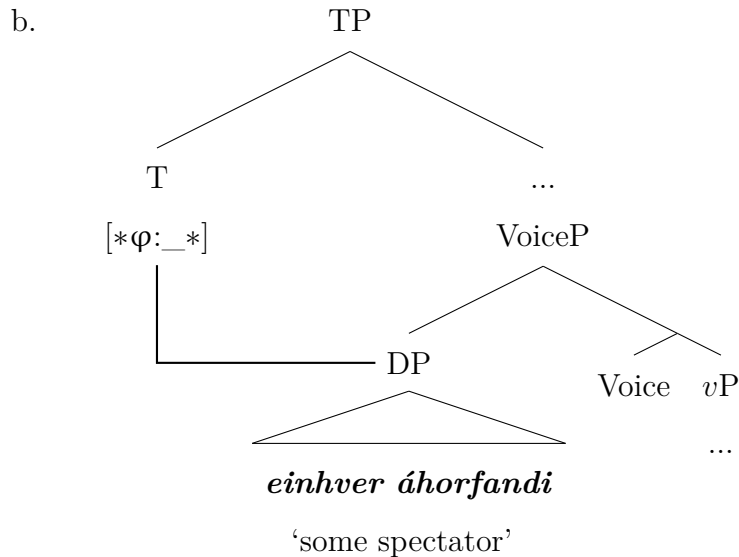
Unvalued features drive Agree: a head with an unvalued feature probes for a goal to get its feature valued.

    Chomsky (2000, 2001) argues that when a probe and a goal establish a relation, uninterpretable features are deleted. Also, he argues, a probe can only agree with a φ-complete goal. As discussed by Danon (2011), these assumptions are problematic, especially when we look at the internal structure of the DP. Not all features are generated on the same head but they are nevertheless visible to outside probing. Therefore, unvalued features which are valued in the process of the derivation must be visible to a probe like T. Let us look at the French example below and the tree following it.

(8)   ***French***

　a.　la　　　belle　　　fille
　　　the.F.SG beautiful.F.SG girl.F.SG

　　　'the pretty girl'　　　　　　　　　　　　　　(Danon 2011:303)

　b.

```
                    DP
              ┌──────┴──────┐
              D            NumP
           [γ:__]      ┌────┴────┐
           [π:3]      Num        nP
           [#:__]    [#:SG]   ┌───┴───┐
                            aP        nP
                         ┌───┴───┐  ┌──┴──┐
                         a   √BELL  n   √FILLE
                       [γ:__]      [γ:F]
                       [#:__]
```
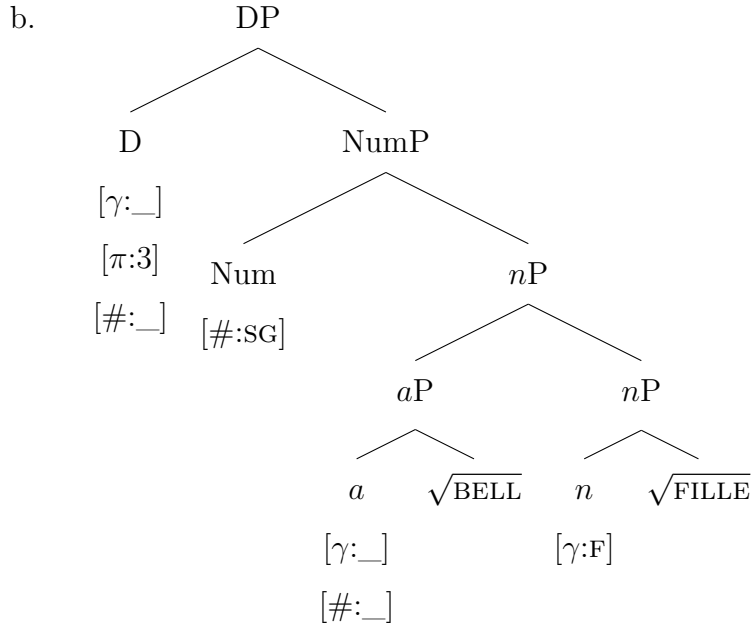
　　　　　　　　　　　　　　　　　　　　　　　(cf. Danon 2011:304)

D enters the derivation with only one φ-feature valued, person (π:3). Nevertheless, number on D is visible to T even though D enters the derivation with an unvalued number feature.

　　To solve this problem, Danon adopts feature sharing (Frampton et al. 2000, Frampton and Gutmann 2006, Pesetsky and Torrego 2007) where a link between a probe and a goal is created and unvalued features can establish an Agree relation with other unvalued features. In addition to Feature Sharing via Agree, I will propose feature sharing via Merge DP-internally. I will take another look at the tree above in §1.2.3.

1.2.3 Feature sharing via Merge

In the discussion above we saw Merge taking place at the clause level where one syntactic object discharged its features onto another. However, such a relationship is reciprocal, even though we did not see it in the previous examples. This becomes particularly clear in concord DP-internally, for which I propose feature sharing via Merge.

Let us have another look at the tree in (8b), see (9). I have now added unvalued features on n and Num in addition to the valued features they bear. I assume that restrictive adjectives, such as 'beautiful', are adjuncts that merge with nP.

(9)

DP

D
$[\gamma:\_]$
$[\pi:3]$
$[\#:\_]$

NumP

Num
$[\gamma:\_]$
$[\#:\text{SG}]$

nP

aP

a
$[\gamma:\_]$
$[\#:\_]$

$\sqrt{\text{BELL}}$

nP

n
$[\gamma:\text{F}]$
$[\#:\_]$

$\sqrt{\text{FILLE}}$
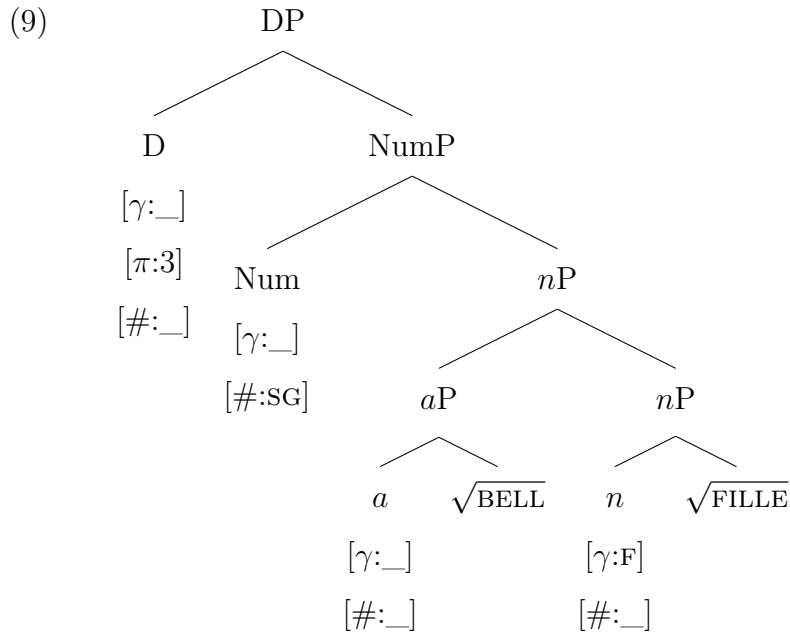
(cf. Danon 2011:304)

a has unvalued gender and number features that are valued in the course of the derivation. I propose that this is accomplished via Merge. When nP and aP merge,

a gets the feminine value on its gender feature from n. However, neither a nor n has a value for their number feature. Nevertheless, they establish a relation, a chain, such that when one of them gets a value, the other also receives that same value. Below, I show only the nP along with its adjunct aP where the chain is marked with an index i. I have also included structure-building features — it should be noted that I take adjuncts to select its target, following Ingason (2016), and therefore aP has the structure-building feature $\bullet n \bullet$.

(10)

$$
\begin{array}{c}
n\text{P} \\
[\gamma\text{:F}] \\
[\#\text{:}\_i]
\end{array}
$$

Node nP $[\gamma\text{:F}]$ $[\#\text{:}\_i]$ branches into:

- aP $[\bullet n \bullet]$ $[\circ\gamma\text{:F}\circ]$ $[\#\text{:}\_i]$ branching into:
  - a $[\bullet\sqrt{}\bullet]$ $[\bullet n \bullet]$ $[\circ\gamma\text{:F}\circ]$ $[\#\text{:}\_i]$
  - $\sqrt{\text{BELL}}$
- nP $[\gamma\text{:F}]$ $[\#\text{:}\_i]$ branching into:
  - n $[\bullet\sqrt{}\bullet]$ $[\gamma\text{:F}]$ $[\#\text{:}\_i]$
  - $\sqrt{\text{FILLE}}$
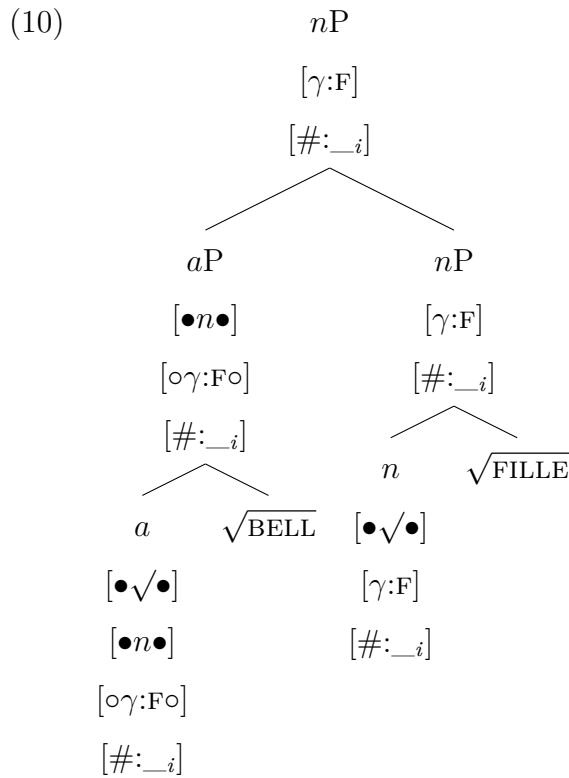
Next, Num merges with n, leading to valuation of number on n and a. As valuation via Merge is reciprocal, gender on Num is valued by n.

(11)

NumP

Num
[●n●]
[○γ:F○]
[#:SG]

nP
[γ:F]
[○#:SG○]

aP
[●n●]
[○γ:F○]
[○#:SG○]

nP
[γ:F]
[○#:SG○]

a
[●√●]
[●n●]
[○γ:F○]
[○#:SG○]

√BELL

n
[●√●]
[γ:F]
[○#:SG○]

√FILLE
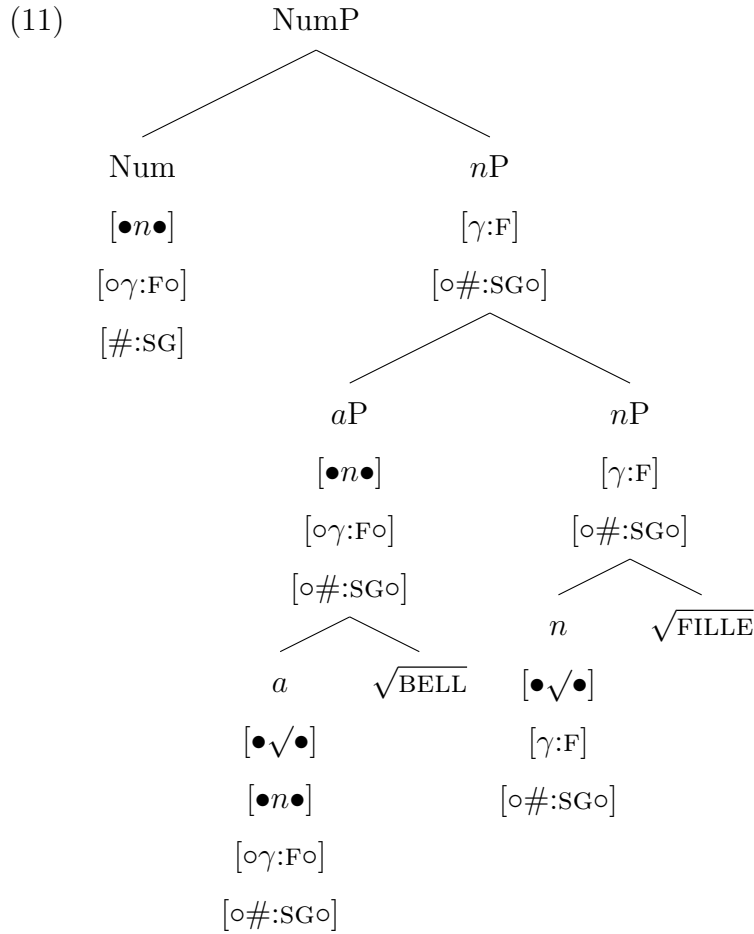
Finally, when D is merged, it has a valued person feature but unvalued gender and number features. D gets values for its unvalued features from Num through Merge, that is, even though Num received a gender feature value from n, that value is visible to D.

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(12)

$$DP$$
$$[\circ\gamma{:}\textsc{f}\circ]$$
$$[\pi{:}3]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

D
$$[\bullet\text{Num}\bullet]$$
$$[\circ\gamma{:}\textsc{f}\circ]$$
$$[\pi{:}3]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

NumP

Num
$$[\bullet n\bullet]$$
$$[\circ\gamma{:}\textsc{f}\circ]$$
$$[\#{:}\textsc{sg}]$$

$$nP$$
$$[\gamma{:}\textsc{f}]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

$$aP$$
$$[\bullet n\bullet]$$
$$[\circ\gamma{:}\textsc{f}\circ]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

$$nP$$
$$[\gamma{:}\textsc{f}]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

$$a$$
$$[\bullet\sqrt{}\bullet]$$
$$[\bullet n\bullet]$$
$$[\circ\gamma{:}\textsc{f}\circ]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

$$\sqrt{\textsc{bell}}$$

$$n$$

$$[\bullet\sqrt{}\bullet]$$
$$[\gamma{:}\textsc{f}]$$
$$[\circ\#{:}\textsc{sg}\circ]$$

$$\sqrt{\textsc{fille}}$$
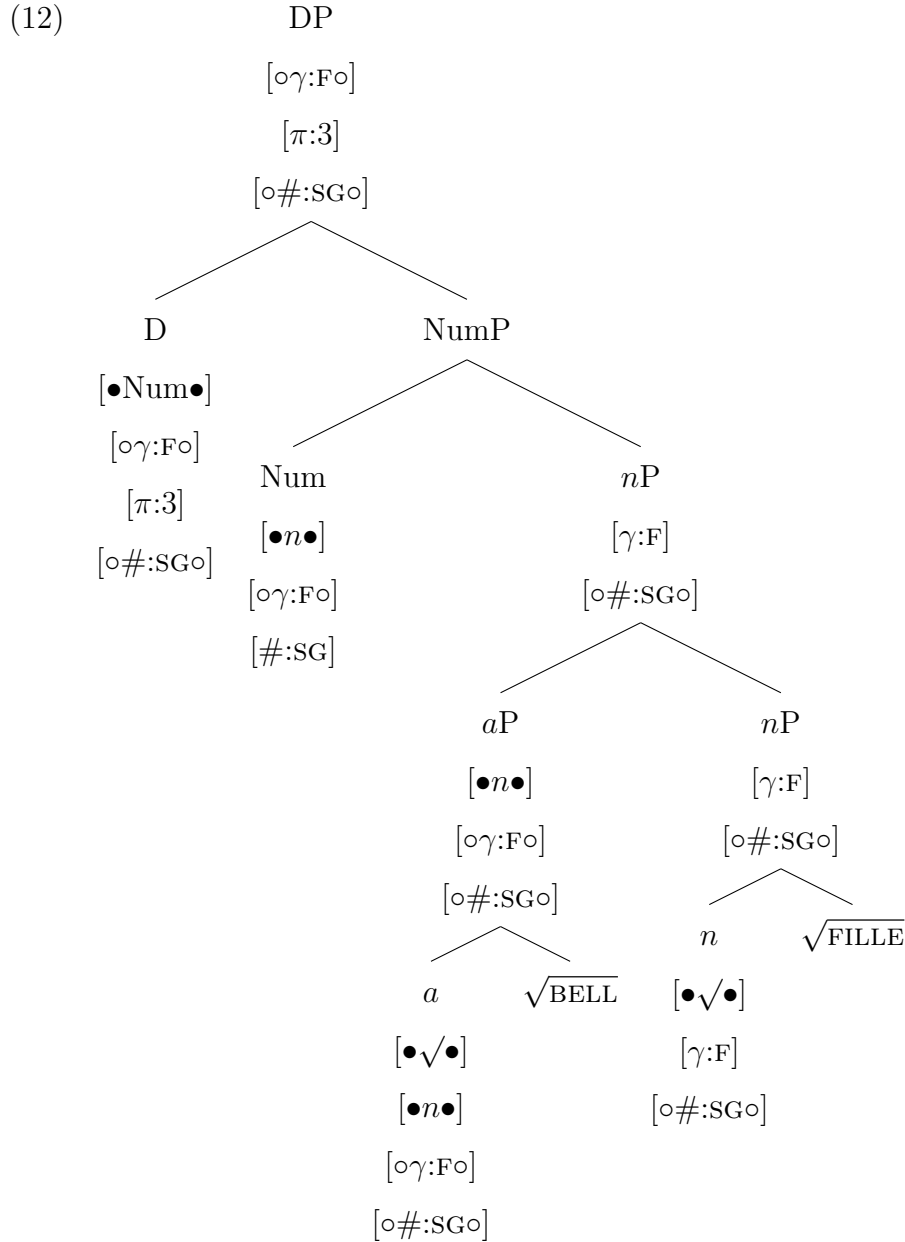
Furthermore, these features — and not only person — are visible for outside probing. Note also that as there is no evidence for person on Num, n or a, I assume that these do not have an unvalued person feature, and as a result, D does not discharge its value on them.

1.2.4   Case

For the past decades there has been an important debate regarding where in the derivation and how case is determined. Broadly speaking, there are two camps: One that argues that case assignment or checking is syntactic and one that argues that case is determined post-syntactically, at the PF branch. This debate has been fruitful, with each camp pointing out cases that are only supposed to be derivable in a specific domain of the grammar. This dissertation argues that case is assigned syntactically but translated post-syntactically.

I argue that the features that drive Merge and Agree also drive case assignment in syntax. That is, case is assigned via Merge and Agree as argued in Chapter 2.

1.3   Distributed Morphology

Within Distributed Morphology, it is generally assumed that there is no lexicon that, e.g., builds structure before it enters the syntactic derivation. That is, there is no pre-syntactic module that derives, e.g., word-formation. In this sense, the derivation of "words" is no less syntactic than clause formation. The syntactic component builds syntactic structures and both syntax and MC manipulate the structures built.

The terminal nodes in syntax are morphemes, where a morpheme is either an acategorial root or a functional head that is a bundle of grammatical features.

Roots do not carry any functional material by themselves. They are verbalized, nominalized, etc., when they merge with phasal, category-defining heads such as v or n, respectively (Arad 2003, Marantz 2007). A root like Icelandic $\sqrt{\text{GRÁT}}$ can merge with v, giving the verb *gráta* '(to) cry', and it can also merge with n, resulting in the noun *grátur* '(a) cry'.

(13)   ***Icelandic***

    a.   *gráta* '(to) cry'

$$v$$

$$v \quad \sqrt{\text{GRÁT}}$$

    b.   *grátur* '(a) cry'

$$n$$

$$n \quad \sqrt{\text{GRÁT}}$$
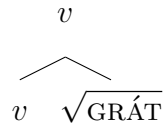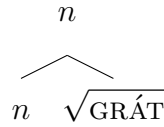
Furthermore, even though certain verbs can be characterized as being, e.g., unergative, I assume, very much in the spirit of, e.g., Marantz (2013), that roots do not enter the derivation with their own argument structure. *Walk* in (14a) is an unergative verb. When *walk* is used in a resultative structure, as in (14b), it is not an instance of the unergative verb being used in a resultative structure but an instance of the root $\sqrt{\text{WALK}}$ entering such a structure.

(14)   ***English***

    a. John walks (every day).

    b. John walked his shoes ragged.   (Marantz 2013:155)

The morphemes do not have phonological content in syntax; after syntax, the structure is sent to PF and LF for phonological realization and interpretation, respectively. The pieces sent to morphology (phonology) are *realized* (phonological material is added to them) by a special operation of insertion of Vocabulary items (Vocabulary Insertion). This takes place late in the derivation (Late Insertion), after other morphological operations, such as impoverishment, fusion and fission (Noyer 1992; Halle and Marantz 1993, 1994; Halle 1997), lowering, linearization and local dislocation (Embick and Noyer 2001; Embick 2007).

In various languages, there is not a one-to-one mapping between syntactic features and Vocabulary items. In Icelandic, for example, one vocabulary item can be the realization of, e.g., gender, number and case.

(15)   ***Icelandic***

    a.   hest-ur,   hest-∅,   hest-i,   hest-s
        horse-M.NOM.SG horse-M.ACC.SG horse-M.DAT.SG horse-M.GEN.SG

    b.   hest-ar,   hest-a,   hest-um,   hest-a
        horse-M.NOM.PL horse-M.ACC.PL horse-M.DAT.PL horse-M.GEN.PL

    c.   búð-ir,   búð-ir,   búð-um,   búð-a
        store-F.NOM.PL store-F.ACC.PL store-F.DAT.PL store-F.GEN.PL

In (15a), for example, the Voculary item *-s* is the realization of masculine, genitive, singular. These are dissociated morphemes (Embick 1997) and are inserted in MC (at PF).

When a suffixed definite article is added (DEF in the glosses below), these features are realized in two places within the DP, as two dissociated morphemes.

(16)   a.   hest-ur-inn,   hest-∅-inn,
                 horse-M.NOM.SG-DEF.M.NOM.SG horse-M.ACC.SG-DEF.M.ACC.SG

                 hest-i-num,   hest-s-ins
                 horse-M.DAT.SG-DEF.M.DAT.SG horse-M.GEN.SG-DEF.M.GEN.SG

     b.   hest-ar-nir,   hest-a-na,
                 horse-M.NOM.PL-DEF.M.NOM.PL horse-M.ACC.PL-DEF.M.ACC.PL

                 hest-u-num,   hest-a-nna
                 horse-M.DAT.PL-DEF.M.DAT.PL horse-M.GEN.PL-DEF.M.GEN.PL

     c.   búð-ir-nar,   búð-ir-nar,
                 store-F.NOM.PL-DEF.F.NOM.PL store-F.ACC.PL-DEF.F.ACC.PL

                 búð-u-num,   búð-a-nna
                 store-F.DAT.PL-DEF.F.DAT.PL store-F.GEN.PL-DEF.F.GEN.PL

I refer to dissociated morphemes DP-internally as nInfl and DInfl (cf. Ingason 2016).

(17)   ***Dissociated Morpheme Insertion***

       X → [X + XInfl]

When XInfl is inserted, the case and φ-feature values of X are discharged onto XInfl. This is shown below for *hestana* 'the.horse.M.ACC.PL' (for expository purposes Num moves to adjoin to D; see, however, Ingason 2016 for local dislocation analysis where D is "lowered"):

(18)　a.　hest-a-na
　　　　horse-M.GEN.PL-DEF.M.GEN.PL

　b.

$$
\begin{array}{c}
\text{D} \\
\diagdown \\
\text{Num} \qquad\qquad \text{D}
\end{array}
$$
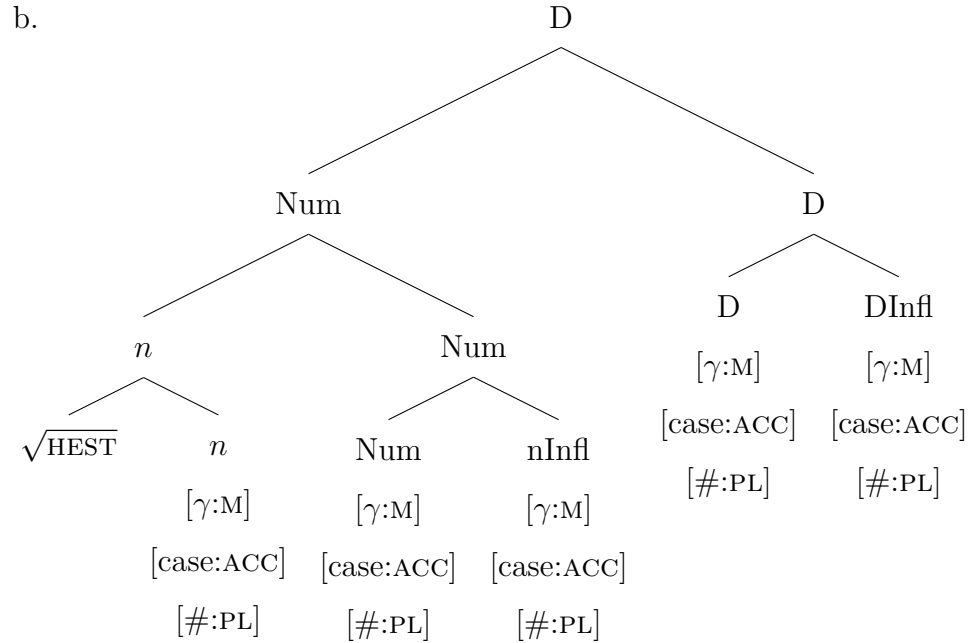
Note that this tree represents the derivation after the structure has been sent to the Morphological Component (MC), at PF. The case feature is accusative as it has been translated from being structural case in syntax. That is, MC translates syntactic case features. This is important for structural case: Unmarked nominative case and dependent accusative case at MC reflect one and the same case in syntax, structural case.

Adopting Embick's (2010) system at MC, we no longer have tree structure at the level of chaining, concatenation, pruning and Vocabulary insertion — after linearization applies. Terminal nodes are concatenated (shown below with ⌢). Concatenation shows linear ordering of terminal nodes and encodes immediate precedence. Vocabulary Items are inserted after concatenation. If there are terminal nodes

that have zero exponents, a pruning rules applies, removing nodes from concatena-
tion statements. Finally, after Vocabulary insertion and pruning, the concatenated
nodes are chained.

Below we see how this process works for accusative *hestana* 'horses' (cf. the tree
in (18)). The process works phase by phase and for the sake of exposition, I take
the DP to be one phase (rather than splitting it up in more than one, where at least
n would count as a phasal head).

(19)   a.   ***Concatenation***

       $\sqrt{\text{HEST}}⌢n$, $n⌢\text{Num}$, $\text{Num}⌢\text{nInfl}$, $\text{nInfl}⌢\text{D}$, $\text{D}⌢\text{DInfl}$

   b.   ***Vocabulary Insertion***

       $\sqrt{\text{HEST}}⌢[n,\text{-}\varnothing]$, $[n,\text{-}\varnothing]⌢\text{Num}$, $\text{Num}⌢\text{nInfl}$, $\text{nInfl}⌢\text{D}$, $\text{D}⌢\text{DInfl}$

   c.   ***Pruning***

       $\sqrt{\text{HEST}}⌢\text{Num}$, $\text{Num}⌢\text{nInfl}$, $\text{nInfl}⌢\text{D}$, $\text{D}⌢\text{DInfl}$

   d.   ***Vocabulary Insertion***

       $\sqrt{\text{HEST}}⌢[\text{Num},\text{-}\varnothing]$, $[\text{Num},\text{-}\varnothing]⌢\text{nInfl}$, $\text{nInfl}⌢\text{D}$, $\text{D}⌢\text{DInfl}$

   e.   ***Pruning***

       $\sqrt{\text{HEST}}⌢\text{nInfl}$, $\text{nInfl}⌢\text{D}$, $\text{D}⌢\text{DInfl}$

   f.   ***Vocabulary Insertion***

       $\sqrt{\text{HEST}}⌢[\text{nInfl},\text{-a}]$, $[\text{nInfl},\text{-a}]⌢\text{D}$, $\text{D}⌢\text{DInfl}$

   g.   ***Vocabulary Insertion***

       $\sqrt{\text{HEST}}⌢[\text{nInfl},\text{-a}]$, $[\text{nInfl},\text{-a}]⌢[\text{D},\text{-}\varnothing]$, $[\text{D},\text{-}\varnothing]⌢\text{DInfl}$

   h.   ***Pruning***

       $\sqrt{\text{HEST}}⌢[\text{nInfl},\text{-a}]$, $[\text{nInfl},\text{-a}]⌢\text{DInfl}$

i.   ***Vocabulary Insertion***

$\sqrt{\text{HEST}}\frown$[nInfl,-a], [nInfl,-a]$\frown$[DInfl,-na]

j.   ***Chaining***

$\sqrt{\text{HEST}}$-a-na

(19) serves as an example how we think the derivation proceeds at the Morphological Component (MC). However, I will not be applying these operations elsewhere. What is important for current purposes is that at MC, syntactic case features are translated into relevant morphological case features. Structural case at syntax is translated into either nominative or accusative, depending on whether the DP in question is the highest structurally case marked DP in its domain or not.

1.4   Semantics

When the syntactic derivation of a cycle (a phase) is complete, at Spell-Out, it is sent to Phonological Form (PF) and Logical Form (LF). LF is the semantic interface where semantic interpretation is computed. To model that, we use different modes of composition: Function Application, Existential Closure, Predicate Modification, Event Identification and Predicate Restriction.

I will now show examples of different modes of composition. We start with Function Application and use it with *die*, which is a verb that has a theme argument that needs to be saturated. The DP *the actor* does exactly that in the following.

(20)   ***English***

   The actor died.

The verb *die* enters the derivation with an open argument variable (λx), whose domain is a set of individuals, and an open event variable (λe).

(21) λx.λe. [dying(e) $\wedge$ THEME(e,x)]

Here, λx binds all instances of x and λe binds all instances of e. When we apply the DP *the actor* to the function above, it replaces all instances of x (there is only one in (21)) and we remove λx; *the actor* combines with the verb and saturates its argument position.

(22) λx.λe. [dying(e) $\wedge$ THEME(e,x)]($[\![$***the actor***$]\!]$)

   = λe. [dying(e) $\wedge$ THEME(e,the actor)]

The mode of composition used here is Function Application (FA), which is defined in (23):

(23)   ***Function Application***

   If α is a branching node, $\{\beta,\gamma\}$ is the set of α's daugters, and $[\![\beta]\!]$ is a function whose domain contains $[\![\gamma]\!]$, then $[\![\alpha]\!] = [\![\beta]\!]([\![\gamma]\!])$.

   (Heim and Kratzer 1998:44)

We draw the FA composition of (22) in the following tree, where vP equals α in (23) and β and γ equal v and DP, respectively.

(24) vP

Function Application

λe. [dying(e) $\wedge$ THEME(e,the actor)]

```
                    v                    DP
   λx.λe. [dying(e) ∧ THEME(e,x)]
                  v    √DIE        the actor
```

The second mechanism we need in this dissertation is Existential Closure (EC). To saturate the event variable, we existentially close it. In constructions like passives, where there is an external argument which does not saturate the position, we also apply EC to saturate the external argument variable. For a construction like the passive, I assume that Asp(ect), which here is the participial head -*ed*, takes a property of the type $\langle$e,$\langle$s,t$\rangle\rangle$ and returns a proposition of the type $\langle$s,t$\rangle$. (Asp takes a λx variable and returns it saturated, $\exists$x).

(25) a. The actor was fired.

b.

AspP
Existential Closure
$\lambda e.\exists x[\text{AGENT}(e,x)$
$\wedge \varphi(x) \wedge \text{firing}(e) \wedge \text{THEME}(e,\text{the actor})]$

```
                Asp                              VoiceP
    λp⟨e,⟨s,t⟩⟩.λe.∃x[p(x)(e)]            λx.λe. AGENT(e,x)
              -ed                    ∧ firing(e) ∧ THEME(e,the actor)

                                            fire the actor
```

Here, the agent is not further specified in a *by*-phrase. Asp existentially closes the agent argument such that the interpretation of the sentence is: 'Someone (or other) fired the actor', i.e., there is some agent x which fired the actor. The way EC is presented here is a version of Function Application.

Another mode of composition is Predicate Modification (or Predicate Conjunction) which takes two elements that are of the same type and returns that type.

(26) ***Predicate Modification***

If α is a branching node, $\{\beta,\gamma\}$ is the set of α's daughters, and β and γ are both of type $\langle e,st\rangle$, then α is of type $\langle e,st\rangle$.

(adapted from Heim and Kratzer 1998:65)

Intersective adjectives are a typical example of this.

(27) a red jacket

To describe the intersectivity of *a red jacket* is to say that we have two sets, one contains things that are red and the other contains jackets. The intersection is a set of things that are both a part of the set of things that are red and a part of the set of jackets.

We could use Function Application to get the composed meaning of *a red jacket* but as the two are of same type, *red* and *jacket*, we use Predicate Modification which captures well the intersective meaning.

(28)
$$nP$$
Predicate Modification
$$\lambda x.[red(x) \wedge jacket(x)]$$

$$aP \qquad nP$$

red   **jacket**
$$\lambda x.[red(x)] \qquad \lambda x.[jacket(x)]$$
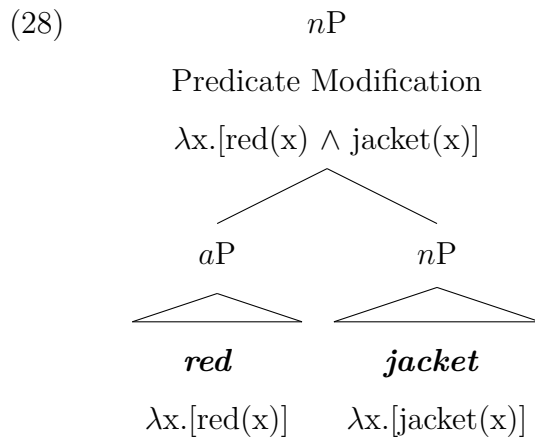
Fourth, I assume Kratzer's (1996) Event Identification when an element in at least SpecVoiceP and SpecApplP is introduced. Kratzer (see also Marantz 1984) assumes that the external argument is not part of the denotation of the verb. Instead, it is introduced by Voice. The mechanism Kratzer introduces for this purpose is Event Identification. (It should be noted that it would also be possible to use Function Application here.)

(29) ***Event Identification***

If α is a branching node, $\{\beta,\gamma\}$ is the set of α's daughters, and β is of type $\langle$e,$\langle$s,t$\rangle\rangle$ and γ is of type $\langle$s,t$\rangle$, then α is of type $\langle$e,$\langle$s,t$\rangle\rangle$.

(adapted from Kratzer 1996:122)

Event identification combines a proposition of type $\langle$s,t$\rangle$ and a property of type $\langle$e,$\langle$s,t$\rangle\rangle$ with an open argument variable. Voice introduces an agent when it combines with vP. This is shown for (30a) in (30b).

(30) a. Mary danced.

b.
VoiceP
Function Application
λe. AGENT(e,Mary) $\wedge$ dancing(e)

DP
Voice$'$
Event Identification
λx.λe. AGENT(e,x) $\wedge$ dancing(e)

Mary

Voice
vP
λx.λe. AGENT(e,x) λe. dancing(e)

danced
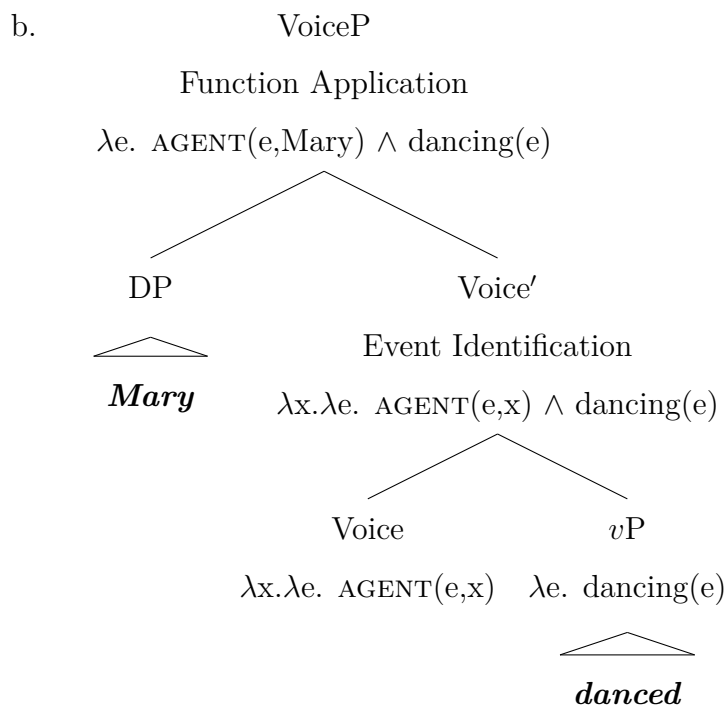
As we see in (30b), Voice says that the agent of an event is x, but does not specify any further what kind of an event it is. When Voice combines with vP, Event

Identification ensures that whatever event x is the agent of, that event is the same as that of vP (here a dancing event) (see, e.g., Harley 2011).

Finally, Chung and Ladusaw (2004) introduce yet another mode of composition, predicate restriction (Restrict). Restrict targets an argument but, importantly, does not saturate it.

(31)   ***Restrict***

If α is a branching node, $\{\beta,\gamma\}$ is the set of α's daughters, and β is of type $\langle$e,st$\rangle$ and γ is of type $\langle$e,t$\rangle$, then α is of type $\langle$e,st$\rangle$.

(adapted from Legate 2014:39)

When Voice introduces an argument via Event Identification, that argument can be saturated by a DP in SpecVoiceP via Function Application. In some cases, a bundle of φ-features, lacking D, may occupy the argument position, without saturating it. This is an important mode of composition for the analysis of the New Impersonal Passive (Legate 2014), the Impersonal Modal Construction and the Aspectual Passive, as we will see in §4.3.

1.5   Structure of the dissertation

The structure of this dissertation is as follows. Chapter 2 discusses case and agreement at the clausal domain. It argues that the Agree and Merge features drive the derivation and that the relation between Agree and Merge is such that Merge can overwrite Agree. The chapter also argues that morphological nominative and ac-

cusative case both realize syntactic structural case. It furthermore argues that there are two types of dative case, derived via probe features (Agree) or via structure-building features (Merge). I refer to these as quirky case and inherent case, respectively. I also propose that Agree is aborted if a DP already has its case feature valued.

Chapter 3 discusses DP-internal agreement and argues that it should be derived in syntax using the same mechanism as in verbal agreement, even though Merge is used through the most part in deriving DP-internal concord. I derive various case mismatch patterns with the system proposed. Various approaches to agreement mismatch take there to be two different feature sets. I argue that a single head can only bear one set of features, using in part H.Á. Sigurðsson's context linkers to derive semantic agreement.

Chapter 4 looks at various Grammatical Object Passive structures (cf. Legate 2014) in Icelandic that share many features with both canonical passives and the active, blurring the distinction between the two: The chapter shows that an approach that makes a clear distinction between actives and passives in language is too simple.

I extend Legate's (2014) analysis to the Impersonal Modal Construction and the Aspectual Passive, where a Weak Implicit Argument (WIA), projected in SpecVoiceP, restricts an argument position. Also, I argue that what being a passive comes down to is Existential Closure of the external argument. I furthermore argue that Voice

does not encode EC and that it does not come in flavors, such as Voice$_{\text{PASS}}$ or Voice$_{\text{ACT}}$. Finally, I propose that the reflexive pronoun of inherently and naturally disjoint verbs is an overt counterpart of WIA, that is, a Weak Explicit Argument.

Chapter 5 discusses dative-accusative (DAT-ACC) structures in passives without a projected implicit argument and in an active construction. Crucially, both these passive constructions have an indirect dative argument. For these passives, we make a connection between DAT-ACC active structures found in Faroese and, to some extent, Icelandic.

In the chapter we also look at stative and resultative participles in Icelandic. These have important implications for case as they corroborate that Voice is the locus of quirky case. The chapter also looks at quirky case from the perspective of attributive passive participles, in the so-called Quirky Case Problem.

Chapter 6 concludes.

Chapter 2

Case and agreement in the clausal domain

2.1   Introduction

In this chapter I discuss case and agreement at the clause level. I argue that derivational features drive the derivation via Agree and Merge. Furthermore, I argue that structural case is assigned in syntax and translated into accusative or nominative at the Morphological Component (MC). I argue that Voice is the locus of structural accusative case and Voice is also needed in assigning quirky case.

The issue where in the derivation case is determined is important as it gets to the core of how much work is done by syntax proper. On the current approach, there are three ways for a phrase with a case feature to get case: via Agree, via Merge or having unassigned case by Spell-Out.

2.2 Case and Agree

2.2.1 Case and Agree in syntax

It is an ongoing debate where case and Agree take place: in syntax or morphology (at the PF branch). Discussing English, Vergnaud (1977/2008) proposed three types of case, Subject Case, Genitive Case and Governed Case, based on syntactic configurations: "the Subject Case, which is the Case of subjects in tensed clauses; the Genitive Case (cf. *Mary's book*, *hers*, *yours*, *mine*, etc.); the Governed Case, which is the case of complements of verbs and prepositions, among others (cf. *Mary saw him*, *Mary gave him a book*, *Mary talked to him*, *a book by him*, etc.)" (Vergnaud 1977/2008:3). Vergnaud proposes these case types despite the fact that morphology does usually not distinguish between, e.g., Subject Case and Governed Case; *John* is no less of a Subject Case than *he* in *John / He ate* and *Mary* is no less of a Governed Case than *her* in *John saw Mary / her*, even though only the pronouns show morphological distinction.

Ideas of case along these lines are worked out further in Chomsky 1980, 1981, where abstract Case is assigned in syntax before it is morphologically realized.

(1) a. NP is nominative if governed by AGR

   b. NP is objective if governed by V with the subcategorization feature: –NP (i.e., transitive)

   c. NP is oblique if governed by P

d. NP is genitive in [$_{\text{NP}}$–X′]

e. NP is inherently Case-marked as determined by properties of its [–N]

governer   (Chomsky 1981:170)

More recently, Chomsky (2000, 2001) has argued for syntactic case as being parasitic on φ-agreement, where unvalued case features are checked in syntax via Agree.

There are also various proposals, going back to at least Yip et al. (1987), H.Á. Sigurðsson (1989) and Marantz (1991) that argue for a less responsibility of syntax in case manipulation.

In his works on Icelandic, H.Á. Sigurðsson has emphasized that A-licensing is unrelated to morphological case. On Sigurðsson's (2012a, 2012b) case star augmentation account for case, syntax does not operate with case features (see also the No Case Generalization in H.Á. Sigurðsson 2009). A-licensing relates to Case, but is unrelated to morphological case.

Yip et al. (1987) propose that syntax contains a linearly ordered case tier, nominative to the left of accusative. Case is "associated" to arguments from left to right in nominative-accusative languages, such that in a transitive clause with two structural case arguments, nominative is first associated with the argument on the left (the higher argument) and then accusative with the argument on the right. Intransitive clauses have the same case tier but only nominative is associated with an argument as there is only one argument.

(2)   *Icelandic*

Ég	lamdi	hana			Ég	lamdi	hana			Ég	lamdi	hana
I	hit	her			I	hit	her			I	hit	her
DP		DP	→		DP		DP	→		DP		DP
					|					|		|
NOM		ACC			NOM		ACC			NOM		ACC

Quirky, or lexical, case does not interfere with nominative-accusative case association, it is on a separate case tier. Under Yip et al.'s (1987) approach, nominative and accusative are associated with syntactic positions but quirky case with certain arguments of a verb.

However we want to formulate it, with a case tier or not, structural accusative case assignment or realization requires nominative case in the same dependency or cycle. H.Á. Sigurðsson (2003, 2006c) dubs this the Sibling Correlation, Woolford (2003) attempts to replace Burzio's (1986:178) generalization with the generalization that "[t]he object gets nominative Case when there is no (nominative) subject" (Woolford 2003), and Marantz (1991) proposes a disjunctive case hierarchy, where accusative case DP, governed by V+I, is dependent on another, higher argument, governed also by V+I.

As in Yip et al. 1987, even though syntactic configurations matter, Marantz (1991) does not make a division into abstract Case licensing in syntax and case realization in the morphology. However, government plays an important role in Marantz's approach (and that is the case also for the classical GB approach; see,

36

e.g., Chomsky 1981). In MC (on the PF branch), the syntactic output is interpreted for the realization of case, on a disjunctive case hierarchy.

(3)   ***Case realization disjunctive hierarchy***

    a.   lexically governed case

    b.   dependent case (accusative and ergative)

    c.   unmarked case (environment-sensitive)

    d.   default case   (Marantz 1991:24)

In Marantz's hierarchy, shown in (3), more specific requirements are selected over more general requirements. On that hierarchy lexically governed case is the most specific, followed by dependent case (accusative in a nominative/accusative system), unmarked case and default case, respectively. Accusative (dependent case) is assigned by "V+I to one argument in opposition to another argument position"; the argument's case is dependent on properties of another DP position, also governed by V+I (Marantz 1991:24). Even though this is not abstract Case (licensing) in the sense of, e.g., Chomsky 1981, this is an extra abstract layer in the derivation. Syntax manipulates arguments and their relations with other elements in the tree. At Spell-out, the output is sent to the Morphological Component which gives arguments a case label (unmarked, dependent, etc.) according to the argument's position in the tree.

Marantz stresses the fact that there is not a one-to-one realationship between syntactic licensing of arguments and their eventual case realization. This becomes

very clear in Icelandic, as he points out, where nominative does not seem to be dependent on T licensing it. In addition, dative case arguments, for example, can originate as the complement of the verb or higher in the structure, such as in SpecApplP; oblique case arguments can move to a derived subject position but they are never generated in the external argument position of the verb phrase, which is here taken to be SpecVoiceP. It is therefore a legitimate question to ask, how much work T or v carry out in case assignment.

McFadden (2004) argues in a similar fashion that morphological case is determined without reference to Case licensing. As for Marantz, the syntactic output is important for case realization at the PF branch, although "[w]hatever syntactic Case/DP-licensing is, it has no empirical connection to case morphology" (McFadden 2004:10).

A more recent version of the case realization on the disjunctive hierarchy, with an emphasis on unmarked and dependent case, is presented below, as formulated by Wood (2011:8):

(4)   If a DP α has no case feature at spellout, it is assigned accusative iff there is some other DP α' which is visible to α and where (a) α' has no case feature and (b) α' c-commands α. Otherwise, α will be nominative.

(Wood 2011:8)

That is, if two DPs are in the same dependency, or domain, and one of them does not get inherent or quirky case, one of these DPs, the highest structural case

argument, will get unmarked case (nominative in a NOM/ACC system) and the other one will receive dependent case (accusative in a NOM/ACC system). This is a somewhat radical approach, given the original formulation by Marantz which defined case realization with respect to syntactic relations. Here, however, the focus is on whether or not a DP has a case feature at Spell-out, without any reference to syntactic position.

Approaches to post-syntactic case may differ on where to place Agree (φ-agreement) in the derivation. H.Á. Sigurðsson (2006a), for example, places Agree in syntax and post-syntactic agreement realization in (deep) PF. Bobaljik (2008), on the other hand, argues that Agree also takes place post-syntactically.

Timing of agreement with respect to case assignment is crucial to Bobaljik's (2008) account: "[I]f agreement is dependent on the outcome of postsyntactic operation (m-case), then agreement must also be postsyntactic" (Bobaljik 2008:297). He argues that Icelandic gives examples of agreement being dependent on the outcome of case calculations. In Icelandic, finite T shows overt agreement with subjects but also objects (never both at the same time) but only if they are in the nominative case (e.g., Thráinsson 1979, Zaenen et al. 1985, H.Á. Sigurðsson 1990–1991).

(5)   ***Icelandic**

    a.   Þessir bílar   hafa   aldrei hentað mér.
            these cars.NOM have.3PL never suited me.DAT
            'These cars have never suited me.'

    b.   Mér   hafa   aldrei hentað þessir bílar.
            me.DAT have.3PL never suited these cars.NOM

That is, it looks like T must know whether its target DP bears nominative case or not. That would mean that if case were post-syntactic, Agree would also have to take place post-syntactically.

There have also been more syntactic approaches to case which use a disjunctive case hierarchy, most notably Legate (2008) and Preminger (2011, 2014). Legate (2008) argues for syntactic licensing of case. She discusses case in absolutive-ergative languages in which absolutive case is the elsewhere case (default case). In these specific languages, which have rich case morphology, there is not a morphological distinction made between nominative and accusative. Legate argues, however, that there is an abstract nominative Case as well as an abstract accusative Case. A syntactic [case] feature is translated to nominative Case when it forms an Agree relation with finite T but accusative Case translation of [case] is not dependent on finite T. Intransitive subjects are therefore in the nominative Case and transitive objects in the accusative Case, even though both are realized in the absolutive. The prediction, which is borne out in three out of the four languages (Legate notes that it cannot be tested for Niuean), is that absolutive on intransitive subjects should be unavailable.

Preminger adopts Marantz's disjunctive case hierarchy and applies it in syntax. Unlike Legate, however, he does not argue for syntactic licensing of case. For him, unmarked case is "the morphological form given to a noun phrase whose case features have never been valued—just as "3rd person singular agreement" is the

morphological form given to φ-probe whose features have never been valued" (Pre-minger 2014:207). If there is another noun phrase unvalued for case in the same case dependency, then it will have dependent case. That is, Preminger does not take structural case to be assigned by functional heads but moves Marantz's disjunctive hierarchy into syntax.

He furthermore argues that Bobaljik's argumentation, discussed above, is based on the false premise that morphological case is post-syntactic rather than syntactic. Crucial examples for him come from languages that do not have quirky subjects; in such languages an XP is targeted by a FIND$_\varphi(f)$ function (see (27) below) and moves subsequently. If XP is not targeted, then it does not move. That is, in these languages, φ-agreement feeds movement and since movement takes place in syntax, φ-agreement must take place in syntax.

I argue that Agree and case assignment take place in syntax (pace Bobaljik 2008) but Agree relations and case are interpreted at the Morphological Component and then finally realized at Vocabulary Insertion. Following a large line of work, I take A-movement to take place in syntax as it can have an effect on semantic interpretation (see, however, Sauerland and Elbourne 2002). If relative timing of A-movement can affect Agree, then that suggests that Agree takes place in the same module, namely syntax. We will see an example of exactly that from Icelandic in §2.2.2.1.

2.2.2 A-movement and Agree

2.2.2.1 Dative intervention

Holmberg and Hróarsdóttir (2004) and H.Á. Sigurðsson and Holmberg (2008) discuss nominative agreement and also the lack thereof with DAT-NOM verbs in Icelandic (see also Boeckx 2000). Holmberg and Hróarsdóttir describe a variety where speakers, for whom nominative number agreement is generally optional, find number agreement ungrammatical in an environment where the dative DP intervenes between a probe and the nominative that would have valued the probe's features (dative intervention). H.Á. Sigurðsson and Holmberg build on their work and propose that there are three Icelandic dialects in this respect, which they call Icelandic A, B and C.

(6)   a.   ***Icelandic A***
      Honum   hafa/?hefur   alltaf líkað þeir.
      him.DAT have.3PL/?has.3SG always liked they.NOM

      b.   ***Icelandic B***
      Honum   hafa/hefur   alltaf líkað þeir.
      him.DAT have.3PL/has.3SG always liked they.NOM

      c.   ***Icelandic C***
      Honum   ??hafa/hefur   alltaf líkað þeir.
      him.DAT ??have.3PL/has.3SG always liked they.NOM

      (cf. H.Á. Sigurðsson and Holmberg 2008:251; judgments as reported there)

Icelandic A (6a) consists of a grammar where nominative object agreement is usually preferred. Icelandic B (6b) is the dative intervention variety described

by Holmberg and Hróarsdóttir where nominative object agreement is otherwise generally optional, and for Icelandic C speakers there is no agreement between the nominative object and the finite verb probe.

We now turn to data where a dative DP may intervene between a probe and the nominative object. According to H.Á. Sigurðsson and Holmberg, nominative agreement is grammatical in such environment in Icelandic A but ungrammatical in the B and C grammars:[1]

(7)   ***Intervention vs. agreement across dative***

     a.   ***Icelandic A***

Það   líkuðu   einum málfræðingi þessar hugmyndir.
EXPL liked.3PL one   linguist.DAT these   ideas.NOM

     b.   ***Icelandic B/C***

Það   líkaði/*líkuðu   einum málfræðingi þessar hugmyndir.
EXPL liked.3SG/*liked.3PL one   linguist.DAT these   ideas.NOM

'One linguist liked these ideas. / There was one linguist who liked these ideas.'   (H.Á. Sigurðsson and Holmberg 2008:257)

In this respect, B and C work the same, there is no finite agreement with the nominative object although Icelandic A exhibits such agreement. To account for this, H.Á. Sigurðsson and Holmberg propose that (i) person (Pn) and number (Num) are separate probing heads and (ii) the timing of probing is different between Icelandic A and Icelandic B.

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[1]This is a case of High Intervention; Low Intervention also shows variation although not along the lines of Icelandic A, B, C, according to H.Á. Sigurðsson and Holmberg (2008).

We start by looking at the proposed derivation for Icelandic A. Note that for H.Á. Sigurðsson and Holmberg, number probing takes place immediately after T raises to Num. For them, intervention is affected by non-syntactic factors.

(8)   ***Derivation for Icelandic A: Dative moves before Num probes***

     a.   ... (EXPL)   Pn   Num T [$_{vP}$ DAT V [$_{TP}$ NOM ...

     b.   ... (EXPL)   Pn DAT   Num T [$_{vP}$ ~~DAT~~ V [$_{TP}$ NOM ...

     c.   ... (EXPL)   Pn DAT T/Num ~~T~~ [$_{vP}$ ~~DAT~~ V [$_{TP}$ NOM ...

     d.   ... (EXPL) T/Num/Pn DAT ~~T/Num~~ ~~T~~ [$_{vP}$ ~~DAT~~ V [$_{TP}$ NOM ...

I take the derivation in (8), however, to suggest that head movement takes place in the same module as phrasal movement. As we can see when we compare (8b) and (8c), the dative argument raises before T raises to Num (Low Subject Raising). The dative argument therefore does not intervene when Num probes. Pn probes when T/Num raises but at that time in the derivation, the dative intervenes. This results in number agreement but not in person agreement.

In Icelandic B, unlike dialect A, Num probes before the dative argument raises. Therefore the dative intervenes. Similar to Icelandic A, however, the dative also intervenes when Pn probes. This results in no number or person agreement.

(9)   ***Derivation for Icelandic B/C: Num probes before dative moves***

    a.   ... (EXPL)   Pn   Num T [$_{vP}$ DAT V [$_{TP}$ NOM ...

    b.   ... (EXPL)   Pn   T/Num ~~T~~ [$_{vP}$ DAT V [$_{TP}$ NOM ...

    c.   ... (EXPL)   Pn DAT T/Num ~~T~~ [$_{vP}$ ~~DAT~~ V [$_{TP}$ NOM ...

    d.   ... (EXPL) T/Num/Pn DAT ~~T/Num~~ ~~T~~ [$_{vP}$ ~~DAT~~ V [$_{TP}$ NOM ...

If this is the right approach, Agree takes place in syntax.[2] It should be noted that Hartmann and Heycock (2017) adopt H.Á. Sigurðsson and Holmberg's (2008) basic idea when analysing copular agreement in Icelandic (see also Heycock 2009 for copular agreement in Faroese), but I will not go into that here.

Furthermore, Richards (2013) argues that the reason why Lardil Tense concord is bled by A-movement in passivization has to do with timing of operations in syntax. If phrasal movement takes place in syntax and if certain case assignment hinges on movement not taking place, then that suggests that case assignment is syntactic as well. We look at timing of operations further in §2.3.

2.2.2.2   Movement to subject position in non-quirky subject languages

Preminger's (2014) argumentation for case being computed in syntax is somewhat similar to the argumentation above. As in §2.2.2.1, phrasal movement being syn-

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[2]On Kučerová's (2016) analysis of agreement with DAT-NOM verbs in Icelandic B, a crucial property is whether the dative can undergo Object Shift or not. Also on that analysis, Agree must take place in syntax.

tactic is a prerequisite. Here Preminger focuses on languages that do not have non-nominative subjects, such as English and French. Under Preminger's analysis, only nominative arguments can move to subject position in languages like English and French. That is, they are not assigned nominative as a result of moving to subject position but have already established an agreement relation in order to be eligible for movement. Preminger (2014:143, 153) discusses the French data in (10).

(10)   ***French***

    a.   Jean$_i$ semble [t$_i$ avoir   du talent].
             Jean   seems   to.have of talent

             'Jean seems to have talent.'

    b. ?? Jean$_i$ semble à Marie [t$_i$ avoir   du talent].
             Jean   seems to Marie   to.have of talent

             'Jean seems to Marie to have talent.'

    c.   * À Marie$_i$ semble t$_i$ [Jean avoir   du talent].
             to Marie seems   Jean to.have of talent

             Intended: 'Jean seems to Marie to have talent.' (McGinnis 1998b:90)

In (10a), an agreement relation is established between the probe T and the DP *Jean*, which is marked for nominative. The DP moves subsequently to subject position. In (10b–c), on the other hand, the probe T finds *à Marie*, but as the phrase is already marked dative, an agreement relation is not established. The consequence is that *à Marie* is an intervener for agreement between T and DP *Jean* in (10b); and in (10c) *à Marie* cannot move to subject position because the establishment of an agreement relation failed.

Note, furthermore, that if case had not been computed already, we could have expected a DP *Marie* to move to subject position, being assigned nominative case by T.

(11)   * Marie$_i$ semble t$_i$ [Jean avoir   du talent].
       Marie seems   Jean to.have of talent

       Intended: 'Jean seems to Marie to have talent.'   (McGinnis 1998a)

That is ungrammatical, suggesting that case has been determined prior to movement.

Note that on my approach, case via Merge is established right away but when case relation is established via Agree, the case is not determined until Spell-Out. I now turn to the derivation of case.

2.2.3   Deriving case

2.2.3.1   Probe and structure-building features

Following Heck and Müller (2007) and Müller (2010), I argue that the syntactic derivation is driven by two types of features: probe features [∗F∗] and structure-building features [●F●] (see also an implementation of this idea in Poole 2015). Probe features trigger Agree but structure-building features trigger Move and Merge.

This is particularly important for case and agreement as both operations trigger feature valuation: Probe features do so via Agree (Chomsky 2000, 2001) and valuation via Merge shares fundamental properties with Spec-head agreement (Koopman 2003, 2006) but as we will see, this operation results in valuation of features irre-

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spective of the configuration (e.g., Spec-head) and what kind of elements merge (e.g., an XP and a head or two heads).

For Heck and Müller (2007), case features are located on T and v. These are external and internal case probes, respectively.

(12)   a. T bears [∗case:ext∗] that instantiates [case:ext] on DP.

   b. v bears [∗case:int∗] that instantiates [case:int] on DP.

(Heck and Müller 2007:172)

On my account, however, external or internal case is not instantiated per se. A functional head can bear [∗case$_{\text{STR}}$:__∗] such that it will assign structural case (rather than nominative or accusative) when it probes. This structural case is eventually translated into nominative or accusative case post-syntactically in a nominative-accusative language.

On the current account, case can also be instantiated via structure-building features (cf. Poole 2015). When [●F●] specified for a certain case merges with a DP, it assigns that case to the DP. I will now discuss both types of features when specified for dative case, meaning that there are at least two types of dative case.

2.2.3.2   Different types of dative case: quirky vs. inherent

Many approaches take there to be at least two types of non-structural case in addition to structural object case (e.g., Jónsson 2003, Woolford 2006). Some such approaches take one of these two to be truly idiosyncratic whereas the other is more

predictable on semantic grounds (also called semantic case sometimes, such as in Jónsson 2003[3])— then the semantic case is often in a direct relationship with what thematic roles the argument has: a goal or an experiencer (cf. Woolford 2006).

Icelandic is famous for having oblique subjects (non-nominative subjects) (Andrews 1976, Thráinsson 1979, Zaenen et al. 1985, H.Á. Sigurðsson 1989, Jónsson 1996, Rögnvaldsson 1996), which behave syntactically like nominative subjects, except for the fact that they do not trigger verbal agreement. This kind is often called 'quirky subjects', highlighting a non-nominative argument's ability to move to subject position (cf. McGinnis's (1998a) distinction into inert and quirky case).

Non-nominative arguments in Icelandic can be divided into at least two types with respect to their where they are generated and how their case is assigned (e.g., Jónsson 2003, Woolford 2006). I refer to the two types as quirky and inherent case:

(13)   ***Two types of non-structural case***

    a.   Inherent case: Assigned via a structure-building feature. Example: indirect object case (Appl case), which is usually dative, assigned via ●case:DAT● on Appl to SpecApplP.

    b.   Quirky case: Assigned via a probe feature. Example: direct object case, assigned via $*\text{case}_{\text{DAT}}{:}\_*$ or $*\text{case}_{\text{GEN}}{:}\_*$ by Voice.

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[3]Jónsson (2003) argues that there are two types of lexical case, truly idiosyncratic case and what he calls semantic case. He puts accusative subjects and dative theme subjects in the first class whereas dative goal or experiencer subjects are in the second one.

The term 'quirky case' is not always used in the same way. For my approach, quirky case is assigned by a probe feature, usually to a direct object, by Voice.

(14)   ***Quirky dative case in Icelandic***

        Ásta   splundraði rúðunni.
        Ásta.NOM shattered   the.window.DAT

        'Ásta shattered the window.'   (Wood 2015:129)

Quirky case assigned by Voice is unpredictable, as Voice usually licenses structural case, meaning accusative case in the active, nominative in the passive. Woolford's (2006) lexical case is supposed to capture the same sort of case assignment as quirky case on the present approach. It is, however, obvious that 'quirky' on my account is not just another name for lexical case if 'lexical' is taken to mean that it is V (or P) that licenses the case (as Woolford 2006 does).[4]

Inherent case in Icelandic assigned by Appl, on the other hand, is predictable. It is usually dative. There are exceptions to this as the indirect object can sometimes be accusative, but never genitive — all genitive objects in Icelandic are direct objects (quirky case).

_____

[4]See Woolford's (2006) treatment of Case licensing:

(i)   ***Lexical and inherent Case licensing***

     a.   Lexical heads (e.g., V, P) license idiosyncratic lexical Case.

     b.   Little/light v heads license inherent Case.

(15)   ***Inherent dative case in Icelandic***
Fólk   leyfði þeim   alla   hluti.
people.NOM allowed them.DAT all.ACC things.ACC

'People allowed them all things.'   (Thráinsson 2007:291)

There are some structures in which the difference between inherent case and quirky case becomes apparent. Let us take a look at the clitic *-st*, which, descriptively speaking, marks at least anticausatives and middles.

(16)   a.   Ég   opnaði dyrnar.
             I.NOM opened the.door

             'I opened the door.'

        b.   Dyrnar   opnuðu-st.
             the.door opened-ST

             'The door opened.'

In (16a), the transitive verb *opna* 'open' takes an accusative object. The *-st* marker in (16b) works as a valency reducer, eliminating the external argument. It is not surprising that the DP (that originates as an object) gets nominative in (16b) — on, e.g., a dependent case account, we could say that the DP *dyrnar* 'the door' gets dependent accusative case in (16a) but unmarked nominative case in (16b) since it is the highest structural case receiving argument in the clause.

However, when a verb taking inherent case DP is used in the middle or anticausative, inherent case is preserved, see (17c), just as it does in the passive, as shown in (17b).

(17) a. Fólk   leyfði þeim   alla   hluti.
       people.NOM allowed them.DAT all.ACC things.ACC

       'People allowed them all things.'

     b. Þeim   voru leyfðir allir   hlutir.
        them.DAT were allowed all.NOM things.NOM

        'They were allowed all things.'

     c. Þeim   leyfðu-st allir   hlutir.
        them.DAT allowed-ST all.NOM things.NOM

        'They got allowed all things.'   (Thráinsson 2007:291)

Given these facts, and the fact that quirky case is preserved in the passive, cf.

(18b), it is surprising that when a verb taking a quirky case object is used in the

middle or in the anticausative, cf. (18c), it is not preserved.

(18) a. Ásta   splundraði rúðunni.
        Ásta.NOM shattered   the.window.DAT

        'Ásta shattered the window.'

     b. Rúðunni   var splundrað.
        the.window.DAT was shattered

        'The window was shattered.'

     c. Rúðan   splundraði-st.
        the.window.NOM shattered-ST

        'The window shattered.'   (Wood 2015:129)

The difference between the two types of case becomes particularly clear when

a verb, such as *úthluta* 'allocate', that takes two dative case objects is used with

the *-st* marker (E.F. Sigurðsson and Wood 2012, Wood and E.F. Sigurðsson 2014b;

also Alexiadou et al. 2014a).

(19) a.   Þeir úthlutuðu okkur velli   til   12:00.
              they allocated us.DAT field.DAT until 12:00

'They allocated a field to us until 12:00.'

  b.   Okkur úthlutaði-st völlur   til   12:00.
              us.DAT allocated-ST field.NOM until 12:00

'We got allocated a field until 12:00.'

(E.F. Sigurðsson and Wood 2012:277)

The indirect object 'us' preserves dative case in (19b), whereas the direct object 'field' does not.

As Wood (2015) points out, quirky dative case "gets its case in a different way" (p. 129) from inherent dative case. He places a dative feature on v (cf. Svenonius 2006a; see also H.Á. Sigurðsson's 2009, 2012a, 2012b case stars on v) whereas I place such a feature on Voice, as shown in (20).

(20) a.   Þeir úthlutuðu okkur   velli.
              they allocated us.DAT field.DAT

'They allocated a field to us.'

b. VoiceP

DP — Voice′

þeir
'they'

Voice — vP

[●v●]

[∗case_DAT:__∗]

[●D●]

v — √P

[●√●]

√ÚTHLUT — ApplP

[●Appl●]

'allocate'

DP — Appl′

[∘case:DAT∘]

okkur
'us.DAT'

Appl — DP

[●D●]   [∘case:DAT∘]

[●case:DAT●]

velli
'field'
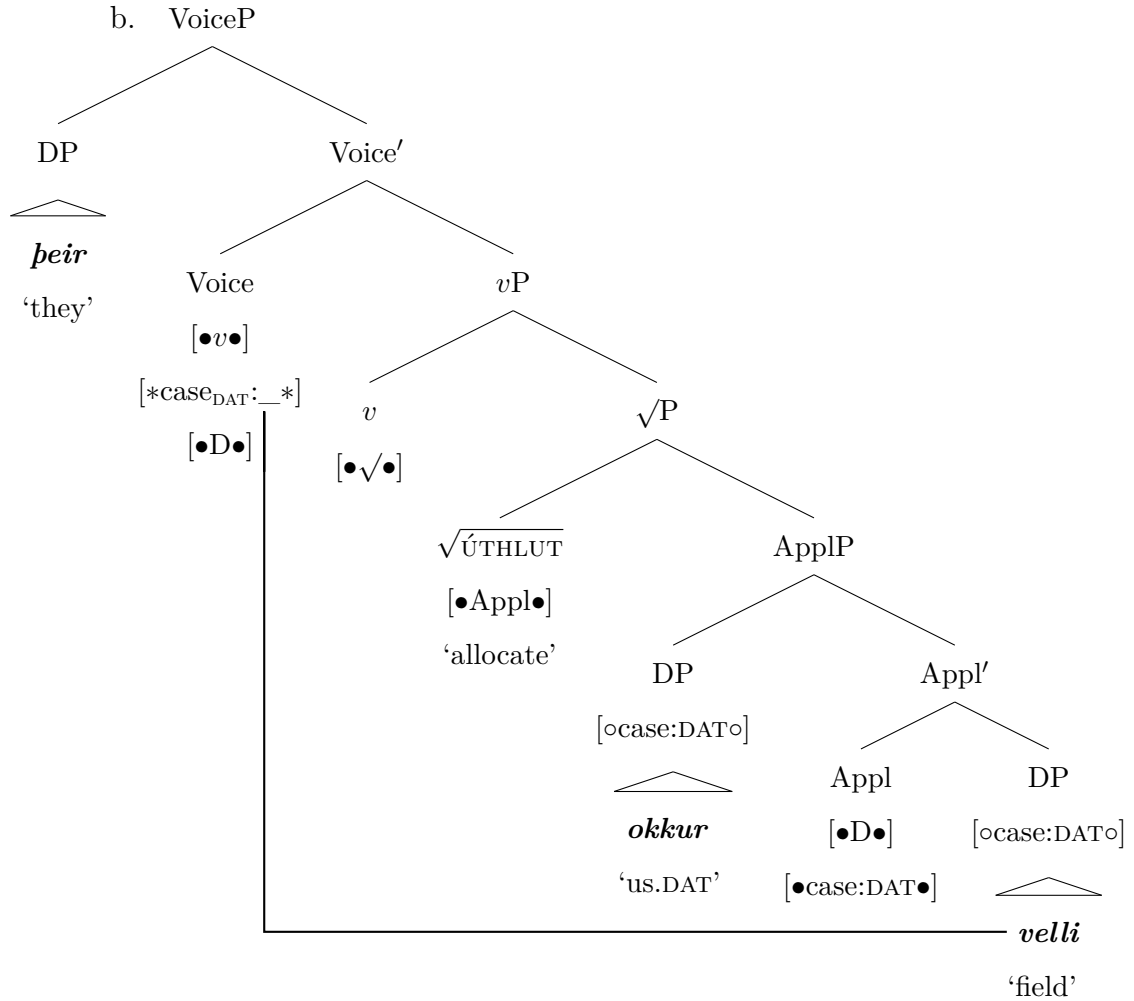
Here, Appl has two structure-building features. It requires a DP in its complement position and requires its specifier to be filled. The element in its specifier position will be assigned dative case upon Merge. Voice's first structure-building feature says it must merge with v. It also has a probe feature: when the case feature will probe, Agree relation is established between Voice and the direct object DP (*velli*), such that the DP is assigned dative case. This probe feature is followed by the second structure-building feature of Voice which requires its specifier to be filled.

As already mentioned, the difference between the two types of case becomes particularly clear when the verb above, *úthluta* 'allocate', is used with the *-st* marker (E.F. Sigurðsson and Wood 2012, Wood and E.F. Sigurðsson 2014b, Alexiadou et al. 2014a; also H.Á. Sigurðsson 1989), resulting in an anticausative structure. The indirect object stays dative, whereas the direct object becomes nominative case marked, see (19).

The *-st* marker is a valency reducer which Wood argues to be a clitic (also Svenonius 2006b, H.Á. Sigurðsson 2012b) and projected in an argument position (see discussion in §4.3.5.8 below). In an example like *úthlutast*, where there is no external argument semantically, *-st* occupies the external argument position, SpecVoiceP, but is not assigned case. I adopt this part of Wood's (2015) analysis.

When *-st* is merged in a specifier position of a quirky case assigning verb, it loses its ability to assign dative or genitive case (via Agree). This has been accounted for, e.g., with case-star deletion (H.Á. Sigurðsson 2012b) and an impoverishment rule, deleting the dative feature at PF (Wood 2015:129). What is important in this respect is that Voice does not assign quirky case when it merges *-st* in its specifier. *-st* in SpecVoiceP cannot, however, affect case assignment in SpecApplP.

2.2.3.3 Structural case

Structural case is a well-known and important notion in case theory.[5] Even though it is clear that nominative and accusative are generally considered to be structural cases, it may be less clear what this notion really comes down to. On the current approach, structural cases are ones that are translated into unmarked nominative case and dependent accusative case in morphology.

(21)   ***Structural case***

    a.   In syntax, structural case can be assigned via Agree or Merge. Structural case features are translated into unmarked nominative case or dependent accusative case at PF.

    b.   Case features that have not been valued at the point of Spell-Out get structural case values and are subsequently translated into unmarked nominative case or dependent accusative case at PF.

As described here, structural case is not derived through a single operation only. Note that even though the Case Filter does not play a significant role on the current approach, (21) does not violate it.

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[5]See, however, Barðdal (2011), who rejects this notion, calling the difference between structural and lexical case a false dichotomy.

2.2.3.3.1 Unvalued case at Spell-Out

It is sometimes assumed that finite T is the locus of nominative case on DPs (e.g., Chomsky 2001). I argue, however, that finite T in Icelandic does not assign case at all, its φ-features can simply be valued by a DP which has not been assigned case.

Even though it might seem feasible to make T be the locus of nominative in a language like Icelandic, there are various contexts where T does not establish an Agree relation with a DP which is nevertheless realized as nominative. Below we see a dative intervention example (Schütze 1997, Boeckx 2000; this is Low Intervention in H.Á. Sigurðsson and Holmberg's 2008 terms).

(22)   Mér   virðist/??virðast   Jóni   líka   hestarnir.
        me.DAT seem.SG/??seem.PL Jón.DAT like.INF horses.NOM
        'It seems to me that John likes the horses'.   (Schütze 1997:107)

In this example, *mér* 'me' is a dative argument of *virðast* 'seem', which embeds an infinitival DAT-NOM clause. As the argument of 'seem' moves to the subject position of the matrix clause, the lower dative does not move and as a result of that agreement between the matrix T and the direct object of the infinitival clause is blocked. Nevertheless, the DP is realized in the nominative case.

Example (23) shows an ECM construction where nominative is realized in an environment where we could have expected accusative. That is, even though the subject of *láta* 'let' in the matrix clause is in the nominative case, the object of *líka*

'like' in the infinitival clause is not in the accusative case, but in the nominative case.

(23)   Ég læt mér   ekki líka þessi dónaskapur   / ??þennan dónaskap.
       I   let me.DAT not like this rudeness.NOM / ??this   rudeness.ACC
       'I don't let myself like such rudeness.'
                                              (Wood and H.Á. Sigurðsson 2014:271)

As argued by Wood (2011) (see also Wood and H.Á. Sigurðsson 2014, McFadden 2004) there is no embedded T at all in an infinitival clause embedded by *láta* 'let', as in (23), to agree with the direct object of *líka* 'like', showing that T is not necessary for nominative case realization. The case feature on *láta* probes and either checks structural case on top of the dative or agreement simply fails.

I conclude that T is not necessary for nominative case realization. Furthermore, I propose that T does not have a case feature at all. Let us take a look at (24).

(24)   a. Við   dönsuðum.
          we.NOM danced.1PL
          'We danced.'

       b.   TP
                           /   \
                         DP   \
                       [π:1]   / \
                       [#:PL]   T   ...
                       [case:__] [∘π:1∘]
                                 [∘#:PL∘]
                          við   dönsuðum
                         'we'   'danced'

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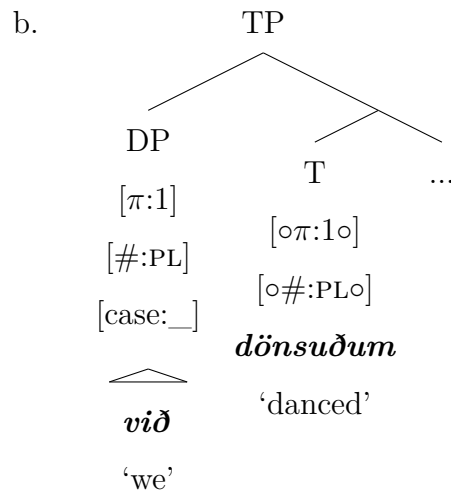
T has unvalued person and number features, but does not have a case feature. T probes to get values for its features; the DP 'we' is its goal and values T's features as 1st person, plural. The DP has an unvalued case feature which is translated into structural case at Spell-Out and then unmarked nominative case at the Morphological Component (but not default case). This is similar to the idea argued for by Preminger (2011, 2014), Levin (2015) that unmarked case is unvalued case. However, that particular approach takes the dependent case algorithm to be computed in syntax, as opposed to PF as is done here.

This is also similar to H.Á. Sigurðsson's (2012a, 2012b) approach where nominative case is a non-case. DPs are event-licensed on his approach (by, e.g., Appl or v). Event licensers can be case star augmented, which affects case realization at PF. v without a star results in no case (nominative) but v^* yields accusative, v^{*+} dative and v^{*++} genitive. A language that only has one case, i.e., does not distinguish between different cases, has no case star augmentation. A language that has two cases, however, has both v without case star augmentation (no case, nominative) and v^* (accusative).

The current approach also shares some properties with Richards' (2013) approach to case, but still differs in fundamental ways. For Richards, the syntactic derivation is usually sent simultaneously to PF and LF, but does not need to if uninterpretable case features have not been deleted. Looking at Lardil, he takes case to be either meaningful or not. Instrumental case, for example, is meaningful

but structural case is not. Before the structure is sent to Spell-Out, meaningless case must be deleted but meaningful case is not.

(25)   ***Lardil***

Ngada latha liban-i   kurrumbuwa-r.
I   spear pumpkinhead-ACC multi.pronged.spear-INSTR
'I speared the pumpkinhead with a multi-pronged spear.'
<div align="right">(Richards 2013:56)</div>

For Richards, 'multi-pronged spear' is assigned instrumental case and *v* values the case of 'pumpkinhead' as accusative. *v* is a phase head and its complement contains features that are interpretable at PF. The instrumental case feature is also interpretable at LF but the accusative case feature is not. Therefore, the derivation is at this point only sent to PF. Later in the derivation, *v* deletes the case feature on 'pumpkinhead' and the derivation can also be sent to LF as a result. What the current approach shares with Richards' approach is that structural case is different from what he calls meaningful case.

The approach in (21b) above is similar to the dependent case algorithm introduced in Wood 2011 ((4) repeated as (26)).

(26)   If a DP α has no case feature at spellout, it is assigned accusative iff there is some other DP α' which is visible to α and where (a) α' has no case feature and (b) α' c-commands α. Otherwise, α will be nominative.

<div align="right">(Wood 2011:8)</div>

That is, for Wood, the DP in (24a) *Við dönsuðum* would not have a case feature at Spell-Out, whereas on the current approach, it has an unassigned case feature which is valued as structural case before the derivation is sent to the interfaces. For both accounts, non-structural cases are assigned in the syntax, prior to Spell-Out.

As is well known, finite T in Icelandic can only show agreement with a(n unmarked) nominative DP (e.g., H.Á. Sigurðsson 1990–1991, 1991, Bobaljik 2008). If T establishes an Agree relation with a DP bearing another case than nominative, that DP will not be able to value T's unvalued φ-features (e.g., H.Á. Sigurðsson 1990–1991). Preminger (2011, 2014) refers to this as *case discrimination*. If another DP on the spine is higher but has another case than nominative, it can prevent T from agreeing with the nominative. I adopt the basic insight of Preminger (2011, 2014) that agreement can fail.

(27)   FIND$_\varphi(f)$

Given an unvalued feature f on a head H, look for an XP bearing a valued instance of f. Upon finding such an XP, check whether its case is acceptable with respect to case discrimination:

a. *yes* → assign the value f found on XP to H

b. *no* → abort FIND$_\varphi(f)$ (and continue with derivation)

(Preminger 2014:159)

If we take H to be finite T and XP to be DP, then if the DP bears nominative case, T is assigned the feature values of that DP. If the DP bears another case than nominative, then FIND$_\varphi$ is aborted.

The current account differs from Preminger's in that syntactic Agree is aborted if the DP already has a valued case feature, not because its case is unacceptable with respect to case discrimination; I discuss this in §2.2.3.3.2. This means that finite T cannot establish an Agree relation with a DP that has already a valued case feature. This idea has some predecessors in the literature, such as the Protection Principle of H.Á. Sigurðsson (1989:108).

2.2.3.3.2 Participle agreement: accusative is not unassigned case

On the account presented here, finite T agrees overtly with a DP with a case feature that has not been assigned case. Passive and stative participles selected by *vera* 'be' also agree with DPs with an unvalued case feature.[6] In the following example

---

[6]In the active, participles do not seem to have unvalued φ-features when they enter the derivation, irrespective of whether the main verb is an unergative or an unaccusative.

(i) a. Maðurinn hafði öskrað / *öskraður.
   the.man.M.NOM.SG had screamed.DFLT / *screamed.M.NOM.SG
   'The man had screamed.'

  b. Maðurinn hafði dáið / *dáinn.
   the.man.M.NOM.SG had died.DFLT / *died.M.NOM.SG
   'The man had died.'

Also, movement does not have any effect here. If the DP stays in situ, the participle still shows up in default form.

we see that the DP values both T's unvalued features and the participle's unvalued features.

(28)   ***Icelandic***

    Bílarnir   **voru**   **keyptir**   í gær.
    the.cars.M.NOM.PL were.3PL bought.M.NOM.PL yesterday
    'The cars were bought yesterday.'

Unlike finite T, however, participles selected by *vera* 'be' are not limited to agreeing with nominative case DPs:

(29)   Ég taldi   **bílana**   hafa verið **keypta**   í gær.
    I   believed the.cars.M.ACC.PL have been bought.M.ACC.PL yesterday
    'I believed the cars to have been bought yesterday.'

In these examples, the participle agrees overtly in case and φ-features with an accusative DP. In each example, the DP has moved to (or through) the subject position of the infinitival clause. However, the participle agrees with the DP also if it does not move.

(30)   a.   Í gær   **voru keyptir**   **tveir bílar**.
           yesterday were bought.M.NOM.PL two   cars.M.NOM.PL
           'Yesterday two cars were bought.'

(i)   a.   Það höfðu öskrað   / *öskraðir   margir   menn.
           EXPL had.3PL screamed.DFLT / *screamed.M.NOM.PL many.NOM men.NOM
           'Many men had screamed.'

    b.   Það höfðu dáið   / *dánir   margir   menn.
           EXPL had.3PL died.DFLT / *died.M.NOM.PL many.NOM men.NOM
           'Many men had died.'

b. Ég taldi hafa verið **keypta** **tvo bíla**
I believed have been bought.M.ACC.PL two cars.M.ACC.PL

í gær.
yesterday

'I believed there to have been bought two cars yesterday.'

When the derivation contains both T and Asp (the passive participle), it is not always the case that they both Agree with a DP even if one of them does. However, as far as I know, if only one of them Agrees with a DP, it is Asp (as is the case below):[7]

(31) Mér **virðist**/?***virðast** Jóni vera **taldir** líka
me.DAT seem.SG/?*seem.PL John.DAT be believed.M.NOM.PL like.INF

hestarnir.
the.horses.M.NOM.PL

'I perceive John to be believed to like horses.' (Schütze 1997:108)

(32) a. Þar **er** öllum 24 þátttökuþjóðunum sem hófu leik
there is.SG every 24 participation.countries which started game

gefnar **einkunnir** [...]
given.F.NOM.PL grades.F.NOM.PL

'There, all of the 24 participating countries which started the games are given grades [...]' (https://goo.gl/4Jpkh2)

b. Fyrst **var** Tólfunni **boðin** **tíu sæti** í
first was the.Twelve.DAT offered.N.NOM.PL ten seats.N.NOM.PL in

leiguflugi til Parísar [...]
charter.flight to Paris

'First, Tólfan [=supporting group of the Icel. national team] was offered ten seats with charter flight to Paris [...]' (goo.gl/S6d6MW)

---

[7]I take the perfect participle suffix to be the head of an Aspect projection (*-ed*, *-t*, etc., in English, as in *The house was buil-t two years ago*). Asp is important in the current system as Existential Closure is encoded on it in the passive.

It should be noted that not all speakers like the attested examples in (32) but I am not aware of speakers disagreeing with the judgments reported in (31). In the examples above, a dative DP intervenes between T and the nominative plural DP, resulting in non-agreement. It does not, however, intervene between the participle and the DP, and therefore the DP can value the participle's unvalued features.

In the previous examples, Asp and a DP formed an Agree relation. We will now look at examples where Asp and the DP do not agree. I use here DFLT (for default morphology) on the passive participle to show that there is not agreement established between it and a DP in the clause.

(33) a. Það var kastað   nokkrum nemendum   út úr skrifstofunni.
          EXPL was thrown.DFLT several   students.DAT out of the.office
          'Several students were kicked out of the office.'   (Maling 1988:182)

      b. Það var hrósað   einhverjum manni.
          EXPL was praised.DFLT some   man.DAT
          'Some man was praised.'

In the passive examples above there is presumably no projected implicit argument and that rules out the possibility that Asp would be agreeing with another argument than 'several students' or 'some man'. In (33), Voice and the DP establish an Agree relation before Asp probes. That is, Asp's unvalued φ-features fail to agree with the DP because it has a valued case feature and there is a closer case probe that has established an Agree relation with the DP (cf. Case Minimality). Case assignment renders the DP inactive.

(34)

```
                        AspP
                   ┌──────┴──────┐
                 Asp          VoiceP
              [∗φ:✗∗]      ┌─────┴─────┐
             [∗case:✗∗]  Voice         vP
                      [∗case_DAT:✓∗] ┌──┴──┐
                                     v    √P
                                      ┌───┴───┐
                                   √HRÓS      DP
                                  'praise'   [γ:M]
                                             [#:SG]
                                          [case:DAT∘]
                                        ┌──────┴──────┐
                                      einhverjum manni
                                        'some man'
```

Ditransitive structures show more clearly that the problem lies in the case of

the DP (cf. case discrimination):

(35)   ***Canonical* DAT-NOM *passive***

    a. % Það   voru gefnar   einhverjum strák   margar
            EXPL were given.F.NOM.PL some   boy.DAT many

            gjafir.
            gifts.F.NOM.PL

            'Some boy was given many gifts.'

b.   Það   voru einhverjum strák   gefnar   margar
       EXPL were some   boy.DAT given.F.NOM.PL many

    gjafir.
    gifts.F.NOM.PL

    'Some boy was given many gifts.'

Even though the indirect object is structurally closer to Asp, the participle's φ-features nevertheless agree with the lower DP, that is, the direct object. The participle can only agree with a DP if the latter has an unassigned case. This is the same as finite T, which can only agree with a DP with an unassigned case feature. This approach shows that the timing of predicative Agree is crucial: If Asp agrees with a DP before the DP is assigned case, agreement converges. If, however, the DP is assigned case before Asp agrees with it, agreement fails.

Importantly, failed participle agreement is not restricted to non-structural case; as the DFLT (default) marking on the passive participle in (36a) indicates, there is not agreement between *gefið* 'given' and a DP in the clause.

(36)   *DAT-ACC* **passive**

    a. % Mér   var gefið   bílana.
        me.DAT was given.DFLT the.cars.ACC

        'I was given the car.'

    b. * Mér   var gefna   bílana.
        me.DAT was given.M.ACC.PL the.car.M.ACC.PL

        Intended: 'I was given the cars.'

As argued in §5.2, the construction in (36a) does not contain a projected implicit argument. The fact that the participle and the accusative case DP cannot form an

Agree relation suggests that structural case is assigned by a functional head within the verb phrase. Under my analysis, presented in §5.2, Appl assigns case to 'the cars' in (36a), which leads to Asp not being able to agree with it.

Note that accusative participle agreement is strictly ungrammatical here, as shown in (36b). We could have expected the participle to show agreement with the lower DP, realized as accusative, if accusative were unassigned case here. However, what is realized as accusative in (36b) is assigned case (by Appl) before Asp probes.

If, on the other hand, Asp forms an Agree relation with 'the cars' before the DP is assigned case, it exhibits agreement with the DP. This is shown below.

(37) Hann   hafði talið   Jóni   hafa   verið gefna   þessa
      he.NOM had   believed Jón.DAT have.INF been given.M.ACC.PL these

      sokka.
      socks.M.ACC.PL

      'He had believed John to have been given these socks.'

      (Jónsson 1996:150)

Here Appl does not assign case to the direct object; 'believed' does. 'Given' establishes a relation with 'these socks' before 'believed' assigns case to the DP, resulting in participle agreement.

Reduced relative clause data also show the same.

(38) Tveimur verkum   skrifuðum/*skrifað   af útlendingum var
      two   works.DAT written.DAT/*written.DFLT by foreigners   was

      hafnað/*höfnuðum.
      rejected.DFLT/*rejected.DAT

      'Two works written by foreigners were rejected.'

Here, *hafna* 'reject' assigns dative to the DP 'two works written by foreigners'. Therefore, the participle of *hafna* cannot establish an Agree relation with the dative DP. However, the participle 'written' in the reduced relative clasue can show dative agreement with the DP (or an operator) as the verb 'write' does not assign case to the DP. An Agree relation is established between 'written' and 'two works'.

2.2.3.3.3 Structural case and Burzio's Generalization

As discussed above, various accounts take structural accusative case to be dependent on structural nominative case. This is not a Universal Grammar requirement; on the present account we might anticipate seeing a language that realizes structural case in object position as accusative, such as in unaccusative structures. That is not the case, however, for a language like Icelandic (see, e.g., H.Á. Sigurðsson 2011b:161, Jónsson 2009b:289).

(39) a. Það   brotnaði   stóll/*stól.
          EXPL broke.INTR a.chair.NOM/*a.chair.ACC
          'A chair broke.'

     b. Það dó gamall hundur   / *gamlan hund   í gær.
          EXPL died old   a.dog.NOM / *old   a.dog.ACC yesterday
          'An old dog died yesterday.'

I propose that structural accusative case objects are licensed by Voice. This is shown for the sentence in (40a) in the tree in (40b). I argue that only when Voice introduces a phrase in its specifier that has a case feature, via structure-building feature ($\bullet D \bullet$), a probing case feature ($*case_{STR}:\_*$) obligatorily follows, assigning

structural case to the direct object. This relates to Burzio's Generalization which has to do with structural accusative case assignment (see a brief discussion on the generalization in §4.2.3).

(40) a. María keypti tvo bíla.
          María bought two cars.ACC

          'María bought two cars.'

  b.
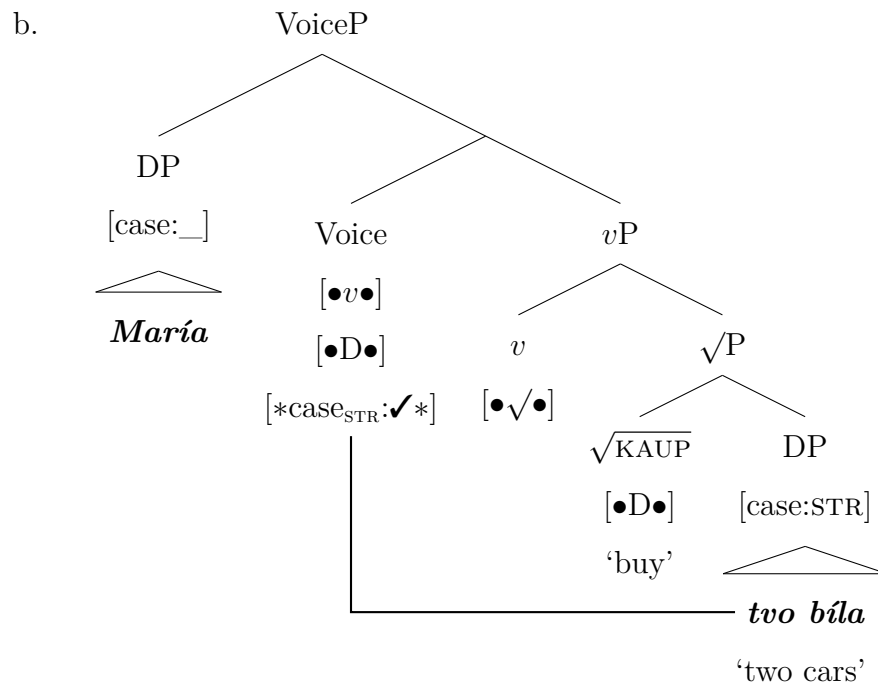
When Voice has the requirement of a filled specifier with a phrase that gets case, it is followed by probing to assign (structural) case. It does not assign accusative case per se, but rather structural case, as Voice is not specified for an accusative case feature. The higher DP, *María*, will value the unvalued features of T but the DP will have an unassigned case which will be translated into structural case by Spell-Out and realized as unmarked nominative case at MC.

Voice does not have a probing structural case feature in the Canonical Passive as it does not have its specifier filled with a phrase with a case feature. T and Asp establish an agreement relation with a DP that originates in an object position. That is, the DP values T's and Asp's φ-features, see (41a). If Voice would have assigned case on the DP, we could have expected nominative on the DP but no agreement, see the ungrammatical (41b).

(41) a. Það   voru keyptir   tveir bílar.
          EXPL were bought.M.NOM.PL two   car.M.NOM.PL
          'Two cars were bought.'

      b. * Það   var keypt   tveir bílar.
          EXPL was bought.DFLT two   car.M.NOM.PL
          Intended: 'Two cars were bought.'

As Voice does not have a filled specifier requirement, it does not have a probing feature. That is, ∗case∗-feature on Voice is dependent on a prior •D•-feature.

(42) a. Það   voru keyptir   tveir bílar.
          EXPL were bought.M.NOM.PL two   car.M.NOM.PL
          'Two cars were bought.'

b.

$$
\begin{array}{c}
\text{AspP} \\
\end{array}
$$

Asp
[●Voice●]
[∗φ:__∗] VoiceP
[∗case:__∗] Voice
[●v●] vP

v
[●√●] √P

√KAUP
[●D●] DP
'buy' [γ:M]
[#:PL]
[case:__]

tveir bílar
'two cars'
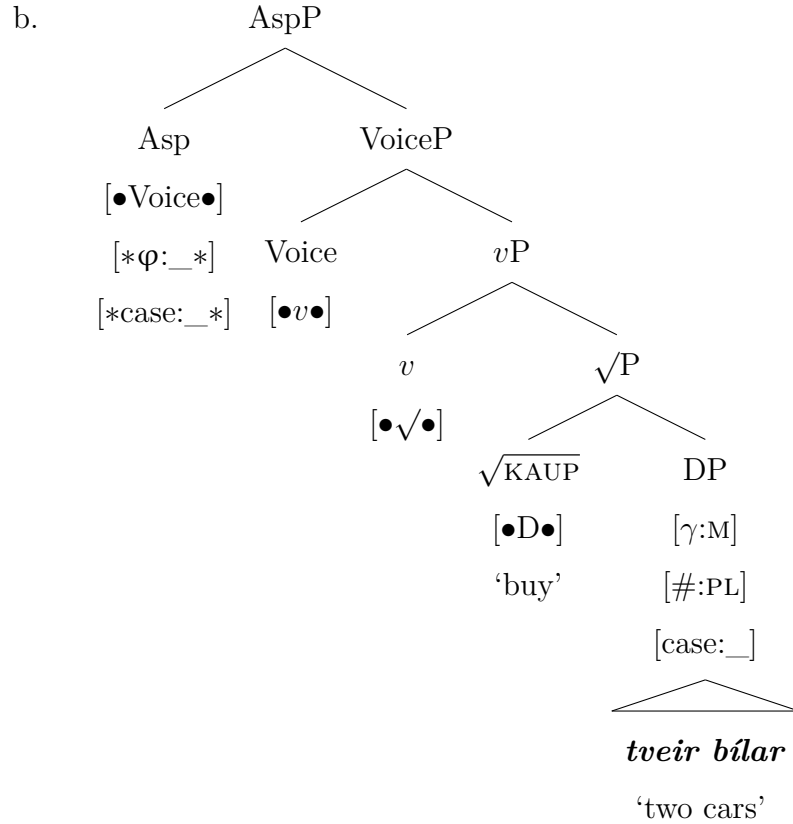
As shown here, there is no case feature on Voice and therefore it does not assign structural case to the DP 'two cars'. As a consequence, Asp can probe and get its features valued by the DP.

2.2.3.3.4 Nominative object case as assigned case in Icelandic C

As mentioned above, some speakers prefer number agreement with DAT-NOM verbs (Icelandic A speakers in H.Á. Sigurðsson and Holmberg 2008), such as *líka* 'like', whereas others prefer non-agreement (Icelandic B and C in H.Á. Sigurðsson and Holmberg 2008). (6) is repeated as (43).

(43)   a.   **_Icelandic A_**

        Honum   hafa/?hefur   alltaf   líkað þeir.
        him.DAT have.3PL/?has.3SG always liked they.NOM

   b.   **_Icelandic B_**

        Honum   hafa/hefur   alltaf   líkað þeir.
        him.DAT have.3PL/has.3SG always liked they.NOM

   c.   **_Icelandic C_**

        Honum   ??hafa/hefur   alltaf   líkað þeir.
        him.DAT ??have.3PL/has.3SG always liked they.NOM

                              (cf. H.Á. Sigurðsson and Holmberg 2008:251)

A question that arises is whether nominative case is derived in the same way in the agreement variety as in the non-agreement variety. I argue that non-agreement stems from two different sources: Either T cannot form an Agree relation with the nominative DP because of intervention or because structural case is being assigned by a functional head lower in the structure. Object agreement, on the other hand, stems from structural case not being assigned at all; when T probes, it finds a DP that is unvalued for case. The DP values T's number feature but its case will be unvalued until Spell-Out.

Under non-agreement, a dative DP can in some cases block agreement. I argue, however, that structural case is assigned in a dialect that has systematic non-agreement between T and the nominative object. I place a probing, structural case feature on Appl that establishes a relation with the DP.

(44)

```
                        ApplP
                       /     \
                     DP       Appl′
              [∘case:DAT∘]    /    \
                          Appl      DP
                 honum   [•D•]     [π:3]
               'him.DAT' [•case:DAT•]  [#:PL]
                      [∗case_STR:✓∗] [∘case:STR∘]
                                      þeir
                                  'they.NOM'
```
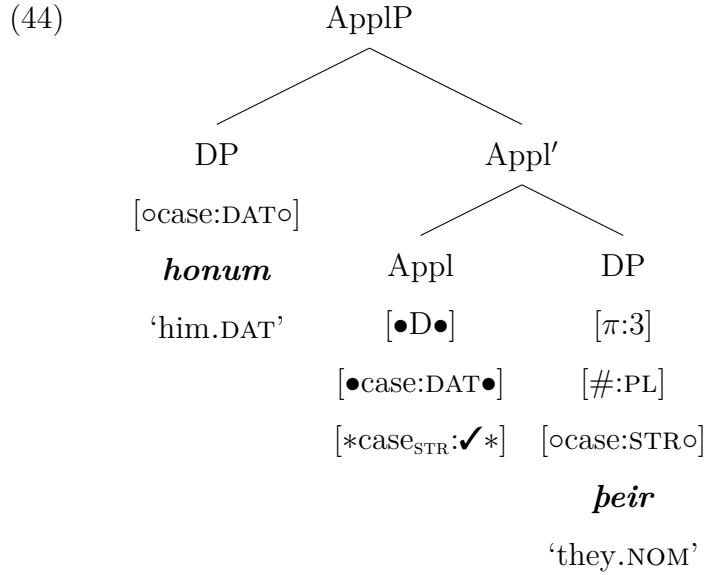
Here, Appl assigns structural case to the direct object and assigns dative to its specifier. As there is no other structural case in the same dependency, the DP will be realized as unmarked nominative case for most Icelandic C speakers. Also, as T cannot establish an Agree relation with an element that has its case valued, number agreement will fail. Interestingly, we will see this kind of structure again in §5.2 where the structural case on the direct object is realized as accusative.

2.3 Timing of Agree and Merge taking effect

2.3.1 Introduction

We now turn our attention to two interesting case and agreement problems in Faroese and Norwegian. This case problem is exhibited with a dative-taking verb, 'help', in (45) and a ditransitive, 'give', in (46).

Let us start by looking at the Faroese data in (45) (the paradigm in (45) is in part based on my 2009 field work in the Faroe Islands, but see also Barnes 1986, Thráinsson et al. 2004, Åfarli and Fjøsne 2012, Eythórsson et al. 2012).[8]

(45)   **Faroese**

    a.   Teir   hjálptu einum manni.
           they.NOM helped a   man.DAT
           'They helped a man.'

    b.   Tað   varð hjálpt   einum manni.
           EXPL was helped.DFLT a   man.DAT
           'A man was helped.'

    c.   Ein maður   varð hjálptur.
           a   man.M.NOM.SG was helped.M.NOM.SG
           'A man was helped.'

Hjálpa 'help' assigns dative to the DP 'a man' in the active. In the passive, the DP is assigned dative also if it stays in situ, see (45b). If it moves, however, it receives a structural case value, realized as nominative, see (45c). The data is somewhat puzzling as it suggests that dative is only preserved if the DP does not A-move.

The Norwegian data below suggests the same.

(46)   **Norwegian**

    a.   E ga   hånnå   ei skei.
           I gave him.DAT a spoon.
           'I gave him a spoon.'

    b.   Det   vart gjevve hånnå   ei skei.
           EXPL was given him.DAT a spoon

---

[8]Note that there are two auxiliaries possible in Faroese in eventive passives, *blíva* and *verða* (Lockwood 1955:75, 134). In the examples below, I use both.

c. Hainn   vart gjevinn ei skei.
he.NOM was given   a spoon

'He was given a spoon.'   (Åfarli and Fjøsne 2012:86)

The indirect object of 'give' is assigned dative in the active (46a) and in situ in the passive (46b). If it moves to subject position, on the other hand, it will bear structural case, realized as nominative (46c). Note for the Norwegian dialects in question that dative marking is only found on definite nominals (Åfarli and Fjøsne 2012:78, Eythórsson et al. 2012:223–224), making it impossible to tell whether dative on direct objects in situ is retained in the passive because of the Definiteness Effect (Åfarli and Fjøsne 2012:85 n. 3). However, indirect dative objects in situ can be definite without causing a DE violation, as seen in (46b) above.

A similar difference as between Icelandic case preservation, on the one hand, and Faroese and Norwegian, on the other, is detected between Russian and Lardil, respectively. Richards (2013) discusses Lardil future concord, showing that passivization bleeds future marking on a moved DP.

(47)   ***Lardil***

a. Ngawa be-thu   bidngen-ku.
dog   bite-FUT woman-FUT
'The dog will bite the woman.'

b. Bidngen be-yi-thu.
woman   bite-PASS-FUT
'The woman will be bitten.'   (Richards 2013:54)

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In the passive in (47b), 'woman' is not future-marked even though it is in the active in (47a). Richards contrasts this with Russian genitive of negation, which passivization does not bleed.

(48)   ***Russian***

     a.   Anna pišet pis'mo   ručkoj.
           Anna writes letter.ACC pen.INSTR

          'Anna is writing a letter with a pen.'

     b.   Anna ne pišet pis'ma   ručkoj.
           Anna not writes letter.GEN pen.INSTR

          'Anna isn't writing a letter with a pen.'   (Richards 2013:53)

(49)   Pis'ma   ne bylo polučeno.
        letter.GEN not was received

        'No letter was received.'   (Richards 2013:66)

'Letter' is assigned structural accusative case in the active in (48a). Under negation, it is realized in the genitive case, as shown in (48b). Passive does not bleed genitive under negation, even when 'letter' moves out of the verb phrase, as demonstrated in (49). This is unlike the Lardil data above, where we saw that passivization bled future-marking of the DP.

Richards argues that the difference between the passive of Lardil future concord and the passive of Russian genitive of negation is timing of derivational operations: On his analysis, genitive is assigned in the Russian example to the DP in object position before T triggers movement to its specifier. In the Lardil example, on the other hand, Tense concord does not take place until after movement of the DP.

I propose that the issues discussed above for Faroese and Norwegian do not have to do with timing of operations but when the operations Merge and Agree take effect. I argue that a probe feature triggers Agree but it is not finalized, or calculated, until the phase is sent to Spell-Out. Merge on the other hand takes effect immediately and can overwrite Agree relations.

We will now take a closer look at the case facts from Faroese and Norwegian.

2.3.2 When Merge overwrites Agree

2.3.2.1 Case in Faroese and Norwegian

Following Richards, I argue that (45a) vs. (45c) above is about timing, but instead of taking it to be about timing of operations, I propose it has to do with the timing of when the operations take effect. When Agree on Voice is triggered, it establishes a relation between a DP and Voice. Agree is not finalized with respect to feature valuation and case assignment. This has important consequences.

(50)   ***Faroese***

    a.   Tað   bleiv hjálpt   einum manni.
          EXPL was helped.DFLT a   man.DAT
          'A man was helped.'

    b. * Tað   bleiv hjálptur   ein maður.
          EXPL was helped.M.NOM.SG a   man.M.NOM.SG

In (50a) dative is assigned to the DP in situ; nominative is ungrammatical here as shown in (50b). If the DP moves to subject position, however, dative is not assigned and the subject is realized in the nominative case. (The judgments reported here

are based on field work in 2009, on judgments from Hjalmar P. Petersen's students in the fall of 2015 and on examples from the literature.[9])

(51) a. * Honum bleiv hjálpt.
        him.DAT was helped.DFLT

    b. Hann bleiv hjálptur.
       he.M.NOM.SG was helped.M.NOM.SG
       'He was helped.'

It has been argued that *helfen* 'help' in German takes an indirect object (McFadden 2004; see also discussion on English *help* and *thank* in Wasow 1977). I am taking it to be a direct object, however, in Faroese (the paradigm above suggests it is a direct object when compared to indirect objects below). Another verb that shows the same pattern with respect to case on its object is *rósa* 'praise'.[10]

———————————————

[9]In my 2009 field work, I asked four speakers about the data in (50)–(51). All four speakers accepted (50a) and rejected (50b). One speaker found (51a) grammatical but three found (51b) grammatical. This is in line with Eythórsson and Jónsson (2003:210) who report examples equivalent to (51a) and (51b) to be ungrammatical and grammatical, respectively. However, whereas Seven out of seven of Petersen's students found an example equivalent to (51b) grammatical, six of them found an example equivalent to (51a) grammatical, that is, with a dative subject. One of these seven speakers found an example equivalent to (50b) grammatical and four found an example equivalent to (50a) grammatical.

[10]None of the four speakers in my 2009 field work found (52b) grammatical but three of them found (52a) grammatical. Three speakers found (53b) grammatical and one speaker found (53a) grammatical.

(52) a. Tað   bleiv róst   einum manni.
          EXPL was   praised.DFLT a   man.DAT
          'A man was praised.'

      b. * Tað   bleiv róstur   ein maður.
          EXPL was   praised.M.NOM.SG a   man.M.NOM.SG

(53) a. * Honum   bleiv róst.
          him.DAT was   praised.DFLT

      b. Hann   bleiv róstur.
          he.M.NOM.SG was   praised.M.NOM.SG
          'He was praised.'

In Faroese, Voice has an unvalued dative case probe feature when the verb is *hjálpa* 'help' or *rósa* 'praise'. Voice establishes an Agree relation with the direct object. Calculation of feature valuation and case assignment does not take place until Spell-Out, however.

When the phase is sent to Spell-Out, case is calculated. If the DP has not moved to, e.g., subject position, the case on the DP is marked as dative. If, however, T has a structure-building feature, it can attract a DP to get its features valued. The structure-building feature cancels out the previous Agree relation that had been established between the DP and Voice. That is, structure-building features can overwrite previously established Agree relations that have not been sent to Spell-Out.

(54)   ***Movement of direct object to subject position***

      a. Hann   bleiv róstur.
          he.NOM was   praised.NOM
          'He was praised.'

b.

TP

DP$_i$

[○case:STR○]

hann

'he.NOM'

T

[●Voice●]

[●case:STR●]

VoiceP

Voice

[●v●]

[*case$_{\mathrm{DAT}}$:__*]

vP

v

[●√●]

√P

√RÓS

[●D●]

'praise'

<DP$_i$>
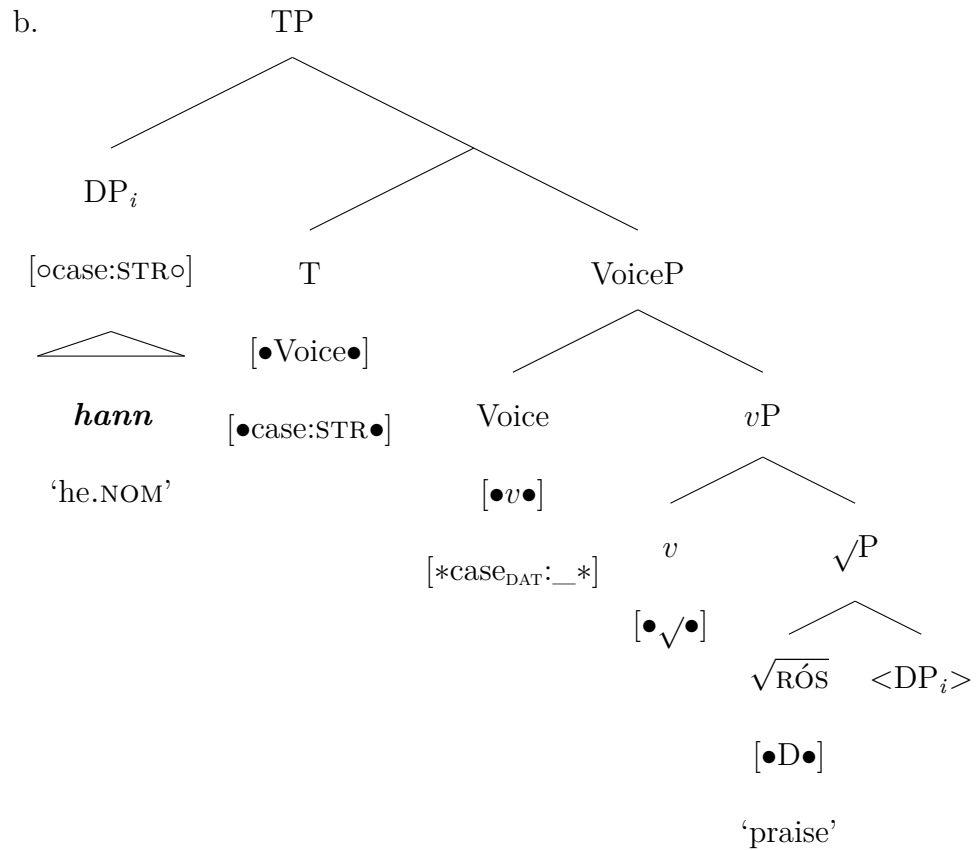
A new relation is established, where the DP values T's unvalued features via Merge and is assigned structural case in turn.

Structure-building features do not, however, overwrite already established structure-building feature relations (that results, however, sometimes in case stacking, see §2.3.2.2). In passives of ditransitives, dative on the indirect object is preserved, not only when the the indirect object stays in situ, see (55a) and (56a), but also when

it moves to subject position, see (55b) and (56b) (Barnes 1986, Barnes and Weyhe 1994:213).[11]

(55)   a.   Ein   kúgv varð seld bóndanum.
                 a.NOM cow   was sold the.farmer.DAT

                 'A cow was sold to the farmer.'

       b.   Bóndanum   varð seld ein   kúgv.
                 the.farmer.DAT was sold a.NOM cow

                 'The farmer was sold a cow.'   (Barnes 1986:35–36)

(56)   a.   Ein blýantur   varð givin henni.
                 a   pencil.NOM was given her.DAT

                 'A pencil was given to her.'

       b.   Henni   varð givin ein blýantur.
                 her.DAT was given a   pencil.NOM

                 'She was given a pencil.'   (Barnes 1986:35–36)

In these examples, the indirect object ('the farmer', 'her') is assigned dative in SpecApplP via a structure-building feature. When it moves to subject position, it retains its case. See, however, discussion on case stacking below.

Norwegian dialects that have a dative case (most Norwegian dialects do not) show the same pattern as Faroese with respect to (51) and (53): a DP that A-moves to subject position does not bear dative case.

_____

[11]In ditransitive passives in Faroese, the theme is usually moved to subject position. In those cases where the recipient (the indirect object) is moved to subject position, dative is preserved.

(57) ***Norwegian***

    a.   E hjælpt hånnå   i går.
           I helped him.DAT yesterday

    b. * Hånnå   vart hjælpt i går.
           him.DAT was helped yesterday

    c.   Hainn   vart hjælpt i går.
           he.NOM was helped yesterday

    'He was helped yesterday.'   (Åfarli and Fjøsne 2012:85)

Just as in Faroese, an Agree relation is established between Voice and the DP but case is not computed until the phase is sent to Spell-Out. In the meantime, a structure-building feature on T attracts the DP to SpecTP, leading to a cancellation of the Agree relation previously established.

2.3.2.2   Case stacking via structure-building features

2.3.2.2.1   Faroese case stacking

For Faroese, we have primarily been looking at direct objects with respect to participle agreement. Case works differently when it comes to indirect objects, as we will now see (see also the discussion above on different types of datives, based on whether the arguments were direct or indirect objects). The derivational difference between case on indirect objects and direct objects leads to case stacking in one but not the other. I argue that structure-building features are needed to derive case stacking in at least Faroese. That may, however, be different from case stacking in some other languages, such as Lardil (Richards 2013) and Korean (Yoon 2004)

which have overt case stacking, unlike Faroese in which case stacking is detected through agreement.

In Faroese, dative is often retained on DPs generated in SpecApplP[12] (see also discussion above on the dative preservation in ditransitive passives in Faroese). The same is less frequently true for DPs generated in complement position of the verb phrase. Here we can contrast two verbs that have only one DP as an argument: *steðga* 'stop', which takes a dative *direct* object in the active, and *eggja* 'encourage', which I argue takes an *indirect* dative object in the active (meaning that the DP is generated in SpecApplP). In the passive, there is a rather clear difference between dative preservation of *steðga* and *eggja* as Jóhannes Gísli Jónsson's results from a 2008 questionnaire for 41 Faroese speakers reveal — his results are reported in Jónsson 2009a. All speakers accepted (58a) but noone accepted (58b). Therefore I mark (58b) as ungrammatical. 78% of the speakers in Jónsson's survey accepted (59a), whereas a considerably lower percentage, 37%, accepted (59b). Even though less than half of the speakers accepted dative preservation of a DP generated in SpecApplP, the results suggest that there is a great difference between (59b) and (58b).

_____

[12]This seems to be changing toward nominative diachronically.

(58)   a.   Bilurin   varð steðgaður   í rundkoyringini í Søldarfirði.
              the.car.NOM was stopped.NOM in the.roundabout in Søldarfjørður

              'The car was stopped in the roundabout in Søldarfjørður.'

        b. * Bilinum   varð steðgað   í rundkoyringini í Søldarfirði.
              the.car.DAT was stopped.DFLT in the.roundabout in Søldarfjørður

(59)   a.   Hann   varð eggjaður   at fara á hesa ferð.
              he.NOM was encouraged.NOM to go   on this trip

              'He was encouraged to go on this trip.'

        b. % Honum   varð eggjað   at fara á hesa ferð.
              him.DAT was encouraged.DFLT to go   on this trip

                                                              (cf. Jónsson 2009a:148–149)

Like *eggja*, I take *takka* 'thank' to take an indirect DP object. Thórhallur Eythórs-

son administered a written questionnaire for 62 Faroese speakers in 2008 where

participantes were supposed to compare sentences — his results are reported in

Eythórsson 2012. 47% found (60a) to be grammatical and 42% judged (60b) as

grammatical. This is somewhat similar pattern as in (59) above. The fact that

dative is preserved in the passive in some speakers' grammars is conistent with

Thráinsson et al. (2004:269).

(60)   a. % Hann   bleiv takkaður   fyri hjálpina.
              he.NOM was   thanked.NOM for the.help

        b. % Honum   bleiv takkað   fyrir hjálpina.
              him.DAT was   thanked.DFLT for   the.help

              'He was thanked for the help.'   (Eythórsson 2012:118)

We have seen above examples of dative preservation, and the lack thereof, in

the passive. The same pattern can be detected in the active for DPs generated in

SpecApplP as is detected for DPs generated in SpecApplP in the passive.

(61) a.   Tað hevði mær   ikki dámað.
           that had   me.DAT not liked

           'I would not have liked that.'

      b.   Tað hevði ikki dámað mær.
           that had   not liked   me.DAT

           'I would not have liked that.'   (cf. Jónsson 2009a:152

(62) a.   Tað hevði hon   ekki dámað.
           that had   she.NOM not liked

           'She would not have liked that.'

      b. *Tað hevði ikki dámað hon.
           that had   not liked   she.NOM

           Intended: 'She would not have liked that.'   (Jónsson 2009a:153))

If the DP stays low, it is obligatorily in the dative, as seen when we compare (61b) and (62b). Much more variation w.r.t. case is found when the DP moves.

It should also be noted that in ditransitive passives, the direct object is usually moved to subject position rather than the indirect object. If, however, an indirect object, which bears dative in the active, is moved to subject position, it will generally preserve its dative case.

Finally, Faroese sometimes shows plural agreement on finite verbs with dative subjects (Jónsson 2009a, H.Á. Sigurðsson 2003, Jónsson and Eythórsson 2005:240–241; note also example (24c) in Petersen 2002:73).

(63) Teimum tørva   góða   hjálp.
      they.DAT need.PL good.ACC help

      'They need good help.'   (Jónsson and Eythórsson 2005:241)

(64) Teimum dáma at vera saman   í bólki.
      them.DAT like.PL to be   together in band   (Jónsson 2009a:158)

That structural nominative case is in fact involved, is suggested by the use of the anaphoric element *sjálvur* 'self', which is grammatical for many speakers in the nominative in examples like the following:

(65)   Sjálvur   / Sjálvum dámar honum   ikki at lurta eftir tónleiki.
         self.NOM / self.DAT likes   him.DAT not to listen to   music

                                                              (Jónsson 2009a:159)

As Jónsson (2009a:159) notes, *sjálvur* may be default nominative case for some speakers rather than unmarked nominative case. However, as almost 60% of the speakers in his survey liked the nominative better than the dative, he argues that this cannot be default nominative for all speakers. If that were the case, we could expect nominative to be preferred in the Icelandic equivalent as well but that is not the case, Jónsson (2009a) argues.

To account for these data, Jónsson (2009a) proposes the Covert Nominative Hypothesis, which states that dative case subjects are assigned nominative case in SpecTP by T, even though nominative is not morphologically realized. It is important for his analysis that nominative is assigned rather than checked by T. Therefore, a dative subject bears both lexical and structural case on Jónsson's analysis. I adopt Jónsson's hypothesis and apply it to the theory proposed here.

Below, T with a [●case:STR●] feature attracts a DP originating in SpecApplP to its specifier. Even though the DP already bears dative it is assigned structural case as well on top of that, via Merge. I refer to this as case-stacking in Faroese.

When T merges with the DP and assigns it structural case, the DP in turn values T's unvalued φ-features via Merge.

(66)　a.　***Indirect object***

Teimum　dáma　at vera saman　í　bólki.
them.DAT like.PL to be　together in band

b.
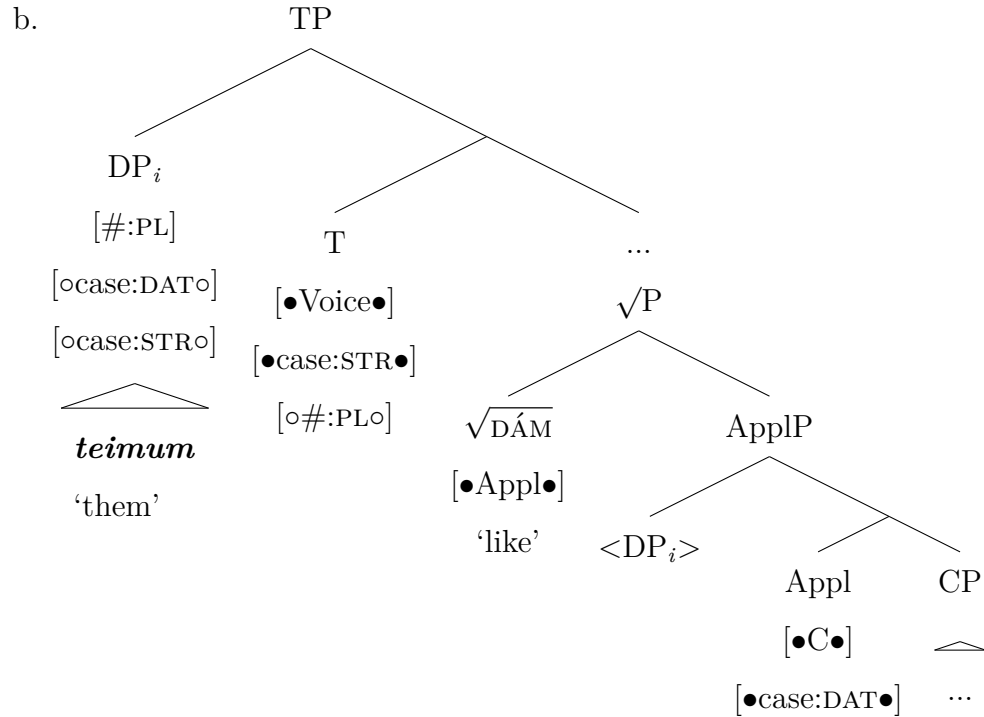
For direct objects of verbs like *rósa* 'praise' or *steðga* 'stop', however, Voice establishes an Agree relation with the DP in the complement position of the verb phrase. Case under Probe-Goal matching in Faroese is not calculated until the end of the phase, however, meaning that if the DP moves, it can get a case from another source, overwriting the original case relation.

2.3.2.2.2 Remaining problems

A few problems remain that are worth pointing out. In Faroese case-stacking, typically only number agreement is triggered, and not person agreement (Jónsson 2009a):

(67)   * Mær   dámi   hasa bókina.
      me.DAT like.1SG this the.book.ACC
      Intended: 'I like this book.'   (Jónsson 2009a:159)

Another potential problem is the fact that nominative is often realized as the subject case of verbs like *dáma* 'like'.

(68)   Eg   dámi føroyskan tónleik.
        I.NOM like   Faroese   music.ACC
        'I like Faroese music.'   (Jónsson 2009a:142)

It is not clear whether the subject bears a silent dative case feature. If so, we would like to understand why nominative is realized rather than dative. Also, it is not clear whether we should expect dative to be possible on, e.g., anaphoric elements. As far as I know, examples like the following, with dative on 'self' but nominative on the subject, are unattested.

(69)   Sjálvum dámar hann   ikki at lurta eftir tónleiki.
        self.DAT likes   he.NOM not to listen to   music

If, on the other hand, dative is not assigned to the DP, which originates in SpecApplP, in examples like (68), an explanation is needed. This is the same

problem as arises in Norwegian dialects which preserve dative case, but in situ only
(and under A′-movement). In the Halsa dialect, for example, it does not matter
whether a DP originates in SpecApplP or as the complement of the verb, dative
will always be lost on a DP that moves to subject position.

(70)   ***Norwegian***

    a.   E hjælpt hånnå   i går.
            I helped him.DAT yesterday

    b.   Hainn/*Hånnå   vart hjælpt i går.
            he.NOM/*him.DAT was helped yesterday

                                            (Åfarli and Fjøsne 2012:85)

(71) a.   E ga   hånnå   ei skei.
            I gave him.DAT a spoon.

    b.   Det   vart gjevve hånnå   ei skei.
            EXPL was given him.DAT a spoon

    c.   Hainn/*Hånnå   vart gjevinn ei skei.
            he.NOM/*him.DAT was given   a spoon

                                            (Åfarli and Fjøsne 2012:86)

It might be the case in the Halsa dialect, and for Faroese speakers who find (68)
grammatical, that the case feature on Appl is [∗DAT∗] rather than [•DAT•]. Another
possibility is that the structural case feature is realized rather than the dative in
some case-stacking languages and dialects. Yet another possibility is that dative
case on DPs in SpecApplP in, e.g., Norwegian dialects, is licensed by a probe feature
on Voice. In that case, the case on the direct object would be licensed by another
functional head, such as Appl. I will not go further into these issues here.

2.3.2.3 Extension: Participle agreement and timing in Swedish

Somewhat similar to the Faroese and Norwegian case problem, passive participles in Swedish can only agree with a DP if the DP does not stay in situ (H.Á. Sigurðsson 1993a:32, Holmberg 2002:85).

(72)   ***Swedish***

    a.   Det   har blivit skrivet   / *skrivna   tre   böcker
         EXPL has been written.N.SG / *written.PL three books

         om   detta.
         about this

    b.   Det   har blivit tre   böcker *skrivet   / skrivna
         EXPL has been three books *written.N.SG / written.PL

         om   detta.
         about this   (Holmberg 2002:85)

I propose that this problem can be accounted for by applying structure-building features. First, however, let us look at participle data from Icelandic and Lithuanian.

2.3.2.3.1 Participle agreement via Agree: Further examples

We argued above that when a participle exhibits agreement with a DP, it must, at least in Icelandic, establish an Agree relation with a DP before the DP checks or is assigned case. More examples that show that come from participles embedded under *fá* 'get' in Icelandic. With 'get'-participles, Icelandic makes a clear distinction

in meaning between an embedded participle agreeing with a DP and when it does not.

(73)   **Icelandic**

    a.   Ég   fékk bókina   senda.
         I.NOM got the.book.ACC sent.PASS.ACC
         'I got the book sent to me.'

    b.   Ég   fékk ekki sent   bókina.
         I.NOM got not sent.DFLT the.book.ACC
         'I didn't manage to send the book.'   (E.F. Sigurðsson 2012:24–25)

The sentences in (73a) and (73b) have two different structures, as argued by E.F. Sigurðsson and Wood (2012) who call them 'causative 'get'-passives' and 'manage 'get'-passives', respectively. In (73b), the verb 'send' assigns case to 'the book' and as a result, its participle cannot agree with the DP. In (73a), on the other hand, 'get' checks case on 'the book'. It does not intervene between the participle of 'send' and 'the book'; the participle and the DP can therefore establish an Agree relation before case is assigned by 'get'.

We see a similar pattern in, e.g., Lithuanian with respect to participle agreement. In (74), the passive participle agrees with the DP in case and φ-features.[13]

(74)   **Lithuanian**

    Hana   buvo   apgautà   (savo sesiu).
    Hana.NOM.F.SG AUX.PAST deceived.PASS.NOM.F.SG (self sisters.GEN)
    'Hana was deceived by her sisters.'   (Lavine 2010:123)

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[13]There are also non-agreeing participles in Lithuanian which I will not discuss here.

When genitive is assigned in Lithuanian by a verbal participle, the DP does not agree with the participle. However, in the inferential evidential where a genitive is assigned to the surface subject, a DP and a participle can agree. An evidential version of (74) is shown in (75).

(75)   Hanos   buta   (savo sesiu)   apgautos.
          Hana.GEN.F.SG AUX.DFLT (self sisters.GEN) deceived.PASS.GEN.F.SG
          'Hana has apparently been deceived by her sisters.'   (Lavine 2010:125)

This suggests that the participle and the DP establish an Agree relation prior to genitive assignment by the evidential structure.

We now turn to examples where participle agreement is not established via Agree but only through Merge.

2.3.2.3.2   Participle agreement via Merge

In §2.2.3.3.2 and §2.3.2.3.1 we saw how participles in Icelandic and Lithuanian can exhibit agreement with a DP in other case than nominative, if an Agree relation is established before case is assigned to the DP.

We will now see participle data that I will derive differently from the previous participle data.

93

(76)   **Swedish**

   a.   Tre   böcker blev skrivna   / *skrivet.
        three books was written.PL / *written.N.SG

        'Three books were written.'

   b.   Det   blev skrivet   / *skrivna   tre   böcker.
        EXPL was written.N.SG / *written.PL three books

        'Three were written three books.'   (H.Á. Sigurðsson 1993a:32)

(77) a.   Det   har blivit skrivet   / *skrivna   tre   böcker om
          EXPL has been written.N.SG / *written.PL three books about

          detta.
          this

          'There have been written three books about this.'

     b.   Det   har blivit tre   böcker *skrivet   / skrivna   om
          EXPL has been three books *written.N.SG / written.PL about

          detta.
          this

          'There have been three books written about this.'

(Holmberg 2002:86)

In Swedish, a participle selected by *bli* 'be, become' has unvalued φ-features but they only get valued by a DP if the DP moves to the specifier of the participle phrase (AspP). I suggest that in (72a) the DP does already have an assigned structural case by the time the participle agrees with it. However, if it moves to SpecAspP, it will discharge its features through Merge onto Asp, see (72b). This is another instance of Merge overwriting a previously established Agree relation.[14]

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[14]Holmberg (2002) suggests an economy principle, which he calls "restrict checking relations to a minimum", which ensures that the expletive, and not the lexical NP, values the participle. Holmberg suggests a parameter: PrtP is a phase in Swedish, Norwegian 2 and English but not in

A similar pattern is observed in some Romance languages (Kayne 1989, Egerland 1996; see also discussion in H.Á. Sigurðsson 1993a).

(78)   ***French***

    a.   Paul a   repeint   les chaises.
          Paul has repainted.DFLT the chairs

          'Paul has repainted the chairs.'

    b. * Paul a   repeintes   les chaises.
          Paul has repainted.FEM.PL the chairs.FEM.PL   (Kayne 1989)

In the a-example, 'the chairs' stays in situ and agreement between the participle and the DP is not possible. Agreement is sometimes possible; Kayne (1989) argues it is possible when there is movement to or through the participle.

(79) Paul les   a   repeintes.
      Paul them.FEM.PL has repainted.FEM.PL   (Kayne 1989)

That is, Kayne's analysis is compatible with Spec-head agreement (e.g., Belletti 2005). On such an analysis, the clitic *les* in the above example moves through the specifier position of the participle.[15]

Norwegian 1, Icelandic and Danish. With the DP in situ in Swedish, it gets default case (does not get case as a result of Agree with the participle and T does not Agree with the DP but rather with the expletive). The expletive (*det* = N.SG) values the φ-features on the participle.

[15]For a different analysis, see D'Alessandro and Roberts (2008), who analyse participle agreement without making reference to Spec-head agreement but rather to PIC using Agree only.

2.3.3 Interim summary

We argued above that there is a crucial difference between Agree and Merge with respect to when these operations take effect: Merge does so immediately but feature values valued under Agree are not calculated until a phase is sent to Spell-Out.

This was important for the Faroese data discussed above. We argued that when T has a structure-building feature specified for structural case, it attracts a DP to its specifier. If that DP has been valued for case via a probe feature, the structure-building feature can overwrite that relation.

If, on the other hand, a DP has been assigned case via Merge, T's structure-building feature cannot overwrite the previous given value. However, this can in some cases result in case stacking, as we argued for Faroese.

2.4 Resultatives, PathPs and case

2.4.1 Introduction

We have seen dative being assigned in two different ways, through Merge and Agree. One of them is assigned in a specifer position and the other in a complement position. It might seem like a specifier position is needed for case assignment via Merge and a complement position for case assignment via Agree. However, we will now see dative case assignment via Agree to a phrase in specifier position. The following are examples of that.

(80)   *Icelandic*

    a.   Ásdís **kastaði spjótinu**   yfir línuna.
           Ásdís threw   the.javelin.DAT over the.line

           'Ásdís threw the javelin over the line.'

    b.   Fólkið   **kastaði sér**   út úr bílnum.
           the.people threw   REFL.DAT out of the.car

           'The people threw themselves out of the car.'

In (80), the DPs 'javelin' and 'the people', as well as the reflexive pronoun, move along a certain trajectory, a path, with respect to a location specified by a PP ('over the line', 'out of the car'). These are sometimes discussed in terms of a relation between FIGURE and GROUND, introduced by Talmy (1975, 1978, 1985). He describes these as follows:

(81)   a.   The FIGURE object is a moving or <u>conceptually</u> mo<u>vable</u> point whose path or site is conceived as a variable the particular value of which is the salient issue.

        b.   The GROUND object is a reference-point, having a stationary setting within a reference-frame, with respect to which the FIGURE's path or site receives characterization.   (Talmy 1975:419)

The relationship between FIGURE and GROUND (82a) is in some ways, simplifying the structures a bit, parallel to AGENT and PATIENT relations in the verb phrase (82b), or BENEFACTIVE and THEME in a low applicative structure (82c):

(82) a. PP   b. VP   c. ApplP

a. PP tree:
DP, P, DP; DP → FIGURE; DP → GROUND

b. VP tree:
DP, V, DP; DP → AG; DP → PATIENT

c. ApplP tree:
DP, Appl, DP; DP → BENEF; DP → THEME
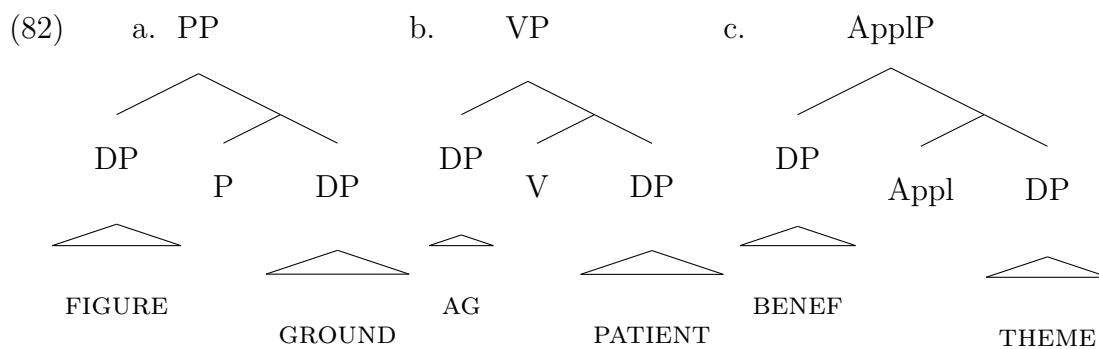
Just like we need at least one functional layer in the verb phrase, we may need at least one functional layer in the prepositional phrase, termed here PathP (Svenonius 2008).

(83) PathP
DP, Path, PP
DP → FIGURE
PP → P, DP; DP → GROUND
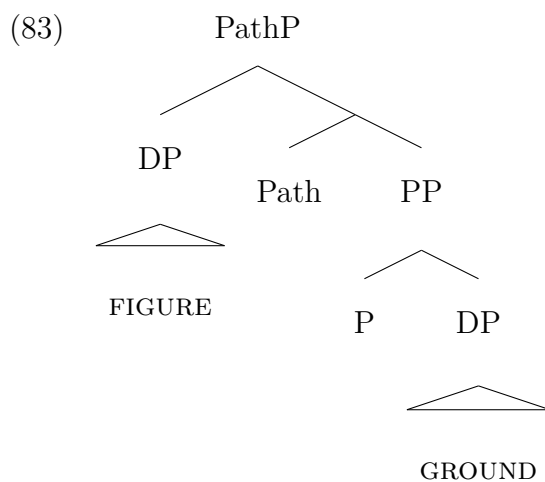
Furthermore, I argue that the dative case on the DP stems from a dative probe feature on Voice.

Interestingly, the verb *kasta*, cf. (80) above, can also assign accusative case in Icelandic, see (84).[16]

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[16]An attested example, taken from https://goo.gl/edpKNr, is shown in (i):

(84) Ásdís **kastaði sig**   í úrslit.
      Ásdís threw   REFL.ACC in finals

      'Ásdís threw the javelin such that she made it into the finals.'

This is a resultative structure, different from the PathP structure above, as we will

see below.

    As has been pointed out in the literature, movement or motion seems to be

related to some instances of datives (Barðdal 1993, 2001, Maling 2002, Svenonius

2002, Jónsson 2013a). *Kasta* 'throw' and *hella* 'pour' are examples of that ((80b)

is repeated as (85a)).

(85) a. Fólkið   kastaði sér   út úr bílnum.
          the.people threw   REFL.DAT out of the.car

          'The people threw themselves out of the car.'

      b. Ég   hellti mjólkinni   niður.
          I.NOM poured the.milk.DAT down

At first glance it may look like the dative is being assigned via a dative structure-

building feature located on Path. However, unlike Appl, which has such a structure-

building feature, dative is not preserved under anticausative *-st* structures:[17]

─────────────────────────

(i) Spjótkastarinn   Ásdís Hjálmsdóttir kastaði sig   í gær   inn í úrslit
     the.javelin.thrower Ásdís Hjálmsdóttir threw   REFL.ACC yesterday into finals

     Evrópumótsins   í frjálsum íþróttum sem nú fer fram   í Amsterdam í
     Europe.tournament in track and field   which now takes place in Amsterdam in

     Hollandi.
     Holland

[17]See also Wood's (2014, 2015) discussion on figure reflexives.

(86) a. Fólkið / *Fólkinu kastaði-st út úr bílnum.
the.people.NOM / *the.people.DAT threw-ST out of the.car

b. Mjólkin / *Mjólkinni hellti-st niður.
the.milk.NOM / *the.milk.DAT poured-ST down

This results in the DP having structural case, realized as nominative case, see (86).

Recall from (19) above, repeated as (87), that case assigned via Merge is preserved

under *-st* whereas case assigned via Agree is not.

(87) a. Þeir úthlutuðu okkur velli til 12:00.
they allocated us.DAT field.DAT until 12:00
'They allocated a field to us until 12:00.'

b. Okkur úthlutaði-st völlur til 12:00.
us.DAT allocated-ST field.NOM until 12:00
'We got allocated a field until 12:00.'

(E.F. Sigurðsson and Wood 2012:277)

That is, a structure-building feature on Appl assigns case to the DP in SpecApplP

which is preserved in (87b). In (87a), Voice has a probe feature specified for dative

and assigns it to the direct object. However, dative case via Agree is not preserved

under the use of anticausative *-st*. The fact that dative is not preserved in (86)

suggests that a probe feature is involved, rather than a structure-building feature.

I argue therefore that Voice has a dative probe feature in (85).

We will now discuss resultatives and PathPs which are of importance in many

respects for the theory of grammar but we will discuss them in the current context

with respect to case. Here we are concerned with examples like (80) and (84),

where one and the same verb seems to be able to assign dative in one context and accusative in another.

2.4.2 Resultatives and structural case

We showed above that *kasta* 'throw' sometimes takes a dative object and sometimes an accusative object. (80a) and (84) are repeated as (88a) and (88b), respectively.

(88)   a.   Ásdís **kastaði spjótinu**   yfir línuna.
            Ásdís threw   the.javelin.DAT over the.line

            'Ásdís threw the javelin over the line.'

   b.   Ásdís **kastaði sig**   í   úrslit.
            Ásdís threw   REFL.ACC in finals

            'Ásdís threw the javelin such that she made it into the finals.'

The verb *hella* 'pour', which often takes a dative object as we saw in (85b), repeated as (89a), is the same as *kasta* in this respect as it can also sometimes take an accusative case object (see also Jónsson 2013b).

(89)   a.   Ég   **hellti mjólkinni**   niður.
            I.NOM poured the.milk.DAT down

   b.   Jón **hellti mig**/**sig**   fullan.
            Jón poured me.ACC/REFL.ACC drunk.ACC

There is an important difference between the two uses, dative vs. accusative. (88b) and (89b) exhibit a resultative construction. For example, even though the reflexive pronoun is coindexed with Ásdís, she does not throw herself in any way. Rather, in (88b) Ásdís throws something, such as a javelin, and as a result of the throwing, she ends up in the finals. In this example we get accusative case.

In (88a), on the other hand, Ásdís throws the javelin, which moves along a path and lands outside a certain line. Here the DP is in the dative case. Dative is also required if Ásdís would throw herself, as shown in (90).[18]

(90) Ásdís kastaði sér   niður.
      Ásdís threw   REFL.DAT down

      'Ásdís threw herself down.'

For some cases of movement it looks like it is possible to use either accusative or dative. Jónsson (2013a) discusses various such examples.

(91) Messi skallaði boltann/boltanum   í netið.
      Messi headed the.ball.ACC/the.ball.DAT in the.net

      'Messi headed the ball into the net.'   (Jónsson 2013a:145)

Importantly, Jónsson points out that there is a difference between the use of accusative and dative in (91) even though it is subtle: *skalla* + accusative means 'make forceful contact with some entity using the forehead', whereas *skalla* + dative means 'make forceful contact with some entity using the forehead and thereby cause that entity to move' (Jónsson 2013a:154–155). He furthermore points out that these definitions mean that the dative entails the accusative and not the other way around; (92b) is a contradiction but (92a) is not.

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[18]See also discussion on different readings and case marking in different structures, including path, with roots like $\sqrt{\text{TROÐ}}$ 'squeeze' in Wood 2015:174–192.

(92)   a.   Jón skallaði boltann   án þess að skalla honum (neitt).
             Jón headed   the.ball.ACC without to head   it.DAT   anywhere

       b.   # Jón skallaði boltanum   (burt) án þess að skalla hann.
             Jón headed   the.ball.DAT   away without to head   it.ACC

                                                     (Jónsson 2013a:155)

For us, this means that the accusative case is a direct object whereas the dative is

an argument in a PathP. That the accusative case does not have to do with Path

is clearer in (93) below:

(93)   skalla vegginn   / *veggnum
         head   the.wall.ACC / *the.wall..DAT

The dative use is ungrammatical here because that would mean that the wall moves.

    A similar contrast has often been noted in the literature (Barðdal 1993, 2001,

Maling 2002, Svenonius 2002, Jónsson 2013a), cf. the examples below.

(94)   a.   moka snjónum
             shovel the.snow.DAT

       b.   moka tröppurnar
             shovel the.staircase.ACC

(95)   a.   skjóta kúlunni
             shoot   the.ball.DAT

       b.   skjóta fuglinn
             shoot   the.bird.ACC

In the a-examples we see PathPs with dative arguments; the DP objects can move

along a trajectory even though it is not specified here. In the b-examples, on the

other hand, we have direct objects in the accusative case (not a resultative as in

(88b) and (89b) above). Note also that the accusative object is not moving, unlike the datives.

The same contrast in case between PathPs and resultatives is shown below.

(96)   a.   skíta peningum
             shit   money.DAT

       b.   skíta eitthvað   út
             shit   something out
             'make something dirty'

(97)   a.   sparka boltanum
             kick   the.ball.DAT

       b.   sparka manninn   niður
             kick   the.man.ACC down

What the data may indicate is that PathPs are the decisive factor for verbs like *kasta* 'throw', whether they assign dative case or not. It would therefore not be the verb or the root itself that is specified for dative, it is the PathP structure that determines the case properties.

2.4.3   Resultatives

There is a requirement on resultatives such that the resultative phrase is the direct object of the verb (Levin and Rappaport Hovav's 1995 Direct Object Restriction; see also Simpson 1983 and Hoekstra 1988);[19] this has also been framed such that the resultative phrase is predicated of the immediately postverbal DP, but can-

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[19] For potential counterexamples to the Direct Object Restriction, see Wechsler (1997).

not be predicated of a subject or an oblique complement (Levin and Rappaport Hovav 1995:34).[20] I will talk about two of the groups that fall under resultative constructions in English, discussed in Levin and Rappaport Hovav (1995) — for Icelandic.[21]

The first group is called "resultative constructions based on unergative verbs". Usually, of course, unergative verbs (98a) cannot take a direct object (98b–c). However, they can if the object is a resultative small clause (98d). (98d) is an example of a so-called fake reflexive.[22]

(98)   a.   María   öskraði.
              María.NOM screamed
              'María scremed.'

       b.   * María   öskraði   sig.
               María.NOM screamed REFL.ACC

---

[20]My analysis of the Icelandic resultative and path constructions is closer to Hoekstra's (1988) analysis than, e.g., that of Levin and Rappaport Hovav's (1995) or Carrier and Randall's (1992) in that I do not take the postverbal DP to be an argument of the verb (Carrier and Randall 1992 argue that not only is the postverbal DP an argument of the verb but also the result XP).

[21]For further discussion on resultatives in Icelandic, see Whelpton (2011).

[22]The predicate in the small clause is here an adjective but that is not required; in (i), for example, it is a prepositional phrase (*í svefn*).

(i)   Hann   grét   sig   í   svefn.
      he.NOM cried REFL.ACC in sleep
      'He cried himself to sleep.'

c. * María   öskraði hása.
      María.NOM screamed hoarse.ACC

d.   María   öskraði sig   hása.
      María.NOM screamed REFL.ACC hoarse.ACC
      'María screamed herself hoarse.'

The verb *öskra* 'scream' is an unergative verb but the root can, however, participate in resultative constructions. The verb takes a small clause complement in fake reflexives where neither the reflexive pronoun nor its predicate can be left out, as shown in (98b–c). It is noteworthy that the reflexive pronoun and the adjectival predicate are in the accusative case. In line with our analysis above, the adjective establishes an Agree relation with the pronoun before the accusative case is assigned.

We do not have to assume that case is derived differently in resultative constructions from regular active constructions where accusative is assigned just because intransitive verbs seem to participate, which do not in general assign accusative case. Note, however, that we are not dealing with the same verb in some sense in unergative structures and resultatives: the root $\sqrt{\text{ÖSKR}}$ is compatible both with an unergative structure, where Voice does not assigns case, and a resultative structure, where Voice assigns structural case. It would therefore be a misnomer to call *öskra* in a resultative construction an unergative verb. Again we see that a root can be compatible with different structures, where it does not on its own decide whether the Voice will assign case or not — or even whether it is structural or dative case.

It is not only possible to use *öskra* in a resultative construction with fake reflexives, as the example below shows.

(99)   Öskraðu   gat   á   myrkrið.
         scream.you a.hole.ACC into the.darkness
         'Scream so that there will be a hole in the darkness.'
                                       (booktitle by Bubbi Morthens, 2015)

The second group in Levin and Rappaport Hovav 1995 is termed "resultative constructions based on transitive verbs". In (100), Magnús is a handball goalkeeper.

(100)   a.   Magnús varði   boltann   / markið.
             Magnús saved/defended the.ball.ACC / the.goal.ACC
             'Magnús made a save. / Magnús defended the goal.'

        b.   Magnús varði Víkinga   upp í Olís-deildina.
             Magnús saved Víkingar.ACC up   in the.Olís-division
             'Magnús made a save and as a result of that, team Víkingar are
             promoted to the next division.'   (https://goo.gl/jX1jEP)

In (100a), 'the ball' or 'the goal' is the direct object of 'save'. In the attested example in (100b), however, Magnús does not save or defend Víkingar — he makes a save by touching the ball and the result of that is that the team is promoted. This example is similar to examples like *drink the teapot dry* (Levin and Rappaport Hovav 1995, Kratzer 2005) where the agent does not drink the teapot but the tea in it and her/his drinking causes the teapot to become dry.

2.4.4   Syntactic structures of PathPs and resultatives

Focusing on the syntax of PathPs and the resultatives discussed above, I argue that the dative DP in examples like (80a) *Ásdís kastaði spjótinu yfir línuna* 'Ásdís threw the javelin over the line' is in a specifier position of the prepositional phrase, more

specifically in SpecPathP. Voice has a dative probe feature, which results in dative case assignment. In (101) I abstract away from other potential projections within the prepositional phrase, such as PlaceP.

(101)

```
                    VoiceP
              ┌───────┴───────┐
           Voice              vP
           [•v•]         ┌─────┴─────┐
        [∗case_DAT:__∗]  v           √P
                       [•√•]    ┌─────┴─────┐
                              √KAST        PathP
                              [•P•]    ┌─────┴─────┐
                             'throw'  DP          
                                    ┌──┐    Path      PP
                                  spjótinu  [•P•]   ┌──┐
                                'the javelin' [•D•] yfir línuna
                                                   'over the line'
```
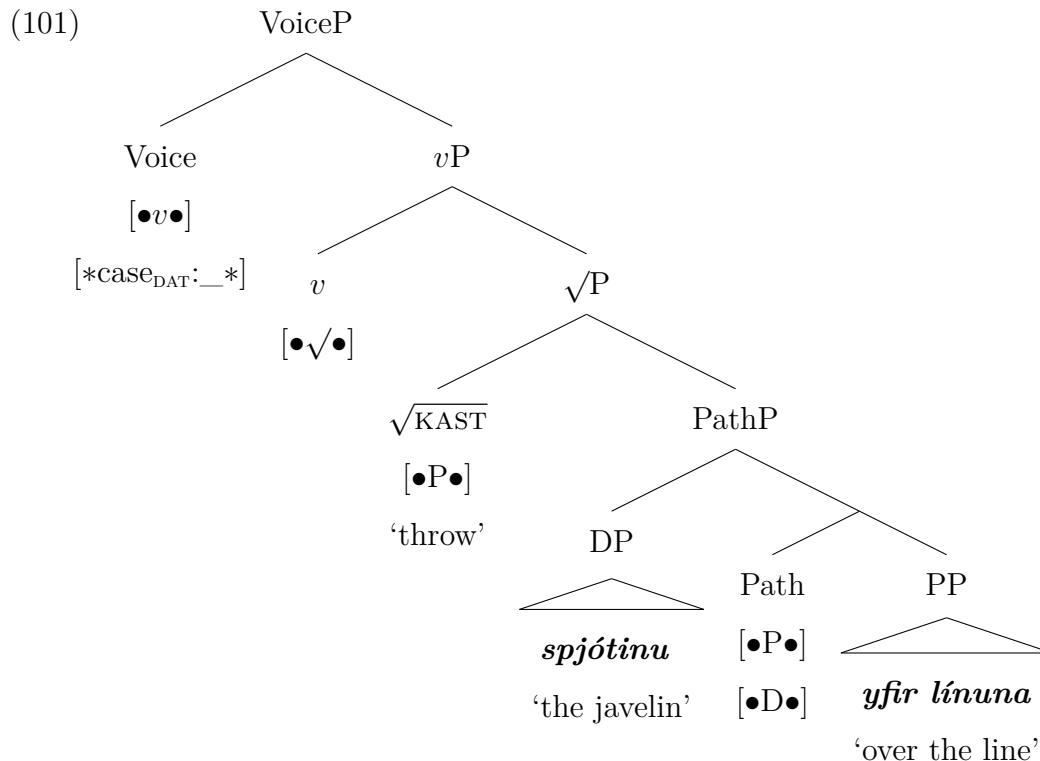
The Path projection is similar to Ramchand's (2008) *proc*P. Adopting her terminology, I take the DP in SpecPathP to be an undergoer, here experiencing the change of location.

In (101), Path relates to directed motion whereas Place would be the location; Path can specify whether Place is, e.g., a goal or a source (see disussion in Svenonius 2010). In (80a), Path gives information about the trajectory of the javelin and specifies that Place denotes a goal.

The example in (84), on the other hand, is a resultative construction: Ásdís throws something (e.g., a javelin) and as a result of that she wins a place in the finals. That is, as a result of her throwing, she is in the finals.

(102)

VoiceP
- DP
- Voice [●v●] [●D●] [∗case_STR:__∗]
- vP
  - v [●√●]
  - √P
    - √KAST [●R●] 'throw'
    - RP
      - DP *sig* 'REFL.ACC'
      - R'
        - R [●P●]
        - PP
          - P [●D●] *í* 'into'
          - DP *úrslitin* 'the finals'
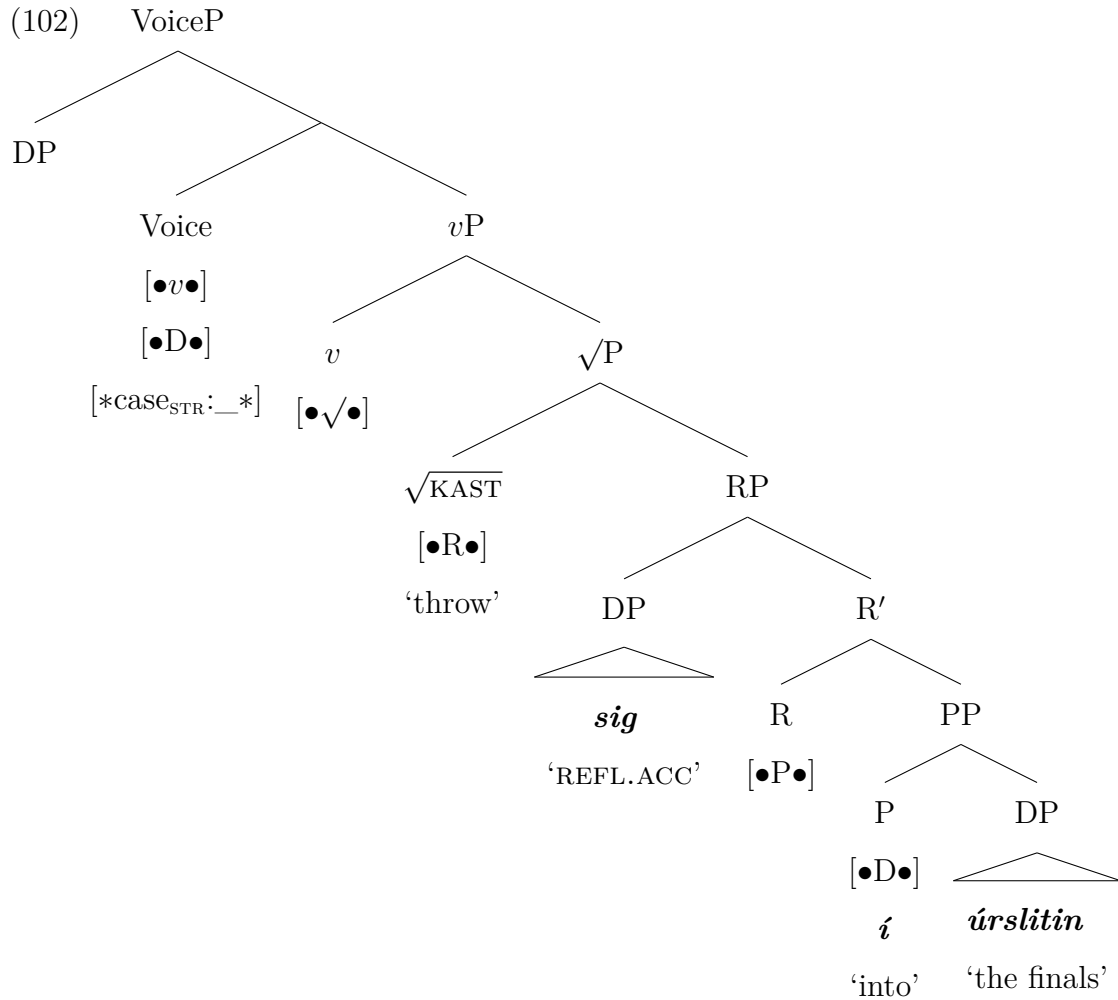
This is an example of a fake reflexive resultative. The syntactic structure is different from (101) in that instead of a PathP, we now have a projection which I am calling R(esultative)P. RP does not make any demands regarding case assignment.

Therefore Voice has simply a structural case feature hinging on there being a filled specifier of Voice (cf. the discussion on Burzio's Generalization in §2.2.3.3.3).

2.4.5 The semantics of PathPs and resultatives

Svenonius (2002) makes an interesting attempt to account for dative case licensing in Icelandic, see below:

(103)   In a syntactic context α representing an event x composed of subevents y and z, dative case is licensed in α iff the temporal relationship of y and z is not total overlap.   (Svenonius 2002:209)

Verbs of ballistic motion, such as *kasta* 'throw', fit nicely with this generalization (Svenonius 2002:211). *Kasta*, as in *kasta boltanum í markið* 'throw the ball into the goal', has a subevent of a person making a throw and another subevent where the ball moves towards and into the goal. These two subevents do not overlap and the prediction, which is borne out, is that this results in dative case licensing.

However, the generalization seems to account only for a subset of datives. For example, verbs like *hrósa* 'praise' do not seem to fit with this generalizaiton, as far as I can see. Svenonius's insight thus seems to bear on certain verbs of motion which are compatible with PathPs. A few such verbs are shown below:

(104)   *fleygja* 'throw', *henda* 'throw', *kasta* 'throw', *varpa* 'throw', *skutla, snara, sparka* 'kick', *spyrna* 'kick (a ball)', *þruma, þrusa, velta* 'roll', *rúlla* 'roll', *mjaka* 'budge', *ýta* 'push', *skyrpa* 'spit'

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We want to derive semantically the structures captured by Svenonius's general-
ization, i.e., PathPs, as well as resultatives. In order to do that, it is important to
distinguish between direct and indirect causation. When Ásdís throws the javelin
over the line, it is crucial that she holds the javelin and then throws it. The sen-
tence cannot mean that she threw something else, and as a result of that throwing
event, the javelin went over the line — that would be indirect causation and would
amount to the resultative reading we are going for where Ásdís throws something
(here the javelin) and as a result of that she is in the finals.

To account for the difference between the two, I follow Kratzer (2005), who
distinguishes between events of causing other events (direct causation) and events
that cause other events (see also Tatevosov and Lyutikova 2014).[23]

(105)   a.   ***Events of causing other events***

            An event c is an event of causing an event e iff c is the sum of all the
            members of some causal chain with maximal element e.

        b.   ***Events that cause other events***

            An event c is an event that causes an event e iff c is the minimal
            element of some causal chain with maximal element e.

                                                              (Kratzer 2005:197)

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[23]Elsewhere in the dissertation I only use CAUSE, not making a distinction between CAUSE and
CAUSING where causation is involved.

We use these to account for the difference between the semantics of (80a) and (84). In (106) we show the proposed semantic derivation of (80a) *Ásdís kastaði spjótinu yfir línuna.*

(106)

vP
λe.∃e′.∃s[throwing(e)
∧ [causing(e+e′)(s)
∧ over.the.line(javelin)(s)]]

v
λe[throwing(e)]
√KAST v
throw

PathP
λe.∃e′.∃s[change-of-location(e)
∧ [causing(e+e′)(s)
∧ over.the.line(javelin)(s)]]

DP
the javelin

Path′

Path
λp$_{\langle e,st\rangle}$.λx.λe.∃e′.∃s[ch.-of-loc.(e)
∧ causing(e+e′)(s)
∧ over.the.line(x)(s)]]

PP
λx.λs[over.the.line(x)(s)]
over the line
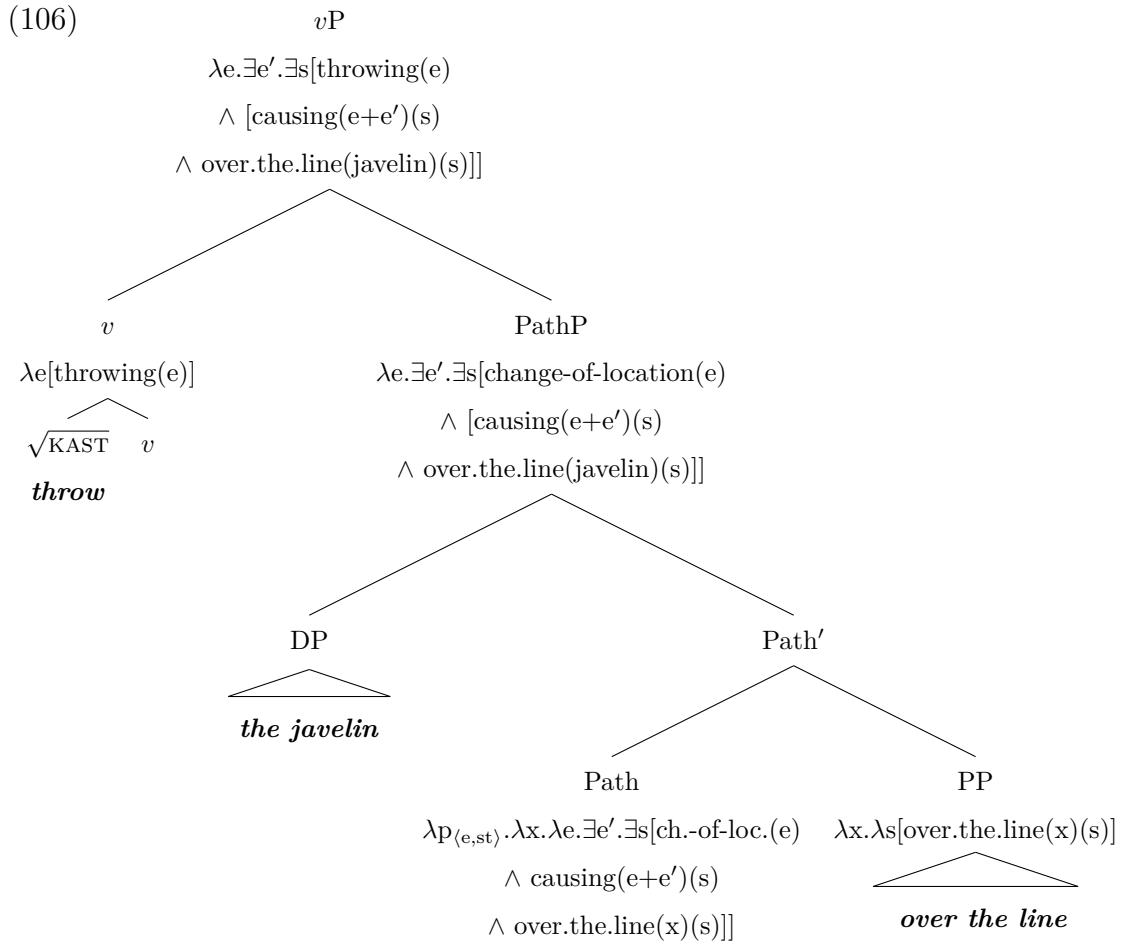
In this example, we have direct causation, a causing event (rather than a caused event) where e+e′ is the mereological sum of the two events involved. This way we exclude other events having effect on the outcome. Therefore, the javelin must be thrown in the example above, that is, the javelin is a part of the throwing event

(we could have expected something else to have been thrown and as a result of that the javelin would change location).

In (107), we see the structure for (84) *Ásdís kastaði sig í úrslit.*

(107)

vP

$\lambda e.[\text{throwing}(e)$
$\wedge \exists s[\text{cause}(e)(s)$
$\wedge \text{in.the.finals}(\text{sig})(s)]]$

v

$\lambda e[\text{throwing}(e)]$

$\sqrt{\text{KAST}}$ v

throw

RP

$\lambda e.[\text{change-of-state}(e)$
$\wedge \exists s[\text{cause}(e)(s)$
$\wedge \text{in.the.finals}(\text{sig})(s)]]$

DP

sig

R′

R

$\lambda p_{\langle e,\langle s,t\rangle\rangle}.\lambda x.\lambda e.$
$[\text{change-of-state}(e)$
$\wedge \exists s[\text{cause}(e)(s)$
$\wedge p(x)(s)]]$

PP

$\lambda x.\lambda s[\text{into}(x)(\text{the finals})(s)]$

P

into

DP

the finals

In this example, we have an indirect causation, CAUSE, which allows for intermediate events. That is, even though a throwing event causes Ásdís' state of being in the finals, other intermediate events are not excluded, unlike (106) above.

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2.5 Chapter summary

We argued in this chapter for an approach that places case assignment in syntax. In §2.2 we derived case via derivational features, that is, structure-building features (Merge) and probe features (Agree). We also made an important distinction between case assigned via Agree and case assigned via Merge. We furthermore argued that two types of datives are found in Icelandic, quirky case (Agree) and inherent case (Merge).

Moreover, we discussed timing of derivational operations in §2.3. We argued that there is a crucial difference between Agree and Merge with respect to when these operations take effect: Merge does so immediately but feature values valued under Agree are not calculated until a phase is sent to Spell-Out.

Finally, we discussed case assignment in resultative phrases and PathPs in §2.4. We argued that dative can be assigned by Voice to a DP in specifier position, more precisely in SpecPathP.

Chapter 3

DP-internal agreement

3.1 Introduction

In Chapter 2 we focused on verbal agreement, including participial agreement, with structure-building features and probe features driving the derivation. We now turn our attention to DP-internal agreement, often referred to as (nominal) concord. We demonstrate that the same feature driven mechanisms are needed DP-internally, although I argue that structure-building features usually drive the derivation.[1] This is important as there have been many different approaches to these matters, some claiming that we can use the same approach for both predicate agreement and DP-internal agreement, others saying that we need two different operations.

There are, however, several differences between DP-internal agreement and verbal agreement that might suggest we need different mechanisms (see larger dis-

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[1]Chomsky (2001:n. 6 on p. 42) mentions concord when he discusses Agree: "There is presumably a similar but distinct agreement relation, Concord, involving merge alone."

cussion on this in Norris 2014:100–103). First, subject-verb Agree will typically only show agreement on a finite verb. Nominal concord can be realized in multiple places, on the other hand. Second, subject-verb agreement will typically be a relation between a probing head and a DP, although Agree can also be between two heads on the spine. Concord, however, can show up in more types of relations, which include adjuncts. Third, an important difference between nominal concord and Agree is that the two do not deal with all the same features. Whereas both involve gender and number, concord deals with case also whereas verbal agreement deals with person.

Let us look at DP-internal agreement in Icelandic, a language that shows robust DP-internal concord.

(1) **_Icelandic_**

    a.   Fjórir   stórir   bjórar   voru í ísskápnum.
        four.M.NOM.PL big.M.NOM.PL beer.M.NOM.PL were in the.fridge

    b.   Ég   drakk fjóra   stóra   bjóra.
        I.NOM drank four.M.ACC.PL big.M.ACC.PL beer.M.ACC.PL

(2) a.   Ein   lítil   bjórflaska   var í
        one.F.NOM.SG little.F.NOM.SG beer.bottle.F.SG.NOM was in

        ísskápnum.
        the.fridge

    b.   Ég opnaði eina   litla   bjórflösku.
        I   opened one.F.ACC.SG litle.F.ACC.SG beer.bottle.F.ACC.SG

In the examples above all the elements exhibit agreement with respect to case, gender and number (see H.Á. Sigurðsson 2006b, Norris 2012). There are no agreement

mismatches here, i.e., no mixed or hybrid agreement. However, even though we usually do not find agreement mismatches DP-internally, there are various such examples discussed in the literature — such mismatches are challenging to any analysis of agreement. We will see various such mismatches in §3.4.

Two important issues arise in this domain. First, it is important to figure out whether we need a different mechanism from Agree to derive DP-internal agreement. Because of the different properties between verbal agreement and DP-internal agreement, some approaches introduce a mechanism for concord different from verbal Agree. Norris (2012, 2014) proposes Morphological Feature Copying for the theory of concord whereas Baier (2015) argues for a split theory of concord, involving both Agree and morphological Feature Copying. I will argue, however, that concord is derived primarily through Merge (structure-building features) but also Agree (probe features).

The second issue regards when and where in the derivation it takes place, in syntax (Carstens 2000, Danon 2011, 2013, Pesetsky 2013, Toosarvandani and van Urk 2014, Landau 2016) or postsyntactically, at the Morphological Component (Norris 2014, H.Á. Sigurðsson 2015). I argue that it takes place in syntax.

The chapter is structured as follows. We discuss the locus of different φ-features in §3.2 and in §3.3 we discuss how we derive DP-internal agreement via Merge. In §3.4 we take a closer look at the derivation of DP-internal agreement, in various examples that show agreement mismatches.

3.2 The Locus of DP-Internal Features

We now investigate where person, number and gender, as well as definiteness, originate within the DP, starting with number and gender.

3.2.1 Number and gender

It is not a straightforward task pinpointing where exactly number and gender originate in the noun phrase. We can start by asking whether they originate as low as the root itself.

Icelandic suggests that gender is located low within the DP but not as low as the root. For example, Ingason and E.F. Sigurðsson (2015) show that agent nominals with *-and* as the exponent of *n* nominalize verbal structure. These are always masculine. Note that nInfl in (3b) denotes an inflectional exponent.

(3) a. leik-and-i
         play-AND-M.NOM.SG
         'actor'

     b.

         (Ingason and E.F. Sigurðsson 2015)

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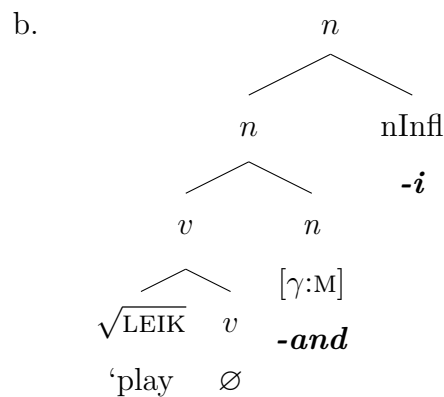
If the root would specify the gender, then masculine would have to percolate up via the v-layer. This would also assume that the root would be phase local to n, which is ruled out by the Phase Impenetrability Condition (Chomsky 2001) if category defining heads, here v and n, are phase heads. I therefore assume that gender is located on n (see also, e.g., Julien 2005, Ingason 2016).

Next we consider where to locate the number feature: on n, a dedicated number projection Num, or on D, to name a few obvious candidates. For Icelandic at least, the answer is not clear-cut, as the inflectional exponent is a dissociated morpheme, a realization of more than one feature. That is, there is not a one-to-one morphological realization of gender, number and case. I will, however, rule out that number is located on n, the same head as gender. Whereas most nominalizers in Icelandic specify gender, they do not specify a number value. Take for example the nominalizers -*and* and -*un*. A noun formed with -*un* is always marked for the same gender, feminine, but number and case may differ. A noun with the nominalizer -*and* is always masculine but its number and case marking can differ, depending on the context (see also discussion in Ingason 2016).[2] I therefore take number to

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[2]Note that there is also a feminine nominalizer -*and* (or -*andi*), see (i).

(i)   hníg-and-i,   stíg-and-i
        fall-AND-F.NOM.SG rise-AND-F.NOM.SG

It has a different function as it is not an agent nominalizer. I treat it as a different nominalizing suffix even though it has the same realization as the agent nominalizer -*and*.

originate higher in the structure than gender, in Num (see a similar argumentation in Julien 2005:2–10 for a Num layer).[3]

(4) a.

		'entertainment'
SG	NOM	skemmt-un-∅
	ACC	skemmt-un-∅
	DAT	skemmt-un-∅
	GEN	skemmt-un-ar
PL	NOM	skemmt-an-ir
	ACC	skemmt-an-ir
	DAT	skemmt-un-um
	GEN	skemmt-an-a

b.

		'actor'
SG	NOM	leik-and-i
	ACC	leik-and-a
	DAT	leik-and-a
	GEN	leik-and-a
PL	NOM	leik-end-ur
	ACC	leik-end-ur
	DAT	leik-end-um
	GEN	leik-end-a

(Ingason 2016:183)

Note, however, that the nominalizers above are different in the plural from the singular. This could suggest that number originates on the same head as gender. I, however, take the suffix in these examples to be a realization of a number head which bears a masculine gender feature originating on n. The tree below is a plural version of the singular in (3) above.[4]

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[3]Like Kramer (2014) for Amharic, see §3.4.4, Koopman (2003, 2006) argues that gender originates lower than number and case in Maasai — I will not go into her arguments here.

[4]The tree in (5b) shows how n and Num share their features through Merge. I will discuss how I derive DP-internal agreement in §3.3.

(5) a. leik-end-ur
        play-AND-M.NOM.PL
        'actors'

   b.

```
                        Num
                       /    \
                    Num      nInfl
                   /   \      -ur
                  n     Num
                 / \   [∘γ:M∘]
                v   n  [#:PL]
               /\  [γ:M]  -end
         √LEIK  v [∘#:PL∘]
         'play' ∅
```
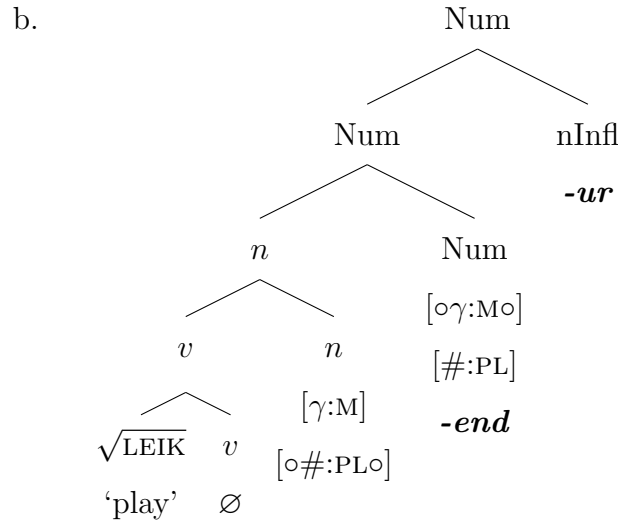
I have added a Num layer in the tree above. It is difficult to determine exactly where above *n* the number feature originates, however. For Hebrew, Ritter (1991, 1993) argues there is a separate Num projection, encoding number, which is higher than N, where gender originates. For Romance languages, however, Ritter (1993) argues that gender is located on Num. I have adopted the Num layer here, including for Icelandic, although it would also be possible to locate number on D (see Ingason 2016) in languages where there does not seem to be specific empirical evidence for a special Num layer.

3.2.2 Definiteness

Following a long line of work, going back to Abney (1987), maximal noun phrases are DPs (determiner phrases). In a DP like *the car* in English, the definite article *the* is the exponent of D; we will assume that definiteness is encoded on that head. Icelandic has both a free-standing definite article *hinn* (6a) and a suffixed article *-inn* (6b) (see, e.g., H.Á. Sigurðsson 1993b, 2006b, Pfaff 2015, Ingason 2016 for discussion).

(6) a. hinn   fullkomn-i   bíll
       the.M.NOM.SG perfect-WK.M.NOM.SG car.M.NOM.SG
       'the perfect car'

     b. rauð-i   bíll-inn
       red-WK.M.NOM.SG car.M.NOM.SG-the.M.NOM.SG
       'the red car'   (Pfaff 2015:1)

In addition to the determiner (the definite article), the adjective in both of these examples gets inflection which traditionally is called weak, which encodes definiteness. When the the noun is indefinite, the adjective has strong inflection, reflecting indefiniteness.

(7) a. fullkom-inn   bíll
       perfect-STR.M.NOM.SG car.M.NOM.SG
       'a perfect car'

     b. rauð-ur   bíll
       red-STR.M.NOM.SG car.M.NOM.SG
       'a red car'

Indefinite D does not have an overt exponent, however, as the examples above demonstrate.

3.2.3 Person

Person is usually not relevant when we talk about DP-internal agreement as adjectives and other modifiers do not have a person feature to be valued. As pronouns are usually regarded as DPs (see, however, e.g., Déchaine and Wiltschko 2002), it might seem straightforward to place person on D (following, e.g., Ritter 1995). I argue in §4.4.2, however, that inherently reflexive pronouns in Icelandic, including first and second person reflexive pronouns, are not DPs, but structurally smaller (I refer to them there as φPs). In the following example, *ég* and *þú* are DPs but inherently reflexive *mig* and *þig* are smaller than DPs.

(8) a. Ég   montaði mig   af þessu.
       I.NOM boasted me.ACC of this
       'I boasted of/about this.'

    b. Þú   montaðir þig   af þessu.
       you.NOM boasted   you.ACC of this
       'You boasted of/about this.'

It may therefore be the case that person originates lower than D. For present purposes, however, we assume that the person feature does originate on D.

3.2.4 Case

When we discuss at least gender, number and definiteness of DPs, we are usually dealing with features that enter the derivation valued and we are asking where these valued features originate in the structure. DPs enter the derivation with unvalued case features, on the other hand. A DP can get case from a functional head outside it, meaning that case must be located high in the structure, although the case feature must be able to spread down.

In Chapter 2, we discussed case assignment, both by probing features on functional heads (Agree) and by structure-building features (Merge). These operate on the highest layer of the DP, i.e., D itself.

In some cases, there has to be a way for case to spread downwards. In Icelandic, for example, case as well as φ-features can be realized in more than one place DP-internally.

(9) a. hest-ur-inn,   hest-∅-inn,
         horse-M.NOM.SG-DEF.M.NOM.SG horse-M.ACC.SG-DEF.M.ACC.SG

         hest-i-num,   hest-s-ins
         horse-M.DAT.SG-DEF.M.DAT.SG   horse-M.GEN.SG-DEF.M.GEN.SG

     b. hest-ar-nir,   hest-a-na,
         horse-M.NOM.PL-DEF.M.NOM.PL horse-M.ACC.PL-DEF.M.ACC.PL

         hest-u-num,   hest-a-nna
         horse-M.DAT.PL-DEF.M.DAT.PL   horse-M.GEN.PL-DEF.M.GEN.PL

c. búð-ir-nar,   búð-ir-nar,
    store-F.NOM.PL-DEF.F.NOM.PL store-F.ACC.PL-DEF.F.ACC.PL

    búð-u-num,   búð-a-nna
    store-F.DAT.PL-DEF.F.DAT.PL store-F.GEN.PL-DEF.F.GEN.PL

The definite DPs in (9) (repeated from (16) in §1.3) show that case, gender and number are sometimes realized on two dissociated morphemes.

3.2.5 Interim summary

To summarize, I assume that n is the locus of grammatical gender and Num the locus of number. Definiteness and person originate higher, on D. Case, which does not enter the derivation valued, is posited on D and spreads downward.

We will next look at how we derive DP-internal agreement.

3.3 Deriving DP-internal agreement:

Feature sharing via Merge

It is notable that when adjectives and other modifiers merge with DPs in Icelandic, they never show any feature mismatches the way we find for predicative structure. This may suggest that DP-internal agreement is derived via Merge rather than Agree.

It is possible to derive DP-internal agreement with Agree in syntax, which is what Danon (2011) does. Also, Ingason and E.F. Sigurðsson (2017 [forthcoming]) suggest that dissociated AGR morphemes probe for valuation in the Morphological

Component (MC). That is, they make Agree available at MC also. I will propose a different approach: Feature sharing via Merge. I start by giving a relatively simple example, before moving on to more complex data. In the following I focus on number and gender, ignoring for now case and definiteness.

(10) a. gul-ur   bíl-l
          yellow-STR.M.NOM.SG car-M.NOM.SG
          'a yellow car'

      b. gul-ir   bíl-ar
          yellow-STR.M.NOM.PL car-M.NOM.PL
          'yellow cars'

When a noun like 'cars' is built, Num merges with n. Num has only one derivational feature, a structure-building feature selecting for n. However, as Num has an unvalued gender feature and n has a valued gender feature, n discharges its value onto Num's gender feature when Num and n merge. At the same time, Num's valued number feature is discharged onto n. When Merge is complete, Num's feature values percolate up and are visible for further operations. To make it clear where a feature gets its value from, I subscript the head name in the trees in (11b), (12b) and (13b). For example, $\circ\gamma$:M$\circ_n$ means that a masculine gender value came from n.

(11)   a.   bílar
            cars.M.NOM.PL

   b.   NumP   →   NumP

                                  $[\circ\gamma\text{:}\textsc{m}\circ_n]$

            Num n $[\#\text{:}\textsc{pl}]$

            $[\bullet n\bullet]$ $[\gamma\text{:}\textsc{m}]$

            $[\gamma\text{:}\_]$ $[\#\text{:}\_]$ Num n

            $[\#\text{:}\textsc{pl}]$ $[\bullet n\bullet]$ $[\gamma\text{:}\textsc{m}]$

                               $[\circ\gamma\text{:}\textsc{m}\circ_n]$ $[\circ\#\text{:}\textsc{pl}\circ_{\text{Num}}]$

                               $[\#\text{:}\textsc{pl}]$

This is feature sharing via Merge: n values Num's unvalued gender feature which in turn can value an unvalued gender feature on the next layer up that merges with Num.

I take restrictive adjectives to adjoin low in the structure, to nP (see Ingason 2016, Ingason and E.F. Sigurðsson 2017 [forthcoming]). This raises the question why the adjective shows not only gender agreement but also number agreement — recall that n has a valued gender feature but an unvalued number feature.

(12)   a.   gulir   bílar
            yellow.M.NOM.PL cars.M.NOM.PL

b.

nP   → nP   →   NumP

aP nP aP nP   Num nP

[●n●] [γ:M]   [●n●] [γ:M]   [●n●]   [γ:M]

[γ:__] [#:__] [γ:M∘$_n$] [#:__] [∘γ:M∘$_n$]   [∘#:PL∘$_{Num}$]

[#:__]   [∘#:__∘$_n$]   [#:PL] aP nP

                                                  [∘γ:M∘$_n$]   [γ:M]

                                                  [∘#:PL∘$_n$] [∘#:PL∘$_{Num}$]

The problem is resolved if we apply Feature Sharing via Merge: Even though n has no number feature value for a, n discharges its feature non-value such that a chain is created, meaning that whatever feature value n will eventually get, a will get that value also.

Even though this is a different mechanism from Feature Copying (Norris 2014), the result will be the same, multiple exponense of certain features DP-internally. What the current approach does is that it distributes features through indices. Such approaches have often been discussed in the literature, see, e.g., Chomsky (1981:174–175) for Case assignment to the index of an NP.

In the example above, the restrictive adjective 'yellow' is an adjunct. If we would adopt Late Adjunction (Lebeaux 1988), we might argue that n already has

its features valued by the time the adjective merges with the structure and therefore we would not need to create a feature chain via Merge as n would directly value a's unvalued features. However, this would not work for evaluative adjectives, assuming they are merged as specifiers,[5] following Ingason (2016). In that case, we would need the mechanism in (12b).

Next we concentrate on the definiteness marking on the adjective (the weak inflection), as it creates the same kind of a problem as number marking on an adjective, i.e., even though the adjective merges below the locus of definiteness, it still receives a definiteness value in DP-internal agreement.

(13)   a.   gulu   bílar-nir
              yellow.WK.M.NOM.PL cars.M.NOM.PL-DEF.M.NOM.PL

b.

$$
\begin{array}{c}
\text{DP} \\
\swarrow \qquad \searrow \\
\text{D} \qquad\qquad \text{NumP} \\
[\bullet\text{Num}\bullet] \\
[\circ\gamma{:}\textsc{m}\circ_n] \qquad \text{Num} \qquad\qquad n\text{P} \\
[\circ\#{:}\textsc{pl}\circ_{\text{Num}}] \qquad [\bullet n\bullet] \\
[\text{Def:}+] \qquad [\circ\gamma{:}\textsc{m}\circ_n] \qquad a\text{P} \qquad\qquad n\text{P} \\
[\#{:}\textsc{pl}] \qquad [\bullet n\bullet] \qquad [\gamma{:}\textsc{m}] \\
[\circ\text{Def:}+\circ_{\text{D}}] \quad [\circ\gamma{:}\textsc{m}\circ_n] \quad [\circ\#{:}\textsc{pl}\circ_{\text{Num}}] \\
[\circ\#{:}\textsc{pl}\circ_n] \quad [\circ\text{Def:}+\circ_{\text{Num}}] \\
[\circ\text{Def:}+\circ_n]
\end{array}
$$

_____
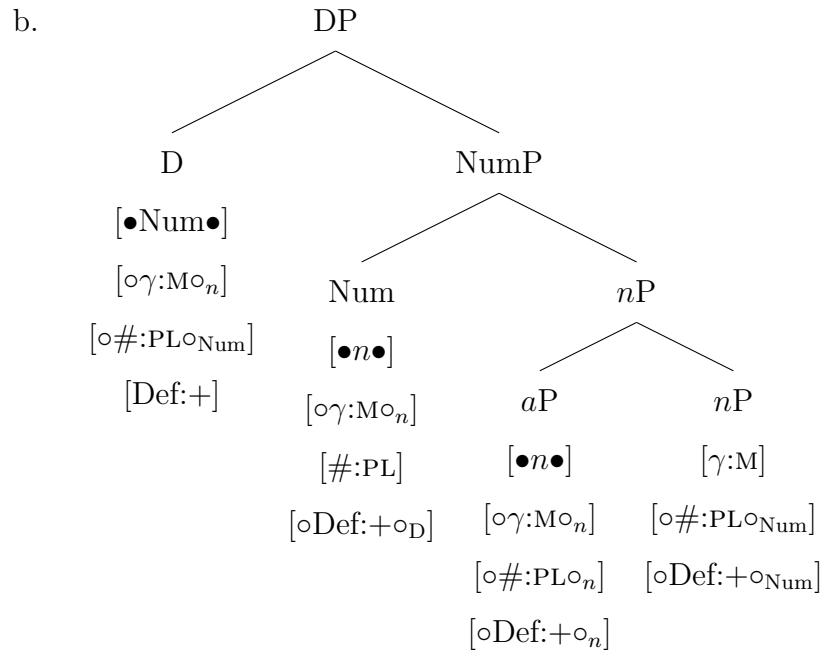
[5]Unless we would argue for late merge of specifiers.

As can be seen here, we derive definiteness marking on the adjective in the same way as number above.

3.4   Agreement mismatches

We have now argued for an account of DP-internal agreement, termed Feature Sharing via Merge. We have not addressed various agreement mismatches, both DP-internally and in the relationship between DP-internal agreement and clausal agreement. The proposed system needs to be able to handle mismatches of various sorts. The types of mismatches that we will look at are as follows:

(14)   i. DP-internal agreement mismatch.

    ii. Agreement mismatch between a DP and an outside functional head.

    iii. Mismatch across domains (clauses, phases...).

In some cases, we see in the same clause mismatches of more than one type, DP-internally and between the DP and an outside element, or even a mismatch between the DP and two separate DP-external probes (for which the probe's goal is the DP). In such cases, four patterns are in theory available, but generally at most three grammatical (Pesetsky 2013, Landau 2016).

3.4.1 Syntactic and semantic agreement

DP-internal agreement is generally robust cross-linguistically whereas predicative and verbal agreement often show agreement mismatches. Consider the Icelandic noun *ráðherra* 'minister' in Icelandic. When it is modified DP-internally by an adjective as in (15), the adjective will obligatorily show masculine agreement whether or not the minister is a male or a female. We refer to this as syntactic agreement; *ráðherra* is inherently masculine and when it triggers syntactic agreement on an adjective, the outcome is masculine.

(15)　a.　gamall　　　ráðherra
　　　　　old.M.NOM.SG minister.M.NOM.SG

　　　b. * gömul　　　ráðherra
　　　　　old.F.NOM.SG minister.M.NOM.SG

When the adjective is in a predicative position, on the other hand, agreement mismatches (or mixed or hybrid agreement) may arise (see, e.g., Helgadóttir 2011, H.Á. Sigurðsson 2016a, Þórhallsdóttir 2015b).[6]

———————————————

[6]Various examples of such agreement mismatches can be found by simple google search.

(i)　a.　[...] og　þá　telur　dómurinn sannað að　**brotaþoli**　　hafi verið mjög
　　　　　and then believes the.court　proved that victim.M.NOM.SG has　been　very

　　　　ölvuð　　　　er　atvik　máls　gerðust.
　　　　drunk.F.NOM.SG when incidents of.case happened

　　　　'... and the court believes it to have been proved that the victim (masc.) was very drunk (fem.) when the incidents of the case took place.'　(https://goo.gl/Oc9s3v)

　　　b.　**Krakkarnir**　　eru mjög **glöð**　　　[...]
　　　　the.kids.M.NOM.PL are very　happy.N.NOM.PL

　　　　'The kids (masc.) are very happy (neut.) ...'　　　　(https://goo.gl/pLBsYd)

(16) a. Ráðherra-nn   er gamall.
          minister.M.NOM.SG-M.NOM.SG is old.M.SG.NOM

      b. % Ráðherra-nn   er gömul.
          minister.M.NOM.SG-M.NOM.SG is old.F.SG.NOM

Ráðherra is, as already noted, inherently masculine. That is seen in (16) by the fact that the suffixed, definite article invariably exhibits masculine agreement with *ráðherra*. In (16b), however, this noun triggers feminine agreement on the predicative adjective. This is grammatical for some speakers, but only if the referent is female. The agreement shown by the adjective is based on the reference of the DP (a female minister) and we therefore refer to this as semantic agreement. *Ráðherra* in (16a) triggers masculine agreement but that does not necessarily mean that the minister is a male. That is, a masculine noun which refers to a female can trigger masculine agreement on the adjective in predicative position in Icelandic.

Let us take a look at another example of semantic agreement in Icelandic in (17).

(17) a. % Foreldrar   mínir   eru skilin.
          parents.M.NOM.PL mine.M.NOM.PL are divorced.N.NOM.PL

          'My parents (masc.) are divorced (neut.).'
                                                      (Þórhallsdóttir 2015a:273)

----

      c. Fyrrum **markvörður**   Þórs/KA **tilnefnd**   sem **sú**   **besta** í
          former goal.keeper.M.NOM.SG Þór/KA nominated.F.NOM.SG as the.F best.F in

          Norður- og   Mið-Ameríku
          North- and Mid-America

          'Former goal keeper (masc.) of team Þór/KA nominated (fem.) as the (fem.) best
          (fem.) in North- and Mid-America.'   (https://goo.gl/pGXVQO)

b. Mamma og pabbi eru skilin.
mom.F.NOM.SG and dadM.NOM.SG are divorced.N.NOM.PL

'Mom (fem.) and dad (masc.) are divorced (neut.).'

c. Skeið-in og
spoon.F.NOM.SG-DEF.F.NOM.SG and

gaffall-inn eru týnd.
fork.M.NOM.SG-DEF.M.NOM.SG are lost.N.NOM.SG

'The spoon (fem.) and the fork (masc.) are lost (neut.).'

The plural *foreldrar* 'parents' is masculine and triggers masculine syntactic agreement on the possessive pronoun but neuter on the participle in (17a). In Icelandic, a conjoined phrase triggers neuter agreement if it consists of nouns that are not both (or all) of the same morphological gender, as shown in (17b–c). Very often, 'parents' refer to a man and a woman. The neuter on the participle suggests that the parents are a man (Dad) and a woman (Mom). If the parents had been two women, we would have expected either masculine agreement (because *foreldrar* is formally masculine) or feminine semantic agreement, but not neuter agreement.

A similar contrast between DP-internal and predicative agreement is seen in various other languages, such as Serbo-Croatian (see, e.g., Wechsler and Zlatić 2000, 2003, Corbett 2006).

(18) ***Serbo-Croatian***

Ta dobra deca su došla.
that.F.SG good.F.SG children(F.SG) AUX.3.PL come-PPRT.N.PL

'Those good children came.' (Wechsler and Zlatić 2000:816)

In the example above, *deca* 'children' is a feminine, singular noun which triggers feminine, singular concord agreement but neuter, plural predicative agreement.

British English also shows a contrast between syntactic agreement DP-internally and semantic agreement in predicative position. This is shown for the noun *committee* below (Perlmutter 1972, Corbett 1979).

(19)   ***British English***

    a.   The committee has decided.

    b.   The committee have decided.   (Corbett 1979:203)

(20)   a.   This committee sat late.

    b.   * These committee sat late.   (Corbett 1979:203)

Morphologically, *committee* can be argued to be singular as it has no plural marking (such as plural *-s* as in *committees*). Therefore the singular agreement on *has* in (19a) is expected. This is syntactic agreement. *Committee* is a collective noun, consisting of more than member. This meaning seems to be able to trigger plural agreement on the verb, see *have* in (19b), even though formally the noun is singular. This is semantic agreement.

An element in attributive position, on the other hand, cannot show semantic agreement in English. (20b) shows this, where a plural determiner *these* is incompatible with singular *committee*. This shows that there is a difference in this regard between DP-internal and predicative agreement in British English.

Even though many languages do not allow DP-internal agreement mismatches, mixed agreement within the DP is found in some languages. In (21a) below we see

gender mismatch in Russian DP-internally and in (21b) we see number mismatch in Hebrew.

(21)   a.   ***Russian***

        ? U   menja očen' interesn-aja   nov-yj
        by me   very interesting-F.NOM.SG new.M.NOM.SG

        vrač
        doctor.NOM.SG

        'I have a very interesting new (female) doctor.'   (Pesetsky 2013:38)

   b.   ***Hebrew***

        ha-be'alim ha-pratiyim   ha-axaron šel ha-tmuna   haya
        the-owner the-private.PL the-last.SG of the-painting was.3SG

        ha-psixo'analitika'i Jacques Lacan.
        the-psychoanalyst   Jacques Lacan

        'The last private owner of the painting was the psychoanalyst
        Jacques Lacan.'   (Landau 2016:1005)

In the Russian example, the higher adjective, *interesn-aja* 'interesting', exhibits feminine agreement whereas the lower adjective, *nov-yj* 'new', exhibits masculine agreement, even though both of them modify the noun *vrač* 'doctor'. We see a similar pattern in the Hebrew example, where one of the adjectives, *ha-pratiyim* 'private', shows plural agreement whereas the other, *ha-axaron* 'last', shows singular agreement even though both of them modify the same element, *ha-be'alim* 'the owner'.

3.4.2 More than one feature set

Agreement mismatches between a feature on an element in the DP and a modifier, verb or a predicate is sometimes taken to suggest that more than one feature set is needed to account for the agreement features DP-internally. The implementation of this varies quite a bit in different approaches. In Head-driven Phrase Structure Grammar (HPSG), CONCORD and INDEX features trigger agreement on agreement targets. Concord features trigger agreement DP-internally, on elements that are not referential, such as adjectives, whereas INDEX features trigger agreement on elements that are "referentially anchored" (Wechsler and Zlatić 2000); INDEX agreement has to do with, e.g., bound pronouns and often with subject-verb agreement. Danon (2013) and Landau (2016) adopt INDEX and CONCORD features and translate the system into Minimalism.

Pesetsky (2013) argues, when accounting for Russian gender mismatch, that the same gender morpheme can be merged in different places in the tree, resulting in feminine agreement. H.Á. Sigurðsson (2016a) refers to gender feature mismatches as conflicting n and D gender, which highlights that gender features can have different loci within the DP.

Person mismatch within a DP, often referred to as imposters, has been argued to reflect a shell and a core of a DP (Collins and Postal 2012). These represent more than one feature set. An imposter like *The present authors*, which has a 1st person

reference even though it is formally 3rd person, has a DP shell and a pronominal 1st person core on such an analysis.

This brief overview is intended to show that these approaches to feature mismatches all have a different way of implementing two different values of the same feature or simply two different feature sets, where one is a formal or grammatical feature, triggering what I call syntactic agreement, and the other reflects the referent, triggering what I call semantic agreement. Broadly speaking, syntactic agreement features correspond to CONCORD features and semantic agreement features correspond to INDEX features. A question that arises is where syntactic and semantic agreement features are located. In general, it seems to be the case that the former originate lower than the latter. I will argue that, e.g., gender can have two different loci, but two valued gender features cannot be simultaneously present on a single head.

My approach is as follows. I take a single head to be able to carry only a single value of each feature, that is, a single head cannot carry two feature sets. Both syntactic and semantic agreement features are visible in the syntax. Syntactic agreement features originate on different heads within the DP, such as n and Num, whereas semantic agreement features are introduced when there is a L(ogophoric)-layer in the structure. This triggers agreement valuation by so-called context linkers (logophoric linkers) which are found at least at phase edges.

Before we look at how to derive syntactic and semantic agreement, we will discuss context linkers, which are crucial for the current account.

3.4.3 Context linkers

According to H.Á. Sigurðsson's (2004a, 2004b, 2010, 2011a, 2014) theory, "the C-domain contains silent but probing (i.e., syntactically active) "speaker" and "hearer" features" (H.Á. Sigurðsson 2011a:281), the so-called logophoric agent and the logophoric patient. Λ_A and Λ_P along with Top (3rd person) are the C/edge linkers (CLn). These match arguments in the clause, cf. the following generalization.

(22)   ***C/Edge-Linking Generalization***

       Any definite argument, overt or silent, positively matches at least one CLn in its local C-domain, CLn $\in \{\Lambda_A, \Lambda_P, \text{Top}, ...\}$

                                              (H.Á. Sigurðsson 2011a:282)

These will be referred to here as context linkers, edge linkers or logophoric linkers.

As noted in H.Á. Sigurðsson 2016c, every phase that licenses an argument has edge linkers.[7] On H.Á. Sigurðsson's approach, logophoric linkers match an abstract person head which in turn matches a noun phrase. Even though this is an impor-

---

[7]The logophoric linkers are only a subset of the edge linkers for H.Á. Sigurðsson. These "link the inner phase to the next phase up or to the speech act content" (H.Á. Sigurðsson 2016c). In my approach here, I disregard other edge linkers than the logophoric linkers.

tant part for H.Á. Sigurðsson, such as in his explanation of the Definiteness Effect (H.Á. Sigurðsson 2010), I will not assume his abstract person head here.

I posit a revised Linking Generalization below where there is reference to phase domain rather than C-domain and there is no talk of definite arguments, just arguments. Instead of Top, I have put Λ_3 for 3rd person.

(23)   ***Revised Edge-Linking Generalization***

Any argument, overt or silent, positively matches at least one CLn in its local phase domain, CLn $\in \{\Lambda_A, \Lambda_P, \Lambda_3, ...\}$

The context linkers are speech event features which cannot be lexicalized and have meaning only in relation to other elements. To look more concretely at this, we see in (24a) two pronouns, *you* and *me*, respectively. *Me* represents the speaker, which is the logophoric agent, whereas *you* represents the addressee, which is the logophoric patient. As mentioned above, every phase that licenses a noun phrase has logophoric features. *You* matches a logophoric feature in the higher phase but *me* matches a logophoric feature in the lower phaes.

(24)   ***English***

a.   You love me.

b. $[_{CP}\ \Lambda_{Pi}\ ...\ you_i\ ...\ [_{VoiceP}\ \Lambda_{Aj}\ ...\ me_j$

On H.Á. Sigurðsson's (2004a) approach, the two arguments have unvalued φ-features which are valued under matching with the logophoric elements.

To show how semantic agreement can be accomplished (which we will take a closer look at below), let us take a look at gender in Amharic.

3.4.4 When semantic features overwrite syntactic features

Amharic (Kramer 2014) exhibits masculine and feminine on suffixed definite articles on nouns. Most inanimate nouns in the language are masculine, with a few exceptions. Animate nouns, however, can usually either be masculine or feminine, based on the referent: A male doctor will exhibit masculine agreement and female doctor will be feminine. The two share the same root. Kramer (2014) argues that gender, whether syntactic or semantic, originates on n which merges with a $\sqrt{}$P but is realized on D.

(25)   ***Amharic***

     a.   hakim-u
          doctor-DEF.M

          'the (male) doctor'

     b.   hakim-wa
          doctor-DEF.F

          'the (female) doctor'   (Kramer 2014:103)

(26)   a.   tämari-w
          student-DEF.M

          'the (male) student'

     b.   hakim-wa
          student-DEF.F

          'the (female) student'   (Kramer 2014:103)

If it is unknown whether the referent is male or female, it is marked masculine by default. Natural gender (the gender of the referent) is, however, always expressed if it is known. A female doctor is therefore always referred to as *hakim-wa*.

Most animate nominals have the same root for male and female referents. As Kramer notes, it would be a bit problematic to place the gender feature on the root, as that would lead us to posit two homophonous, synonymous roots for something like 'doctor', one for male doctor and one for female doctor.

Kramer argues for locating gender on n, as an essential part of making a root a noun (via nominalizer n) is assigning it a gender. Even though I agree that formal gender should be located on n, I propose that gender reflecting the referent transparently (natural gender) should be treated differently. I argue that natural gender realization is a result of the highest layer in the maximal noun phrase receiving feature values from a logophoric linker. In the following, I show two ways of doing this.

(27) a.

```
                    CP
              ┌──────┴──────┐
            Λ₃             ...
           [γ:F]            │
             │             LP
             └──┐      ┌────┴────┐
                L      DP
             [∘γ:F∘]  ┌──┴──┐
              -wa     D      nP
                   [∘γ:M∘]  ┌─┴──┐
                           n    √HAKIM
                         [γ:M]   'doctor'
```

b.

```
                    CP
              ┌──────┴──────┐
            Λ₃             ...
           [γ:F]            │
             │             DP
             └──┐      ┌────┴────┐
                D      LP
             [∘γ:F∘]  ┌──┴──┐
              -wa     L      nP
                   [∘γ:F∘]  ┌─┴──┐
                           n    √HAKIM
                         [γ:M]   'doctor'
```
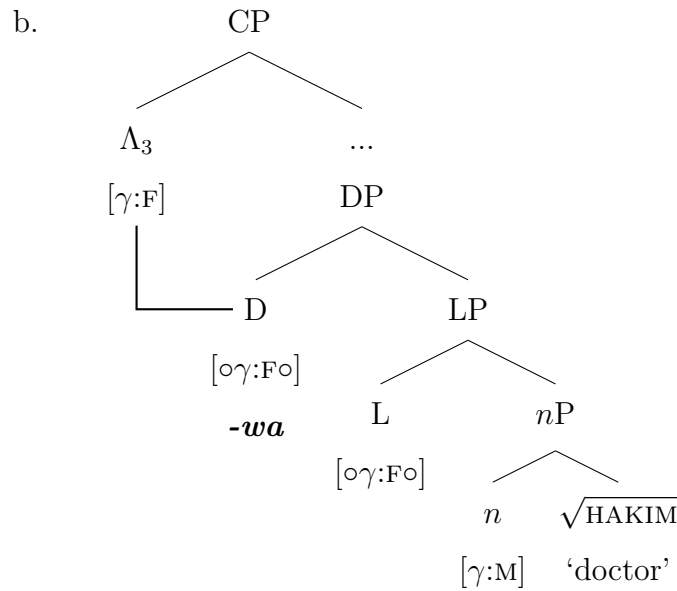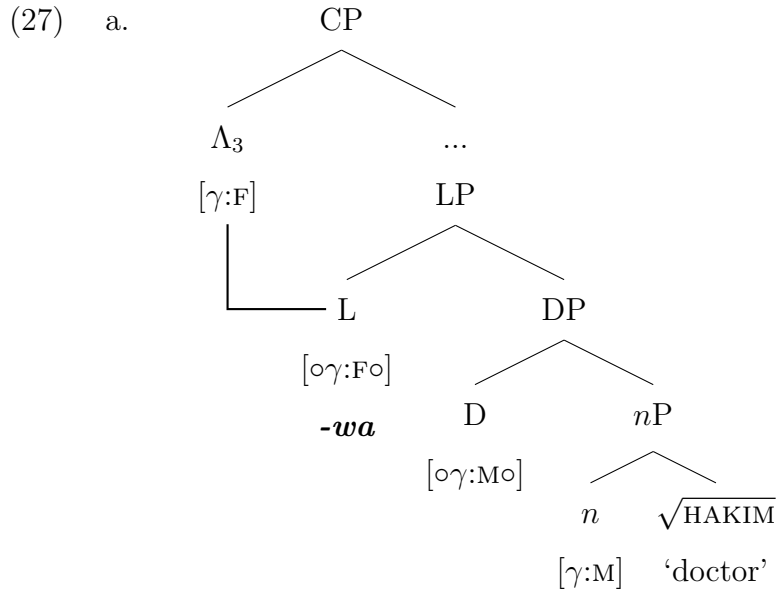
In (27a), the highest projection of the maximal noun phrase is L(ogophoric)P. Its function is essentially to force feature valuation by a logophoric linker, here shown at the edge of a CP. When L merges with a structure like DP, it is specified for not receiving feature values from below. It will therefore get features from above, in this case a logophoric linker — L gets a feminine gender value as the referent is female.

The gender feature that originates on n (the formal gender feature), however, is masculine and it percolates up to D via Merge.

In (27a), the definite article is a realization of L. I argue, however, that L does not realize Vocabulary items; its primary function is to make sure that a phrase reflects transparently its referent. I therefore argue that a better structure is shown in (27b), where D merges on top of L but not the other way around. As before, L does not receive values from below, i.e., n does not discharge its number value onto L when L and n merge. When L merges with D, however, the two form a chain via Merge, resulting in a feminine value on both D and L when D establishes an Agree relation with the context linker.

In short, L makes sure that the highest layer of the maximal noun phrase gets feature values from a context linker. For Amharic, I argued that DP is on top of LP and I will argue the same for Russian and Hebrew. For Icelandic and English, on the other hand, I will argue that LP merges on top of DP.

3.4.5   Person mismatch

3.4.5.1   Imposters

So-called imposters exhibit person mismatch, similar to, e.g., the number and gender mismatches we see elsewhere. I propose that imposters can be derived in a similar way as other mismatch examples.

(28)   ***English***

    a.   **Daddy** is going to get you an ice cream cone.   (Wood 2009)

    b.   In this reply, **the present authors** (= the writers of the reply) attempt to defend ourselves/themselves against the scurrilous charges which have been made.   (Collins and Postal 2012:17)

The speaker in (28a) refers to himself as *Daddy*. Semantically it is 1st person but formally 3rd person. Similarly, in (28b) the speakers refer to themselves in the 3rd person, as *the present authors*.

Collins and Postal (2012:6) define imposters as in (29):

(29)   ***Imposter definition***

    An imposter is notionally X person DP that is grammatically Y person, X $\neq$ Y.   (Collins and Postal 2012:6)

Almost by definition, imposters involve more than one feature set (cf. the discussion in §3.4.2). Collins and Postal (2012) analyze imposters as having a complex DP shell, consisting of what they call a silent precursor and an overt DP (such as *Nixon* in (30)). An overt counterpart of the silent precorsor is *I* in (30a).

(30)   a. I, Nixon, am going to get even.

        b. Nixon is going to get even.   (Collins and Postal 2012:48)

For Collins and Postal (2012:49), then, imposters "represent syntactic deformations of precursors". In (30a), *I* is a precursor and (30b) contains an imposter without a precursor.

(31)

```
              DP₄
            /      \
        DP₃         \
        |        D      DP₁
       Nixon            /    \
                    DP₂      Clause
                    |        /‾‾‾‾\
                    I       <DP₃>
```

$$\text{(31)}\quad DP_4 [\, DP_3\, [Nixon]\quad D\quad DP_1\, [DP_2\, [I]\quad Clause\, [<DP_3>]\,]\,]$$
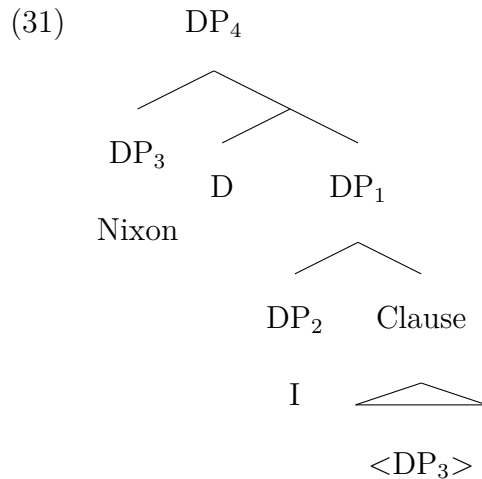
(adapted from Collins and Postal 2012:66)

Building on Collins and Postal's work, Wood (2009) proposes a structure somewhat similar to (31) whereas, however, he argues that the constituent labelled DP_3 in (31) must be smaller than a DP, an nP for him.[8]

We now turn to imposters in Icelandic which sometimes show agreement that does not seem to match the DP's features. First of all, Icelandic has typical imposters such as *mamma* 'Mommy' and *pabbi* 'Daddy' which can be used to refer to 1st or 2nd person. However, 1st or 2nd person verbal agreement is typically not grammatical but it tends to be more accepteable if the subject is a plural imposter (Wood 2009, Wood and E.F. Sigurðsson 2014c).

---

[8]Acehnese and Indonesian imposters (Legate 2012 and Kaufman 2014) also suggest that imposters do not have as large a structure as suggested by Collins and Postal.

(32)   *Icelandic*

    a.   Pabbi hefur   / *hef   sagt þér það.
             Daddy has.3SG / *have.1SG told you that

             'Daddy has told you that.'

    b.   Mamma og   pabbi hafa   / ??höfum   sagt þér þetta áður.
             Mommy and Daddy have.3PL / ??have.1PL told you this   before

             'Mommy and Daddy have told you this before.'
                                  (Wood and E.F. Sigurðsson 2014c:205, 207)

Wood and E.F. Sigurðsson (2014c) discuss various imposters in Icelandic that behave like *pabbi* 'Daddy' and *mamma* 'Mommy', for example in usually not triggering 1st person verbal agreement. They point out, however, that the imposter *undirritaður* 'undersigned' works much better with 1st person agreement. Furthermore, it works much more readily in the plural than in the singular. Note that the form of *undirritað-* changes according to number and gender specifications but the person agreement it triggers does not have any effect on its form.

(33)   a.   Undirritaður   hefur   / *hef   ákveðið að hætta.
             undersigned.M.SG has.3SG / *have.1SG decided to quit

             'The undersigned (sg.) has decided to quit.'

    b.   Undirritaðir   hafa   / ?höfum   haldið þessu fram.
             undersigned.M.PL have.3PL / ?have.1PL held   this   forth

             'The undersigned (pl.) have claimed this.'

    c.   Undirritaður   og Jón hafa   / höfum   haldið þessu fram.
             undersigned.M.SG and Jón have.3PL / have.1PL held   this   forth

             'The undersigned and Jón have claimed this.'
                                  (Wood and E.F. Sigurðsson 2014c:205–207)

While the difference between singular and plural is very interesting, I will only focus on the fact that 1st person agreement is possible, in the plural.

The participle *undirritað-* does not have any valued features by itself but it merges with a silent noun phrase with valued features. Num and *n* within the DP provide number and gender values but D enters the derivation with a valued 3rd person feature. The 3rd person feature triggers 3rd person verbal agreement.

(34)　　**3rd person, masculine, plural** undirritaðir

```
                        DP
                      /    \
                     D      NumP
                 [•Num•]    /    \
                  [π:3]    Num      nP
                 [∘γ:M∘]  [•n•]    /   \
                [∘#:PL∘]  [#:PL]  aP     nP
                         [∘γ:M∘] [•n•]  [γ:M]
                                [∘γ:M∘] [∘#:PL∘]
                                [∘#:PL∘]
                                   /‾‾\
                              undirritaðir
                              'undersigned'
```

For 1st person valuation of 'undersigned', I propose that a functional head L(ogophoric) merges with D (see also discussion on Amharic above). The L-layer is silent in the example below but it is specified for receiving values from a logophoric linker and therefore does not get values from a DP via Merge. In cases where semantic agreement is not triggered, there is no evidence for an L-layer and in such cases, the DP is the highest layer of the maximal noun phrase.

(35)   ***1st person, masculine, plural*** undirritaðir

CP
├── Λ_A
│   [π:1]
│   [γ:M]
│   [#:PL]
└── ...
    └── TP
        ├── LP
        │   ├── L
        │   │   [●D●]
        │   │   [∘π:1∘]
        │   │   [∘γ:M∘]
        │   │   [∘#:PL∘]
        │   └── DP
        │   ├── D
        │   │   [●Num●]
        │   │   [∘π:1∘]
        │   │   [∘γ:M∘]
        │   │   [∘#:PL∘]
        │   └── NumP
        │   ├── Num
        │   │   [●n●]
        │   │   [#:PL]
        │   │   [∘γ:M∘]
        │   └── nP
        │   ├── aP
        │   │   [●n●]
        │   │   [∘γ:M∘]
        │   │   [∘#:PL∘]
        │   │   *undirritaðir*
        │   │   'undersigned'
        │   └── nP
        │   [γ:M]
        │   [∘#:PL∘]
        └── T
            [∘π:1∘]
            [∘#:PL∘]
            höfum
            'have'

L has unvalued features which it does not get valued via Merge. Instead, it must probe upward for features on a logophoric linker.

In (34), the DP needs to match a context linker in the left periphery (here the logophoric agent) even though it has a valued person feature and also has its gender and number features valued via merging with NumP. The difference between (34) and (35) is therefore not matching with a logophoric linker but whether the highest layer of the maximal noun phrase gets feature values from the phase edge element or not.

3.4.5.2 A 3/4 pattern in Icelandic person and English number mismatch

We have now seen variation in whether a finite verb agrees with an imposter subject in 1st or 3rd person. Reflexive pronouns also show such variation, as demonstrated in the Icelandic imposter examples below.

(36) a. Undirritaður   og Jón skammast sín
       undersigned.M.SG and John shame.3PL REFL.GEN

       fyrir ummælin.
       for   the.comments

       'The undersigned and John feel ashamed for their comments.'

    b. Undirritaður   og Jón skömmumst okkar
       undersigned.M.SG and John shame.1PL   ourselves

       fyrir ummælin.
       for   the.comments

       'The undersigned and John feel ashamed for our comments.'
                                (Wood and E.F. Sigurðsson 2014c:210)

In the Icelandic examples in (36), the finite verb and the reflexive pronoun have the same person feature — either both are in the third person (36a) or both are in the first person (36b).

The English examples below show the same, even though the difference between (37a) and (37b) does not have to do with person but number. Note that *faculty* can trigger either plural or singular agreement in British English, even though the noun itself does not distinguish morphologically between singular and plural. Therefore, its form is the same in (37a) and (37b).

(37)   ***British English***

    a.   The faculty is voting itself a raise.

    b.   The faculty are voting themselves a raise. (Pollard and Sag 1994:71)

Similar to the Icelandic examples, both the finite verb and the reflexive pronoun have the same number marking in (37) — either both are in the singular (37a) or both in the plural (37b).

The faculty in (37) either triggers syntactic singular agreement or semantic plural agreement. It is different from imposters like *undirritaðir* in that it does not have to do with person at all. We, however, analyze the difference between singular and plural on *the faculty* in the same way as we are analyzing the difference between 3rd person and 1st person on *undirritaðir*. That means that the context linkers must have something to say about other features than person. On my proposal, Num of *the faculty* enters the derivation with a valued singular feature which percolates up to D via Merge. D triggers singular if there is no L-layer. When there is an L-layer, however, it establishes an Agree relation with a logophoric linker which values the

unvalued features on L. That is, L gets a plural value from the logophoric linker and triggers plural agreement on T and the reflexive pronoun.

(38)   ***Semantic plural agreement triggered by* the faculty**

This is semantic agreement: Even though T agrees with LP syntactically, the features on L originate on a logophoric linker, representing the referent.

Note also that according to the judgments in Wood and E.F. Sigurðsson (2014c) and Pollard and Sag (1994:71), the person and number consistency between the finite verb and the reflexive pronoun in (36)–(37) is obligatory. Let us take a look at the following examples; the judgments are as reported in the works cited.

(39) **Icelandic**

    a.   * Undirritaður   og Jón skammast okkar   fyrir ummælin.
           undersigned.M.SG and Jón shame.3PL ourselves for   the.comments

          Intended: 'The undersigned and John feel ashamed for their / our comments.'

    b.   * Undirritaður   og   Jón skömmumst sín   fyrir
           undersigned.M.SG and Jón shame.1PL   themselves for

          ummælin.
          the.comments

          Intended: 'The undersigned and Jón feel ashamed for their / our comments.'   (Wood and E.F. Sigurðsson 2014c:210)

(40) **British English**

    a.   * The faculty is voting themselves a raise.

    b.   * The faculty are voting itself a raise.   (Pollard and Sag 1994:71)

However, Smith (2017) shows a somewhat different paradigm w.r.t. the judgments above. The judgments he reports are the same as for (37) and (40) in Pollard and Sag 1994 except that he gives the equivalent of (40a) a question mark, see (41c).

(41)   a.   The government has offered itself up for criticism (with this economic policy).

     b.   The government have offered themselves up for criticism.

     c.   ? The government has offered themselves up for criticism.

     d.   * The government have offered itself up for criticism.   (Smith 2017)

That is, singular verbal agreement but plural agreement on the reflexive pronoun is not ungrammatical, according to Smith (2017). This is a 3/4 agreement pattern,

where three agreement possibilities out of four are grammatical. In the paradigm above we see two elements that show agreement, the finite verb and the reflexive pronoun. In (41a) and (41b) they do not differ from one another, either they both show singular agreement or plural agreement, and both of these are grammatical in British English. Mismatch between the two is also possible, where one shows singular agreement and the other plural agreement. However, it matters which one of them exhibits singular and which one exhibits plural agreement, as the judgments for (41c) and (41d) reflect. When there is a number mismatch, it is obligatory that the finite verb is in the singular and the reflexive pronoun in the plural, and not the other way around. This kind of a pattern, a 3/4 agreement pattern, is found in various paradigms where agreement mismatch is possible — for a discussion and various examples, see Landau (2016:1008–1016).

Icelandic seems to show the same tendency as well. Even though Hlíf Árnadóttir (p.c.) agrees that neither (39a) nor (39b) is grammatical, she finds (39b) much worse than (39a). That is, 3rd person verbal agreement and 1st person reflexive agreement is better than 1st person verbal agreement and 3rd person reflexive agreement.

What we take from these judgments is that if finite T agrees with an LP (semantic agreement) the reflexive pronoun must do that also. If, however, the finite T agrees with a DP (syntactic agreement), with LP absent, the reflexive pronoun may in some cases exhibit semantic agreement, even though syntactic agreement is preferred.

I propose that T can only agree syntactically with the subject but the reflexive pronoun can either agree syntactically with its antecedent or semantically, with a context linker in the left edge of the phase.

To understand this better, let us have a look at the following example where we see the noun *committee*, which is the same as *faculty* and *government* in that it can trigger both singular and plural agreement in British English:

(42)   This committee are deciding the future of the project.   (Smith 2017)

This merging with *committee*, in addition to *committee* not showing plural *-s* morphology, suggests that *committee* is singular DP-internally. The fact that the finite verb can exhibit plural agreement suggests that in such cases T agrees with an additional layer, LP, on top of DP (because *this* realizes D). When T shows singular morphology, there is no LP, just DP.

The contrast between (41c) and (41d) is important as the reflexive pronoun can exhibit semantic number agreement even when T exhibits syntactic agreement (with DP) but this does not go the other way around: when T exhibits semantic agreement (with LP), the reflexive pronoun cannot exhibit syntactic agreement. This is explained if D is not always the outermost layer of the maximal noun phrase. T can only get φ-feature values from the highest layer of the noun phrase, which is either LP or DP, but not directly from a context linker.

H.Á. Sigurðsson (2004a:248) argues that subordinate clauses inherit values from preceding elements: from silent elements or from overt elements in a preceding

clause. I follow Wood and E.F. Sigurðsson (2014c) in using a dotted line to indicate what they refer to as a control relation.

(43) a. John told Mary: "I love you".

  b. $[_{CP} \Lambda_{3i}\ \Lambda_{3j}\ \Lambda_{Ak}\ \Lambda_{Pl} \ldots [_{TP} \text{John} \ldots \text{Mary} \ldots [_{CP} \Lambda_{Ai}\ \Lambda_{Pj}\ [_{TP} \text{I} \ldots \text{you}$

  c. $[_{CP} \Lambda_{3i}\ \Lambda_{3j}\ \Lambda_{Ak}\ \Lambda_{Pl} \ldots [_{TP} \text{John} \ldots \text{Mary} \ldots [_{CP} \Lambda_{Ai}\ \Lambda_{Pj}\ [_{TP} \text{I} \ldots \text{you}$

(cf. Wood and E.F. Sigurðsson 2014c, H.Á. Sigurðsson 2004a:249)

In this example, the relation between the DP *John* or the logophoric linker Λ_3 in the matrix clause and the embedded logophoric agent does not have any effect on the features of the latter (i.e., the embedded logophoric linker) and the same goes for *Mary* or a logophoric linker Λ_3 in the matrix clause and the logophoric patient in the embedded clause.

Reflexives are different as they get features from an antecedent. The reflexive matches a logophoric linker which in turn gets its features valued by either a logophoric linker or the DP/LP *the government*. It is not straightforward to derive this "optionality" and I do not intend to do that here in any detail. It is important to emphasize that T can only establish an Agree relation with the DP/LP but not with a logophoric linker but there is more flexibility when it comes to the reflexive pronoun. The problem at hand is reminiscent of case transmission to PRO in infinitival clauses (H.Á. Sigurðsson 2008, Landau 2008). On Landau's approach, PRO

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can get case via two different routes, directly from a matrix probe or from a higher probe via the infinitival C head.

(44) a. ? The government has offered themselves up for criticism.

  b. $[_{CP}\Lambda_{3i}...$ $[_{TP}[_{DP_j}$ the gov't] has...$[_{VoiceP}\Lambda_{3i}...$ $<DP_j>...$ themselves

In (44), the reflexive establishes an Agree relation with the logophoric linker. The context linker and the reflexive do not have valued φ-features but whatever features the linker will get, the reflexive will receive the same feature values through the Agree chain established. In (44) the logophoric linker of the matrix phase transmits its valued features to the logophoric linker of the embedded phase. This results in the reflexive getting 3rd person plural values.

In (45), on the other hand, the reflexive establishes an Agree relation with the DP before the DP moves.

(45) a. The government has offered itself up for criticism.

  b. $[_{CP}\Lambda_{3i}...$ $[_{TP}[_{DP_j}$ the gov't] has...$[_{VoiceP}\Lambda_{3i}...$ $<DP_j>...$ itself

This results in 3rd person singular value because the DP is singular, even though the logophoric linker is plural.

Finally, the semantic agreement in (46) can be derived in two ways.

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(46) a. The government have offered themselves up for criticism.

b. $[_{CP}\Lambda_{3i}... [_{TP}[_{LP_j}$ the gov't] have...$[_{VoiceP}\Lambda_{3i}... <LP_j>...$ themselves

c. $[_{CP}\Lambda_{3i}... [_{TP}[_{LP_j}$ the gov't] have...$[_{VoiceP}\Lambda_{3i}... <LP_j>...$ themselves

In (46b), a matrix logophoric linker transmits its feature values to the reflexive via the lower logophoric linker. In (46c), on the other hand, the reflexive establishes an Agree relation directly with the LP. Both of these result in semantic agreement.

When T is plural, as in (46), L values T and either L or the higher logophoric linker decides the values of the reflexive pronoun. Either way, only plural is available to the reflexive (as the higher logophoric linker values L's unvalued features), meaning that the singular *itself* will be ungrammatical, excluding the sentence *The government have offered itself up for criticism* in (41d) above.

3.4.6 Number mismatch

The Hebrew noun *be'alim* 'owner(s)' and the agreement patterns it triggers, discussed in Landau 2016, is somewhat similar to the hybrid agreement examples we have been looking at, as we will now see. This noun shows mixed agreement with respect to number: syntactically it is a plural noun that can trigger plural agreement. However, singular semantic agreement can also be triggered. I will extend

my analysis introduced above to Hebrew number mismatch after looking at the relevant data discussed by Landau (2016) and reviewing his analysis.

After discussing Hebrew number mismatch in §3.4.6.1, we will take a brief look at polite pronouns in §3.4.6.2 in French and Icelandic which sometimes show a mismatch between a finite verb and an adjective or participle in predicative position.

3.4.6.1 Number mismatch in Hebrew

The Hebrew examples in (47) show a number mismatch and resemble in that way the number mismatch discussed above for English. Here, a DP-internal adjective can show different agreement from an element DP-externally. Just as in (41) above, three out of four possibilities are available — note especially the contrast between (47c) and (47d).

(47)　　*Hebrew*

a.　ha-be'al-im　ha-kodem　　maxar　et　ha-makom lifney šana.
　　the-owner-PL the-previous.SG sold.3SG ACC the-place　before year
　　'The previous owner sold the place a year ago.'

b.　ha-be'al-im　ha-kodm-im　　maxru　et　ha-makom lifney šana.
　　the-owner-PL the-previous.PL sold.3PL ACC the-place　before year
　　'The previous owners sold the place a year ago.'

c.　? ha-be'al-im　ha-kodm-im　　maxar　et　ha-makom lifney šana.
　　the-owner-PL the-previous.PL sold.3SG ACC the-place　before year
　　'The previous owner sold the place a year ago.'

d.　* ha-be'al-im　ha-kodem　　maxru　et　ha-makom lifney šana.
　　the-owner-PL the-previous.SG sold.3PL ACC the-place　before year
　　Intended: 'The previous owner(s) sold the place a year ago.'

(Landau 2016:984–985)

Formally, *be'alim* is a plural noun but when it denotes a single referent it can trigger singular semantic agreement. Note for (47) above that if the verb shows plural agreement, then the referent is plural, and the referent is singular if the verb exhibits singular agreement. This is not as transparent in the case of an attributive adjective; if the adjective is plural, the referent can either be singular or plural even though a singular attributive adjective can only modify a singular referent.

To account for the mixed agreement above, Landau (2016) adopts so-called CONCORD and INDEX features of the HPSG framework and applies the distinction between them to this hybrid noun. Landau's (2016) distribution of φ-features is such that in his system, the locus of number and gender CONCORD features is the nominal stem (which is more or less equivalent to *n*) whereas the locus of at least the number INDEX feature is Num.

(48)   ***The distribution of*** CONCORD ***and*** INDEX ***features within the DP***

DP

D
[INDEX|PERSON *val*]
[INDEX|NUMBER __]
[INDEX|GENDER __]
[CONCORD|NUMBER __]
[CONCORD|GENDER __]

Num
[INDEX|NUMBER *val*]
([INDEX|GENDER *val*])

n
[CONCORD|GENDER *val*]
[CONCORD|NUMBER *val*]
([INDEX|GENDER *val*])
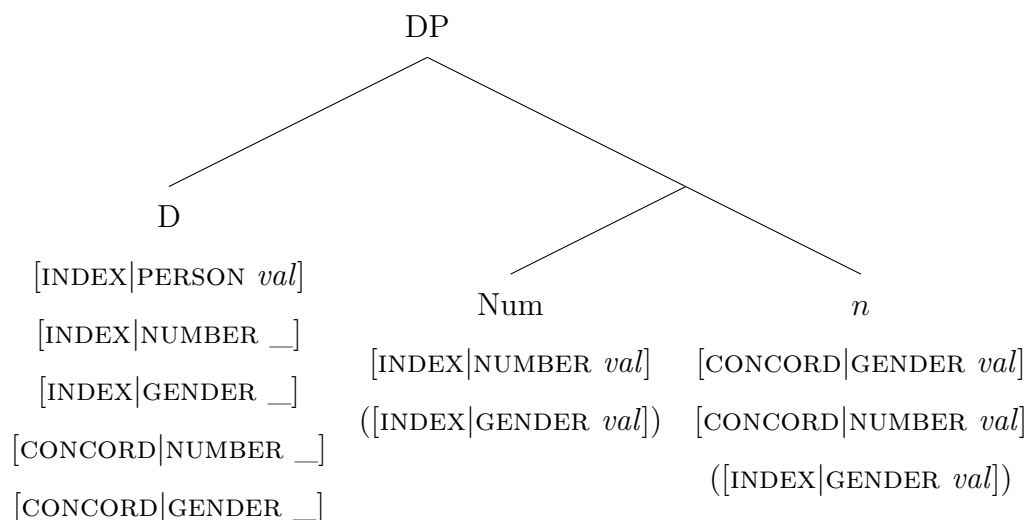
(adapted from Landau 2016:995)

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For Landau, either CONCORD or INDEX features can be accessed in DP-internal agreement but only INDEX features are accessible for verbal agreement. The INDEX number value can either be SG or PL, depending on the referent. The INDEX features always transparently reflect the referent through the verb, meaning that if the DP has a singular referent, then the verb exhibits singular agreement; if the DP has a plural referent, the verb exhibits plural agreement.

The CONCORD values of *be'alim*, which is formally plural, are always M.PL. Agreement mismatch can arise when CONCORD and INDEX feature values trigger different number values, one for a DP-internal adjective and another for the verb. Landau shows where the values on the adjective and the verb come from in the following diagram.

(49)   ***Agreement configurations with* be'alim**

a. $[_{DP}$ be'alim $\begin{smallmatrix}[\text{INDEX: SG}]\\ [\text{CONCORD: M.PL}]\end{smallmatrix}$ Adj$_{[SG]}$] ... V$_{[SG]}$ ...

b.   i. $[_{DP}$ be'alim $\begin{smallmatrix}[\text{INDEX: PL}]\\ [\text{CONCORD: M.PL}]\end{smallmatrix}$ Adj$_{[PL]}$] ... V$_{[PL]}$ ...

  ii. $[_{DP}$ be'alim $\begin{smallmatrix}[\text{INDEX: PL}]\\ [\text{CONCORD: M.PL}]\end{smallmatrix}$ Adj$_{[PL]}$] ... V$_{[PL]}$ ...

c. $[_{DP}$ be'alim $\begin{smallmatrix}[\text{INDEX: SG}]\\ [\text{CONCORD: M.PL}]\end{smallmatrix}$ Adj$_{[PL]}$] ... V$_{[SG]}$ ...

d.   *$[_{DP}$ be'alim $\begin{smallmatrix}[\text{INDEX: PL}]\\ [\text{CONCORD: M.PL}]\end{smallmatrix}$ Adj$_{[SG]}$] ... V$_{[PL]}$ ...
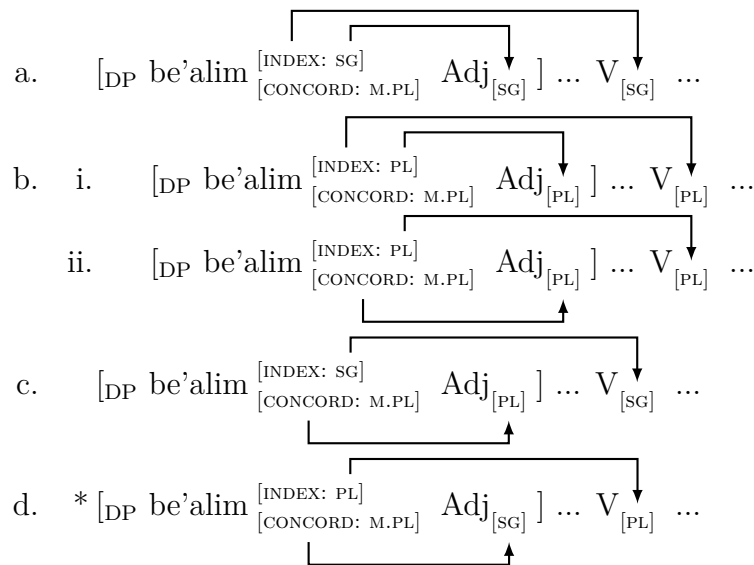
(Landau 2016:989)

On Landau's approach, INDEX features on *be'alim* always value the unvalued features on the verb whereas either the INDEX or the CONCORD features can value unvalued features on the adjective. Since the CONCORD value is always PL, the INDEX value must be SG to derive singular on the adjective (or the verb, for that matter). With CONCORD being invariably plural and the INDEX number value either plural or singular, Landau can derive the grammatical patterns in (49a–c). His approach also explains why the fourth pattern, see (49d), is ungrammatical: If the INDEX number feature is plural, resulting in plural value on the verb, then singular on the adjective is not possible because the CONCORD features are always the same for *be'alim*, M.PL. This means that if there is a singular referent, it is possible to have singular on the adjective, but only if valued by the INDEX. As CONCORD features cannot value the number feature on the verb, a singular feature on the adjective, valued by a plural INDEX feature, will necessarily lead to singular marking on the verb.

On Landau's analysis, the adjective probes for a value. If an adjective merges with the noun below Num, the adjective will only be able to access the CONCORD feature when it probes. If it merges above Num, only the INDEX feature will be visible to the adjective.

Landau points out that Hebrew *be'alim* can take more than one adjective where the adjectives show mixed agreement. If one adjective exhibits singular and another plural, then it is obligatory that the higher one is in the singular and the lower one

in the plural. This is expected on Landau's analysis, where INDEX features value number on the higher adjective (singular) and CONCORD features on the lower one (plural):

(50) a. ha-be'alim ha-pratiyim   ha-axaron šel ha-tmuna   haya
          the-owner the-private.PL the-last.SG of the-painting was.3SG

          ha-psixo'analitika'i Jacques Lacan.
          the-psychoanalyst   Jacques Lacan

     b. * ha-be'alim ha-prati   ha-axron-im šel ha-tmuna
          the-owner the-private.SG the-last-PL   of the-painting

          haya/hayu   ha-psixo'analitika'i Jacques Lacan.
          was.3SG/3PL the-psychoanalyst   Jacques Lacan

          'The last private owner of the painting was the psychoanalyst
          Jacques Lacan.'   (Landau 2016:1005)

My account differs from Landau's as I do not use CONCORD and INDEX features. I propose that the hybrid number agreement can be accounted for in a similar way as the hybrid person agreement in Icelandic and the hybrid number agreement in English discussed in §3.4.5.2. In the British English data, D got a number value from Num but L received a number value through an Agree relation it established with a context linker. In the Hebrew data, the L-layer is always present and reflects the referent's features, i.e., it gets a value from a context linker.

Hebrew differs from Icelandic and British English in that LP merges below DP, not on top of it. If this were the other way around, we would be forced to make some adjectives merge with the DP or even higher, which would suggest a reading where the adjective is not within the scope of D, resulting in non-restrictive reading.

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Even though LP is not the highest layer of the maximal noun phrase, it works the same as in English and Icelandic, in that it is specified for not receiving values for its features from below. Therefore, when L merges with Num, Num does not discharge its number feature values onto L. When L merges with D, however, D and L form a feature chain such that when D will eventually get its features valued, by a logophoric linker, L will have the same feature values.

When an adjective merges with *be'alim* below L, it will always get a plural value — I propose that the locus of the plural feature is on Num. This is equivalent to a CONCORD feature in Landau's (2016) system valuing the feature value on the adjective. If an adjective merges higher, with the LP, it will always get the referent value via the DP, i.e., a value reflecting the referent. If the referent's number feature is plural, the adjective will get a plural value, and if the referent's number feature is singular, the adjective will get a singular number value. This is equivalent to an INDEX feature valuing the number feature value on the adjective. Similarly, since the features on D reflect the referent, via a context linker, finite T gets the referent values from agreeing with the DP. Therefore, the values on the finite verb and the high adjective reflect the referent transparently.

Let us first look at DP-internal agreement with two adjectives which do not exhibit the same agreement. The lower *a*P, *ha-pratiyim* 'private', merges with NumP, although nothing hinges on the exact location of the merging site, as long as it is low enough in the structure. Num's plural value is not passed up the tree to

L via Merge. Instead the LP gets a singular value as a result of an Agree relation established between D and a context linker, reflecting the referent.

(51) a. ha-be'alim ha-pratiyim   ha-axaron šel ha-tmuna   haya
          the-owner the-private.PL the-last.SG of the-painting was.3SG

     ha-psixo'analitika'i Jacques Lacan.
     the-psychoanalyst   Jacques Lacan

     'The last private owner of the painting was the psychoanalyst
     Jacques Lacan.'   (Landau 2016:1005)

b.

```
                              CP
                 ┌────────────┴────────────┐
               Λ₃                          TP
             [#:SG]              ┌──────────┴──────────┐
               │               DP                       T
               │        ┌───────┴───────┐           [○#:SG○]
               │       D               LP              haya
               └──── [○#:SG○]    ┌──────┴──────┐       'was'
                      ha-        aP            LP
                     'the'    [○#:SG○]    ┌─────┴─────┐
                               ╱╲        L          NumP
                              ha-    [○#:SG○]   ┌─────┴─────┐
                            axaron             aP          NumP
                          'the last'        [○#:PL○]      [#:PL]
                                              ╱╲           ╱╲
                                            ha-         be'alim
                                          pratiyim      'owner'
                                        'the private'
```

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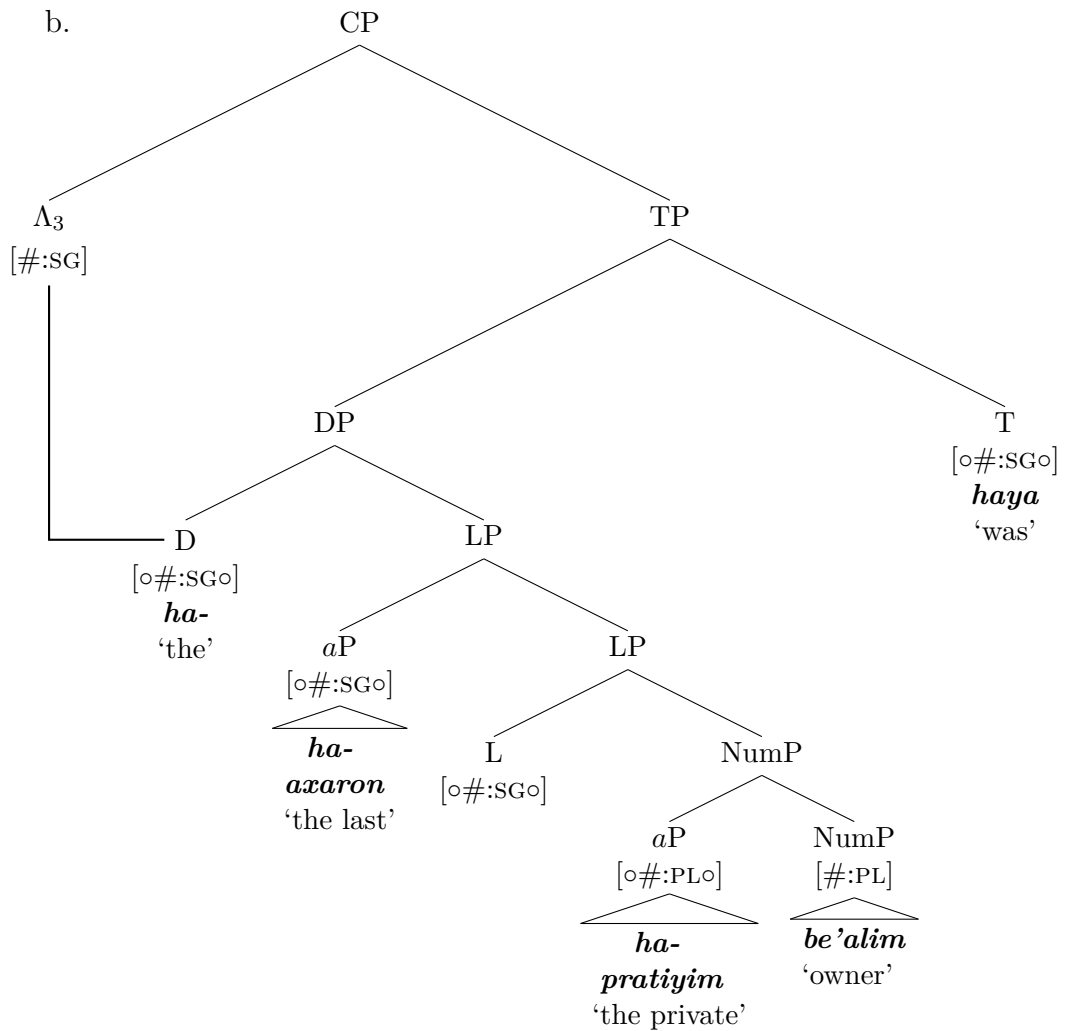
T agrees with the highest layer of the maximal noun phrase, which is the DP. As D has a singular number value (from agreeing with a context linker), T's unvalued number value will be singular as well. Even though T cannot establish a relation with a context linker, it always receives the same features because it agrees with a DP, which in turn gets its values from a logophoric linker. That is how T always transparently reflects the referent.

As mentioned above, it is not possible to have a singular high adjective and plural agreement on the verb. If an attributive adjective is in the singular, the verb is also in the singular. (52) is a way of analyzing Landau's configuration (49a).

(52)   a.   ha-be'al-im   ha-kodem   maxar   et   ha-makom lifney šana.
             the-owner-PL the-previous.SG sold.3SG ACC the-place   before year
             'The previous owner sold the place a year ago.'   (Landau 2016:984)

        b.
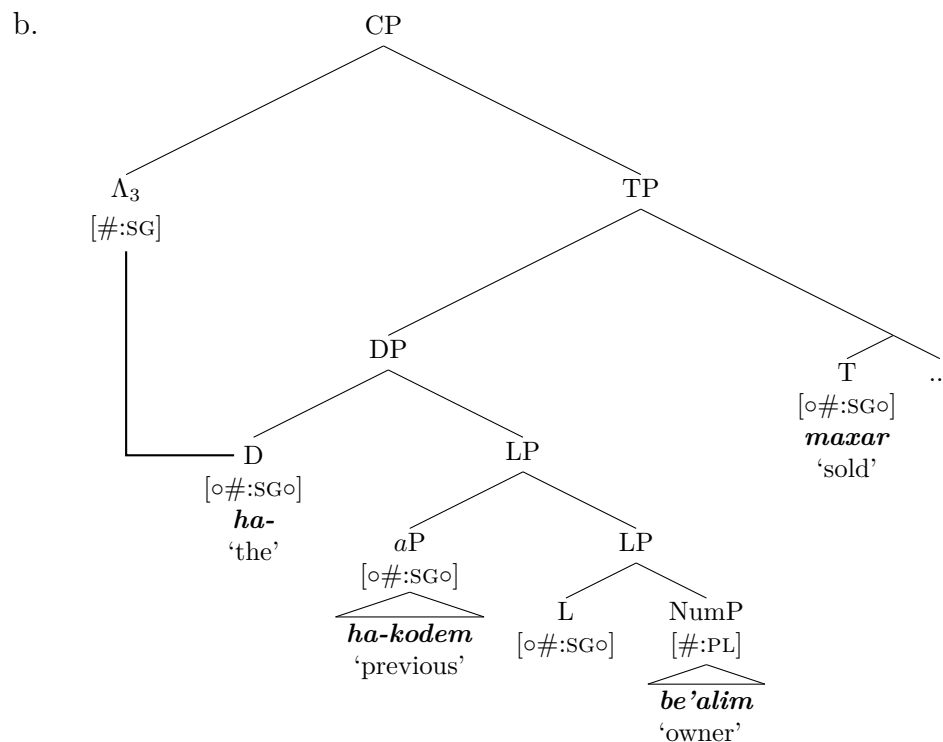
Note that this tree is similar to (51b), except that there is no low adjective in the structure. For the adjective to get a singular number value from merging with LP, L must get a singular number value from D, which in turn gets its number value from agreeing with a context linker with a singular number value, reflecting a singular referent. T agrees with the DP and also gets a singular number value.

When the referent is plural, the adjective(s) and the verb will show plural agreement. T agrees as before with the DP but there are at least two possible loci of the the plural agreement on the adjective.

(53) a. ha-be'al-im   ha-kodm-im   maxru   et   ha-makom lifney šana.
          the-owner-PL the-previous.PL sold.3PL ACC the-place   before year
          'The previous owners sold the place a year ago.'   (Landau 2016:985)

b.

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c.

```
                                CP
                        _____
                       Λ₃                     TP
                    [#:PL]              _____
                       |              DP               T   ...
                       |          _____        [∘#:PL∘]
                       |         D      LP          maxru
                       |    [∘#:PL∘]  _____        'sold'
                       |____  ha-    L     NumP
                            'the' [∘#:PL∘]  _____
                                          aP      NumP
                                      [∘#:PL∘]    [#:PL]
                                       ha-kodm-im  be'alim
                                       'previous'  'owner'
```

In (53b), the adjecive merges high, with LP. This means that adjective will get the same number value as L and D, that is, the referent value (via a context linker). As the referent is plural, the adjective will have a plural number value. In (53c), on the other hand, the adjective merges low, with NumP. Because *be'alim* is a plural noun formally, the adjective will get a plural number feature via Merge. Note that (53b) reflects Landau's (49b-i) above whereas (53c) reflects (49b-ii).

With a singular referent, an adjective can exhibit plural agreement if it merges below L. The finite verb will be in the singular, however, because D cannot get its features valued from below, by Num, as L merges between D and Num. D gets a singular number feature, as a result of matching with a context linker.

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(54)   a.   ? ha-be'al-im   ha-kodm-im   maxar   et   ha-makom lifney šana.
            the-owner-PL the-previous.PL sold.3SG ACC the-place   before year

       'The previous owner sold the place a year ago.'   (Landau 2016)

b.

```
                              CP
                  _____
                 /                        \
               Λ₃                          TP
             [#:SG]               _____
                |                /                  \
                |              DP                    \
                |        _____                 \
                |       /            \                 \
                └──── D              LP               T    ...
                  [∘#:SG∘]      _____        [∘#:SG∘]
                     ha-       /          \         maxar
                    'the'     L           NumP      'sold'
                           [∘#:SG∘]    _____
                                      /           \
                                    aP           NumP
                                 [∘#:PL∘]        [#:PL]
                                   /\             /\
                              ha-kodm-im       be'alim
                              'previous'        'owner'
```
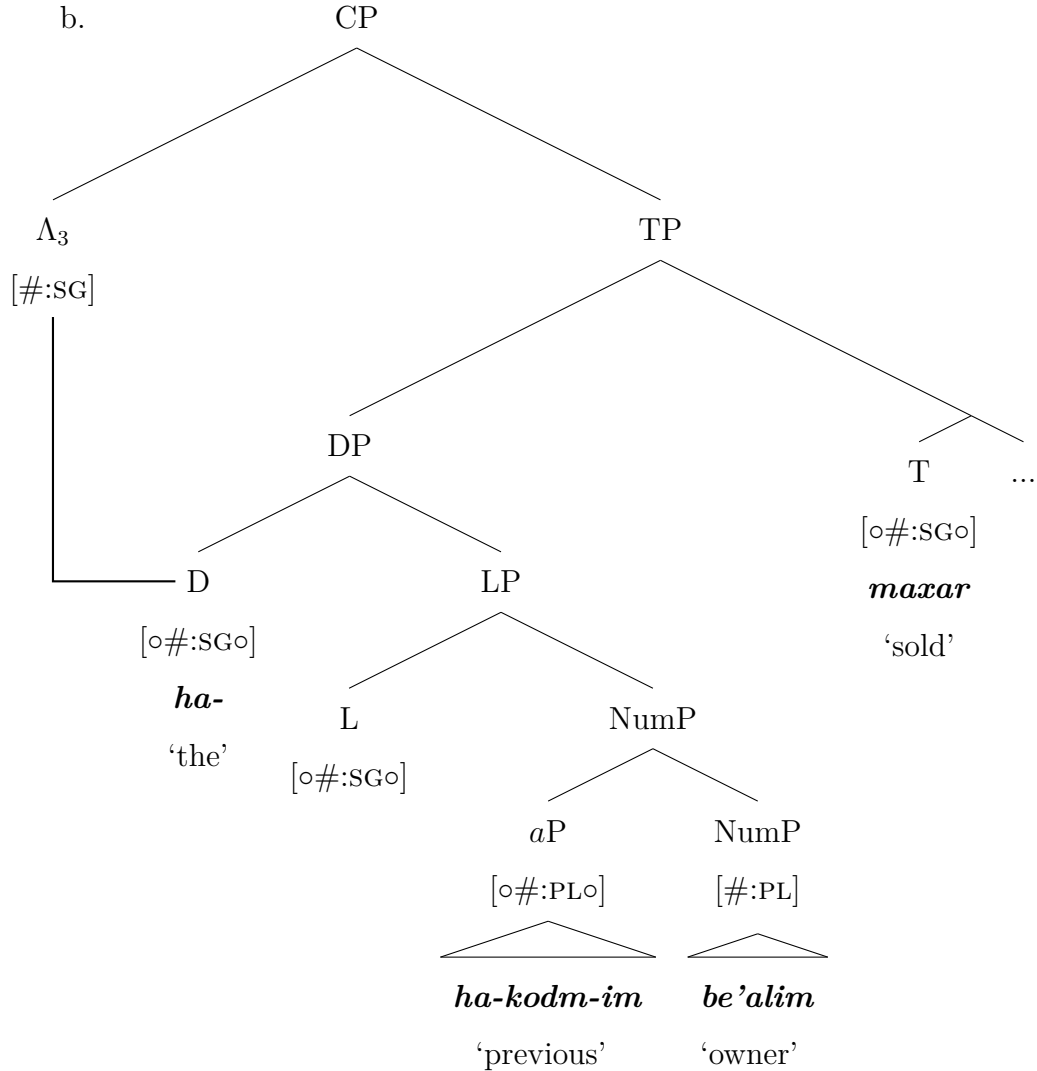
(54) reflects (49c) in Landau's CONCORD and INDEX feature system.

Finally, it is worth emphasizing that on the current approach, examples like

(47d), repeated as (55), are ungrammatical because the singular adjective suggests a

singular referent whereas the plural verb suggests a plural referent; see also Landau's (2016) agreement configuration in (49d).
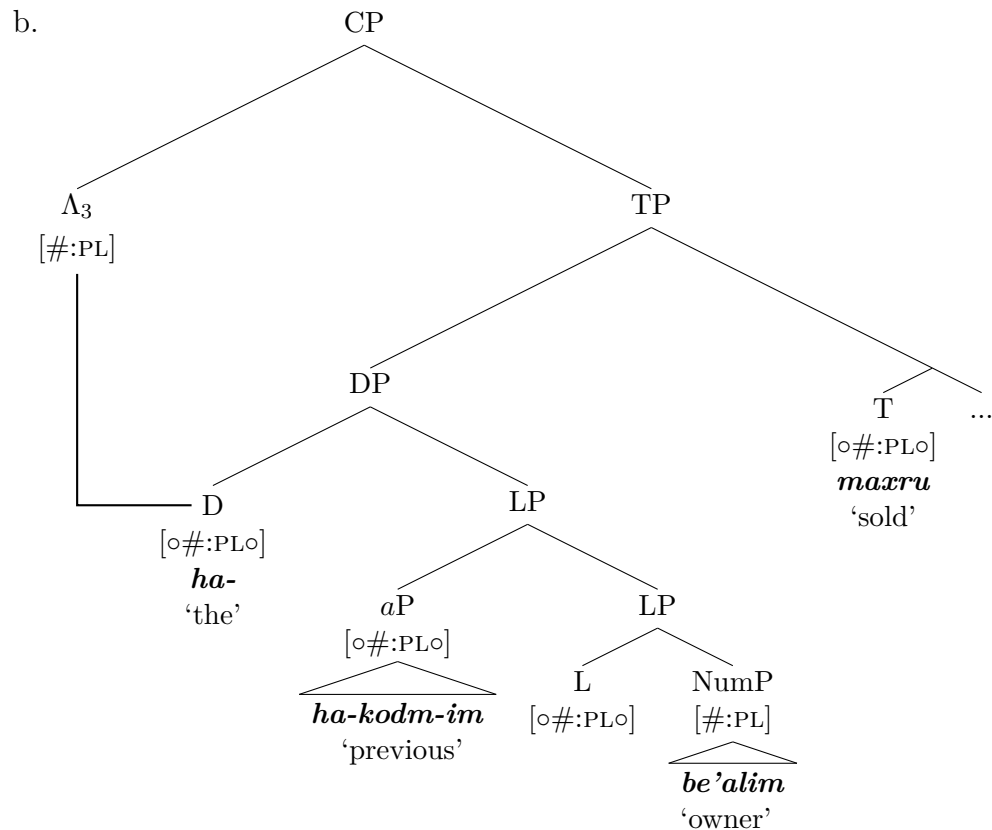
(55)   * ha-be'al-im   ha-kodem   maxru   et   ha-makom lifney šana.
        the-owner-PL the-previous.SG sold.3PL ACC the-place   before year
        Intended: 'The previous owner(s) sold the place a year ago.'
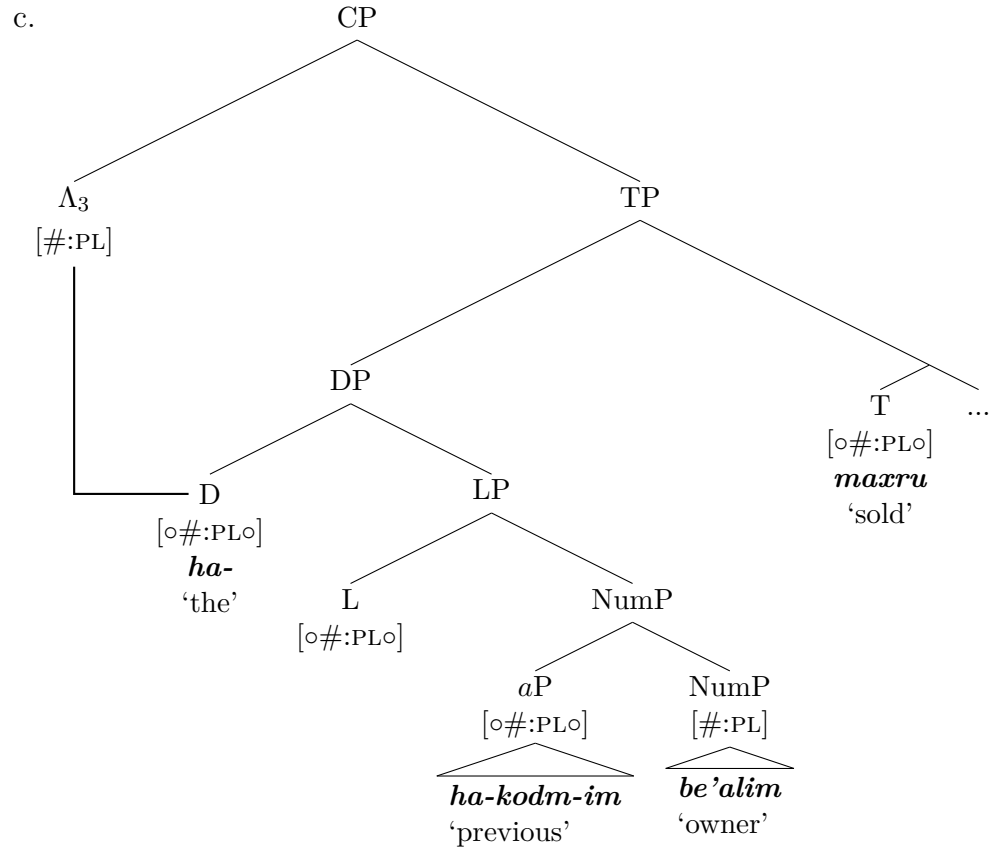   (Landau 2016:985)

Importantly, D and L always have the same value which results from L, with unvalued features, merging with D, which in turn receives values from a logophoric linker. They therefore both can have either a singular or plural value via a context linker but L cannot have a singular value at the same time as D bears a plural value. That is, L cannot have a singular value, which it discharges onto the adjective via Merge, at the same time as D has a plural value to value T's unvalued number feature.

We have now discussed mixed number agreement in Hebrew. Next we look at mixed number agreement in French and Icelandic.

3.4.6.2   Polite pronouns

Many languages have a second person plural polite or honorific pronoun which can have a singular or a plural referent (Comrie 1975, Wechsler and Hahm 2011). The finite verb shows second person plural agreement but depending on the language, a predicate, such as an adjective, can show either plural or singular agreement when the referent is singular; if the referent is plural, a plural agreement on the adjective

is obligatory. French (56) and Icelandic (58) (e.g., Einarsson 1949:134) are among

languages which allow such mixed agreement.

(56)   ***French***

    a.   Vous êtes   loyal.
            you.PL be.2PL loyal.M.SG

           'You (one formal male addressee) are loyal.'

    b.   Vous êtes   loyaux.
            you.PL be.2PL loyal.PL

           'You (multiple addressees) are loyal.' (Wechsler and Hahm 2011:249)

Vous is formally a plural pronoun but can nevertheless refer to a singular entity.

In such cases, the predicative adjective, here 'loyal', exhibits singular agreement.

Similarly, the agreement on the adjective is plural when there is a plural referent.

This suggests that the number value on the predicative adjective is determined

by a context linker in French polite pronoun structures. However, unlike, e.g.,

transitive structures, predicative structures are probably not phases. This suggests

that context linkers are not found only at phase edges.

(57)   a.   Vous êtes   loyal.
             you.PL be.2PL loyal.M.SG

    b. $[_{\text{CP}} \Lambda_{\text{A}i}\ \Lambda_{\text{P}j}\ ...\ [_{\text{TP}} [_{\text{DP}_k}\ \text{vous}]\ \text{êtes} ...[_{\text{PredP}} \Lambda_{\text{A}i}\ \Lambda_{\text{P}j} <\text{DP}_k> \text{loyal}$

In (57), logophoric linkers are located at the edge of PredP even though Pred is

presumably not a phase head. Just like reflexive pronouns, predicative adjectives

establish a relation with a logophoric linker with unvalued features. The logophoric

linker at the edge of CP, which has a singular referent, transmits its singular number

value to the lower logophoric linker (see a brief discussion on feature transmission in §3.4.5.2). As the embedded linker and the adjective establish an Agree relation, the adjective's number feature will be valued as singular. The plural can be captured in the same way.

As we have already noted, our approach to polite pronouns suggests that context linkers are not only found at phase edges. Where exactly a context linker can or cannot occur is an empirical problem that remains to be studied in more detail. Furthermore, this approach suggests that context linkers are not limited to matching with (noun phrase) arguments.

Icelandic polite pronouns are similar to French polite pronouns, in that mixed number agreement is possible.[9]

(58)   ***Icelandic***

    a.   Eruð   þér   lasin,   Sigríður?
            are.2PL you.POL.PL sick.F.SG Sigríður
            'Are you sick, Sigríður?'

    b.   Eruð   þér   lasnar,   Sigríður?
            are.2PL you.POL.PL sick.F.PL Sigríður
            'Are you sick, Sigríður?'   (cf. Axelsdóttir 2011:68)

In both a and b, a single referent, a female whose name is Sigríður, is addressed. We see the polite plural pronoun in both (58a) and (58b), which triggers 2nd person

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[9]See also Friðjónsson (1978:32–33) who shows only plural agreement, noting that the Icelandic 1st and 2nd person polite pronouns "function syntactically as plurals, although they are most often semantically singulars" (p. 32).

agreement on the verb. The agreement on the adjective differs, however. The adjective in (58a) is in the singular whereas it is in the plural in (58b).[10]

This means that the predicative adjective can exhibit both plural and singular agreement with a singular referent. If there is a plural referent, however, the predicative adjective exhibits obligatorily plural morphology.

Whereas the French structures always transparently reflect the referent, Icelandic does not always do that for a singular referent. In addition to the derivation in (57b), repeated for Icelandic in (59b), I propose the derivation in (57c).

(59) a. Þér   eruð   lasnar.
          you.POL.PL are.2PL sick.F.PL

      b. [$_{CP}$ Λ_{Ai} Λ_{Pj} ... [$_{TP}$ [$_{DP_k}$ þér] eruð ...[$_{PredP}$ Λ_{Ai} Λ_{Pj} <DP$_k$> lasnar

      c. [$_{CP}$ Λ_{Ai} Λ_{Pj} ... [$_{TP}$ [$_{DP_k}$ þér] eruð ...[$_{PredP}$ Λ_{Ai} Λ_{Pj} <DP$_k$> lasnar

In (59b), just as in (57b), an embedded context linker transmits its features to the lower linker. In (59c), on the other hand, the adjective establishes an Agree relation directly with the DP before it moves. Both of these result in plural agreement; the referent in (59b) is plural whereas the referent in (59c) is either singular or plural.

---

[10]Note that it is likely that speakers' judgments vary, especially because polite pronouns have largely fallen out of use in Icelandic except in formal written language (cf. Friðjónsson 1978:33). I do not have clear judgments in this regard, although I would probably prefer syntactic plural agreement on the adjective or participle.

Singular morphology on the adjective in the structures above can only mean that there is a single referent, both in Icelandic and French. The languages differ regarding the interpretation of plural morphology on the adjective: In Icelandic it can mean that there is either a singular or plural referent but in French it invariably means that there is a plural referent.

3.4.6.3 Interim summary

Above we discussed Hebrew number mismatch where we saw the 3/4 agreement pattern we discussed in §3.4.5.2. Agreement with the noun *be'alim* is always semantic in part as the outermost layer, D, gets φ-feature values based on the referent, which in turn triggers semantic agreement on the finite verb.

I suggested that the locus of the plural (syntactic) feature is on Num — this results in *be'alim* being "formally" plural — but semantic agreement can be accomplished via a context linker in the left periphery establishing an Agree relation with D.

I gave a somewhat similar analysis of polite plural pronouns and the agreement they trigger, even though the adjective is not DP-internal but in predicative position. The plural pronoun always triggers syntactic agreement on the finite verb but semantic agreement is often triggered on the adjective.

3.4.7 Gender mismatch

Below I will discuss gender mismatches in Russian and Icelandic. The Icelandic mismatch is detected outside the DP only, in predicative position, whereas the Russian mismatch is detected both DP-internally and outside the DP, similar to the Hebrew number mismatch we saw above.

3.4.7.1 Gender mismatch in Russian

In Russian, there is a class of nouns like *vrač* 'doctor' and *professor* 'professor' which by default trigger masculine agreement. When nouns in this class (hereafter *vrač*-class) refer to a female participant, however, they may trigger feminine agreement on, e.g., adjectives (Pesetsky 2013). I will argue that the same analysis as presented above for Hebrew can largely be extended to Russian. First, however, we will look at the data presented by Pesetsky (2013) and his analysis.

In (60) we see an adjective 'new' that modifies 'doctor'; the difference between (60a) and (60b) is the gender on the adjective — these adjectives can be referred to as high adjectives (cf. Pesetsky 2013). In (60b) it exhibits feminine agreement and in that case the doctor must be female. In (60a) we see masculine agreement in which case the doctor can either be male or female. Even though masculine high adjective can refer to a female doctor, a feminine high adjective cannot refer to a male doctor.

(60)   **_Russian_**

    a.   nov-yj   vrač
          new-M.NOM.SG doctor.NOM.SG
          'a new doctor'

    b.   nov-aja   vrač
          new-F.NOM.SG doctor.NOM.SG
          'a new (female) doctor'   (cf. Pesetsky 2013:36)

In (61), on the other hand, we see that low adjectives can only show masculine agreement, even when the referent is feminine.

(61)   a.   glavn-yj vrač
          head-M   doctor.NOM.SG

    b.   * glavn-aja vrač
          head-F   doctor.NOM.SG   (cf. Pesetsky 2013:37)

Pesetsky argues that the difference between (60) and (61) can be explained by assuming that adjectives like 'head' in (61) always merge below a certain threshold whereas adjectives like 'new' may merge above this threshold.

The threshold that Pesetsky proposes is a feminizing head Ж[11] which has the properties listed in (62):

(62)   **_Analysis of feminine agreement with_ vrač-_class nouns_**

    a.   An optional null morpheme Ж 'female' may be merged at any point above a certain structural threshold within NP. Low adjectives fall below this threshold.

---

[11]Pesetsky uses the Cyrillic letter Ж (pronounced "že") as it is the first letter of _ženščina_ 'woman' and other related words (Pesetsky 2013:39).

b. Once Ж merges, the nominal counts as feminine for agreement pur-

poses from then on. (Pesetsky 2013:39)

Below we see a potential merge site for the feminizing head.

(63) **A merge site for** Ж

```
                    N′
                  /    \
              high      N′
           adjective   /   \
                    (Ж)     N′
                           /   \
                        low     N′
                     adjective  / \
                            (*Ж)   N
```
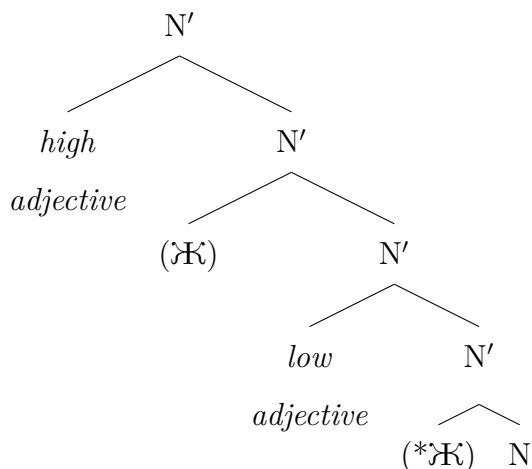
(Pesetsky 2013:40)

If a DP has a female referent and a low adjective merges with the noun (below the

threshold) as well as a high adjective above the threshold, the result will be gender

mismatch — hybrid or mixed agreement.

(64) a. xoroš-aja   glavn-yj   vrač
        good-F.NOM.SG head-M.NOM.SG. doctor.NOM.SG
        'a good (female) head doctor'

     b. xoroš-aja   zubn-oj   vrač
        good-F.NOM.SG dental-M.NOM.SG. doctor.NOM.SG
        'a good (female) dentist'   (cf. Pesetsky 2013:37–38)

A gender mismatch can also be detected on subject-verb agreement.[12]

(65)　　*'Doctor' with female referent*

    a.　Nov-yj　　　　vrač　　　　prišël.
       new-M.NOM.SG doctor.NOM.SG arrived.M.SG

    b.　Nov-aja　　　　vrač　　　　prišl-a.
       new-F.NOM.SG doctor.NOM.SG arrived-F.SG

    c.　Nov-yj　　　　vrač　　　　prišl-a.
       new-M.NOM.SG doctor.NOM.SG arrived-F.SG

    d.　* Nov-aja　　　vrač　　　　prišël.
       new-F.NOM.SG doctor.NOM.SG arrived.M.SG　　(Pesetsky 2013:36)

Note in this 3/4 pattern that if the adjective has a feminine feature, then the
finite verb cannot exhibit masculine agreement (three possibilities out of four are
grammatical). It is, however, possible to have a masculine adjectival agreement
realization and a feminine feature realization on the finite verb. As Pesetsky (2013)

---

[12]It should be noted that even though Pesetsky (2013) marks (65c) as grammatical, this pattern
does not seem to grammatical for all speakers. Matushansky (2013:275) marks it with '%', as
shown in (i-c) below.

(i)　　*'Doctor' with female referent*

    a.　Naš　　　vrač　　　　prišël　　　vovremja.
       our.M.SG doctor-NOM.SG arrived.M.SG on.time

       'Our doctor arrived on time.'

    b.　Naša　　　vrač　　　　prišla　　　vovremja.
       our.F.SG doctor-NOM.SG arrived.F.SG on.time

    c.　% Naš　　　vrač　　　　prišla　　　vovremja.
       our.M.SG doctor-NOM.SG arrived.F.SG on.time

    d.　* Naša　　　vrač　　　　prišël　　　vovremja.
       our.F.SG doctor-NOM.SG arrived.M.SG on.time　　(Matushansky 2013:275)

argues, it therefore looks like the feminizing head can be attached in different heights in the structure.

(66)   ***Possible merge sites for Ж***

```
                        DP
                       /  \
                    (Ж)    D′
                          /  \
                         D    NP
                             /  \
                          (Ж)    N′
                                /  \
                             high   N′
                           adjective  /  \
                                   (?Ж)   N′
                                         /  \
                                      high   N′
                                   adjective  /  \
                                           (Ж)    N′
                                                 /  \
                                               low   N′
                                            adjective  / \
                                                    (*Ж)  N
```
                                            (Pesetsky 2013:40)
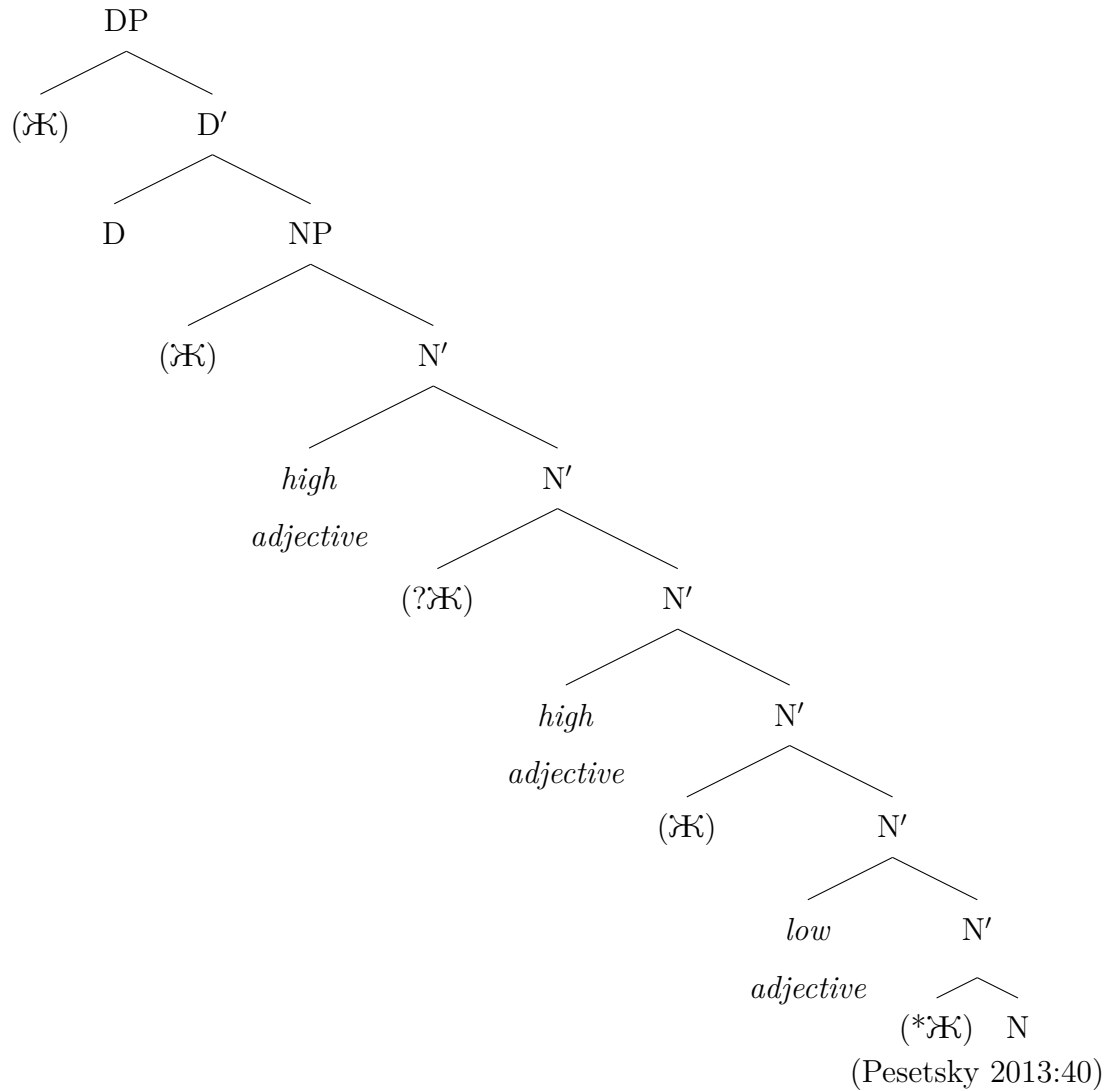
My analysis deviates a bit from Pesetsky's, even though there are many similarities between the two. I argue that n enters the derivation with a valued masculine

gender feature. Adjectives like 'dental' merge with nP, and as a result get the gender value masculine.

(67) a. zubn-oj   vrač
          dental-M.NOM.SG doctor.NOM.SG
          'dentist'   (cf. Pesetsky 2013:38)

  b.

```
                    nP
                  /    \
               aP        nP
            [•n•]       /   \
          [∘γ:M∘]     n      √VRAČ
            /‾‾\    [•√•]   'doctor'
       zubn-oj    [γ:M]
        'dental'
```

Adjectives such as 'new' that merge with n or Num also receive a masculine value, irrespective of whether the referent is a male or a female.

When the referent is female, however, D can get a feminine value when it establishes an Agree relation with a context linker. In such cases, however, L merges between D and Num, but not above D as was the case for, e.g., Icelandic. On my proposal, this is the actual threshold of Pesetsky's. If an adjective merges below L, or below D when there is no LP, it will invariably get a masculine value. If it merges with L, it gets a feminine value.

(68) a. ? interesn-aja   nov-yj   vrač
        interesting-F.NOM.SG new-M.NOM.SG doctor.NOM.SG

      'an interesting new (female) doctor'

                                    (adapted from Pesetsky 2013:38)

b. CP

As before, L is specified for not getting its features values from below, but from an element higher in the tree. In Icelandic and English, this was accomplished via a probing feature where L's features were directly valued by the logophoric linker. In Russian, L gets its features valued from D, which in turn gets its features valued by a logophoric linker.

Furthermore, when D has a feminine value, T gets a feminine value as well as a result of the Agree relation between T and DP. This is shown below.

(69) a. Nov-aja   vrač   prišl-a.
          new-F.NOM.SG doctor.NOM.SG arrived-F.SG   (Pesetsky 2013:36)

b.

$$
\begin{array}{c}
\text{CP} \\
\Lambda_3 \quad\quad \text{TP} \\
[\gamma{:}\textsc{f}] \\
\text{DP} \quad\quad \text{T} \quad \ldots \\
\text{D} \quad \text{LP} \quad [\circ\gamma{:}\textsc{f}\circ] \\
[\circ\gamma{:}\textsc{f}\circ] \quad\quad \textbf{\textit{prišl-a}} \\
a\text{P} \quad \text{LP} \quad \text{`arrived'} \\
[\circ\gamma{:}\textsc{f}\circ] \quad \text{L} \quad \text{NumP} \\
\textbf{\textit{nov-aja}} \quad [\circ\gamma{:}\textsc{f}\circ] \quad [\circ\gamma{:}\textsc{m}\circ] \\
\text{`new'} \quad\quad \textbf{\textit{vrač}} \\
\text{`doctor'}
\end{array}
$$
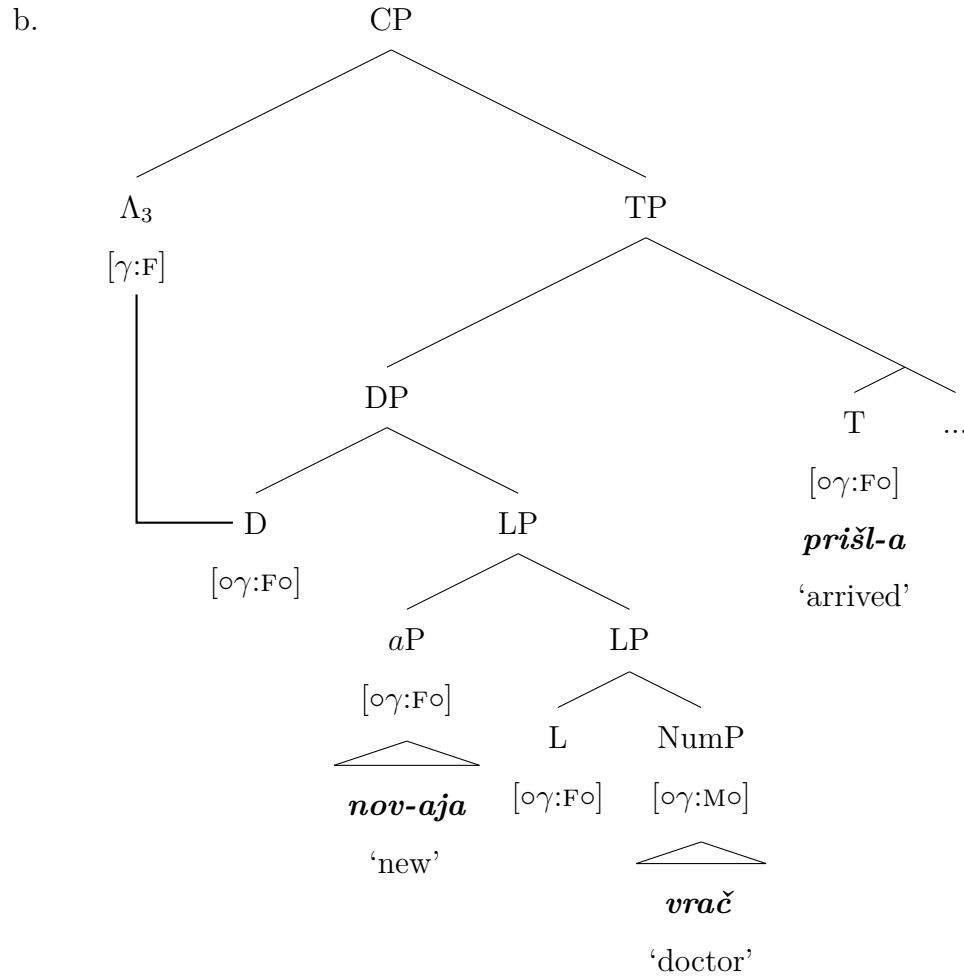
Here, both T and the high adjective get a feminine gender value from the DP.

In some cases, T can exhibit feminine value even though the highest adjective in the structure shows masculine agreement. That reflects the adjective's merging below L.

(70) a. Nov-yj   vrač   prišl-a.
new-M.NOM.SG doctor.NOM.SG arrived-F.SG   (Pesetsky 2013:36)

b.

```
                          CP
                 _____/  _____
               /                     \
             Λ₃                       TP
           [γ:F]              _____/  _____
             |              /                   \
             |            DP                     T    ...
             |          /   \                  [∘γ:F∘]
             |___     D      LP                 prišl-a
                 [∘γ:F∘]    /  \               'arrived'
                          L    NumP
                        [∘γ:F∘]  / \
                              aP    NumP
                           [∘γ:M∘]  /  \
                            /\    Num    nP
                          nov-yj [∘γ:M∘] [γ:M]
                          'new'          /\
                                        vrač
                                       'doctor'
```
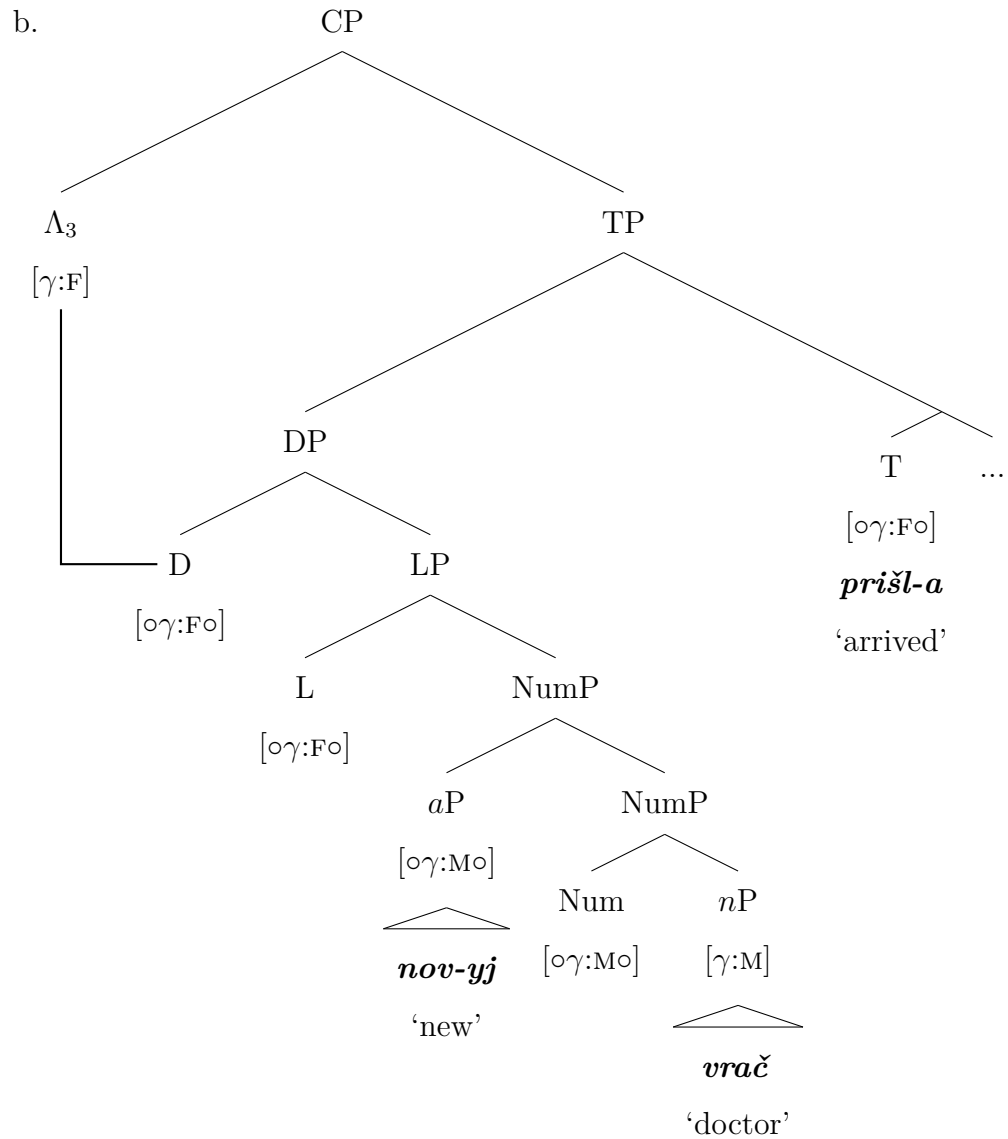
On the other hand, T cannot show masculine agreement if an adjective shows feminine agreement. That is because the adjective merges with an LP and both the adjective and the LP will be receiving the values D will get from the logophoric

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linker, i.e., feminine. However, the DP cannot have simultaneously a feminine value

for the adjective and the LP and a masculine value for T.

(71) * Nov-aja   vrač   prišël.
         new-F.NOM.SG doctor.NOM.SG arrived.M.SG   (Pesetsky 2013:36)

That is, from the point where feminine gender is implemented, on LP through the

DP, masculine is not visible. That explains the ungrammaticality of the example

above, where a DP-external probe, 'arrived', establishes an agreement relation with

the DP. As feminine gender but not masculine is visible to it, as witnessed by the

feminine adjective, the verb should only be able to show feminine agreement in this

case.

   We have now seen a gender mismatch in Russian between attributive adjectives

of different heights and between adjectives in attributive positon and finite verbs.

Next, we look at gender mismatch in Icelandic between an adjective in attributive

position and predicative position.

3.4.7.2   Gender mismatch in Icelandic

Gender mismatch in Icelandic is possible in predicative position but not attributive

position, as we saw above ((15)–(16), repeated as (72)–(73)). This kind of a mis-

match only arises if there is a mismatch between the inherent gender of the noun

an the sex of the referent. *Ráðherra* 'minister' is inherently masculine but in the

examples below, the referent is supposed to be a female.

(72)   *'Minister' with female referent in Icelandic*

    a.   gamall   ráðherra
         old.M.NOM.SG minister.M.NOM.SG

    b. * gömul   ráðherra
         old.F.NOM.SG minister.M.NOM.SG

(73)   *'Minister' with female referent in Icelandic*

    a.   Ráðherra-nn   er gamall.
         minister.M.NOM.SG-M.NOM.SG is old.M.NOM.SG

    b. % Ráðherra-nn   er gömul.
         minister.M.NOM.SG-M.NOM.SG is old.F.NOM.SG

An adjective in predicative position can, at least for some speakers, exhibit semantic agreement (H.Á. Sigurðsson 2016b).

The definite article in Icelandic exhibits gender, number and case. The adjective in (73b) shows feminine agreement even though the suffixed article on 'the minister' shows masculine agreement. Feminine therefore must be visible to the adjective. A possible analysis is that there is a functional L-layer above D. This layer is silent in the example above but gets values different from D from a logophoric linker at the C-edge.

LP is specified for receiving values from a logophoric linker and therefore does not get values from a DP via Merge. In cases where semantic agreement is not triggered, there is no LP and the DP is the highest layer of the maximal noun phrase.

Let us now look at different ways of accomplishing gender mismatch in Icelanidc, where we disregard other features than gender.

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(74)   a. % Ráðherra-nn   er gömul.
             minister.M.NOM.SG-M.NOM.SG is old.F.NOM.SG

b. $[_{CP} \Lambda_{3i} \; ... \; [_{TP} [_{DP_j} \text{ ráðherrann}] ... [_{PredP} \Lambda_{3i} <\text{DP}_j> ... \text{gömul}$

c. $[_{CP} \Lambda_{3i} \; ... \; [_{TP} [_{LP_j} [_{DP} \text{ ráðherrann}]] ... [_{PredP} \Lambda_{3i} <\text{LP}_j> ... \text{gömul}$

The approach in (74b) is feature transmission from a high context linker to the adjective via a low context linker. In (74c), however, we posit an LP which gets its features valued by a logophoric linker. If the adjective establishes a relation with this LP, as in (74c), the adjective will receive the same feature values as L. Both of these approaches result in agreement that transparently reflect the referent, in this case a female referent.

3.4.8   Definiteness mismatch and the height of LP

In the Icelandic examples we have seen so far, internal agreement has been robust in that no DP-internal agreement mismatches have been allowed. A feature mismatch is detected DP-internally, however, in appositive adjectives. This mismatch does not have a bearing on context linkers, but it suggests that LP is located at the top of the maximal noun phrase in Icelandic.

Normally, attributive adjectives (DP-internally) agree not only with the noun they modify in number, gender and case, but also in definiteness. That is, attributive adjectives usually show definite agreement (traditionally called weak) if the

noun phrase is definite, and indefinite agreement (traditionally called strong) when the noun phrase is indefinite. This is shown below.

(75) Gul-i   bíllinn   valt   ofan í skurð.
      yellow-WK.M.NOM.SG the.car.M.NOM.SG rolled into   ditch
      'The yellow car rolled into a ditch.'   (Árnason 1980:44)

The meaning of the adjective is restrictive. Non-restrictive adjectives as in (76), on the other hand, exhibit strong indefinite agreement, even when the noun phrase is definite (see, e.g., Rögnvaldsson 1984, Thráinsson 2007, Pfaff 2015).

(76) Gul-ur   bíllinn   valt   ofan í skurð.
      yellow-STR.M.NOM.SG the.car.M.NOM.SG rolled into   ditch
      'The car, which happened to be yellow, rolled into a ditch.'
                                                              (Árnason 1980:44)

As the translation suggests, the adjective describes further the noun it modifies, without participating in picking out a referent. As noted by Árnason (1980:43), this use does not restrict the meaning, as it is already known what is being referred to, irrespective of the adjective.

   (77) is another example which shows this kind of appositive use.

(77) Ég horfði upp í bláan   himininn.
      I   looked up   in blue.STR the.sky
      'I looked up into the sky, which happened to be blue.'
                                                              (Thráinsson 2007:3)

The strong form of the adjective is used because it allows a non-restrictive reading. The weak form would be restrictive, suggesting there were more than one sky.

Pfaff (2015) argues, as well as Ingason and E.F. Sigurðsson (2017 [forthcoming]), that appositive adjectives as in (76) are merged high, outside the D-layer. D picks out a referent but elements outside D cannot restrict this domain and that is exactly how appositives work.

Pfaff (2015) makes the important observation in this respect that when there is both a weakly inflected restrictive adjective and a strongly inflected nonrestrictive appositive, the appositive is always structurally higher.

(78)　a.　? Blessað　　blessaða　　vatnið.
　　　　　　blessed.STR blessed.WK the.water
　　　　　　'the damn blessed water'

　　　　b.　* Blessaða　　blessað　　vatnið.
　　　　　　blessed.WK blessed.STR the.water　　　　　　　　(Pfaff 2015:57)

This fits nicely with the assumption that restrictive adjectives are located within the DP but appositives outside it.

Let us now take a look at how we can derive this definiteness mismatch. An important assumption we have to make is that definiteness on D can be shared by elements below D but it does not percolate up.

(79)   a.   ? Blessað   blessaða   vatn-ið.
            blessed.STR blessed.WK water-the

            'the damn blessed water'

b.

```
                        DP
                   ╱         ╲
                aP             DP
              [∘γ:N∘]        [∘γ:N∘]
              [∘#:SG∘]       [∘#:SG∘]
               ╱──╲          ╱      ╲
             blessað        D        NumP
                         [∘γ:N∘]    ╱    ╲
                         [∘#:SG∘] Num      nP
                         [Def:+]  [∘γ:N∘]  ╱  ╲
                          -ið     [#:SG]  aP    n
                         'DEF'  [∘Def:+∘] [∘γ:N∘]  ╱ ╲
                                         [∘#:SG∘]  n   √VATN
                                         [∘Def:+∘][γ:N] 'water'
                                          ╱──╲   [∘#:SG∘]
                                        blessaða [∘Def:+∘]
```
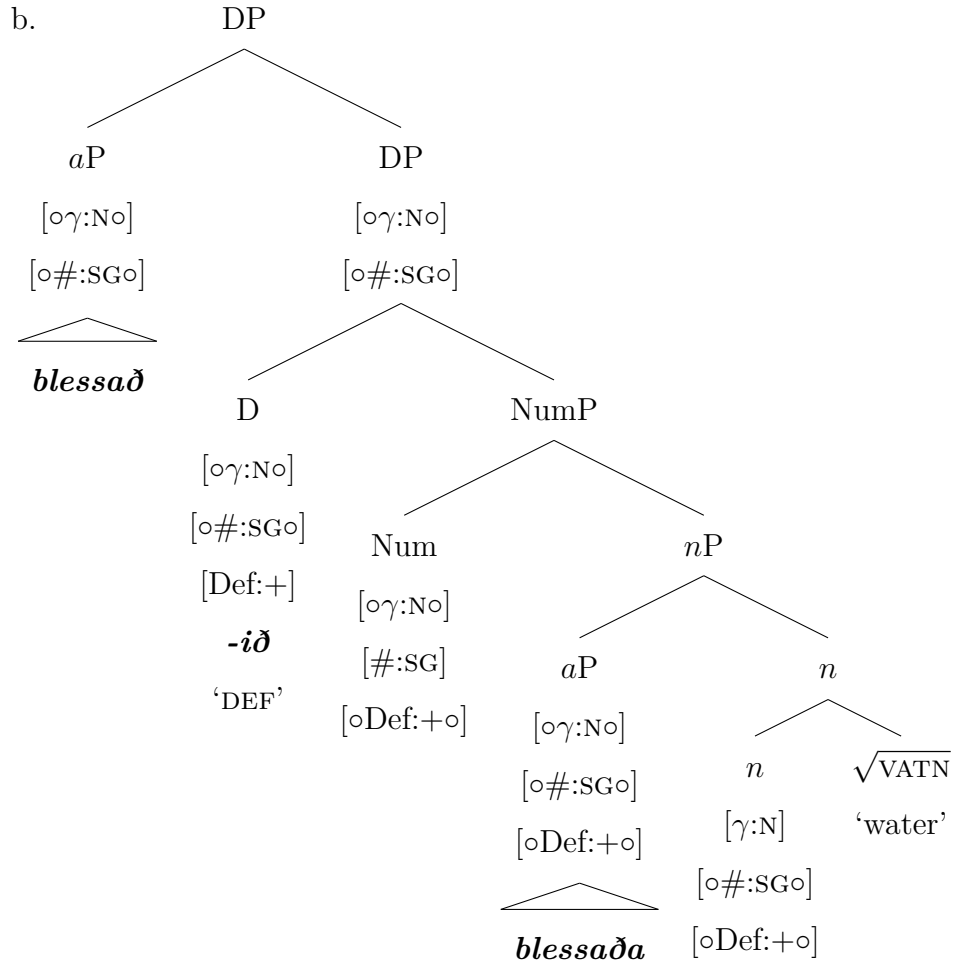
The definiteness mismatch is different from other mismatches that we have seen in that it does not bear directly on logophoric linkers. However, it is similar to other DP-internal mismatches, such as in Hebrew and Russian, in that structural height is important and the order is asymmetrical. Also, we suggested before that LP is merged on top of the DP. Even though appositives are merged outside the DP, LP is merged even higher. This can be concluded from the fact that, as far as I know,

appositive adjectives behave the same as, e.g., adjectives that merge lower in the structure: They cannot show gender mismatch, as shown below.

(80)   ***'Minister' with female referent***

Ósáttur   / *Ósátt
unsatisfied.INDEF.M.NOM.SG / *unsatisfied.INDEF.F.NOM.SG

ráðherrann   kvartaði.
the.minister.M.NOM.SG complained

'The minister, which happened to be unsatisfied, complained.

This indicates that the LP, when and if present, is merged higher than the DP and the appositive. This suggests that the L-layer is very high in the structure of Icelandic noun phrases.

3.4.9   Implications

We have now looked at different types of agreement mismatches and offered a syntactic account for them. This syntactic approach raises the question whether we should treat "pragmatic agreement" syntactically.

Pragmatic agreement has been described as being "the requirement that coreferential elements bear compatible referential features" (Landau 2016:978). Examples like the following, where we see agreement mismatches across a matrix clause and a subordinate clause, could be subsumed under pragmatic agreement:

(81) **Icelandic**

Nemendur-nir   sögðu að þau   gætu
students.M.NOM.PL-DEF.M.NOM.PL said   that they.N.NOM.SG could

ekki tekið prófið.
not take the.test

'The students (masc.) said that they (neut.) couldn't take the test.'

(82) **Serbo-Croatian**

Ovo   malo   devojce_i je   uslo.
this.N.SG little.N.SG girl.N.SG AUX.3SG entered.N.SG

Ona_i   je   htela   da telefonira.
she.F.SG AUX.SG wanted.F.SG that telephone.3SG

'This little girl_i (neut.) came in. She_i (fem.) wanted to use the
telephone.'   (Wechsler and Zlatić 2000:804)

However, future research should look into whether we can apply the same mecha-
nism as above to transmit features across clauses.

Furthermore, future research should investigate what are possible locations for
context linkers and whether they can value features on phrases that are generated
higher than the context linkers. Let us look at the following attested examples.

(83) **Icelandic**

Aðeins tvær af eistnesku þríburunum skiluðu sér   í mark
only   two.F of Estonian the.triplets.M returned REFL.DAT to goal

'Only two (fem.) of the triplets (masc.) made it to the goal.'
                                                       (https://goo.gl/DQaBJT)

(84) Þrjár   af viðmælendum Pressunar sögðust hafa fengið skilaboð [...]
three.F of interlocutors.M Pressan   said   have gotten message [...]
                                                       (https://goo.gl/uGKIOE)

Both *þríburar* 'triplets' and *viðmælendur* 'addressees, interlocutors' are masculine nouns. However, in the examples above these nouns have female referents. This would usually result in masculine agreement but here we have semantic feminine agreement. This may suggest that there are context linkers at the edge of the PP and these linkers are visible to the quantifier.

3.5   Chapter summary

In this chapter we argued that DP-internal agreement should for the most part be derived with feature sharing via Merge. We also looked at various feature mismatches DP-internally and between the DP and an outside element, where I suggested that we should analyze semantic agreement in the syntax. I, however, adopted H.Á. Sigurðsson's context linkers to derive semantic agreement, arguing also for LP in the syntax.

Chapter 4

Beyond Active and Passive:

Voice and Implicit Arguments

4.1 Introduction

In this chapter I investigate the interaction of Voice and implicit arguments. The main focus is on Icelandic which shows a wealth of constructions which have both typical passive and active properties, showing that the distinction is often not clear-cut. One of the key contributions of the chapter is the claim that there are no Voice flavors per se, such as Voice$_{\mathrm{ACT}}$ or Voice$_{\mathrm{PASS}}$, blurring the distinction between actives and passives. I argue that what being a passive comes down to is Existential Closure of the external argument.

In §4.2 I give a short background, discussing properties often attributed to passives. I also discuss the Canonical Passive (CanP) in Icelandic and its properties. In §4.3 I discuss three Icelandic constructions that contain an implicit argument,

the New Impersonal Passive (NIP), the Impersonal Modal Construction (IMC) and
the Aspectual Passive (AspPass). All of these constructions have been discussed
substantially in the literature, especially the first two. A novelty of the section is
my proposal that all three structures can be given fundamentally the same analysis,
with a Weak Implicit Argument in SpecVoiceP. Using Legate's (2014) term, these
can be referred to as grammatical object passives. Then, in §4.4, I discuss the
Reflexive Passive (ReflPass), which bears resemblance to the NIP. However, I argue
that the ReflPass is different from the NIP, IMP and the AspPass in that it does not
contain a WIA in SpecVoiceP. I will, furthermore, argue that the reflexive pronoun
of inherently and naturally reflexive verbs in Icelandic is the overt counterpart to a
WIA, i.e., a Weak Explicit Argument (WEA).

The three constructions shown in (1) share various properties that are generally
attributed to passives (such as 'by'-phrases), but at the same time they also share
properties often attributed to actives (such as structural accusative case on an
object). In the examples below I show the three constructions with an agentive
'by'-phrase, a hallmark of passives.

(1) a. ***NIP***

   % Nýlega var selt mikinn   kvóta   af útgerðarmanninum
     recently was sold much.ACC quota.ACC by the.fishing.vessel.owner

   Aðalsteini
   Aðalsteinn

   'Recently, a large quota was sold by the fishing vessel owner
   Aðalsteinn.'

b. **IMC**

Það þarf að rannsaka þetta betur af fræðimönnum.
EXPL needs to investigate.INF this.ACC better by scholars

'This needs to be studied further by scholars.'

c. **AspPass**

Er verið að afgreiða þig af einhverjum?
is been to serve you.ACC by anyone

'Are you being served by anyone?'

The NIP has received the most attention of these. It has passive morphology (a past participle selected by *vera* 'be') and 'by'-phrases are grammatical in the construction. On the other hand, it shows signs of an active construction in that it assigns accusative case to an object and A-movement of objects to subject position is blocked. Note that the participle does not show agreement with a DP in the clause and therefore I usually gloss it as DFLT (default) which has the form of a neuter, nominative, singular passive participle. This is also the same form as for an active participle selected by *hafa* 'have', which I usually gloss as PTCP.

The AspPass also has passive morphology, with *vera* 'be' selecting a past participle. However, it is not the main verb that exhibits passive morphology, but an aspectual verb, such as *verið* 'been' in (1c) above. 'By'-phrases are also allowed in the AspPass, suggesting a passive structure. On the other hand, accusative case is assigned in it and a DP in the AspPass cannot move to subject position.

'By'-phrases are also allowed in the IMC, even though it does not show any passive morphology. These facts are important for showing that passive morphology

is not essential for passivization. In the IMC, just as in the NIP and the AspPass, accusative case is assigned and A-movement of an internal argument to subject position is disallowed.

I adopt Legate's (2014) proposal for the NIP and extend it to the IMC and the AspPass. Legate argues for a φP in SpecVoiceP that restricts, but does not saturate, the external argument. The following is Legate's (2014) analysis of what she calls grammatical object passives, which includes the NIP.

(2)   VoiceP

    φP   Voice   vP

              v   VP
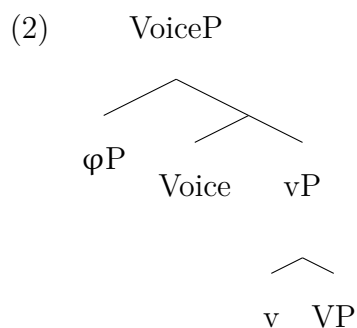
(Legate 2014:85)

I extend this analysis to the IMC and the AspPass. My analysis of the IMC and the AspPass leads to the conclusion that Existential Closure is not part of VoiceP but provided external to it, by participial Asp (broadly speaking equivalent to Bruening's 2013 Pass). Note that I use Asp for both passive participle *-ed* as well as aspectual verbs.

I will now discuss basic properties of passives before discussing the NIP, the IMC and the AspPass.

4.2   Passives and their properties

4.2.1   Passivization is Existential Closure
of an external argument

We may start this overview by asking the simple question: What do passives in different languages have in common? That is, what are the defining properties of passivization? A lot of effort has been put into answering questions like these in various analyses of passives. To answer the question above we might think of passive morphology, accusative-to-nominative case conversion, demotion of the external argument (Comrie 1977) or promotion or advancement of an internal argument (Perlmutter and Postal 1977), and availability of 'by'-phrases. However, most of these properties are not shared by all alleged passive constructions cross-linguistically (see, e.g., Chomsky 1981:117–127).

I argue that what being a passive comes down to is Voice head that introduces an external argument variable (which I will typically refer to as agent) but there is not a projected DP that saturates the agent variable. Therefore an extra mechanism, Existential Closure (EC), is needed to saturate that argument (see a general discussion on EC in §1.4). As a result of the external argument being unsaturated when VoiceP has been built, 'by'-phrases, which further define the external argument, become available. I will therefore assume that a construction is a passive if it allows 'by'-phrases.

Other properties often attributed to passives do not seem to be shared by all passive constructions, such as passive morphology, promotion of an object or nominative-to-accusative conversion. First of all, not all passives (or passive-like structures) show special morphology that is different from the active (see, e.g., Perlmutter and Postal 1977:398–399 on Mandarin Chinese). I will argue below that the Impersonal Modal Construction in Icelandic has both a passive and an active variant, even though the two do not differ in form and they do not exhibit any passive morphology.

There are also various constructions in English that allow *by*-phrases, at least to some extent. Ability adjectives are among them.

(3)   ***English ability adjectives***

   a.   This book is readable by a 10-year-old.

(McCawley 1975; via McGinnis 2010)

   b.   The grammar is learnable by the child.   (Roeper 1987:269)

The *by*-phrases in these examples show that an external argument is introduced. If the definition of a passive is Existential Closure of an external argument, then ability adjectives, at least in some cases, would count as passives. We might not necessarily as a result want to go as far as defining *-able* as passive morphology, however.

Second, even if we say that an external argument is "demoted" in passives, it may be odd saying that the internal argument is promoted in the Icelandic constructions

discussed in this chapter, i.e., the New Impersonal Passive, the Impersonal Passive and the Aspectual Passive, as the internal argument cannot A-move to subject position.

Third, the lack of accusative-to-nominative conversion cannot be taken as a diagnostic for a passive-like construction being an active. As shown for Ukrainian in (4), 'by'-phrases are compatible with the so-called *-no/-to* construction, where accusative case on an internal object is preserved.

(4)   ***Ukrainian***

Cerkvu   bulo zbudova-no Lesevym.
church.ACC was built-DFLT by.Lesiv

'The church was built by Lesiv.'   (Sobin 1985:658)

Under various proposals mentioned in Chapter 2, accusative is dependent on there being a nominative in the same dependency. Therefore, it might look like that since passive-like structures have accusative on the internal argument, then there must be a higher DP, PRO, that is assigned nominative. We cannot jump to this conclusion, however. I argue that Weak Implicit Arguments in the Icelandic structures discussed below do indeed bear case but these arguments do not, however, saturate the external argument variable.

4.2.2   Background

The approach to passives in transformational syntax was language-specific, deriving the passive from the active with a passive-specific transformation rule (Chomsky

1957, 1965). In the Extended Standard Theory (EST) and Government and Binding (GB) era (X′-theory), approaches in modelling grammar shifted from language-specific rules to general principles applying to language. Ambitious research was conducted on case and Voice phenomena, along with their interaction (Chomsky 1981; Vergnaud 1977/2008; Jaeggli 1986; Baker et al. 1989). The Principles and Parameters approach, which has its roots in GB, is pursued further in Minimalism (Chomsky 1993, 1995, et seq.). In recent years, many important cross-linguistic observations and discoveries regarding Voice phenomena and case have been made. Yet, at the same time, the interaction between the two requires a much better understanding. This chapter delves into how case and Voice are intertwined from the viewpoint of Icelandic, a case-rich language famous for exhibiting quirky case subjects. Icelandic has various different Voice structures where the interaction with case is often not what would have been expected. The phenomena researched here make us redefine what we often take for granted when we talk about actives, passives, middles, etc., in language.

The generative literature on different Voice types, case and their interaction is vast, with well-known problems such as accusative objects in the active being nominative in the passive. Ever since the discovery of oblique case subjects in Icelandic (Andrews 1976, Thráinsson 1979, Zaenen et al. 1985, H.Á. Sigurðsson 1989) and

other languages, such as Faroese (Barnes 1986; Thráinsson et al. 2004),[1] the problems have become more interesting and challenging. Below I provide new analyses for constructions in Icelandic that provide important insights into the intersection of Voice and case. The focus is on the interaction of syntax and morphology, on the one hand, and syntax and semantics, on the other.

The chapter contemplates what counts as, e.g., a passive construction and challenges traditional views, arriving at the conclusion that the boundaries are in some cases much more vague than often believed, between, say, active and passive constructions. Surely, even though passives are often described as demoting the agent (Comrie 1977), that is not enough. As has become evident in recent years in various constructions, not even passive morphology and structural accusative to nominative case alternation is required (e.g., Maling and Sigurjónsdóttir 2002).[2]

4.2.3 Implicit external arguments and case

Two properties have often been highlighted in the discussion of passives cross-linguistically, regarding case and external arguments (e.g., Chomsky 1981:124).

──────────────────────

[1]See also the claim made by Eythórsson and Barðdal (2005) that oblique subjects are a common Germanic inheritance.

[2]For a recent attempt to define passives, see Bruening and Tran (2015), who define passives as a demotion or existential binding of an external argument.

(5) a. External arguments of active structures are not pronounced in corre-

         sponding passives.

    b. Structural objective case is not assigned to an internal argument.

Burzio (1986:178) famously makes a connection between the two problems above in

his generalization.

(6) ***Burzio's Generalization***

    All and only the verbs that can assign θ-role to the subject can assign

    (accusative) Case to an object.   (Burzio 1986:178)

The generalization highlights the need of understanding when and why structural

accusative case is and is not assigned. Internal arguments get nominative case in

canonical passives (7b), such as in Icelandic, whereas they are in the accusative in

corresponding active structures (7a).

(7) ***Icelandic***

    a. Ég   borðaði matinn.
        I.NOM ate   the.food.ACC
        'I ate the food.'

    b. Maturinn   var borðaður.
        the.food.NOM was eaten
        'The food was eaten.'

As discussed in §2.2.1, various approaches take accusative case to be dependent on

nominative; I do that as well in the present approach. That is important for the

NIP, the IMC and the AspPass, which we will discuss below. In these constructions,

a structural accusative case is realized on the object. The reason for that, I propose, is that there is phrase higher in the tree, a φP, that gets structural case (translated to nominative in the MC).

Another related idea from the GB era is case and external argument absorption. For Jaeggli (1986), an essential property of passives is that a passive morpheme (-*en* in English) is assigned the external θ-role (the passive morpheme absorbs it). This idea is perhaps not that far from what I propose, that an essential property of the passive is Existential Closure of the external argument; in some cases it could be claimed that the functional head where the passive morpheme is realized does this work. Jaeggli argues also that structural objective case is absorbed in the passive, i.e., that that it is assigned to the passive morpheme (see, however, various cross-linguistic complications which he discusses). Baker et al. (1989) build on Jaeggli's (1986) work, arguing that the passive morpheme (-*en* in English) is in fact an argument. I will not discuss these accounts further.

Zeroing in on (5), external, implicit arguments can be referred to or, in a sense, made visible even though they are not generated syntactically in an argument position. Agentive 'by'-phrases are in general taken to be a reliable diagnostic for the existence of an implicit external argument. In the active example in (8a) below, *Bill* is the agent. In the eventive passive in (8b), there is no overt agent in argument position but the agent argument is referred to in a *by*-phrase. The fact that an

agentive *by*-phrase is not compatible with the structure of the anticausative in (8c) indicates that there is no implicit argument in the structure.

(8)   ***English***

    a.   Bill sank the ship.

    b.   The ship was sunk by Bill.   (Roeper 1987:268)

    c. * The ship sunk by Bill.   (Roeper 1987:268)

Subject-oriented adverbials, such as *deliberately* or *intentionally*, have also been used to show that there is an implicit argument in passives, but not in, e.g., anti-causatives.

There are various other properties that actives and passives share as opposed to anticausatives (and, e.g., middles). The instrumental phrase *with a torpedo* is compatible with the active structure in (9a) and the passive in (9b). The instrumental refers to the agent, who uses a torpedo to sink the ship. Anticausatives do not have an external argument and therefore (9c) is not grammatical.

(9)   a.   The enemy sank the ship with a torpedo.

    b.   The ship was sunk with a torpedo.

    c. * The ship sank with a torpedo.   (Bruening 2013:4)

Bruening (2013) takes instrumental phrases to be an external argument diagnostic. Note, however, that Svenonius (2006a) points out for Icelandic that even though instrument phrases are impossible in unaccusatives, middles do allow them, at least

sometimes, but we would not automatically want to argue that middles have an implicit argument. I will not use instrumental phrases as a diagnostic for external arguments.

Another property that differentiates between actives and passives, on the one hand, and, e.g., anticausatives, on the other, is control into infinitival clauses by an external argument (e.g., Manzini 1983, Roeper 1987).

(10)   a.   Bill sank the ship to collect the insurance.

        b.   The boat was sunk to collect the insurance.   (Roeper 1987:268)

        c.   * The boat sank to collect the insurance.   (Roeper 1987:268)

I assume that implicit arguments are not projected unless we can detect syntactic effects such as blocking of A-movement. This is an important distinction for the comparison of the NIP and the canonical passive in Icelandic. As we will be arguing for a projected implicit argument in the NIP, the AspPass and the IMC, we now look at different types of implicit arguments, weak and strong.

4.2.4 Weak and Strong Implicit Arguments

According to Bhatt and Pancheva (2006:560), "the literature on implicit arguments has defined them as syntactically active elements that nevertheless do not occupy a syntactically projected position." The passive voice, for example, is assumed to have an implicit argument that we can refer to but does not occupy a syntactic position.

More recently, though, Landau (2010) has analyzed the implicit argument of the passive as not only being syntactically active but also occupying a syntactically projected position. Landau calls the argument introduced in the passive a Weak Implicit Argument (WIA), as opposed to Strong Implicit Arguments (SIA, i.e., PRO/*pro*). The main difference between WIAs and SIAs is that the latter contain a D-head but WIAs do not. The result of WIAs not being DPs is that they are able to restrict an argument position without saturating it (Legate 2014, Ingason et al. 2012, 2013; see discussion on Chung and Ladusaw's 2004 predicate restriction in §1.4).

Furthermore, Landau (2010) argues that only SIAs but not WIAs license secondary predicates and reflexive binding. Also, WIAs in SpecVoiceP allow 'by'-phrases whereas SIAs do not (Legate 2014; also Ingason et al. 2012, 2013).

4.3   Breaking down the passive/active dichotomy

4.3.1   Introduction

In this section, I look at two constructions in Icelandic, the Impersonal Modal Construction (IMC) and the Aspectual Passive (AspPass), which share several properties with the New Impersonal Passive (NIP). I argue for essentially the same analysis of all three, extending Legate's (2014) analysis of the NIP. In these constructions, a φP, smaller than a DP, restricts the agent position, but does not saturate it.

The φP in SpecVoiceP leads to structural accusative case on the object and blocks movement of the DP. As it does not saturate the Agent, 'by'-phrases are allowed.

The section investigates the boundaries between actives and passives and looks at where, why and how the dichotomy between them breaks down, focusing on the interaction of Voice and implicit arguments in Icelandic. I argue what being a passive comes down to is Existential Closure of the external argument (as suggested most recently by Bruening and Tran 2015; see also Bruening 2013).

The constructions investigated below (the NIP, the IMC and the AspPass) have it in common that 'by'-phrases are available, a hallmark of passives. However, structural accusative case is realized in the absence of an overt nominative argument, which goes against many, or most, descriptions of passives. Many passive constructions have passive morphology but that is not the case for the IMC, for example. These constructions force us to rethink what passivization really comes down to.

4.3.2   Survey data

A lot of what is known about the NIP, as well as the Reflexive Passive (ReflPass) discussed in §4.4.2, comes from a few large-scale written questionnaire surveys, whose results have been reported on in various works. Below, I build on the results from these studies and report their results where appropriate. These, of course, did not test everything that is relevant for the NIP and the ReflPass. In addition, I rely on my own judgments here, as a speaker of the NIP, the ReflPass and the

Canonical Passive (CanP), but I rely also on other speakers' judgments over the past few years, especially in cases where survey data fall short and where there do not exist relevant judgments in the literature. This concerns also the IMC and the AspPass which have not been studied as extensively in questionnaire surveys as the NIP and the ReflPass.

The first of these surveys was conducted in 1999–2000 by Joan Maling and Sigríður Sigurjónsdóttir (see Maling and Sigurjónsdóttir 2002), who evaluated answers from 1695 15- and 16-year-olds and 200 adults (the latter group was tested as a control group). The participants were given two options when judging the sentences: *yes* 'this is something one can say' and *no* 'this is something one cannot say'. I will refer to this study as M&S. When presenting their results, Maling and Sigurjónsdóttir divided the adolescents into two groups based on where they lived: inner Reykjavík vs. Elsewhere. The adolescents in inner Reykjavík accepted the NIP to a lesser extent than adolescents elsewhere.

The second large-scale judgment task survey was conducted as part of a project called Variation in Syntax (2005–2007, principal investigator Höskuldur Thráinsson — see Thráinsson et al. 2013). Three surveys were conducted in the project. The NIP was one of the main variables tested in the first of these three, conducted in 2005 (Thráinsson et al. 2013). Answers from 772 speakers where evaluated. The participants were divided into four groups: 15-year-olds, 20–25, 40–45, and 65–70-year-olds. Whereas the speakers in Maling and Sigurjónsdóttir's (2002) survey got

two answering choices, participants in the Variation in Syntax project were given three: *yes* 'I could say this', *?* 'I could hardly say this' and *no* 'I could not say this'. I will refer to this survey as Var1.

In 2010–2012, 142 speakers from M&S were tested again in the project Real time change in Icelandic phonology and syntax (principal investigator Höskuldur Thráinsson). When M&S was conducted, these speakers were 15–16 years old but at the time of this survey, they were 26–28 years old. They were given a few of the NIP and ReflPass sentences tested in M&S with two choices, *yes* and *no*, but they were also given more such examples that had not been tested previously, with three choices, *yes*, *?* and *no* (see Sigurjónsdóttir to appear). I refer to this survey as REAL.

4.3.3 Grammatical object passives in Icelandic and elsewhere

4.3.3.1 A comparison of The New Impersonal Passive and the Canonical Passive in Icelandic

A recent innovation in Icelandic syntax is the so-called New Impersonal Passive (NIP; also termed the New Passive, the New Construction and the New Impersonal).[3] This construction has passive morphology but the object is assigned ac-

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[3] As pointed out by H.Á. Sigurðsson (2011b), however, we cannot be sure that the NIP is a recent innovation; "the fact that it was discussed by linguists until in the 1980s might be coincidental or

cusative case (11b), unlike the Canonical Passive (CanP) (11a). The New Impersonal Passive is mainly found among younger speakers whereas it is strictly ungrammatical for a lot of speakers. Therefore I use the '%' sign to indicate that only some speakers accept the NIP.[4]

(11)   a.   ***CanP***

Það   voru keyptir   tveir   bílar.
EXPL were bought.M.NOM.PL two.NOM cars.NOM

'Two cars were bought.'

   b.   ***NIP***

% Það   var keypt   tvo   bíla.
EXPL was bought.DFLT two.ACC cars.ACC

'Two cars were bought.'

Various NIP sentences were tested in M&S, Var1 and REAL. Two of the sentences tested in NIP are shown in (12), including the number of speakers in each

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have social explanations that have nothing to do with the phenomenon itself" (H.Á. Sigurðsson 2011b:153 n. 4).

[4]A note on the translation of NIP and Reflexive Passive clauses is in order. There are a few different ways of translating such sentences. They can often be translated into English using the passive — that is usually difficult for the reflexive passive, though. Another way is to translate the implicit argument as 'people' or 'someone', depending on the context. Yet another way, as Árnadóttir et al. (2011) do, is to translate NIP and reflexive passive sentences as 'There was V-ing...' Depending on each sentence, I choose whichever I think captures best its meaning, that is, I do not choose any specific strategy in translating these sentences.

age group that accepted each sentence. The younger speakers accept the NIP to a much greater degree than older speakers.

(12)   ***NIP in Var1***

    a.   Það var rekið manninn   út af staðnum.
            EXPL was fired the.man.ACC out of the.place

            'The man was thrown out of the place.'
            (15: 47%, 20–25: 16%, 40–45: 4%, 65–70: 2%)

    b.   Var passað   krakkana   á meðan?
            was babysitted the.kids.ACC meanwhile

            'Were the kids babysitted in the meantime?'
            (15: 37%, 20–25: 11%, 40–45: 1%, 65–70: 2%)

                              (Thráinsson et al. 2015:103–104)

For further discussion and more results from Var1, see Jónsson (2009b), Árnadóttir et al. (2011), Thráinsson et al. (2015) and Sigurjónsdóttir (to appear).

An accusative object in what looks like a passive construction is surprising, given, e.g., Burzio's (1986) generalization and Woolford's (2003) new descriptive generalization (i.e., her reading of Burzio's generalization): The object gets nominative Case when there is no (nominative) subject.

In recent years, the NIP has been quite extensively studied (e.g., Maling and Sigurjónsdóttir 2002, 2012, 2013, 2015, Barðdal and Molnár 2003, Thráinsson 2007, Benediktsdóttir 2008, Eythórsson 2008a, Jónsson 2009b, H.Á. Sigurðsson 2011b, Árnadóttir et al. 2011, E.F. Sigurðsson 2012, Schäfer 2012, Ingason et al. 2013, Legate 2014). It shares various properties with the passive but at the same time it has properties in common with the active. As a matter of fact, Maling and

Sigurjónsdóttir (2002) proposed originally that the NIP contains a *pro* subject. Their proposed structure is shown in (13).

(13)   [IP *pro* [I Tns,Agr] [VP V NP]]   (Maling and Sigurjónsdóttir 2002:100)

They do not go much deeper into the specifics of the derivation but in the structure above, *pro* is located in SpecIP. This analysis has various implications, as Maling and Sigurjónsdóttir (2002) discuss at length (see also subsequent papers). It captures, for example, the fact that object case is preserved. In addition, a *pro* subject would be able to bind reflexive pronouns (simplex and complex). However, their active impersonal analysis predicts that 'by'-phrases are not available in the NIP, a prediction which does not seem to be borne out. Also, secondary predicates have been reported to be ungrammatical in the NIP but they should be possible if the NIP contains a *pro* subject.

Eythórsson (2008a) and Jónsson (2009b) both argue that the NIP cannot be an active construction and that it really is a passive (they both argue that 'by'-phrases are possible and Jónsson claims that secondary predicates are not possible in the NIP). They do not, however, go into any detail how the derivation works and how exactly it differs from CanP. Eythórsson (2008a:209) suggests, however, that object case assignment be attributed to a parametric variation in passives (a [±accusative] case feature on a functional head taking a VP complement).

We will below compare the NIP and the CanP, pointing out what they have in common and what differentiates between them. The clearest examples of the NIP

are sentences like (11b) above, that is, with an accusative object. The NIP is often also shown with dative or genitive case DPs. What is crucial in such examples is that the object of the verb (if monotransitive) is definite.

(14)   a.   Í gær   var manninum   / einhverjum manni   hjálpað.
               yesterday was the.man.DAT / some   man.DAT helped
               'Yesterday, the man / some man was helped.

       b.   Það   var hjálpað einhverjum manni   í gær.
               EXPL was helped some   man.DAT yesterday

       c. % Það   var hjálpað manninum   í gær.
               EXPL was helped the.man.DAT yesterday

(15)   a.   Í gær   var mannsins   / einhvers manns   leitað.
               yesterday was the.man.GEN / some   man.GEN searched
               'Yesterday, the man was searched for.'

       b.   Það   var leitað   einhvers manns   í gær.
               EXPL was searched some   man.GEN yesterday

       c. % Það   var leitað   mannsins   í gær.
               EXPL was searched the.man.GEN yesterday

In the a-examples, 'the man'/'some man' moves to the subject position but in the b-examples 'some man' stays low. Both of these are compatible with the CanP grammar.[5] In the c-examples however, a definite DP, 'the man' stays low. That is compatible with the NIP grammar, as are the b-examples, but the c-examples are,

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[5]Note that for some verbs, not all CanP speakers seem to like to leave the indefinite dative DP low, as Maling (1988) points out. She shows the following examples (judgments as reported there).

(i)   a. ?* Það var hjálpað   gömlum manni yfir   götuna.
             EXPL was helped.DFLT old   man.DAT across the.street

      b.   Það var gömlum manni hjálpað yfir götuna.   (Maling 1988:180)

however, not compatible with the CanP grammar because they violate the so-called Definiteness Effect (DE; e.g., Milsark 1974, 1977, Safir 1985). There is no DE in the NIP, on the other hand.[6]

The examples with low definite DPs are grammatical for speakers for whom NIP examples with accusative objects are grammatical: that is, the grammar that

(ii)   a.   ?* Það   var   þakkað   mörgum mönnum í   formála.
              EXPL was thanked.DFLT many   men.DAT in preface

         b.   Það var mörgum þakkað í formála.   (Maling 1988:180)

(iii)   a.   Í morgun   var úthlutað   teppum   til flóttamannanna.
              this morning was distributed.DFLT blankets.DAT to the.refugees

         b.   Það   var bjargað   mörgum sjómönnum úr   skipinu.
              EXPL was rescued.DFLT many   sailors.DAT from the.ship

         c.   Það   var kastað   nokkrum nemendum   út   úr skrifstofunni.
              EXPL was thrown.DFLT several   students.DAT out of the.office

                                                     (Maling 1988:181–182)

The important point for our purposes is that even though indefinite DPs cannot always be left in situ, for most verbs, there is a clear difference between definite and indefinite DPs in situ for CanP speakers.

[6]Note that a definite nominative case DP that stays low is ungrammatical in both the NIP and the CanP grammar, see (i-c) below.

(i)   a.   Í gær   var maðurinn   / einhver maður   barinn.
              yesterday was the.man.NOM / some   man.NOM beaten

              'Yesterday, the man / some man was beaten.'

         b.   Það   var barinn einhver maður   í gær.
              EXPL was beaten some   man.NOM yesterday

         c.   * Það   var barinn maðurinn   í gær.
              EXPL was beaten the.man.NOM yesterday

The reasons are twofold. For the NIP, structural nominative case on an internal argument is not compatible with the grammar. For the CanP, (ic) is a DE violation.

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generates the NIP with accusative objects can also generate the c-examples in (14)–(15). On the other hand, speakers who find (11b) ungrammatical also find (14c) and (15c) ungrammatical.

It is not a necessary condition, with respect to possible grammars in natural language, that (14c) and (15c) be grouped together with (11b), even though the same speakers accept both, and another group rejects both. There could have been a grammar which would generate examples like (14c) and (15c) but not examples like (11b). Such a grammar would not have DE, but, nevertheless, it would not be capable of generating examples like (11b).

Before we look at further differences between the NIP and the CanP, a note on the latter is in order. I take the canonical passive in Icelandic to consist of the eventive personal and the impersonal passives. What counts as impersonal passive on my view is the passive of intransitives, the passive of verbs that only take a PP complement (impersonal PP-passive) and the passive of transitives where the object is omitted.[7] I will not discuss impersonal passives further here, but see §4.4.2.4. What counts as personal passives, then, are passives of transitive verbs that do not have a projected implicit argument. For this definition, it does not matter whether an internal argument moves to subject position or not. It is important, however, that there is no projected implicit argument that blocks the internal argument's movement.

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[7]For different definitions of impersonal passives, see, e.g., discussion in Siewierska 1984:93–95.

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A few properties distinguish between the NIP and CanP other than the DE and accusative case being preserved in the former but not the latter. A-movement is blocked in the NIP (Maling and Sigurjónsdóttir 2002), but not in CanP. In the following example, the DP 'the book' / 'it.F' is located in SpecTP.

(16) a. Var bókin / hún keypt í gær?
     was the.book.NOM / it.F.NOM bought yesterday
     'Was the book / it bought yesterday?'

   b. * Var bókina / hana keypt í gær?
     was the.book.ACC / it.F.ACC bought yesterday
     Intended: 'Was the book / it bought yesterday?'

This we take to suggest that there is an implicit argument in the structure blocking A-movement.

Next, MacDonald (to appear) argues, when discussing impersonal *se* constructions in Spanish, that a body-part expression which lacks an overt possessive pronoun can get an inalienable possession interpretation only when there is a projected possessor antecedent. When this is applied to Icelandic, a body-part expression without a possessive pronoun gets an inalienable possession in the active (17) but not in the canonical passive. This is shown in (17) and (18), respectively.

(17) ***Active***
   a. Nemandinn rétti upp höndina.
     the.student.NOM raised up the.hand.ACC
     'The student$_i$ raised their$_i$ hand.'

    b.   Krakkarnir   hreyfðu hvorki hönd né fót.
          the.kids.NOM moved   neither hand nor foot.ACC

          'The kids didn't move their$_i$ hand nor foot.'
          $\approx$ 'The kids didn't move a muscle.'

(18)   ***CanP***

    a.   Höndin   var rétt   upp.
          the.hand.NOM was raised up

          ✓'The hand was raised up.'
          ✗'Somebody raised her/his hand.'

    b.   Það   var hvorki hreyfð hönd   né fótur.
          EXPL was neither moved hand.NOM nor foot.NOM

          ✓'Neither a hand nor foot was moved.'
          ✗'Somebody$_i$ didn't move their$_i$ hand nor foot.'
          i.e. ✗'Somebody didn't move a muscle.'

In the active sentence in (17a), for example, the student raises 'the hand', which is interpreted as her or his own hand. In the canonical passive, see (18a), there is no projected implicit argument that c-commands 'the hand' and therefore the reading is that some hand was raised up, but the sentence will either have a disjoint reference, where somebody raises a hand that belongs to someone else, or accidental co-reference.

In (17a) the theme argument is definite and therefore must move in the passive to subject position, see (18a). When the theme is indefinite, as in (17b), it does not have to move in the passive, as shown in (18b). This does not affect the meaning; there is not a co-reference between the unprojected implicit argument and the body-part expression in (18b). It should also be noted that the subject of (17b) is plural but formally the object is singular 'hand' and 'foot'. The reading of the example is

distributive, meaning that each kid did not move their own hand or foot. In the canonical passive, the distributional reading is unavailable, which means that the clause states that neither a single hand nor a single foot was moved.

In the NIP, on the other hand, the idiomatic reading is preserved.

(19)   ***NIP***

    a.   Það   var rétt   upp höndina.
           EXPL was raised.DFLT up   the.hand.ACC

          'Somebody$_i$ raised their$_i$ hand.'

    b.   Það   var hvorki hreyft   hönd né fót.
           EXPL was neither moved.DFLT hand nor foot.ACC

          'Somebody$_i$ / People$_i$ didn't move their$_i$ hand nor foot.'
          ≈ 'Somebody / People didn't move a muscle.'

Applying MacDonald's (to appear) logic, this means that there is a projected implicit argument in the structure.

Perhaps somewhat similarly, Ingason et al. (2016c) (also Kjartansson 1991, E.F. Sigurðsson 2012) observe that the meaning of verb phrase idioms are preserved in the NIP even if they are not in the canonical passive. In this respect the NIP is like the active and distinct from the canonical passive.

(20)   ***Active***

    a.   Jón   tók þátt   í hlaupinu.
           Jón.NOM took thread.ACC in the.run

          'Jón participated in the run.'
          'take thread' ≈ 'participate'

    b.   Gunna   keypti köttinn   í sekknum.
           Gunna.NOM bought the.cat.ACC in the.sack

          ≈ 'Gunna was sold a pig in a poke.'

(21)   ***NIP***

    a. % Það var tekið   þátt   í hlaupinu.
          there was taken.DFLT thread.ACC in the.run

          ✓'Somebody participated in the run.'

    b. % Það var keypt   köttinn   í sekknum.
          EXPL was bought.DFLT the.cat.ACC in the.sack

          ✓≈ 'Somebody was sold a pig in a poke.'

(22)   ***CanP***

    a. # Það   var tekinn þáttur   í hlaupinu.
          there was taken thread.NOM in the.run

          ✗'Somebody participated in the run.'

    b. # Kötturinn   í sekknum var keyptur.
          the.cat.NOM in the.sack was bought

          ✗'Somebody was sold a pig in a poke.'

Ingason et al. argue that this reflects different syntax of the two constructions: the NIP contains a projected implicit argument but the canonical passive does not.

Even though there are various features that distinguish between the NIP and the CanP, there are also some properties that they have in common. Secondary predicates are ungrammatical in both. This is shown for the NIP only in (23).

(23)   ***NIP***

    a. % Það   er alltaf borðað morgunmat   (*nakinn).
          EXPL is always eaten   breakfast.ACC *naked.M.NOM.SG

          'Breakfast is always eaten (nude).'   (Jónsson 2009b:297)

    b. % Var barið   hana   (*fullur)?
          was beaten her.ACC *drunk.M.NOM.SG

          'Was she hit (by somebody who was drunk)?'
                                         (H.Á. Sigurðsson 2011b:157)

In addition, 'by'-phrases seem to be grammatical in not only the CanP but also the NIP (Jónsson 2009b, E.F. Sigurðsson and Stefánsdóttir 2014).[8]

(24)   a.   ***Active***

      Bifvélavirkinn   lagaði strax   bílinn.
      the.car.mechanic fixed   immediately the.car.ACC

      'The car mechanic fixed the car immediately.'

   b.   ***CanP***

      Bíllinn   var strax   lagaður af bifvélavirkjanum.
      the.car.NOM was immediately fixed   by the.car.mechanic

      'The car was immediately fixed by the car mechnic.'

   c.   ***NIP in Var1***

      % Það   var strax   lagað bílinn   af bifvélavirkjanum.
      EXPL was immediately fixed the.car.ACC by the.mechanic

      'The car was immediately fixed by the car mechanic.'
      (15: 28%, 20–25: 4%, 40–45: 1%, 65–70: 2%)

The numbers in (24c) from Var1 are taken from Thráinsson et al. (2015:105) and show the percentage from each age group that accepted the NIP sentecne with a 'by'-phrase; see also Jónsson (2009b:302). The NIP is accepted in general mostly by younger speakers. The fact that almost one third of the speakers in the youngest group accepted the NIP with a 'by'-phrase is an indication that 'by'-phrases are indeed grammatical in the NIP.

Next, binding of anaphors might at first glance be taken to distinguish between the NIP and the CanP. Results from REAL suggest that the NIP can bind anaphors

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[8]This is true of at least some NIP speakers. This remains to be studied in more detail.

of naturally disjoint verbs, such as *gagnrýna* 'criticize'. CanP, on the other hand, cannot. This is shown for the NIP in (25).[9]

(25)   ***NIP in REAL***

      Þar   er gagnrýnt sjálfan   sig.
      there is criticized self.ACC refl.ACC

      'There is criticizing of oneself there.'
      (yes: 35%, ?: 18%, no: 47%)

The results suggest that binding of anaphors is in fact grammatical in the NIP grammar. 35% accepted the sentence, a similar ratio as accepted various other NIP examples in the same survey, which consisted of 26–28 year old speakers.

Examples of this sort seem to be rare, at least when compared to the regular NIP examples. Árnadóttir et al. (2011) report the attested example in (26), however.[10]

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[9]The context for this sentence in REAL was: *Á þingi er alltaf verið að gagnrýna aðra* 'At the parliament, people are always criticizing others'.

[10]The context of (26) is shown in (i):

(i)   Fólk   er   fífl   ég hata mannkynið...nei í alvöru þetta er ógeðslegasta   tegund sem
     people are fools I   hate human.kind...no really   this   is most.disgusting species that

     hefur verið til..við drepum hvort annað, það   er stolið og   nauðgað, það   er drepið
     has   existed..we kill   each other EXPL is stolen and raped   EXPL is killed

     sjálfan sig,   það   er byggt á   jörðinni og skemmt allt   og   mengað
     self   REFL.ACC EXPL is built   on the.earth og ruined   everything and polluted

     allt.
     everything   (https://goo.gl/DjaoHw)

(26)   ***NIP***

% […] það   er drepið sjálfan   sig.
       EXPL is killed self.ACC REFL.ACC

‘People kill themselves.’   (https://goo.gl/DjaoHw,
                                                       Árnadóttir et al. 2011:48)

In accordance with Binding Principle A (Chomsky 1981), we do not expect the use of a reflexive pronoun to be possible without it being bound by another element, in this case, an implicit argument (see, however, discussion on the Reflexive Passive in §4.4.2).

Both (25) and (26) should be possible only in the NIP because of the definite accusative case DP. That is, irrespective of binding, (25)–(26) should not be compatible with CanP grammar.

Testing comparable examples for CanP is not straightforward. Anaphors like *sjálfan sig* are definite and therefore cannot stay in situ in CanP. We show this for the dative in (27a) as *sjálfan sig* is not found in the nominative (see, however, discussion in §4.4.2 on the nominative of *sig*).

(27)   a.   % Það   var hjálpað sjálfum   sér.
               EXPL was helped self.DAT REFL.DAT
               ‘One helped oneself.’

     b.   * Var sjálfum   sér   hjálpað?
              was self.DAT REFL.DAT helped

Because of DE, (27a) can only be grammatical in the NIP, irrespective of binding. It is possible to test (27b), however, where *sjálfum sér* has moved to subject position. That is ungrammatical in the CanP (and in the NIP, for that matter) but it is

not clear what we can conclude from the ungrammaticality of an anaphor that has moved out of the verb phrase to a derived subject position (SpecTP).

H.Á. Sigurðsson (2011b:159) shows a similar pair of examples that shows that binding is fine in the NIP, see (28a), but impossible in the CanP, see (28b), when the DP A-moves out of the verb phrase.

(28) a. %Eftir vinnu var bara keyrt bílana **sína** heim.
          after work was just driven the.cars.ACC self's.REFL.ACC home

     b. *Eftir vinnu voru bílarnir **sínir** bara keyrðir heim.
          after work were the.cars.NOM self's.REFL.ACC just driven home

(H.Á. Sigurðsson 2011b:159)

If we were to test whether CanP can generate binding of anaphors, we would need a phrase that does not violate DE even if it stays low. As argued by Eythórsson et al. (2016), Ingason et al. (2016b), reflexive pronouns of inherently and naturally reflexive verbs are not definite. As a matter of fact, many non-NIP speakers find passive structures like (29) grammatical.

(29) Það var flýtt sér heim.
     EXPL was hurried REFL.DAT home
     'People hurried home.'

If CanP can generate (29), we will have to say that binding of anaphors is not restricted to the NIP (and the active, of course).

Another matter that is not easily accounted for in the NIP vs. the CanP is control. Consider the sentences in the following ((30b) taken from Jónsson 2009b):

(30)   a.   ***Active***

Við réðum tvo   menn   án   þess að hafa næga
we   hired   two.ACC men.ACC without it   to have enough

menntun.
education.

'We hired two men without having enough education.'

b.   ***CanP***

Tveir   menn   voru ráðnir án   þess að hafa næga
two.NOM men.NOM were hired   without it   to have enough

menntun.
education

'Two men were hired without having enough education.'

(Jónsson 2009b:285)

In the active sentence in (30a), only the subject, the agent 'we', can bind PRO in the infinitival clause. Therefore, the sentence cannot mean that the men hired did not have enough education. In the CanP sentence in (30b), on the other hand, the theme 'two men' is in the subject position and this subject can bind PRO.

In (31), we compare the CanP without A-movement and the NIP, respectively. In (31a) the theme stays low and does not move to subject position. As Jónsson points out, this DP can still control PRO (the sentence is not perfectly good — the reason is not that the DP stays low, but that PRO is controlled by a DP in situ). On this reading, the two men do not have enough education. The other reading, where the hirer does not have enough education, is not possible. This latter reading is possible in the NIP example in (31b) (as pointed out in Legate 2014:154). The

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first reading, where the hired men do not have enough education, is unavailable

(this patterns with the active sentence reading above).[11]

(31) a. ***CanP***

?Þá   voru ráðnir tveir   menn   án   þess að hafa næga
then were hired two.NOM men.NOM without it   to have enough

menntun.
education

✓'Then, two men who didn't have enough education were hired.'
✗'Then, someone who didn't have enough education hired two men.'

b. ***NIP***

%Þá   var ráðið tvo   menn   án   þess að hafa næga
then was hired two.ACC men.ACC without it   to have enough

menntun.
education.

✗'Then, two men who didn't have enough education were hired.'
✓'Then, someone who didn't have enough education hired two men.'
(cf. Jónsson 2009b:285)

Jónsson uses these facts to support his claim that the DP in the NIP is an object. But that of course raises the question of what it means to be an object. I argue that an object is a phrase generated in object position. Such an object can, however, move to a derived subject position, SpecTP. Therefore, a nominative DP in CanP is just as much of an object as an accusative DP in the NIP.

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[11]Maling et al. (2011) give a similar set of examples where they contrast transitive expletive passives (CanP with DP in situ) with the NIP with respect to whether an implicit argument can bind PRO in a present participle clause.

4.3.3.2 Weak Implicit Argument in SpecVoiceP in the NIP

Following Landau's (2010) division of implicit arguments into strong and weak categories and based on the properties of the NIP, outlined above, Legate (2014) (see also Ingason et al. 2013) argues for a WIA that restricts, but does not saturate, the subject position. By placing a projected implicit argument in SpecVoiceP, assignment of accusative case and blocking of A-movement is explained.

Landau (2010) argues that a D-head is needed to license secondary predicates and that they can only be predicated of SIAs but not of WIAs because there is no D-layer in WIAs. That is, WIAs are not DPs, but φPs. By arguing that the implicit argument of the NIP is not a DP, Legate (2014) accounts for the ungrammaticality of secondary predicates in the NIP and also the availability of 'by'-phrases, because the WIA does not saturate the external argument position.

Legate follows Kratzer (1996) in assuming that external arguments (a WIA in the case of the NIP) are introduced by Voice via the operation Event Identification.

(32) ***Event Identification***

If α is a branching node, $\{\beta,\gamma\}$ is the set of α's daughters, and β is of type $\langle e,\langle s,t\rangle\rangle$ and γ is of type $\langle s,t\rangle$, then α is of type $\langle e,\langle s,t\rangle\rangle$.

(adapted from Kratzer 1996:122)

Here, α could be Voice′, β Voice and γ be vP. This is shown in the following for *read the book* (adapted from Kratzer 1996).

(33)   Voice′

                              Event Identification

                        λx.λe. AGENT(e,x) ∧ reading(e)

                            ∧ THEME(e,the book)

                    Voice vP

        λx.λe. AGENT(e,x)   λe. reading(e) ∧ THEME(e,the book)

When Voice, of type $\langle$e,$\langle$s,t$\rangle\rangle$, combines with vP, of type $\langle$s,t$\rangle$, the result is of type

$\langle$e,$\langle$s,t$\rangle\rangle$.

The agent role introduced by Voice must be saturated somehow. In an active

construction with an agent, a DP in SpecVoiceP will normally do that whereas

in canonical passives this is accomplished via Existential Closure. For the NIP,

Legate argues that a φP (WIA) occupies SpecVoiceP, which restricts the external

argument position but does not saturate the agent role introduced by Voice. She

proposes that Voice, of type $\langle$e,$\langle$s,t$\rangle\rangle$, combines with φP, of type $\langle$e,t$\rangle$, applying

Chung and Ladusaw's (2004) predicate restriction (Restrict).

(34) ***Restrict***

      If α is a branching node, $\{\beta,\gamma\}$ is the set of α's daughters, and β is of type

      $\langle$e,$\langle$s,t$\rangle\rangle$ and γ is of type $\langle$e,t$\rangle$, then α is of type $\langle$e,$\langle$s,t$\rangle\rangle$.

                                              (adapted from Legate 2014:39)

Applying this to the NIP, α is VoiceP, β Voice′ and γ is φP. Restrict makes it possible to combine φP of type $\langle e,t\rangle$ with Voice′ of type $\langle e,\langle s,t\rangle\rangle$. The result is of type $\langle e,\langle s,t\rangle\rangle$, meaning that φP does not saturate the external argument as there is still an open individual variable to be closed. This is demonstrated in (35b), which is the derivation for the NIP sentence in (35a) (the derivation below follows Legate 2014).

(35)   a.   Það   var   lesið   bókina.
            EXPL was read.PASS the.book.ACC
            'The book was read.'

      b.

VoiceP
Restrict
$\lambda x.\lambda e.$ AGENT(e,x)
$\wedge$ φ(x) $\wedge$ reading(e)
$\wedge$ THEME(e,the book)

φP
$\lambda x.φ(x)$

Voice'
Event Identification
$\lambda x.\lambda e.$ AGENT(e,x) $\wedge$ reading(e)
$\wedge$ THEME(e,the book)

Voice
$\lambda x.\lambda e.$ AGENT(e,x)

vP
$\lambda e.$ reading(e) $\wedge$ THEME(e,the book)

v

$\sqrt{}$P
Function Application
$\lambda e.$ reading(e) $\wedge$ THEME(e,the book)

$\sqrt{}$READ
$\lambda x.\lambda e.$ reading(e)
$\wedge$ THEME(e,x)

DP
the book
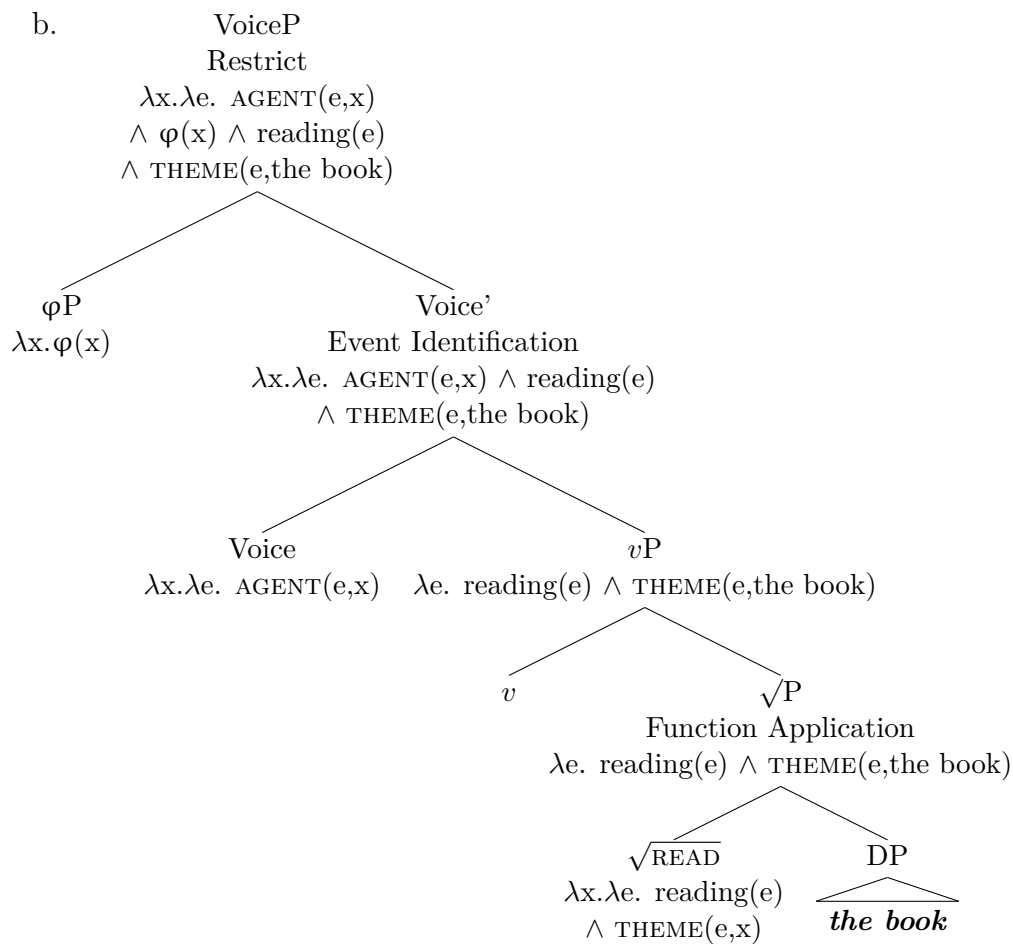
After φP and Voice′ combine, the agent argument needs to be saturated. This is accomplished through Existential Closure (EC) applying to VoiceP on Legate's (2014) analysis (I, on the other hand, locate EC on Asp above VoiceP). This in turn means that the agent variable can be further modified, such as with a 'by'-phrase, as long as Existential Closure does not take place first.

4.3.3.3 Grammatical object passives in other languages

Constructions that have both various passive and active properties are not only found in Icelandic syntax. Various languages have impersonal constructions that have similar properties as the Icelandic NIP, such as Polish and Ukrainian (Sobin 1985, Lavine 2000, 2005, Maling and Sigurjónsdóttir 2002), Lithuanian (Sprauniené et al. 2015, Šereikaité 2017), Irish (McCloskey 2007) and Hiaki (Harley 2014). As a matter of fact, Maling and Sigurjónsdóttir (2002) point out the similarity between the NIP, on the one hand, and so-called *-no/-to* constructions in Polish and Ukrainian, where there is no overt external argument but still the internal argument is assigned accusative case. Note that in the brief discussion below, I only focus on accusative case being assigned and (un)availability of 'by'-phrases. I gloss *-no* below as DFLT just like I do for NIP participles.

(36)   a.   ***Polish***
       Świątynię   zbudowa-no w 1640 roku.
       church.ACC built-DFLT   in 1640 year
       'They built the church in 1640.'

                            (Maling and Sigurjónsdóttir 2002:102)

b. **Ukrainian**

Stadion bulo zbudova-no v 1948 roc'i.
stadium.ACC was built-DFLT in 1948

'The stadium was built in 1948. (Sobin 1985:649)

However, only in Ukrainian are 'by'-phrases grammatical in the *-no/-to* construction, which indicates that the Ukrainian construction is passive and that the Polish construction is not.

(37) a. **Polish**

Jana obrabowa-no (*przez nich).
John.ACC robbed-DFLT (*by them)

'They robbed John.' (Maling and Sigurjónsdóttir 2002:103)

b. **Ukrainian**

Cerkvu bulo zbudova-no Lesevym.
church.ACC was built-DFLT Lesiv.INST

'The church was built by Lesiv.' (Sobin 1985:658)

Lithuanian has a *-ma/-ta* construction, equivalent to *-no/-to*, where accusative is assigned (Sprauniene et al. 2015, Šereikaitė 2017).

(38) **Lithuanian**

(Yra) rašo-ma laišką.
(be.PRS.3) write-DFLT letter.ACC

'One is writing a letter.' (Šereikaitė 2017:231)

In this construction 'by'-phrases are ungrammatical, just as in Polish. In fact, Šereikaitė (2017) argues that the structure in (38)–(39) contains a PRO subject.

(39)   ***Lithuanian***

(Yra)   rašo-ma   laišką   (*tėvo).
(be.PRS.3) write-DFLT letter.ACC (*father.GEN)

'One is writing a letter.'   (Šereikaitė 2017:232)

Based in part on data as those presented above, the Polish and the Lithuanian constructions have been argued to be, essentially, active constructions containing a PRO subject whereas the Ukrainian construction has been argued to be a passive. (See, e.g., Maling and Sigurjónsdóttir 2002, Legate 2014, Šereikaitė 2017. For a different analysis, see Kučerová 2012.) Legate in fact extends her analysis of Icelandic NIP to the Ukrainian *-no/-to* construction as a grammatical object passive.

4.3.3.4   Interim conclusions

Above we looked at the properties of the NIP in Icelandic and compared it to the NIP. In Table 4.1 we see a summary of this comparison, where we have also added properties of the active. As we can see, the NIP shares various features with the CanP, but also with the active. Therefore, the distinction between passives and actives is not clear-cut. Even though the NIP has many features in common with the active, we take it to be a passive structure as 'by'-phrases are grammatical and the construction involves Existential Closure over the external argument.

We now turn to the passive of aspectual verbs which also has various features that can either be attributed to passives or actives.

	NIP	CanP	active
Passive morphology	✓	✓	✗
'By'-phrases	✓	✓	✗
Overt external argument	✗	✗	✓
Secondary predication of ext. arg.	✗	✗	✓
Structural case on object	ACC	NOM	ACC
Binding of reflexives	✓/✗	✗	✓
Inalienable body-part interpr.	✓	✗	✓
Preservation of idiomatic readings	✓	✗	✓
Control by external argument	✓	✗	✓
A-movement of an internal arg.	✗	✓	✗
Definiteness Effect	✗	✓	✗
Subject type	φP	–	DP

Table 4.1: Properties of the NIP, the CanP and the active.

4.3.4 Aspectual Passives

4.3.4.1 Introduction

This section looks at what prima facie looks like the passive of aspectual raising verbs in Icelandic. An apparent passivization is found within the progressive aspect. First, however, we see the active version of the progressive (40a) and compare it to the progressive in English (40b).

(40)   a.   ***Icelandic***

Barþjónninn   er að afgreiða   mig.
the.bartender.NOM is   to serve.INF me.ACC

'The bartender is serving me.'

b.   ***English***

The bartender is serving me.

Progressive aspect in Icelandic (40a) is different from the English equivalent (40b) in that *vera* 'be' in Icelandic takes an infinitival clause whereas *be* in English selects a present participial clause (headed by *-ing*).

Interestingly, when the progressive is passivized in Icelandic, the main verb, here *afgreiða* 'serve', does not show passive morphology but instead it is the verb *vera* 'be' that seems to be passivized. Also, just like in the active, it takes an infinitival

clause. This is shown in (41a), with a comparison to the English passive of the progressive in (41b):[12]

(41) a. **Icelandic**

Það er verið að afgreiða mig.
EXPL is been.PASS to serve.INF me.ACC

'I'm being served.'

b. **English**

I'm being served.

As we see here, the verb *vera* 'be' seems to passivize and structural accusative case is assigned to the object, just as it is in the active. This is somewhat unexpected. I will demonstrate below that aspectual verbs are raising verbs and therefore we do not expect them to passivize. Instead of (41a), we could have expected something like (42):

(42) **Icelandic**

* Ég er að vera afgreiddur.
I.NOM am to be.INF served.PASS.M.NOM.SG

Intended: 'I am being served.'

The ungrammatical structure in (42) is closer to the English passive of the progressive than (41a) is in that the embedded main verb shows passive morphology in (42). If English were like Icelandic in this respect, on the other hand, the progressive passive could be something like the ungrammatical (43b) or (43c).

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[12]The sentence in (41) is a typical answer for a customer who is waiting for her/his drinks at a bar when asked *Get ég aðstoðað þig?* 'Can I serve you?' by a bartender.

(43)   ***English***

   a.   I am being served.

   b.   * I am been serving.

   c.   * It/There is been serving me.

Other Icelandic aspectual verbs seem to be able to passivize in the same way. Both in the active and the passive, the main verb is in the infinitive and it assigns objective case to its object.

As the verb *afgreiða* 'serve' can assign accusative to its object, it may look like that the progressive passive (and other aspectual verbs discussed below) takes an infinitival clause with a PRO subject — and that is indeed H.Á. Sigurðsson's (1989) analysis. However, extending Legate's (2014) analysis of the Icelandic New Impersonal Passive (NIP), I argue that there is a Weak Implicit Argument introduced in the structure, rather than a Strong Implicit Argument (PRO), using Landau's (2010) terms.

It should be mentioned that even though the NIP is only grammatical for some speakers, mainly younger speakers, the passive of the progressive and other aspectual verbs discussed here is grammatical for all speakers, as far as I know. However, the progressive passive seems to be an innovation in Icelandic syntax — it is younger than the progressive active (Smári 1920, Thráinsson 1974) and the oldest example found in the Icelandic Parsed Historical Corpus (IcePaHC; Wallenberg et al. 2011) is from late 17th century (E.F. Sigurðsson 2012).

I will look at the passive of aspectual verbs below.[13] I argue that the aspectual verbs are not really being passivized, but rather that the main verb is, even though the aspectual verb shows passive morphology. This gets to the heart of the issue of what being a passive really is; as discussed in §4.2.1, I argue that passivization really comes down to existential binding of an external argument (as, e.g., Bruening and Tran 2015 have argued recently).

4.3.4.2 Aspectual verbs

In the following, I will consider the passive of the aspectual verbs in (44) and eventually extend Legate's (2014) analysis of the NIP to it.

(44) ***Icelandic aspectual verbs***

vera búinn 'be done, be finished', progressive *vera* 'be', *byrja* 'begin', *fara* 'begin', (lit. 'go') *hætta* 'stop' (cf. H.Á. Sigurðsson 1989:55)

Below we see the aspectual verbs used in simple (past or present) tense in the active. It should be noted that *búinn* is only possible as an aspectual verb when it includes *vera* 'be'; compare (45a) and (46a).

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[13]H.Á. Sigurðsson (1989) and E.F. Sigurðsson (2012) discuss the aspectual passive. For a more general discussion on aspect in Icelandic, including the progressive and the *vera búinn* perfect, see, e.g., Jónsson (1992), Thráinsson (1999, 2001b, 2007), Thráinsson and Torfadóttir (2015), Harðarson (2000), Wide (2002), Andrason (2008), Larsson (2008), Torfadóttir (2008, To appear), Jóhannsdóttir (2011, 2015).

(45)   a.   * Jón bjó   að moka snjóinn.
               Jón finished to shovel the.snow.ACC

               Intended: 'Jón finished shoveling the snow.'

    b.   Jón er að moka snjóinn.
          Jón is to shovel the.snow.ACC

          'Jón is shoveling the snow.'

    c.   Jón byrjaði / fór   / hætti   að moka snjóinn.
          Jón began   / went / stopped to shovel the.snow.ACC

          'Jón began / started / stopped shoveling the snow.'

In (46) we see these same verbs used in the active when selected by *vera* 'be'. It should also be noted that the progressive participle is not possible in the active if selected by *vera*; compare the ungrammatical (46b) and the active progressive in (45b).[14]

(46)   a.   Jón er búinn að moka snjóinn.
          Jón is done to shovel the.snow.ACC

          'Jón is done shoveling the snow.'

    b.   * Jón er verinn að moka snjóinn.
            Jón is been   to shovel the.snow.ACC

    c.   Jón var byrjaður / farinn / hættur að moka snjóinn.
          Jón was begun   / gone   / stopped to shovel the.snow.ACC

          'Jón was in the state of having begun / started / stopped shoveling the snow.'

Even though the participles above have the same form as passive participles, these are not passives as *Jón* is an external argument; he is the one shoveling the snow

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[14]The aspectual verbs shown in (46a) and (46c) form a perfect aspect with *vera* 'be'. However, a perfect aspect cannot be formed with *vera* and the main verb only, see (i).

(i)   * Jón er mokaður snjóinn.
       Jón is shoveled the.snow.ACC

in the examples above. Aspectual verbs form passives, however, where the external

argument is demoted, see (47).

(47) a. Það var búið að moka   snjóinn.
            EXPL was done to shovel.INF the.snow.ACC

'People were done shoveling the snow.'

    b. Það var verið að moka   snjóinn.
        EXPL was been to shovel.INF the.snow.ACC

'People were shoveling the snow.'

    c. Það var byrjað / farið / hætt   að moka   snjóinn.
        EXPL was begun / gone / stopped to shovel.INF the.snow.ACC

'People began / started / stopped shoveling the snow.'
'People were in the state of having begun / started / stopped
shoveling the snow.'   (cf. H.Á. Sigurðsson 1989:61)

As we will see later, the external argument in the passive of aspectual verbs can be

expressed in a 'by'-phrase.

It should be observed that there is a certain ambiguity in the passive of *byrja,*

fara, hætta that is not found in the active. (47c) can either reflect the active in

(45c), which would then mean something like 'People began / started / stopped

shoveling the snow', or the active participle structure in (46c). In that case the

meaning would be 'People were in the state of having begun / started / stopped

shoveling the snow'. I will not focus on this difference here.

It is interesting that the structure in (47) patterns like the passive of control

verbs. We could have expected the theme argument to be able to raise in the

passive of aspectual verbs, especially because we will argue that they are raising

verbs. That is ungrammatical, however.

(48) a. * Snjórinn   var byrjaður að moka.
         the.snow.NOM was begun   to shovel

     b. * Snjórinn   var hættur að moka.
         the.snow.NOM was stopped to shovel   (H.Á. Sigurðsson 1989:61)

In this respect, the passive of aspectual verbs patterns like the passive of control verbs, which do not allow (Voice) restructuring, as shown in (49b).

(49) a.   Það   var reynt að moka snjóinn.
          EXPL was tried to shovel the.snow.ACC

     b. * Snjórinn   var reyndur að moka.
          the.snow.NOM was tried   to shovel   (H.Á. Sigurðsson 1989:60)

However, we argue that aspectual verbs take a smaller complement than control verbs. We furthermore argue that they do not have their own argument structure as they are raising verbs, which we will now demonstrate. In that respect, it is surprising that aspectual verbs seem to be able to passivize.

4.3.4.3   Raising

Case preservation, non-argument subjects and idiom chunks reveal that the aspectual verbs reviewed above are raising verbs.

4.3.4.3.1   Case preservation

For a language like Icelandic, where subjects can have other cases than nominative, case preservation is a good test to see whether a verb is a raising verb or not.

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Líka 'like' is a verb that takes a dative subject, see (50). When it is embedded under a raising verb, like *virðast* 'seem', the subject retains its case when it raises (51a). On the other hand, when *líka* is embedded under a control verb like *vonast til* 'hope to' (51b), the latter verb takes an argument of its own which it assigns a thematic role. The external argument of the control verb *vonast til* is realized in the nominative case but the lower argument, the subject of *líka*, is PRO. This is shown with the examples in (50)–(51) (I use yes/no questions below as they are in general a fairly good diagnostic for subjecthood in Icelandic; the DP that follows the finite verb is located in SpecTP).

(50)   Líkar Haraldi/*Haraldur vel í Stuttgart?
         likes Haraldur.DAT/NOM well in Stuttgart

         'Does Haraldur like it in Stuttgart?'
                                        (adapted from Thráinsson and Vikner 1995:60)

(51)   a.   ***Raising***

           Virðist Haraldi/*Haraldur líka   vel í Stuttgart?
           seems   Haraldur.DAT/*NOM like.INF well in Stuttgart

           'Does Haraldur seem to like it in Stuttgart?'

       b.   ***Control***

           Vonast Haraldur/*Haraldi   til að líka   vel í Stuttgart?
           hopes   Haraldur.NOM/*DAT for to like.INF well in Stuttgart

           'Does Haraldur hope to like it in Stuttgart?'
                                        (adapted from Thráinsson and Vikner 1995:60)

The sentences in (51) reflect two different structures: The control verb *vonast til* 'hope to' in (51b) has its own external argument, which is in the nominative case, and the embedded *líka* 'like' takes a PRO subject. Raising verbs, on the other hand,

cf. *virðast* 'seem' in (51a), do not take arguments of their own and therefore the dative argument of *líka* A-moves past *virðast* 'seem' in (51a).

Now we can ask whether, for example, progressive *vera* 'be' patterns as a raising verb or a control verb. The progressive active example in (52) shows that it is in fact a raising verb: the DP *Haraldi* 'Harold.DAT' moves to subject position and retains its dative case assigned by *líka* 'like'. This reflects a raising construction.

(52) Er ?Haraldi/*Haraldur   að líka   vel í Stuttgart?
      is ?Haraldur.DAT/*Haraldur.NOM to like.INF well in Stuttgart
      'Is Haraldur liking it in Stuttgart?'

Other aspectual verbs pattern the same, which indicates that they are also raising verbs.

(53) a. Okkur er búið að leiðast.
          us.DAT is done to be.bored

      b. Honum   var farið að líka vel í Stuttgart.
          him.DAT was gone to like well in Stuttgart

      c. Mér   er hætt   að lítast á blikuna.
          me.DAT is stopped to look at the.look.of.it

That is, the aspectual verbs do not take an external argument of their own in the active.

4.3.4.3.2 Non-argument subjects

In English, weather verbs (meteorological expressions) take an expletive *it* subject.

(54)   **English**

     It is raining.

The subject of the clause above is not assigned a thematic role. Raising predicates do not either assign a thematic role and therefore we expect expletives to be compatible with raising verbs, see (55a) below. Control predicates, however, assign a thematic role to their external argument and therefore expletives, which do not bear a thematic role, should not be compatible with control verbs. That is, in (55b), the expletive would have to be able to take on the agent role assigned by *try*.

(55)   a.   It seemed to be raining.

       b.   *It tried to be raining.

Icelandic shows the same contrast between raising (56b) and control predicates (56c).

(56)   **Icelandic**

    a.   Það   rignir.
           EXPL rains

          'It is raining.'

    b.   Það   virtist rigna.
           EXPL seemed rain.INF

          'It seemed to rain.'

    c. *Það   reyndi að rigna.
           EXPL tried   to rain.INF

          Intended: 'It tried to rain.'

    If aspectual verbs are raising verbs, then they should be fine with sentences as in (56a). We test this in (57).

(57)   a.   Það   er enn að rigna.
           EXPL is still to rain.INF

           'It is still raining.'   (Thráinsson 2007:14)

      b.   Það   er búið að rigna   í   fjóra daga.
           EXPL is done to rain.INF for four days

           'It has been raining for four days.'

      c.   Það   er byrjað / farið að rigna.
           EXPL is begun / gone to rain.INF

           'It has started to rain.'

      d.   Það   er loksins hætt   að rigna.
           EXPL is finally stopped to rain.INF

           'It has finally stopped raining.'

These sentences are all fine, suggesting that aspectual verbs are indeed raising verbs.

4.3.4.3.3 Idiom chunks

Idiom chunks are frequently used to determine whether a verb is a raising predicate or a control predicate. Idioms have a special meaning, not predictable from the parts that they consist of. When a subject is a part of an idiom, the idiom cannot be embedded under a control verb, only under a raising verb. When a subject idiom chunk is embedded under raising predicates, this special meaning is preserved. Take (58), for example.

(58)   ***English***

       The cat is out of the bag.

This sentence is ambiguous: It has a literal reading, where some cat is no longer in some bag it was in before. It also has an idiomatic reading: 'What used to be a

secret is no longer a secret.' Under this reading, *the cat* is an idiom chunk, referring to a secret.

When we combine (58) with a raising predicate, such as *seem*, and a control predicate, such as *try*, the outcome is as shown in (59a) and (59b), respectively.

(59)   a.   The cat seemed to be out of the bag.

        b.   ? The cat tried to be out of the bag.   (Davies and Dubinsky 20048)

Only (59a) is ambiguous; it preserves the idiomatic meaning under one reading. (59b), on the other hand, has only a literal reading, where some cat makes an attempt to be or get out of the bag. Here, *the cat* cannot denote a secret.

Embedding idioms under aspectual verbs in Icelandic leads to the conclusion that they are raising verbs. (60) shows an idiomatic expression where the subject is part of the idiom.

(60)   ***Icelandic***

        Haltur   leiðir blindan.
        lame.NOM leads blind.ACC

        Literally: 'Someone with a limp leads a blind person.'
        Idiomatic reading: 'Someone who lacks the relevant skills helps someone who also lacks relevant skills.'

It's possible to add a raising verb (61b) to the structure in (60) above, and still get the idiomatic reading, but not a control verb (61a).

(61) a. ***Control***

      # Haltur   vonast til að leiða   blindan.
          lame.NOM hopes for to lead.INF blind.ACC

    b. ***Raising***

         Haltur   virðist leiða   blindan.
         lame.NOM seems lead.INF blind.ACC

Just like with raising verbs, using the idiomatic expression with aspectual verbs is fine.

(62) a. Haltur   er hér að leiða   blindan.
         lame.NOM is here to lead.INF blind.ACC

         'Here, someone with a limp is leading someone who is blind.'

    b. Nú er haltur   farinn að leiða   blindan.
         now is lame.NOM gone   to lead.INF blind.ACC

         'Now someone with a limp has started leading someone who is blind.'

This suggests that aspectual verbs are raising verbs.

4.3.4.3.4 Dual nature of aspectual verbs?

We have seen that aspectual verbs share important traits with raising predicates. H.Á. Sigurðsson (1989), however, argues that they are of 'dual nature'. He discusses Stylistic Fronting (SF) in Icelandic to show that aspectual verbs sometimes take a CP complement. As he points out, "SF may shift any category (sentence adverbs, past participle, particles, etc.) into a 'subject gap'" (H.Á. Sigurðsson 1989:57). An example of SF is shown below. In the relative clause in (63a) we have a subject gap which the infinitival verb *lesa* 'read' can move to, as shown in (63b).

(63) a. ***Relative clause without Stylistic Fronting***

menn sem þurfa að lesa   þessar bækur
men   who need   to read.INF these   books

'men who need to read these books'

b. ***Relative clause with Stylistic Fronting***

menn sem lesa$_i$ þurfa (*að) t$_i$ þessar bækur
men   who read.INF need   to   these   books

'men who need to read these books'   (H.Á. Sigurðsson 1989:57)

Furthermore, SF is clause-bounded (Maling 1980); SF cannot take place across a

CP boundary:

(64) a. ***Relative clause without Stylistic Fronting***

menn sem reyna að lesa   þessar bækur
men   who try   to read.INF these   books

'men who try to read these books'

b. ***Relative clause with Stylistic Fronting***

* menn sem lesa$_i$ reyna (að) t$_i$ þessar bækur
men   who read.INF try   to   these   books

Intended: 'men who try to read these books'
                                                    (H.Á. Sigurðsson 1989:58)

Reyna 'try' is a control verb which takes a CP complement; the embedded infinitival

verb cannot move to a subject gap across clause boundaries. Therefore the SF in

(64b) is ungrammatical. H.Á. Sigurðsson uses this as a diagnostics for control vs.

raising. Unexpectedly, given our conclusion regarding raising verbs, aspectual verbs

do not allow SF:

(65) a. ***Relative clause without Stylistic Fronting***

menn sem eru að lesa   þessar bækur
men   who are to read.INF these books

'men who are reading these books'

   b. ***Relative clause with Stylistic Fronting***

* menn sem lesa$_i$ eru (að) t$_i$ þessar bækur
men   who read.INF are to   these books

Intended: 'men who are reading these books'

(H.Á. Sigurðsson 1989:59)

H.Á. Sigurðsson concludes that aspectual verbs are of dual nature: sometimes they are raising verbs and sometimes control verbs. However, this may not be as clear-cut as Sigurðsson argues. First, Ingason and Wood (to appear) argue that SF is not only clause-bounded, but phase-bounded — SF can only cross one phase boundary under their analysis. It could be the case that aspectual verbs have an additional phase head.[15] Second, verbs that are undisputedly raising verbs pattern the same as aspectual verbs with respect to SF, at least in some cases (66b).[16]

(66) a. ***Relative clause without Stylistic Fronting***

Sá sem virðist elda   matinn er önnum kafinn.
he who seems cook.INF the.food is very busy

---

[15]That would be in line with Harwood's (2015) analysis of the progressive in English, even though under his analysis the progressive does not have an extra phase boundary, but rather, it extends the phase.

[16]The judgment in (66b) is mine. Jónsson (1991) marks this example with two question marks. He also marks an example equivalent to (66b) but with the control verb *reyna* with two question marks (unlike H.Á. Sigurðsson's asterisk in (64b)).

b. ***Relative clause with Stylistic Fronting***

* Sá sem elda$_i$ virðist t$_i$ matinn   er önnum kafinn.
he who cook.INF seems   the.food is very busy

<div align="right">(Jónsson 1991)</div>

What is important for our purposes, irrespective of a dual nature of aspectual verbs, is that they are at least in many cases like raising verbs, taking a smaller complement than CP. However, we have not seen yet how much structure the infinitival clause contains. We will look at that now.

4.3.4.4 Structure of the infinitival clause

I assume a split verb phrase with both a Voice and a v projection where v is the locus of event semantics and Voice the locus of the external argument (for arguments for such a split, see, e.g., Harley 2013 for Hiaki and Legate 2014 for Acehnese). We use adverbs to show that both projections are involved in the Canonical Passive (CanP; cf. Zaenen and Maling 1984) and the Aspectual Passive (AspPass). The use of both event-oriented and external-argument-oriented adverbials is grammatical in the AspPass:

(67)   a.   ***CanP***
          Möguleikarnir   voru skoðaðir   **vandlega**.
          the.options.NOM were considered carefully
          'The options were considered carefully.'

b. **AspPass**

Nú er verið   að skoða   möguleikana **vandlega**.
now is been.PASS to consider.INF the.options.ACC carefully

'Now the options are being considered carefully.'

(68) a. **CanP**

Nýjar   peysur   voru prjónaðar **af kappi**.
new.NOM sweaters.NOM were knitted   with zeal

'New sweaters were knitted enthusiastically.'

b. **AspPass**

Nú er verið   að prjóna nýjar   peysur   **af kappi**.
now is been.PASS to knit.INF new.ACC sweaters.ACC with zeal

'Now, new sweaters are being knitted enthusiastically.'

The manner adverb *vandlega* 'carefully' describes in which manner the event was carried out whereas the agent modifier *af kappi* 'enthusiastically' describes how the agent carried out his or her task. The data above suggest that in the Aspectual Passive, as well as in the Canonical Passive, we have both VoiceP and *v*P.

Negation is sometimes used to determine how much structure there is above a certain point in a structure. Sentential negation in Icelandic is rather high. In the following, it is between an epistemic modal verb *munu* 'will' in C and an auxiliary *hafa* 'have'.

(69) **Negation in Aspectual Active**

Jón mun **ekki** hafa   verið að skoða   möguleikana.
Jón will not   have.INF been to consider.INF the.options

'Jón supposedly was not considering the options.'

Moreover, in the aspectual constructions discussed above, it is usually not possible to place a negation below a non-finite aspectual verb.[17]

(70) a. ***Negation in Aspectual Active***

Hún hafði **ekki** verið   að borða kökuna.
she had   not   been.PRF to eat.INF the.cake
'The woman had not been not eating the cake.'

      b. ***Negation in the AspPass***

Það   var **ekki** verið   að borða kökuna.
EXPL was not   been.PASS to eat.INF the.cake
'The cake was not being eaten.'

(71) a. ***Negation in Aspectual Active***

Hún hafði verið   {***ekki**} að {***ekki**} borða {??**ekki**} kökuna
she had been.PRF   not   to   not   eat.INF   not   the.cake
{***ekki**}.
   not

Intended: 'The woman had been not eating the cake.'

      b. ***Negation in the AspPass***

Það   var verið   {***ekki**} að {***ekki**} borða {??**ekki**}
EXPL was been.PASS   not   to   not   eat.INF   not
kökuna {***ekki**}.
the.cake   not

Both in the progressive active and the progressive passive the only natural place for negation is between the finite verb and *verið*. If the negation is placed within the embedded infinitival clause, it is usually ungrammatical. However, if it is placed between the infinitival verb and its object, it is not always fully ungrammatical, but an emphasis on the negation may be needed.

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[17]The curly brackets, '{}', are used to test different positions for *ekki* 'not'.

Negation works the same in other examples involving aspectual verbs.

(72)   a.   ***Negation in Aspectual Active***

       * Ég hætti   að lesa   **ekki** bókina.
       I   stopped to read.INF not   the.book   (H.Á. Sigurðsson 1989:66)

      b.   ***Negation in the AspPass***

       * Það   var hætt   að lesa   **ekki** bókina.
       EXPL was stopped to read.INF not   the.book

(73)   a.   ***Negation in Aspectual Active***

       * Jón er búinn að lesa   **ekki** bókina.
       Jón is done   to read.INF not   the.book

      b.   ***Negation in the AspPass***

       * Það   er búið að lesa   **ekki** bókina.
       EXPL is done to read.INF not   the.book

H.Á. Sigurðsson takes the ungrammaticality of examples like (72a) to be semantic, as "one does not usually 'stop *not* doing something'" (H.Á. Sigurðsson 1989:66). As he points out, however, such examples are sometimes possible.

(74)   a.   ***Negation in Aspectual Active***

       Ég byrjaði að reykja   **ekki** fyrir   hádegi.
       I   began to smoke.INF not   before noon

                                               (H.Á. Sigurðsson 1989:67)

      b.   ***Negation in the AspPass***

       Það   var byrjað að reykja   **ekki** fyrir   hádegi.
       EXPL was started to smoke.INF not   before noon

In (74a) we can imagine a smoker who has the habit of smoking all day. However, as s/he tries to cut down on smoking, s/he starts not smoking before noon. The meaning is reminiscent of English constituent negation but this is also the meaning

we would expect if the aspectual verbs in this case were control verbs. That is, it is difficult to determine what the actual structure is and whether it differs from a control structure. In these examples, adding an emphasis to *ekki* 'not' makes them better. That may tell us that the negation adverb is attached low in structure, to VoiceP or *v*P, which we will refer to as constituent negation below.

Now let us compare the aspectual verb data to the control verb structure below:

(75) a. Ég lofaði   að {***ekki**} lesa   {**ekki**} bókina   {**ekki**}.
          I   promised to   not   read.INF not   the.book not
          'I promised not to read the book.'

      b. Það var lofað   að {***ekki**} lesa   {**ekki**} bókina   {**ekki**}.
          it   was promised to   not   read.INF not   the.book not
          'It was tried not to read the book.'

In the embedded infinitival clause, no emphasis is needed when the negation is between the infinitival verb and its object. I assume that the verb moves above negation, presumably to at least T (e.g., Platzack 1986, H.Á. Sigurðsson 1989, Rögnvaldsson and Thráinsson 1990, Thráinsson 2007:§8). Therefore we see that the control verb embeds a TP (and, actually, a CP) whereas the structure of the aspectual verbs is unclear.

Even though it is difficult to determine the structure based on the data above, the scope of the negation is telling for where it attaches to the structure. There is an important difference between control verbs and aspectual verbs in this respect.

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(76)   ***Neg >> many***; ***many >> Neg***

    a.   Neil Young reyndi að spila ekki Heart of Gold
           Neil Young tried   to play not Heart of Gold

        marga tónleika í röð.
        many concerts in a.row

    b.   Neil Young lofaði   að spila ekki Heart of Gold
           Neil Young promised to play not Heart of Gold

        marga tónleika í röð.
        many concerts in a.row

Heart of Gold is probably Neil Young's most famous song. We might imagine that he is getting tired of playing it every time he performs for live audience. Therefore he tries not to play the song on every concert, but only some of the concerts. That is, he might for example play it every other concert (***Neg >> many***). This meaning is available for the example in (76a).

There is also another, less salient meaning available, where Neil Young tries for many concerts in a row not to play the song. That is, he is so fed up with playing the song, that he just does not play the song at all many concerts in a row (***many >> Neg***).

The two meanings described above, where Neil Young plays Heart of Gold (i) only every other concert or (ii) not at all many concerts in a row, are possible for other control verbs, such as *lofa* 'promise' in (76b). However, only the latter reading is possible when aspectual verbs take an infinitival clause complement.

(77) a. ✗*Neg* >> *many*; ✓*many* >> *Neg*

Neil Young byrjaði að spila ekki Heart of Gold
Neil Young started to play not Heart of Gold

marga tónleika í   röð.
many concerts in a.row

b. ✗*Neg* >> *many*; ✓/??*many* >> *Neg*

Neil Young er búinn að spila ekki Heart of Gold
Neil Young is done to play not Heart of Gold

marga tónleika í   röð.
many concerts in a.row

c. ✗*Neg* >> *many*; ✓/??*many* >> *Neg*

Neil Young var að spila ekki Heart of Gold marga tónleika í   röð.
Neil Young was to play not Heart of Gold many concerts in a.row

In (77b), for example, it is the case that Neil Young has not played Heart of Gold for some time now, as there have been many concerts in a row where he just has not played the song. Even though I find this reading available for all the examples above, I do not find all of them particularly good, as indicated with the question marks. For some speakers, these examples may be ungrammatical on either reading.

I conclude from these negation data that aspectual verbs embed a smaller structure than control verbs; I argue that the fact that the control verb data give ambiguous readings, whereas aspectual verbs only give one reading, shows that negation can be adjoined in two places in the former but only in one place in the latter. That is, *ekki* 'not' can either be adjoined above the verb phrase (sentential negation) or to the verb phrase (constituent negation) when the infinitival clause is embedded by a control verb whereas it can only be adjoined to the verb phrase of the infini-

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tival clause when the clause is the complement of an aspectual verb. Therefore, I propose, aspectual verbs do not take CP complements nor TP complements.

Furthermore, note that nothing hinges on negation being available on the reading where **many** takes scope over **Neg**. What is important is that negation being adjoined high is unavailable in the aspectual constructions.

4.3.4.5   What is being passivized?

Since the aspectual verbs behave like raising verbs in important ways, aspectual passivization should really be about passivizing the main verb. Unaccusative passivization supports that. Note, nevertheless, that "regular" raising verbs, such as *virðast* 'seem', cannot show passive morphology, unlike aspectual verbs.

Icelandic allows passivization of intransitive verbs (impersonal passive) where only unergatives, such as *dansa* 'dance', passivize (78b) — unaccusatives, like *kafna* 'suffocate' and *fljóta* 'float', do not (79b), (80b), unless they are used agentively.

(78)   a.   Margir dönsuðu í   veislunni.
             many   danced   in the.party

             'Many people danced at the party.'

       b.   Það   var dansað   í veislunni.
            EXPL was danced.PASS in the.party

            'People danced at the party.'

(79)   a.   Margir köfnuðu   hér fyrir tveimur mánuðum.
             many   suffocated here for   two   monthts

             'Many people suffocated here two months ago.'

       b.   * Það   var kafnað   hér fyrir tveimur mánuðum.
            EXPL was suffocated.PASS here for   two   months

            'People suffocated here two months ago.'

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(80) a. Við flutum á   vatninu.
          we floated on the.water
          'We floated on the water.'

     b. ?? Það   var flotið   á   vatninu.
           EXPL was floated on the.water
           Intended: 'People floated on the water.'

Similarly, when the aspectual passive embeds an intransitive verb, it must be an unergative, see (81b). If it is an unaccusative verb, it is ungrammatical, see (82b) and (83b).

(81) a. Flestir eru að dansa.
          most   are to dance.INF
          'Most people are dancing.'

     b. Það   er verið   að dansa.
         EXPL is been.PASS to dance.INF
         'People are dancing.'

(82) a. Flestir eru að kafna.
          most   are to suffocate.INF
          'Most people are suffocating.'

     b. * Það   er verið   að kafna.
           EXPL is been.PASS to suffocate.INF
           'People are suffocating.'

(83) a. Við erum búin   að fljóta lengi á   vatninu.
          we are   finished to floate long on the.water
          'We have been floating for a long time on the water.'

     b. * Það   er búið að fljóta lengi á   vatninu.
           EXPL is done to float long on the.water
           Intended: 'Someone has floated for a long time on the water.'

On the other hand, when a passivized control verb, like *reyna* 'try', takes an intransitive infinitival clause as its complement, it does not matter whether it is an

unergative or unaccusative verb for the sake of grammaticality. This is shown with

unaccusative verbs in (84)–(86).

(84)　a.　Ég reyndi að roðna　ekki þegar ég hitti forsetann.
　　　　　I　tried　to redden not　when I　met　the.president

　　　　　'I tried not to blush when I met the president.'

　　　b.　Það　var reynt að roðna　ekki í　þessum vandræðalegu
　　　　　EXPL was tried to redden not　in these　embarrassing

　　　　　aðstæðum.
　　　　　circumstances

　　　　　'Someone tried not to blush in these embarrassing circumstances.'

(85)　a.　Flestir reyndu að kafna　　　ekki.
　　　　　most　tried　to suffocate.INF not

　　　　　'Most people tried (not) to suffocate.'

　　　b.　Það　var reynt að kafna　　　ekki.
　　　　　EXPL was tried to suffocate.INF not

　　　　　'People tried (not) to suffocate.'

(86)　a.　Við reyndum að fljóta　　ekki lengi á　vatninu.
　　　　　we tried　　to float.INF not　long on the.water

　　　　　'We tried not to float for a long time on the water.'

　　　b.　Það　var reynt að fljóta　　ekki lengi á　vatninu.
　　　　　EXPL was tried to float.INF not　long on the.water

　　　　　'People tried not to float for a long time on the water.'

This suggests that the aspectual verbs discussed here are not control verbs, which we

already concluded in §4.3.4.3. However, it should be noted that even the sentences

that I have judged as grammatical do not sound very natural with respect to the

context; it is not necessarily easy to imagine a situation where someone controls

whether s/he suffocates or not. Future research should look into this matter in

more detail.

4.3.4.6 Stacking of aspectual verbs

The aspectual verbs discussed here can stack on top of each other. There is to some extent a hierarchy with respect to how they can be stacked: *Vera búinn* 'be finished' can embed other aspectual verbs but other aspectual verbs cannot embed *vera búinn.*

(87) a. Það   er búið að vera   að undirbúa   þetta lengi.
          EXPL is done to be.INF to prepare.INF this   long

     b. *Það   er verið (að vera)   búið að undirbúa   þetta lengi.
          EXPL is been (to be.INF) done to prepare.INF this   long

(88) a. Það   er verið að fara   að dansa.
          EXPL is been to go.INF to dance.INF

       'People are about to start dancing.'

     b. Það   er verið að fara   að byrja   að dansa.
          EXPL is been to go.INF to begin.INF to dance.INF

I will argue that an implicit argument is introduced and syntactically projected in the passive of aspectual verbs. However, we want to know where the implicit argument is introduced. We expect there to be only one implicit argument in the structure, and therefore we furthermore want to know whether it is dependent on the highest or the lowest aspectual verb. I argue that the implicit argument, a φP, is introduced in SpecVoiceP and moves to the specifier position of the highest aspectual verb.

First, a participle Asp selected by *vera* 'be' (equivalent to English participle selected by *be*) is needed to form aspectual passive. Therefore, the following examples are ungrammatical:

(89) a. * Það   er að dansa.
          EXPL is to dance.INF
          Intended: 'People are dancing.'

      b. * Það   byrjaði / fór   / hætti   að dansa.
          EXPL started / went / stopped to dance.INF
          Intended 'People began/started/stopped dancing.'

Stacking aspectual verbs does not make the examples above grammatical, as we could expect if the Weak Implicit Argument were hinging on the lowest aspectual verb.

(90) a. * Það   er að fara   að dansa.
          EXPL is to go.INF to dance.INF
          Intended: 'People are about to start dancing.'

      b. * Það   byrjaði að fara   að dansa.
          EXPL started to go.INF to dance.INF
          'People started to dance.'

Second, weather verbs, which do not take an external argument (or at least not the same type of an argument as we are proposing), can also be embedded under aspectual verbs.

(91) a. ?? Það   er að rigna.
          EXPL is to rain.INF
          'It is raining.'   (Thráinsson 2007:14)

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b. Það fór að rigna.
    EXPL went to rain.INF
    'It started to rain.'

The example in (91a) is generally considered a bad sentence, even though it is not really ungrammatical. While weather verbs are generally not fully acceptable in the progressive in Icelandic, it is important to note that the reason is not that an external argument is introduced. The example can be made better; Thráinsson (2007:14) writes that "one could probably look out the window after a longish spell of rain and say (somewhat annoyed)" the sentence in (92):

(92) Það er enn að rigna.
      EXPL is still to rain.INF
      'It is still raining.'   (Thráinsson 2007:14)

If an implicit argument were introduced (of the same type as in the passive of aspectual verbs), this example would mean that *somebody* rained. That reading is not available.

As before, the aspectual verbs can be stacked on top of each other with an embedded weather verb.

(93) Það er að fara að rigna.
      EXPL is to go.INF to rain.INF
      'It is about to rain.'

This example is grammatical; no implicit argument is introduced.

The examples get more complicated when aspectual verb participles are used.

(94)   a.   Það   er búið að rigna   í   viku.
             EXPL is done to rain.INF for week

             'It has rained for a week.'

        b.   Það er farið að rigna.
             it   is gone to rain.INF

             'It has started to rain.'

        c. * Það   er verið að rigna.
             EXPL is been to rain.INF

(94a–b) are grammatical as there are both active and passive (φP-introducing)
versions of *búið* and *farið*, i.e., they are compatible with both the active and the
passive; in (94a–b) we have the active version, whereas the passive version would
have been ungrammatical with an embedded weather verb. There is no version of
verið 'been' selected be *vera* 'be' that is compatible with the active, on the other
hand, as we have previously seen. (94c) can only have a passive reading, where
an external argument is introduced. Therefore the only possible reading of (94c) is
where somebody rains, which is ungrammatical.

   Next, we will stack aspectual verbs on top of each other, with a participle of an
aspectual verb on top.

(95)   a. * Nú   er verið að fara   að rigna.
             now is been to go.INF to rain.INF

        b. ?? Nú   er búið að vera   að rigna   í   tvær vikur.
             now is done to be.INF to rain.INF for two   weeks

             'It has been raining for two weeks now.'

        c.   Nú   er búið að vera   að fara   að rigna   í   tvær vikur.
             now is done to be.INF to go.INF to rain.INF for two   weeks

             'It has been about to rain for two weeks now.'

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(95a) is equally bad as (94c), which shows that the highest aspectual verb is the decisive factor regarding whether or not a φP is projected. Even though, e.g., *búið* is compatible with φP and weather verbs (no φP), when *verið* selected by 'be' is the highest aspectual verb, a φP is always introduced. If progressive *vera* is embedded under another aspectual verb, however, then *vera* does not have any effect on whether a φP is projected. We see this in (95b–c). (95b) is the same example as (91a) above, except that progressive *vera* 'be' has an aspectual verb *búið* on top in (95b); this example is equally bad as (91a) but it is not ungrammatical, importantly. In the grammatical (95c) progressive *vera* is between two other aspectual verbs; here, as in (94b), *vera* cannot introduce a φP.

Before we take a closer look at where in the structure φP is introduced, we will compare the New Impersonal Passive and the Aspectual Passive.

4.3.4.7   Similarities between the NIP and the AspPass

4.3.4.7.1   Introduction

In their discussion on the NIP in Icelandic, Maling and Sigurjónsdóttir (2002:134–135) point out the similarity between the progressive passive and other passives formed with aspectual verbs, on the one hand, and the NIP, on the other. They furthermore propose that such constructions may have served as models for the innovation of the NIP. The analysis proposed in §4.3.4.8 builds on their insight, as I argue for the same analysis, to a large extent, of the NIP and the AspPass.

We now discuss various properties that the NIP and the AspPass have in common.

4.3.4.7.2 Properties shared by the two constructions

There are indeed striking similarities between the AspPass and the NIP, as now will be shown. First of all, in both constructions, there is a covert, understood external argument and a copula *vera* 'be' selects a past participle (which we interpret here as a passive participle, even though there is no morphological difference between it and perfect participles selected by *hafa* 'have'). Second, there are various indications that the NIP and the aspectual passive contain a projected implicit argument, as Maling and Sigurjónsdóttir (2002) have argued for the NIP. In the NIP, structural accusative case is assigned to the DP in object position (96a) which cannot A-move (96b) (Maling and Sigurjónsdóttir 2002:117). In addition, the DP that cannot move can be definite without violating the DE.

(96) ***NIP***

    a. % Var skilið hana   eftir   heima?
            was left   her.ACC behind home
            'Was she left behind at home?'

    b. * Var **hana**   skilið eftir   heima?
            was her.ACC left   behind home
            'Was she left behind at home?'

                                   (Maling and Sigurjónsdóttir 2002:117)

These properties hold for the passive of aspectual verbs as well. We have already seen that accusative case is assigned in the Aspectual Passive. As seen below, the DP can be definite.

(97)   ***AspPass***

    a.   Það er búið að moka   **snjóinn**.
          EXPL is done to shovel.INF the.snow.ACC

        'People are done shoveling the snow.'

    b.   Það er verið að moka   **snjóinn**.
          EXPL is been to shovel.INF the.snow.ACC

        'People are shoveling the snow.'

    c.   Það var byrjað / farið / hætt   að moka   **snjóinn**.
          EXPL was begun / gone / stopped to shovel.INF the.snow.ACC

        'People began / started / stopped shoveling the snow.'
        'People were in the state of having begun / started / stopped
        shoveling the snow.'   (cf. H.Á. Sigurðsson 1989:61)

Also, just like in the NIP, A-movement is blocked.

(98)   ***AspPass***

    a.   * Er **ég**/**mig**   verið   að afgreiða?
          is I.NOM/me.ACC been.PASS to serve.INF

        'Am I being served?'

    b.   * Er **snjóinn**   verið að moka?
          is the.snow.ACC been to shovel.INF

        'Is the snow being shoveled?'

    c.   * Er **snjóinn**   búið að moka?
          is the.snow.ACC been to shovel.INF

        'Has the snow been shoveled?'

    d.   * Hvenær verður **snjóinn**   byrjað / farið / hætt   að moka?
          when   will.be the.snow.ACC begun / gone / stopped to shovel.INF

Third, a body-part expression which lacks an overt possessive pronoun can get

an inalienable possession interpretation in both the NIP and the aspectual passive

(cf. MacDonald to appear), as shown in (99).

(99)   ***NIP***

    a.   Það   var rétt   upp höndina.
           EXPL was raised up   the.hand.ACC

        'Somebody$_i$ raised their$_i$ hand.'

    b.   Það   var hvorki hreyft hönd né fót.
           EXPL was neither moved hand nor foot.ACC

        'Somebody$_i$ / People$_i$ didn't move their$_i$ hand nor foot.'
        ≈ 'Somebody / People didn't move a muscle.'

(100)   ***AspPass***

    a.   Það   var stöðugt   verið að rétta   upp höndina.
           EXPL was constantly been to raise.INF up   the.hand.ACC

        'Somebody$_i$ was / People$_i$ were constantly raising their$_i$ hand.'

    b.   Það   er hvorki búið að hreyfa   hönd né fót   síðan
           EXPL is neither done to move.INF hand nor foot.ACC since

        skólinn   kláraðist.
        the.school finished

        'Somebody / People have neither moved their hand nor foot since
        school ended.'
        ≈ 'Somebody / People haven't moved a muscle since school ended.'

This suggests that both the NIP and the AspPass contain a projected implicit

argument.

Yet another indication of a projected implicit argument in these constructions is

preservation of verbal idiom meaning. The aspectual passive, shown in (101) below,

is the same as the NIP, see (21) above, in this respect.

(101)   ***AspPass***

    a.   Það   er verið að taka   þátt   í hlaupinu í   tíunda sinn.
           EXPL is been to take.INF thread.ACC in the.run   for tenth   time

           'Somebody is participating in the run for the tenth time.'

    b.   Það   er margsinnis búið að kaupa   köttinn   í sekknum.
           EXPL it many.times done to buy.INF the.cat.ACC in the.sack

           ≈ 'Somebody has often been sold a pig in a poke.'

If the preservation of verbal idiom meaning indicates a projected implicit argument, then both the New Impersonal Passive (NIP) and the Aspectual Passive (AspPass) have such an argument, as opposed to the Canonical Passive's unprojected implicit argument.

We have argued that both the NIP and the AspPass contain a projected implicit argument. Legate (2014) argues for the NIP that this is a WIA. We want to know whether the same holds for the AspPass, and now we come to the fourth property that is the same for the two constructions: the availability of 'by'-phrases.

'By'-phrases seem to be grammatical in the NIP (Jónsson 2009b, E.F. Sigurðsson and Stefánsdóttir 2014),[18] although this has been debated in the literature (see especially Maling and Sigurjónsdóttir 2002 for a different view). 'By'-phrases are also grammatical in the AspPass:

(102)   Er verið að afgreiða þig   **af einhverjum**?
         is   been to serve.INF you.ACC by someone

         'Are you being served by anyone?'

---

[18]This is true of at least some NIP speakers. This remains to be studied in more detail.

(103) exhibits attested examples in the aspectual passive, all of which I find grammatical.

(103)   a.   Þar   er verið að halda   því fram af meiri hluta
             there is been to hold.INF it   forth by majority

             utanrmn.   að   ríkisstjórn Steingríms
             foreign.affairs.committee.GEN that govenment Steingrímur

             Hermannssonar hafi látið kanna   hvort   [...].
             Hermannsson's had let   look.into whether

             'It's being claimed there by the majority of the committee of foreign affairs that Steingrímur Hermannsson's government had it looked into whether [...]'   (https://goo.gl/HT3Abn)

        b.   En svo nefndi   hann að það væri búið að sanna   það af
             but then mentioned he   that EXPL were done to prove.INF it   by

             vísindamönnum að   fiskistofnar   væru staðbundnir [...]
             scientists   that fishing.stocks were local

             'But then he mentioned that it had been proved by scientists that fishing stocks were local [...]'   (https://goo.gl/HQP0wu)

        c.   Það   er farið að tala   um   það af ábyrgum   aðilum að
             EXPL is gone to talk.INF about it   by responsible parties to

             útloka allar togveiðar   [...]
             exclude all   trawl.fishing

             'It has been started talking by responsible parties about excluding all trawl fishing [...]'   (https://goo.gl/GJz6rz)

Fifth, anaphors can be bound, both in the NIP, (25) repeated as (104), and the AspPass (105). Whereas 'by'-phrases point to WIA, on Landau's approach, binding of anaphors suggests that the NIP and the aspectual passive involve a SIA.

(104)   ***NIP***

        % Þar   er gagnrýnt **sjálfan sig**.
          there is criticized self.ACC REFL

          'There is criticizing of oneself there.'

(105)   ***AspPass***

    a.   Er verið   að afgreiða **sjálfan sig**?
        is been.PASS to serve.INF self.ACC REFL

        'Is someone serving herself/himself?'

    b.   Á samskiptamiðlum er stöðugt   verið   að upphefja
        on social.media   is constantly been.PASS to glorify.INF

        sjálfan sig.
        self.ACC REFL

        'People are constantly glorifying themselves on social media.'

On the other hand, secondary predicates, predicated of the external argument, have been reported to be ungrammatical in the NIP (106a) (Jónsson 2009b297, H.Á. Sigurðsson (2011b:157)). They often seem to be equally bad in the progressive passive (106b).

(106)   a.   ***NIP***

        % Var barið   hana   (*fullur)?
        was beaten her.ACC   drunk.M.NOM.SG

        'Was she hit (by somebody who was drunk)?'

                                (H.Á. Sigurðsson 2011b:157)

    b.   ***AspPass***

        Var verið að berja   hana   (*fullur)?
        was been to beat.INF her.ACC   drunk.M.NOM.SG

        'Was she being hit (by somebody who was drunk)?'

This suggests that there is not an SIA in the NIP and the AspPass. It might be the case, then, that binding of reflexive pronouns only requires a projected implicit argument, but that it does not matter whether it is weak or strong. In some cases,

though, speakers I have consulted do find secondary predicates grammatical in the aspectual passive, even if they do not like (106b).

(107)   **AspPass**

Það   var oft   verið að keyra   fullur.
EXPL was often been to drive.INF drunk.M.NOM.SG
'People were often driving drunk.'

The reason for this is not clear. This remains to be investigated, for both the NIP and the aspectual passive.

It is not crucial for the present work to find out when exactly secondary predicates are possible in the Aspectual Passive. What is important, however, is the fact that secondary predicates and 'by'-phrases do not seem to be able to co-occur.

(108)   **AspPass**

Var verið að keyra   rútuna   fullur   (*af einhverri
was been to drive.INF the.bus.ACC drunk.M.NOM.SG   by some

fyllibyttu)?
teetotaler
'Was the bus being driven by some teetotaler who was drunk?'

Finally, the implicit argument of the AspPass can control PRO (SIA) in an infinitival adjunct clause, as shown below.

(109)   **AspPass**

Það   er búið að vera   að ráða   nýtt starfsfólk án   þess að
EXPL is done to be.INF to hire.INF new employees without it   to

hafa   næga   menntun.
have.INF enough education
✓'New employees who don't have enough education are being hired.'

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✗‘Someone who doesn't have enough education has been hiring new employees.'

4.3.4.7.3 Summary

We discussed above properties of the AspPass. The availability of secondary predicates and binding of anaphors may point to an SIA subject but the availability of 'by'-phrases suggests that if we have a projected implicit argument, then that is a WIA. Importantly, secondary predicates and 'by'-phrases cannot co-occur. This may suggest that the AspPass licenses both an SIA (cf. H.Á. Sigurðsson 1989) and a WIA; that would fit with H.Á. Sigurðsson's (1989) proposal that aspectual verbs are of dual nature.

When the AspPass and the NIP are compared, striking similarities between the constructions emerge. This is summarized in Table 4.2. Therefore, we pursue the possibility that these constructions share the same syntactic structure to a large extent. Maling and Sigurjónsdóttir (2002) argued that the NIP contains a *pro* subject, whereas Eythórsson (2008a) and Jónsson (2009b) have argued that there is no projected implicit argument in the construction. H.Á. Sigurðsson (2011b) and Legate (2014), on the other hand, argue for a projected implicit argument, smaller than *pro*/PRO (SIA). I adopt Legate's analysis and extend it to the AspPass, as will now be demonstrated.

The data discussed above suggest that the AspPass introduces a projected φP. We will now turn to our analysis.

	NIP	AspPass	CanP	active
Passive morphology	✓	✓	✓	✗
'By'-phrases	✓	✓	✓	✗
Overt external argument	✗	✗	✗	✓
Secondary predication of ext. arg.	✗	✓/✗	✗	✓
Structural case on object	ACC	ACC	NOM	ACC
Binding of reflexives	✓/✗	✓	✗	✓
Inalienable body-part interpr.	✓	✓	✗	✓
Preservation of idiomatic readings	✓	✓	✗	✓
Control by external argument	✓	✓	✗	✓
A-movement of an internal arg.	✗	✗	✓	✗
Definiteness Effect	✗	✗	✓	✗
Subject type	φP	φP(/DP)	–	DP

Table 4.2: Properties of the NIP, the AspPass, the CanP and the active.

4.3.4.8 Analysis: WIA in SpecVoiceP and passive of the main verb

I argue that the analysis discussed above for the NIP should be extended to the AspPass. The facts in §4.3.4.6 point to the highest aspectual head to provide Existential Closure. If, for example, *vera* 'be' is the highest aspectual verb, selected by *vera* 'be', it always provides Existential Closure. It does not, however, if it is embedded under another aspectual verb.

The aspectual verb that existentially closes over the agent does not locally select VoiceP with or without a projected implicit argument. Aspectual verb stacking and data with participle *verið* 'been' selected by *vera* 'be' demonstrate that: When a participle is formed by progressive aspect verb *vera* and selected by another *vera*, it is always the case that a φP is projected in the structure.

(110) a. Það er verið   að dansa.
           EXPL is been.PASS to dance.INF
           'People are dancing.'

   b. * Það   er að dansa.
           EXPL is to dance.INF
           Intended: 'People are dancing.'

In (110a), we have progressive *verið* 'been' selected by *er* 'is'. The embedded main verb *dansa* 'dance' introduces an agent which needs to be saturated. Saturation is accomplished by the highest Asp head, *ið*- '-ed'. There is no participle in (110b), only a progressive *vera* 'be' and an embedded verb *dansa* 'dance'. This is ungrammatical because the main verb, on my analysis, introduces an agent variable and

there is no head higher in the structure that is able to existentially close it — only the participle head can do that.

When a passive participle *ver-ið* combines with an embedded verb that is not compatible with a WIA, the sentence is ungrammatical. If, however, there is a participle on top of progressive *vera* 'be', then the structure is grammatical. This is shown in (111a) and (111b), respectively.

(111)   a.   * Nú er verið að fara   að rigna.
               now is been to go.INF to rain.INF

   b.   Nú er búið að vera   að fara   að rigna   í   tvær vikur.
         now is done to be.INF to go.INF to rain.INF for two   weeks
         'It has been about to rain for two weeks now.'

These facts show that the highest aspectual head can close over the open argument variable. Under my approach, it is the participle suffix, whose realization is *-ið*, that provides Existential Closure. We refer to such a participle as passive participle. The head that merges with a participle may have requirements as to whether the two can combine, but lower, stacked aspectual heads do not have anything to do with whether, e.g., EC can or cannot take place or whether a participle can combine with a weather verb structure. Even though *ver-* can be embedded by another aspectual verb, it can only be selected by two types of participles: (i) an EC participle (passive participle) or (ii) a participle selected by *hafa* 'have' (active perfect participle).

It is important to note that even though in standard Icelandic, the canonical eventive passive (like 'The book was read') does not introduce φP, aspectual

passives introduce φP for all speakers. As a result, structural case is realized as nominative case in the canonical passive but as accusative case in the aspectual passive. In the NIP, as we saw above, φP is introduced in SpecVoiceP. In the aspectual passive, I argue also that φP is introduced in the specifier of Voice, leading to accusative case on the object. However, the highest aspectual verb, when it combines with passive Asp, requires its specifier to be filled, making the φP move to SpecAspP.[19] We show this below; for aspectual semantics, see the tree in (122).

Note that in the tree below, and other trees involving aspectual passives, I abstract away from the infinitival marker and its position in the structure. There are two reasons for that: First, semantically, it does not contribute anything to the derivation under my analysis. And second, it is not clear where exactly it is in the structure.

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[19]Note that there is independent evidence for φPs moving in other environments. I will argue below that *sig* of inherently and naturally reflexive verbs is a φP. Even though it does not usually move, it can move through object shift, as shown in (ib).

(i)   a.   Jón hafði **ekki** montað **sig**.
           Jón had   not   boasted REFL.ACC

      b.   Jón montaði **sig**   **ekki**.
           Jón boasted REFL.ACC not

(112)   ***AspPass***

    a. Það   er búið að vera   að dansa.
       EXPL is done to be.INF to dance.INF

    'People have been dancing.'

    b.

AspP
$\lambda e.\exists x[\text{AGENT}(e,x)$
$\wedge\ \varphi(x) \wedge \text{dancing}(e)]$

Asp
$\lambda p_{\langle e,\langle s,t\rangle\rangle}.\lambda e.\exists x[p(x)(e)]$
-ið
'-ed'

AspP
$\lambda x.\lambda e.\ \text{AGENT}(e,x)$
$\wedge\ \varphi(x) \wedge \text{dancing}(e) \wedge \varphi(x)$

φP_i

Asp
bú-
'finish-'

AspP
$\lambda x.\lambda e.\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e) \wedge \varphi(x)$

Asp
vera
'be'

VoiceP
$\lambda x.\lambda e.\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e) \wedge \varphi(x)$

$\langle\varphi P_i\rangle$

Voice
$\lambda x.\lambda e.\ \text{AGENT}(e,x)$
dansa
'dance'

...
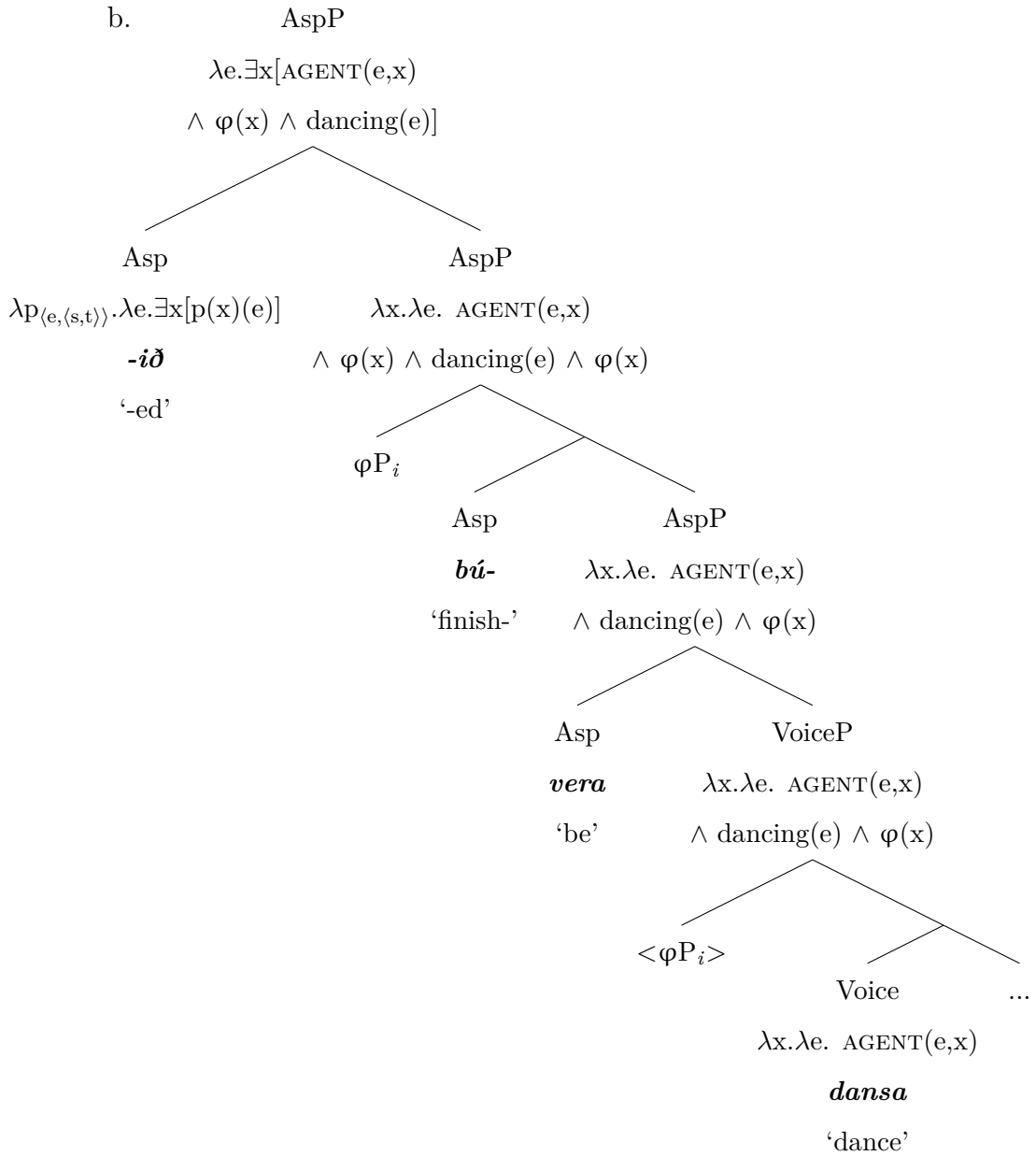
The participle head takes AspP as its argument and existentially closes the external

argument variable. However, in the aspectual passive, structural case of the object

is always realized in the accusative. That suggests that a passive participle that merges with AspP requires there to be a φ. On the one hand, it existentially closes over the external argument, and on the other, it requires its complement to have a filled specifier. The only way to accomplish this is to have a projected phrase in SpecAspP smaller than a DP. Since the passive participle and VoiceP are not in a local relationship (the passive participle does not merge with VoiceP), the participle cannot require VoiceP to have a filled specifier. I therefore propose that the passive participle requires its sister to have a φP in its specifier.

On this account, the implicit argument projected in SpecVoiceP restricts the external argument introduced by Voice; it is not an external argument of the aspectual verb but of the main verb, *afgreiða* 'serve'. That is, Asp *-ið* existentially closes the agent variable of the main verb and therefore the aspectual passive is passivization of the main verb, not the aspectual verb. Because the (highest) aspectual verb is closer to passive Asp *-ið*, however, it shows passive morphology while 'serve' does not.

We now take a closer look at the aspectual semantics of examples like (112a), before we look at the Impersonal Modal Construction.

4.3.4.9 On the semantics of the progressive and the perfect

We have discussed the syntax of aspectual verbs in some detail, but without going into the semantics of Aspect. Comrie (1976:3) defines aspect as "different ways of

viewing the internal temporal constituency of a situation". The Icelandic aspectual predicates in (44) above fit with Comrie's (1976) description; the perfect aspect of *vera búinn* 'be finished' in (45a), for example, denotes "the continuing relevance of a previous situation" (Comrie 1976:56; see also Jónsson 1992:131) and the progressive (45b) has clearly a different internal time from a simple past or present tense.

For the discussion on the relative time of Aspect, I adopt Reichenbach's speech time, reference time and event time. He discusses the relative timing of these for the perfect and the progressive as follows. In the present perfect, the speech time and reference time fall together (present tense is semantically vacuous, see, e.g., Pancheva 2003) but in the past perfect the reference time precedes the speech time. The event time precedes the speech and the reference time in both of these.

(113)   ***English***

    a.   I have seen John.

    b.   I had seen John.   (Reichenbach 1947)

As in the present perfect, reference time is the same as speech time in the present progressive. These two are properly contained by the event time. In the past progressive, on the other hand, the event time and the reference time are the same time interval and these two precede the speech time.

(114)   a.   I am seeing John.

    b.   I was seeing John.   (Reichenbach 1947)

These two can be combined, where the perfect embeds the progressive. In the present perfect of the progressive, the event time is an interval preceding the reference time, which in turn precedes the speech time. In the past perfect of the progressive, the speech time and the reference time are the same and the event time is an interval preceding those two.

(115)   a. I have been seeing John.

         b. I had been seeing John.   (Reichenbach 1947)

This means that when the perfect embeds the progressive, the event time is an interval, as is the case in other progressives, and the reference time is determined by the perfect in relation to tense.

Taking a closer look at the perfect, in (46a) *Jón er búinn að moka snjóinn* 'Jón is done shoveling the snow', for example, Jón is in the state of having started shoveling the snow; its effect has a direct relevance for the reference time. This is an example of the resultative perfect, which is one of four types of the perfect observed for English by McCawley (1971). These four uses are shown below, along with McCawley's descriptions.[20]

(116)   a.   Universal: Indicates that a state of affairs prevailed throughout some
               interval stretching from the past into the present

               Example: I've known Max since 1960.

---

[20]McCawley (1971:104) refers to (116c) as stative, but I refer to it as resulative.

b. Existential: Indicates the existence of past events

Example: I have read 'Principia Mathematica' five times.

c. Resultative: Indicates that the direct effect of a past event still continues

Example: I can't come to your party tonight — I've caught the flu.

d. Hot news: Reports hot news

Example: Malcolm X has just been assassinated.

(cf. McCawley 1971:104)

McCoard (1978) argued for the Extended Now theory of the perfect, where a past event has a direct relevance at the reference time (in the present perfect the reference time is the same as the speech time). This is rather clear in the universal perfect and the resultative perfect. In the universal perfect, see (116a), the time I have known Max is a continuous interval spanning from 1960 up until the reference time. In the resultative perfect, see (116c), the part *I've caught the flu* indicates that the past event of having caught a flu still has an effect at the reference time. The Extended Now reading is less clear in the case of the existential perfect: In (116b) it is stated that there exist five instances or occasions where I have read Principia Mathematica. The direct relevance for the reference time is not obvious.

Looking further at the perfect, Jónsson (1992) discusses two perfect constructions in Icelandic. In the former, a perfect participle is selected by *hafa* 'have', and in the latter, a perfect participle *búinn* is selected by *vera* 'be'.

(117)   ***Icelandic***

    a.   María hefur bakað köku.
            Mary has   baked a.cake

    b.   María er búin   að baka   köku.
            Mary is finished to bake.INF a.cake   (Jónsson 1992:134)

The most natural reading of (117a) above is an existential perfect, in which María

has baked a cake at an unspecified time before the reference time. (117b), however,

is most naturally interpreted on a resultative reading, in which María has baked a

cake in the past which extends to the reference time (see Jónsson 1992).

    I adopt the Extended Now approach to the perfect (McCoard 1978, Dowty

1979) as implemented in Iatridou et al. 2001 and Pancheva 2003 where the perfect

introduces an interval called the Perfect Time Span (PTS) and relates it to the

reference time such that the reference time is the final subinterval of PTS.

(118) $\llbracket \text{PERFECT} \rrbracket = \lambda p.\lambda i.\exists i'\ [\text{PTS}(i',i) \wedge p(i')]$ and $\text{PTS}(i',i)$ iff i is a final subin-

        terval of i'

Focusing on perfect progressive examples like *I have/had been seeing John*, λp is

the progressive, an unbounded property of times as shown below:

(119) $\llbracket \text{UNBOUNDED} \rrbracket = \lambda P.\lambda i.\exists e\ [i \subseteq \tau(e) \wedge P(e)]$

Here, the progressive is properly contained within the running time of the event.

When the perfect takes the progressive as its argument, we get the following result:

(120) $\llbracket \text{PERFECT} \rrbracket (\llbracket \text{UNBOUNDED} \rrbracket)$

    $= \lambda p.\lambda i.\exists i'\ [\text{PTS}(i',i) \wedge p(i')](\lambda P.\lambda i.\exists e\ [i \subseteq \tau(e) \wedge P(e)])$ and $\text{PTS}(i',i)$ iff i

is a final subinterval of i′

$$= \lambda i.\exists i' \ [PTS(i',i) \wedge i' \subseteq \tau(e) \wedge P(e)] \text{ and } PTS(i',i) \text{ iff } i \text{ is a final subinterval}$$

of i′

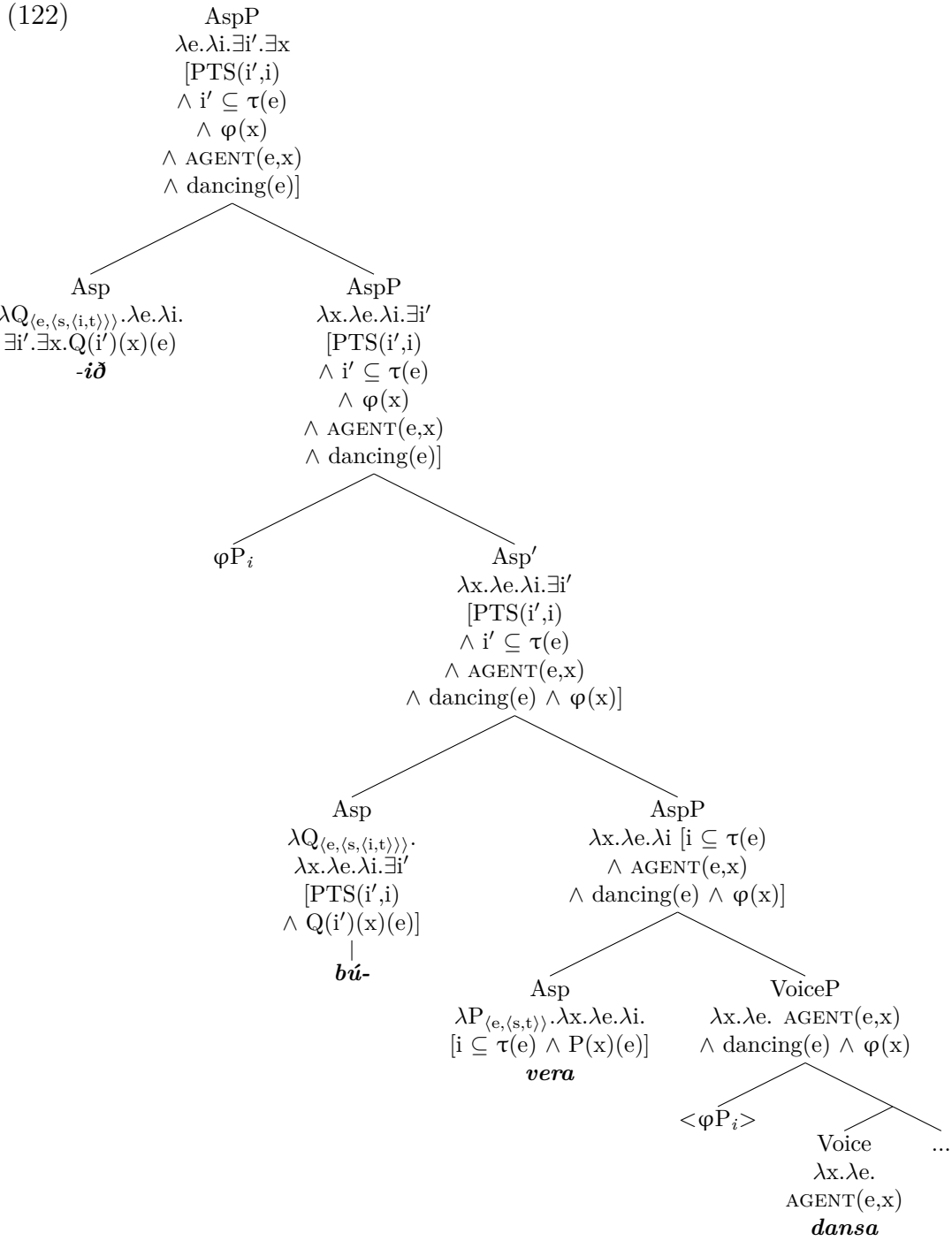These denotations tell us that a perfect of an unbounded aspect gives us a perfect whose time spans the running time of the event and the reference time is the final subinterval of this event. The aspectual time expressed by the perfect therefore has a relevance at the reference time (Extended Now).

(121)   ***AspPass***

Það   er búið að vera   að dansa.
EXPL is done to be.INF to dance.INF
'People have been dancing.'

(122)

AspP
$\lambda e.\lambda i.\exists i'.\exists x$
$[PTS(i',i)$
$\wedge\ i' \subseteq \tau(e)$
$\wedge\ \varphi(x)$
$\wedge\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e)]$

Asp
$\lambda Q_{\langle e,\langle s,\langle i,t\rangle\rangle\rangle}.\lambda e.\lambda i.$
$\exists i'.\exists x.Q(i')(x)(e)$
-ið

AspP
$\lambda x.\lambda e.\lambda i.\exists i'$
$[PTS(i',i)$
$\wedge\ i' \subseteq \tau(e)$
$\wedge\ \varphi(x)$
$\wedge\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e)]$

φP_i

Asp$'$
$\lambda x.\lambda e.\lambda i.\exists i'$
$[PTS(i',i)$
$\wedge\ i' \subseteq \tau(e)$
$\wedge\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e) \wedge \varphi(x)]$

Asp
$\lambda Q_{\langle e,\langle s,\langle i,t\rangle\rangle\rangle}.$
$\lambda x.\lambda e.\lambda i.\exists i'$
$[PTS(i',i)$
$\wedge\ Q(i')(x)(e)]$
|
bú-

AspP
$\lambda x.\lambda e.\lambda i\ [i \subseteq \tau(e)$
$\wedge\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e) \wedge \varphi(x)]$

Asp
$\lambda P_{\langle e,\langle s,t\rangle\rangle}.\lambda x.\lambda e.\lambda i.$
$[i \subseteq \tau(e) \wedge P(x)(e)]$
vera

VoiceP
$\lambda x.\lambda e.\ \text{AGENT}(e,x)$
$\wedge\ \text{dancing}(e) \wedge \varphi(x)$

$<\varphi P_i>$

Voice
$\lambda x.\lambda e.$
$\text{AGENT}(e,x)$
dansa

...

When the progressive combines with VoiceP in (122), a reference time variable is
added; the reference time is contained within the event time (the running time of the
dancing event). When the perfect combines with the progressive, another reference

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time variable is added. This makes the Perfect Time Span, consisting of i and i′, where this added reference time interval i′ states that it is the final subinterval of the the interval i (Extended Now). When Tense eventually combines with the perfect, it will determine this latter reference time with respect to the speech time.

4.3.5 The Impersonal Modal Construction

4.3.5.1 Introduction

The Impersonal Modal Construction (IMC) gives us a great chance to improve our understanding of the interaction of implicit arguments, properties of Voice and modality. The IMC serves a key role in our proposal that Voice does not have flavors.

The IMC is restricted to six modal verbs: *mega* 'may, be allowed to, have the permission to', *eiga* 'have to, have the obligation to, be supposed to, ought (to)', *verða* 'must, have to', *þurfa* 'need to, be necessary to', *skulu* 'shall, have to, must' and *bera* 'have the (moral) obligation to'. I will limit my research to the first four of these, which I argue to be raising verbs as well as root modals (when used in the IMC).[21]

_____

[21]Even though *bera* 'have the (moral) obligation to' and *skulu* 'shall, have to, must' seem to be IMC verbs, they have different properties than *eiga*, *mega*, *verða* and *þurfa*. I argue that these four are root modals and raising verbs. As discussed in §4.3.5.5.1, the four verbs behave like raising verbs with respect to case preservation. When *bera* takes on overt subject, however, it is in the

These six verbs are only a subset of the inventory of Icelandic modal verbs, as seen in (123).

(123)   a.   ***Icelandic modal verbs taking bare infinitival complements***

              mega 'may', *munu* 'will', *skulu* 'shall', *vilja* 'will'

        b.   ***Icelandic modal verbs taking infinitival að-complements***

              bera 'have the (moral) obligation to', *eiga* 'be supposed to, ought (to)',

              hljóta 'must', *kunna* 'can', *verða* 'must', *þurfa* 'need', *ætla* 'intend,

              be going to'

        c.   ***An Icelandic modal verb taking a participial complement***

              geta 'can, may, be able to'   (cf. Thráinsson 2007:422)

Here, the modal verbs are categorized based on what kind of complements they take. The set of IMC verbs does not form a single class in this respect, as *mega* (and *skulu*) take bare infinitival complements whereas the rest take infinitival *að* 'to'-complements (*að* being an infinitival marker).

Even though null subjects are normally not allowed in finite, active clauses in Icelandic (126), certain modals allow their use. Examples of the IMC are shown in (124). (125) serves as an example to show that not all modals allow null subjects:

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dative case, regardless of the subject case of the embedded verb. I also argue that *eiga*, *mega*, *verða* and *þurfa* are root modals, generated lower than epistemic modal verbs. Even though *skulu* has a deontic (root) reading in the IMC, it seems to be generated higher than root modals. These two verbs, *bera* and *skulu*, require a further study. I will not discuss them further here, however.

(124)   ***IMC***

    a.   Hér **má** byggja **nýja** **brú**.
        here may build.INF new.ACC bridge.ACC

        'Here, one is allowed to build a new bridge.'
                               (H.Á. Sigurðsson and Egerland 2009:169)

    b.   Það **á/verður/þarf** að lesa **bókina**.
        EXPL ought/has.to/needs to read.INF the.book.ACC

        'One has to read the book.'

(125)   ***Null subjects not allowed with* geta**

    * Hér **getur** byggt **nýja** **brú**.
      here can   build.PTCP new.ACC bridge.ACC

    Intended: 'Here, one can build a new bridge.'
                             (H.Á. Sigurðsson and Egerland 2009:170)

(126)   ***Null subjects not allowed in active, finite clauses***

    a.   * Hér byggir nýja   brú.
        here builds new.ACC bridge.ACC

        Intended: 'Here, one/someone/people build(s) a new bridge.'

    b.   * Það las   bókina   í gær.
        EXPL read.PST the.book.ACC yesterday

        'One/Someone/People read the book yesterday.'

The IMC, which has been studied most extensively by H.Á. Sigurðsson (1989) and H.Á. Sigurðsson and Egerland (2009) (see also E.F. Sigurðsson 2012), has no overt subject but nevertheless the embedded infinitival verb can take a structural accusative object (124). The object cannot move to subject position as shown below using word order (where the DP immediately following the modal verb is in the subject position).

(127)   a.   * Hér **má nýja   brú**   byggja.
             here may new.ACC bridge.ACC build.INF

             Intended: 'Here, one may build a new bridge.'

        b.   * **Verður bókina**   að lesa?
             has.to   the.book.ACC to read.INF

             Intended: 'Does one have to read the book?'

The ungrammaticality of these examples shows that SpecTP is unavailable to the object DP. This may suggest that the IMC contains an implicit subject argument, blocking the movement of the object. What supports that is the fact that secondary predicates (depictives) are possible.

(128)   ***IMC***

        a.   **Má** ekki vera hérna **fullur**?
             may not be   here drunk.M.NOM.SG

             'Is it not allowed to be here drunk?'   (H.Á. Sigurðsson 2011b:158)

        b.   Það **á/verður/þarf**   að gera þetta   **óþreyttur**.
             EXPL ought/has.to/needs to do   this.ACC untired.M.NOM.SG

             'One has to do this while not tired.'

Here, the adjectives *fullur* 'drunk' and *óþreyttur* 'untired' must be predicated of an implicit subject. This suggests that the IMC is truly an impersonal construction.

We have now seen a few of the core properties of the IMC. In all the IMC examples above, we can insert an overt subject and get all the same properties: accusative objects, secondary predicates, binding of reflexives and control. That is to say, it looks like there is a covert subject in the structure that is like a pronoun or a full DP, see (129)–(132).

(129)   a.   Hér má **fólk** byggja nýja   brú.
            here may people build.INF new.ACC bridge.ACC

            'Here, people are allowed build a new bridge.'

        b.   **Þú** verður að lesa   bókina.
            you have.to to read.INF the.book.ACC

            'You have to read the book.'

(130)   **Jón** á/verður/þarf   að reka   sjálfan sig.
        Jón ought/has.to/needs to fire.INF self.ACC REFL.ACC

        'Jón is supposed to/has to/needs to fire himself.'

(131)   a.   Má **maður** ekki vera   hérna fullur?
            may one   not be.INF here   drunk.M.NOM.SG

            'Is one not allowed to be here drunk?'

        b.   **Páll** á/verður/þarf   að gera þetta   óþreyttur.
            Páll ought/has.to/needs to do.INF this.ACC untired.M.NOM.SG

            'Páll has to do this while not tired.'

(132)   **Maður** má ráða   tvo   menn   án   þess að hafa
        one   may hire.INF two.ACC men.ACC without it   to have.INF

        næga   menntun.
        enough education

        'One is allowed to hire two men without having enough education.'

A logical conclusion is to say that the IMC contains an SIA, i.e., either a PRO or *pro*

subject. Given that, it is surprising that agentive 'by'-phrases are sometimes gram-

matical in the IMC, see (133). Note, however, that there are various restrictions on

the use of 'by'-phrases in the IMC, which we will discuss in §4.3.5.6.4.

(133)   ***IMC with a 'by'-phrase***

        Það   þarf að rannsaka   þetta   betur **af fræðimönnum**.
        EXPL needs to investigate.INF this.ACC better by scholars

        'This needs to be studied further by scholars.'

As expected, 'by'-phrases are not possible in a modal structure with overt DPs, see (134):[22]

(134)   * **Maður** þarf að rannsaka   þetta   betur **af fræðimönnum**.
          one   needs to investigate.INF this.ACC better by scholars
          Intended: 'This needs to be studied further by scholars.'

This raises the question whether the IMC involves an implicit argument at all. Recall, following Landau (2010), that Weak Implicit Arguments (WIAs) have less internal structure than Strong Implicit Arguments (SIAs), i.e., *pro* and PRO. On Landau's approach, WIAs do not license secondary predicates nor bind anaphors. I argue that the IMC comes in two flavors, one with an SIA (secondary predicates and binding of reflexives grammatical, 'by'-phrases ungrammatical) and the other with a WIA (with the opposite properties: secondary predicates and binding of reflexives ungrammatical, 'by'-phrases grammatical).

When 'by'-phrases are allowed, the IMC contains a WIA. Following Legate (2014), I argue that WIA in SpecVoiceP, restricts that position but does not saturate it (cf. Chung and Ladusaw's 2004 predicate restriction). In such cases, secondary predicates and binding of reflexives are not possible. When they are, the IMC contains an SIA and 'by'-phrases are not allowed.

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[22]The subject in (134) is the impersonal pronoun *maður* 'one' (literally 'man'). It should be noted that it is not an overt realization of the null subject of the IMC (or that the null subject simply amounts to null *maður*), as argued by H.Á. Sigurðsson and Egerland (2009).

It is somewhat surprising that Icelandic, which is not a pro-drop language, allows implicit arguments with certain modals. I will argue that IMC verbs can both take propositions (of semantic type $\langle s_w,t \rangle$) and properties (of type $\langle e,\langle s_w,t \rangle \rangle$).[23] When they take properties as arguments, the external argument position (SpecVoiceP) needs to be saturated — we accomplish saturation via Existential Closure of the external argument, which we have taken to define passives.

We will now look into various properties of Icelandic modal verbs and the IMC. I will argue that IMC verbs are root modals (§4.3.5.4) as well as raising verbs (§4.3.5.5). Just as in the case of the Aspectual Passive (AspPass), we will see that there are striking similarities between the IMC and the New Impersonal Passive (NIP) (§4.3.5.6). That leads us to an analysis which is in fundamental ways the same as we have seen for the NIP and the AspPass: with a WIA in SpecVoiceP that restricts the agent argument but does not saturate it (§4.3.5.7).

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[23] As is standard in intensional semantics literature (e.g., Lewis 1970, 1986, Kratzer 1977), I will assume possible world semantics, with modal operators quantifying over possible worlds. In some cases, for example when comparing derivations for the NIP and the IMC, I use event semantics. There I abstract away from possible world semantics, for ease of exposition. I do not include event semantics in those cases where I discuss possible world semantics, for the same reason. Since the letter used for both world arguments and event variables is 's', this can get confusing. Therefore I use subscript 'w' when referring to world semantics and subscript 'e' when referring to event semantics, that is, 's_w' and 's_e', respectively.

4.3.5.2　'By'-phrases in the IMC

Agentive 'by'-phrases in Icelandic are usually considered to be restricted to passives only (e.g., Jónsson 2009b:294), that is, of the kind shown in (135), where a passive participle is what defines something as a passive construction.

(135)　　***CanP***

Þetta　　var rannsaka-ð　　af fræðimönnum.
this.NOM was investigate-PASS by scholars

'This was investigated by scholars.'

With this in mind and the fact that Jónsson (2009b) says that 'by'-phrases cannot be used to refer to the understood agent of the IMC, it comes as a surprise that 'by'-phrases are argued here to be grammatical in the IMC. Consider Jónsson's (2009b) example:

(136)　　***IMC***

* Það　þarf　að þvo　　gólfið　　　af einhverjum.
EXPL needs to clean.INF the.floor.ACC by someone

Intended: 'The floor needs to be cleaned by someone.'

(Jónsson 2009b:294)

I agree that this example is not really an acceptable sentence without context. The sentence gets much better if we make the agent DP heavier by adding a relative clause.[24]

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[24]Heaviness is sometimes an important factor in making 'by'-phrases acceptable, as in the Impersonal Passive in Icelandic (Ingason et al. 2016a).

(137)   ***IMC with a 'by'-phrase***

Það   þarf   að þvo   gólfið   af einhverjum sem kann
EXPL needs to clean the.floor.ACC by someone   who knows

til verka.
how.to.do.it

'The floor needs to be cleaned by someone who knows how to do it.'

Attested examples support the claim made here that 'by'-phrases are possible in
the IMC. The oldest example I have found (from a 1927 newspaper) is shown in
(138).

(138)   ***IMC with a 'by'-phrase***

[...] að   er   hann var búsettur í Síberíu árið   1920 og
      that when he   was resided   in Siberia the.year 1920 and

átti   að handtaka hann   af stjórnarvöldum bolsivíka, þá
was.supposed to arrest.INF him.ACC by government   Bolshevik then

komst hann undan [...]
came   he   away

'that when he was residing in Siberia in 1920 and was supposed to be
arrested by the Bolshevik government, he escaped'
                    (*Lögrjetta* October 5th, 1927, https://goo.gl/F08lKp)

More attested examples, relatively recent, are shown below. I find them all gram-
matical.

(139)   ***IMC with a 'by'-phrase***

    a.   Það   verður að rannsaka   þetta af hlutlausum aðila
         EXPL has.to to investigate.INF this   by unbiased   party

         og   komast til botns   í því.
         and come   to bottom of it

         'This has to be studied by an unbiased party and be understood.'
                    (https://goo.gl/CbkNDE)

b.   Það   verður því að tala   við lækninn.   Ekki samt   af
        EXPL has.to thus to talk.INF to   the.doctor not   though by

        fréttamönnum.
        reporters

        'The doctor has to be spoken to. Not by reporters, though.'
                                              (https://goo.gl/CbkNDE)

c.   [...] þess vegna er   ég að segja   að   það   verði að skoða
              therefore   am I   to say.INF that EXPL has.to to look.at.INF

        þetta af   fagmanni
        this   by professional

        'Therefore I'm saying that this has to be looked at by a professional.'
                                              (https://goo.gl/Gn4c4E)

d.   10.   regla: Lunch Beat má   setja   upp hvar sem er af
        10th rule   Lunch Beat may set.INF up   wherever   by

        hverjum sem er svo framarlega sem það er auglýst   opið
        whoever   as.long.as   it   is advertised open

        öllum,   er ekki notað til fjáröflunar   og   þessum reglum er
        everyone is not   used   for fund.raising and these   rules   are

        fylgt.
        followed

        '10th rule: Anyone is allowed to set up Lunch Beat anywhere as long as it is advertised as open for everyone, it is not used for fund raising and these rules are followed.'
               (*Fréttatíminn* August 24th, 2012; https://goo.gl/vyAr4D)

It is noteworthy that in none of these examples is there an individual referred to in the 'by'-phrase.

In addition, Hlíf Árnadóttir included the following sentence in an online judgment task she conducted in 2012. The sentence is almost the same as in (133) above. Note, though, that *þurfa* 'need' is in the past subjunctive here (rather than present indicative).

(140)   ***IMC with a 'by'-phrase in Hlíf Árnadóttir's survey***

Það **þyrfti** að rannsaka þetta mun betur **af**
EXPL needed.SBJV to investigate.INF this.ACC much better by

fræðimönnum.
scholars

'This needs to be studied much further by scholars.'
(yes N: 672 (72%), ? N: 162 (17%) no N: 97 (10%))

A large ratio accepted the sentence: 672 (72%) found it acceptable, 162 (17%) questionable, and 97 (10%) judged it unacceptable. I will be arguing that when 'by'-phrases are allowed, an implicit argument, strucurally smaller than *pro*/PRO is in the specifier position of the embedded VoiceP, that is, the same kind of an implicit argument as Legate (2014) argues to be in SpecVoiceP in the New Impersonal Passive (NIP) and the same kind as we argued for the AspPass above. We take the NIP to be a recent innovation in Icelandic (see, however, H.Á. Sigurðsson 2011b), mainly used and accepted by younger speakers. If the NIP and the IMC (when 'by'-phrases are acceptable) have the same kind of implicit argument in SpecVoiceP, we might think that 'by'-phrases being acceptable in the IMC is also a recent innovation. If that were the case, we might assume that NIP and 'by'-phrases in the IMC are accepted by the same speakers. In Hlíf Árnadóttir's study, however, the ratio of speakers accepting the NIP was much lower. Only 45 (5%) speakers accepted the NIP sentence in (141), 25 (3%) found it questionable and 853 (92%) found it unacceptable.

(141)   **_NIP_**

Það   var ekki skoðað   myndina   fyrr en næsta dag.
EXPL was not looked.at.DFLT the.picture.ACC until   next   day

'The picture wasn't looked at until the day after.'

The results therefore do not suggest that the IMC with a 'by'-phrase is a recent innovation. In fact, we do not know whether 'by'-phrases in the IMC are an innovation at all.

4.3.5.3   Epistemic vs. deontic modal verbs

I am here mostly concerned with epistemic vs. deontic modality. There are, however, more types, such as teleological, ability, dynamic and circumstantial modals, which I will, for the most part, ignore as such. When I discuss the syntactic structure of modals, I often talk about root modals, to distinguish them from epistemic modals.

My approach to, e.g., deontic and epistemic modality is, however, in terms of modal bases which can be accessed through appropriate conversational backgrounds (e.g., Kratzer 1977, 1981). Different readings of modals are determined by the modal base. An epistemic conversational background can be phrased as, e.g., *In view of what is known...* or *In view of what I know...* whereas a deontic conversational background can be phrased as *In view of the rules...*

(142) a. ***Epistemic conversational background***

In view of what I know, Mary may leave tomorrow.

b. ***Deontic conversational background***

In view of the rules, Mary may leave tomorrow.

A conversational background is a function from worlds to sets of propositions (type $\langle s_w, \langle s_w, \langle t,t \rangle \rangle \rangle$) (Kratzer 1977; cf. also Portner 2009 and von Fintel and Heim 2011). The two conversational backgrounds in (142), *In view of what is known...* and *In view of the rules* give us two readings, epistemic and deontic, respectively. The difference involves what worlds we quantify over in each case.

For epistemic modality, we are quantifying over worlds compatible with what is known in w. For deontic modality, we are quantifying over worlds in which the rules or regulations are followed as they are in w. Kratzer (1981) uses the term modal base, which determines the set of accessible worlds. The modal base in (142a) is epistemic, deontic in (142b).

There are, however, different approaches to what, e.g., deontic and epistemic modality really comes down to. In discussion on Icelandic modal verbs, deontic or root modal verbs are sometimes described as attributing a property, e.g., knowledge, obligation or permission, to its subject whereas epistemic modal verbs do not do that (Thráinsson 1986:250). Rather, epistemic modal verbs relate "the bare propositional content of a sentence to the world" (Platzack 1979:44 ff., cited via Thráinsson 1986:250).

To understand the difference between these two approaches, we will consider two examples. In the first example let us imagine visitors at a prison.

(143)   ***English***

   The visitors must have left by 5pm.

   Epistemic: 'It must be the case that the visitors (already) left.'

   Deontic: 'The visitors are obliged to leave.'

This sentence is at least two-ways ambiguous on both approaches.[25] On a deontic reading on the approach taken in Thráinsson's work, the modal verb attributes an obligation to its subject, the visitors, where they have the obligation of leaving by certain time. On the epistemic reading the modal does not attribute any such property to the subject. On the other approach, taken in Kratzer's work, the two readings of the modal verb can be accessed through different conversational backgrounds. To access the deontic reading, we could preface the sentence above with something like *In view of the rules of this prison...* That gives us the reading of *must* that it is obligatory that the visitors leave by a certain time. To access the epistemic reading, on the other hand, (143) can be prefaced by, e.g., *In view of what is known...* or *In view of the available evidence...*

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[25]We could say that *must* in this example is ambiguous, that we have two elements or verbs *must*, one for epistemic use and one for deontic use. Kratzer (1977), however, argues that we have only one verb *must* and that it depends on the so-called conversational background what it means.

For (143), the two approaches give the same result. Let us, however, take a look at the example in (144) where we can imagine that John robbed a store. By doing that he broke the law.

(144)   John needs to be arrested.

This sentence does not express any property attributed to the subject by the modal verb *need*. John's needs or obligations do not include being arrested. Rather, other people need him to be arrested so they will feel safe again — also, it would be the obligation of the authorities to arrest him. We could therefore argue that the modal verb attributes properties to someone not expressed directly in the sentence, but, importantly, not to the subject. On the approach taken in Thráinsson's work, this would be an epistemic reading of the sentence in (144). On the other hand, the appropriate conversational background is deontic (*In view of the law...*) and therefore the sentence expresses a deontic reading according to work like Kratzer's. That is the approach taken here.

4.3.5.4   Verbs used in the IMC are root modals

4.3.5.4.1   Epistemic modal verbs are structurally higher than root modal verbs

It has often been argued in the literature that epistemic modals are structurally higher than root modals (see Hacquard 2009 and references cited there). Hacquard (2009), for example, argues that modals can appear in two positions which correlate

with two kinds of interpretation: right above Tense (epistemic interpretation) or right above VP, below Aspect (root interpretation).

Icelandic shows a contrast between epistemic and root modal verbs which suggests that the former are structurally higher than the latter. Thráinsson and Vikner (1995) discuss modal stacking in Icelandic. They show that (i) epistemic modals can be stacked under epistemic modals, (ii) root modals can be stacked under epistemic modals, (iii) root modals can be stacked under root modals, but (iv) epistemic modals **cannot** be stacked under root modals.

(145) ✓ *Epistemic modals under epistemic modals*

    a.   Það mun vilja   rigna   meðan þið eruð þar.
           EXPL will tend.INF rain.INF while   you are   there

           'It will tend to rain while you are there.'

    b.   Strákana   ætlaði   að vilja   reka   á land.
           the.boys.ACC were.going to want.INF drift.INF to land

           'It looked like the boys tended to drift ashore.'

                                            (Thráinsson and Vikner 1995:76)

(146) ✓ *Root modals under epistemic modals*

    a.   Þau munu vilja   byggja   hús.
           they will   want.INF build.INF house.ACC

           'They will want to build a house.'

    b.   Hann kann að verða   að selja   húsið.
           he   can to have.to.INF to sell.INF the.house.ACC

           'It is possible that he will have to sell the house.'

                           (Thráinsson and Vikner 1995:77–78)

(147) ✓ *Root modals under root modals*

    a.   Hann vill verða   að fara.
            he   will have.to.INF to go.INF

            'He wants to have to go.'

    b.   Hún verður   að vilja   fara.
            she has.to.INF to want.INF go.INF

            'She has to want to go.'

    c.   Hann á   að kunna   að synda.
            he   ought to know.INF to swim.INF

            'He is supposed to be able to swim.'

    d.   Hann verður að eiga   að gera   eitthvað.
            he   has.to to be.supposed.INF to do.INF something

            'He has to be supposed to do something.'

                                      (Thráinsson and Vikner 1995:75)

(148) ✗ *Epistemic modals under root modals*

    * Hann verður að kunna   að kunna   að synda.
       he   must   to can.INF to know.INF to swim.INF

    Intended: 'He has to may be able to swim.'

                                       (Thráinsson and Vikner 1995:78)

In (148) we see that the deontic root modal *verða* cannot embed *kunna* with an epistemic reading. This is the only combination that is not possible. The conclusion that can be drawn from this is that epistemic modal verbs are structurally higher than root modal verbs.

4.3.5.4.2 IMC verbs are root modals

When the auxiliary *hafa* 'have' is used with modal verbs, it can either come above or below the modal. However, when the modal base is epistemic ('in view of what is known'), the modal verb is always above 'have' (if 'have' is included).

(149)   a.   A: Hver byggði þessa brú?
             who built   this   bridge

        'Who built this bridge?'

        B: Jón **má hafa** byggt   hana,   ég er   ekki viss.
           Jón may have built.PTCP it.F.ACC I   am not   sure

        'Jón may have.INF built it, I'm not sure.'

   b.   Jón **á**   að **hafa**   drepið   konuna,
        Jón ought to have.INF killed.PTCP the.woman.ACC

        eftir því sem   ég best veit.
        after that which I   best know

        'Supposedly, Jón killed the woman, as far as I know.'

We cannot, however, omit the subject when we have an epistemic modal base, as
we see by looking at B's ungrammatical answers in (150). This is shown below with
the unergative *dansa* 'dance' and the transitive verb *drepa* 'kill'.[26]

(150)   a.   A: Var dansað   í   veislunni?
             was danced.PASS in the.party

        'Was there dancing at the party?'

      * B: Það **má hafa**   dansað,   ég bara man   það ekki.
           EXPL may have.INF danced.PTCP I   just remember it   not

        Intended: 'There may have been dancing, I just can't remember.'

   b.   A: Veistu   hvernig konan   dó?
        know.you how   woman.the died

        'Do you know how the woman died?'

      * B: Það **á**   að **hafa**   drepið hana,
           EXPL ought to have.INF killed   her.ACC

        eftir því sem   ég best veit.
        after that which I   best know

        Intended: 'She is supposed to have been killed, as far as I know.'

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[26]In (150) I leave *verða* 'have to' and *þurfa* 'need' out, as these do not seem to be possible as
epistemic modals.

This suggests that epistemic modals are not possible as IMC verbs.

We have seen that root (non-epistemic) modals work fine in the IMC. When *hafa* 'have' is higher than the modal, we get a root reading. Therefore the modal verbs in (151) can only be interpreted on a root reading (with a conversational background like 'in view of the rules'). Epistemic reading (with an epistemic modal base) would not be possible. This is in line with epistemic modals being structurally higher than root modals.

(151)   a.   Það **hefur** alltaf **mátt**   dansa   í veislum.
             EXPL has   always may.PTCP dance.INF in parties
             'Dancing in parties has always been allowed.'

        b.   Undanfarið **hefur orðið**   að selja   marga   bíla   í
             lately   has   had.to.PTCP to sell.INF many.ACC cars.ACC in

             þessu fyrirtæki.
             this   firm

             'Lately, this firm has had to sell a lot of cars.'

        c.   Það **hefur** alltaf **átt**   að borga   reikninga   á
             EXPL has   always been.supposed to pay.INF checks.ACC on

             réttum tíma.
             right   time

             'People have always been supposed to pay (their) checks on time.'

        d.   Það **hefur** alltaf **þurft**   að greiða   skatta.
             EXPL has   always needed.PTCP to pay.INF taxes.ACC
             'People have always needed to pay their taxes.'

Although epistemic modal verbs cannot be embedded under *hafa* 'have', it is not true that root modal verbs cannot be above *hafa*. As seen in (152), the modal verb *þurfa* 'need' is below one auxiliary *hafa* but also above another auxiliary *hafa*.

(152) Við **höfum** aldrei **þurft** að **hafa** þegar borgað þegar við mætum.
       we have   never needed to have already paid   when we show.up

'It has never been the case that we have to have paid already when (before) we show up.'

I take this to show that root modal verbs, below Aspect, can embed clauses or phrases that in turn contain a separate Aspect layer. It makes it more difficult to distinguish between epistemic and deontic or root modal bases; this makes it all the more important to have the appropriate conversational background or context from which the modal base can be interpreted.

The conclusion here is therefore that only root modals are possible in the IMC as our examples above suggest that epistemic modal verbs are not possible in the construction.

4.3.5.4.3 Interim summary

In this subsection, we repeated Thráinsson and Vikner's (1995) arguments for epistemic modal verbs being structurally higher than root modal verbs. The fact that auxiliary *hafa* 'have' can only be placed above root modal verbs but not epistemic modals supports this. Also, we came to the conclusion that only root modals are possible in the IMC.

Next, we will argue that IMC verbs are raising verbs and look at the structure of their complement.

4.3.5.5 IMC verbs are raising verbs

As argued above, epistemic modal verbs are structurally higher than deontic modal verbs in Icelandic. In this subsection, I argue that all IMC verbs are raising verbs.[27] I also argue, contra Wurmbrand (1999),[28] that it is not the case that all modal verbs are raising verbs. Moreover, I agree with Thráinsson and Vikner (1995) in that epistemic modal verbs are raising verbs, whereas I disagree with them when they say that root modal verbs in Icelandic are control verbs.

We can use several diagnostics to determine whether all modal verbs in Icelandic are raising verbs (cf. Wurmbrand 1999) or whether it is true that epistemic modal verbs in Icelandic are raising verbs and root verbs are control verbs (cf. Thráinsson and Vikner 1995). For an overview of empirical distinctions between raising and control, see Davies and Dubinsky (2004).

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[27]It should be noted that where I discuss the raising versus control diagnostics and apply them to modal verbs, I do it with overt subjects but not with implicit arguments licensed in the IMC. This is because at least some of the diagnostics cannot be tested in the IMC. For example, we need overt DPs to check whether case is preserved and we of course cannot omit the subject in subject idiom chunks.

[28]Wurmbrand's claim is not made specifically for Icelandic, although she shows evidence i.a. from Icelandic.

4.3.5.5.1 Case preservation

As discussed above, for a language like Icelandic, where subjects can have other cases than nominative, case preservation is a good test to see whether a verb is a raising verb or not (see, e.g., examples (50)–(51) above).

Wurmbrand (1999) proposes that all modal verbs across languages are raising verbs, irrespective of whether they are epistemic or deontic. One of the arguments in favor of the claim that deontic modal verbs are raising verbs is that in Icelandic, when *líka* 'like' is embedded under the deontic modal verb *verða* 'must, have to', the subject has dative case, as shown in (153) (for this diagnostic applied to modal verbs, see Thráinsson 1986, Thráinsson and Vikner 1995).

(153) **Haraldi/*Haraldur** verður að líka   hamborgarar.
       Haraldur.DAT/NOM   has.to to like.INF hamburgers

   'Haraldur must like hamburgers.' (e.g., in order to be accepted by his new
   American in-laws)'   (Wurmbrand 1999:602)

Wurmbrand (1999) shows this only for *verða* 'have to' (i.e., that the case is preserved with root modals). This works for other IMC verbs as well (the verbs *mistakast* 'fail', *líða (vel)* 'feel (good)', *batna* 'get better' and *leiðast* 'be bored' in (154)–(160) all take dative subjects).[29]

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[29]This actually works the same for most modal verbs. This is shown for the non-IMC verb *geta* 'can, be able to' in (i):

(i) a. **Þér**   getur batnað   fljótt   ef þú tekur meðalið.
         you.DAT can   get.better.PTCP quickly if you take the.drug.ACC

      'You can get better quickly if you take the drug.'

(154) a. **Þér**   má   ekki mistakast.
           you.DAT may not fail.INF

           'You are not allowed to fail.'

       b. * **Þú**   mátt ekki mistakast.
           you.NOM may not fail.INF

(155) a. **Þér**   þarf að líða   vel.
           you.DAT need to feel.INF well

           'You need to feel good.'

       b. * **Þú**   þarft að líða   vel.
           you.NOM need to feel.INF well

(156) a. **Þér**   á   að mistakast.
           you.DAT are.supposed to fail.INF

           'You are supposed to fail.'

       b. * **Þú**   átt   að mistakast.
           you.NOM are.supposed to fail.INF

(157) a. **Þér**   verður að batna.
           you.DAT have.to to get.better.INF

           'You have to get better.'

       b. * **Þú**   verður að batna.
           you.NOM have.to to get.better.INF

Note that in, e.g., (155a), the subject 'you' does not have an obligation to feel good.

It is more like a general necessity, such as in 'You need to feel good in order for me

to be allowed to leave you'. It is an important property of modal verbs that they

cannot attribute properties to a non-nominative subject and on the approach taken

in Thráinsson's work (see discussion above), this could be taken to indicate that

———————————————————

       b. * **Þú**   getur batnað   fljótt ef þú tekur meðalið.
           you.NOM can   get.better.PTCP quickly if you take the.drug.ACC

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the raising examples above suggest an epistemic sense of the modal verbs. On the other hand, I am applying conversational backgrounds to define different readings of modal verbs.

The ungrammaticality of the b-examples in (154)–(157) shows that these root modal verbs are not control verbs. That is, *eiga* 'ought, be supposed to', *mega* 'may', *verða* 'have to' and *þurfa* 'need', which all take part in the IMC, are raising verbs. Other modal verbs behave the same, except for three root modals, *kunna* 'know how', *vilja* 'want' and *ætla* 'intend'.[30]

(158) a. ? Hafðu ekki áhyggjur af mér, **ég** kann ekki að leiðast.
           have.you not worries of me   I.NOM know not to be.bored.INF
           'Don't worry about me, I don't know how to be bored.'

---

[30]I do not find the a-examples in (158)–(160) perfect, as indicated by the question marks. Thráinsson (2007:426), on the other hand, claims that it is not possible to get nominative case with root modals when they take verbs that have oblique case subjects (he actually also claims that it is not possible to get the root reading when case is preserved). He shows this for *vilja* and *ætla* (the judgments are his).

(i) a. ?* Haraldur vill   aldrei vanta peninga.
          Haraldur wants never lack   money

     b. * Haraldur ætlar   að líka vel í Stuttgart.
          Haraldur intends to like well in Stuttgart   (Thráinsson 2007:426)

This might suggest that speakers' judgments in general differ in this regard. I agree with Thráinsson's judgments, at least without context. I do not, however, have an explanation for why (i) is bad but the a-examples in (158)–(160) are much better. What is important here is that *kunna* 'know how', *vilja* 'want' and *ætla* 'intend' on a root reading are different from IMC verbs, in that oblique subject case is not preserved with these verbs.

b. * Hafðu   ekki áhyggjur af mér, **mér**   kann ekki að leiðast.
    have.you not worries   of me   me.DAT know not to be.bored.INF

(159) a. ? **Hann** vill   alls ekki mistakast.
       he.NOM wants not.at.all fail.INF

       'He does not want to fail at all.'

    b. * **Honum** vill   alls ekki mistakast.
        him.DAT wants not.at.all fail.INF

(160) a. ? **Lið**   Liverpool ætlar   að mistakast viljandi
       team.NOM Liverpool intends to fail.INF   intentionally

       í lokaleiknum   svo að   Everton falli.
       in the.final.game so   that Everton falls

       'Liverpool F.C. is going to fail on purpose in the final game (against
       some other team than E.) so that Everton will be relegated.'

    b. * **Liði**   Liverpool ætlar   að mistakast viljandi
        team.DAT Liverpool intends to fail.INF   intentionally

        í lokaleiknum   svo að   Everton falli.
        in final.game.the so   that Everton falls

Now the judgments are opposite to what we had in (154)–(157) above in that
preserving the case of the embedded verb is ungrammatical, cf. the b-examples in
(158)–(160). This suggests that while IMC verbs are raising verbs, *kunna, vilja* and
ætla are control verbs. These three verbs also have an epistemic reading, 'may, be
possible', 'tend' and 'going to', respectively. When they have an epistemic modal
base, case is preserved in examples like those in (158)–(160). That suggests they
are raising verbs when they are epistemic but control verbs when they have root
readings (which fits with Thráinsson and Vikner's 1995 conclusion).

4.3.5.5.2 Embedded passive

Raising and control structures show different behavior when the complement of the predicate in question is a passive clause. In raising structures, the embedded clause (the verbal structure embedded under the raising verb) can be passivized, see (161) and (162). In control structures, this is impossible, see (163) and (164).

(161)   ***Raising in English***

    a.   Barnett seemed to have read the book.

    b.   The book seemed to have been read by Barnett.

<div align="right">(Davies and Dubinsky 2004:5)</div>

(162)   ***Raising in Icelandic***

    a.   Barði virtist hafa   lesið bókina.
            Barði seemed have.INF read book.the.ACC

            'Barði seemed to have read the book.'

    b.   Bókin   virtist hafa   verið lesin   af Barða.
            the.book.NOM seemed have.INF been read.PASS by Barði

            'The book seemed to have been read by Barði.'

(163)   ***Control in English***

    a.   Barnett tried to read the book.

    b. # The book tried to be read by Barnett.

<div align="right">(Davies and Dubinsky 2004:5)</div>

(164)   ***Control in Icelandic***

    a.   Barði reyndi að lesa   bókina.
            Barði tried   to read.INF the.book.ACC

            'Barði tried to read the book.'

    b. # Bókin   reyndi að vera   lesin   af Barða.
            the.book.NOM tried   to be.INF read.PASS by Barði

            Intended: 'The book tried to be read by Barði.'

Try and *reyna* are both control verbs, meaning that they take their own thematic subject which is assigned a thematic role (agent in this case). The sentences in (163b) and (164b) are not possible because *the book/bókin* is now an agent, the thematic subject of *try/reyna*. That does not work because usually agents are human, at least animate. In the control structure, *the book/bókin* is not a theme as in the raising structures above and does not originate as the object of *read/lesa* (PRO in the infinitival clause, however, is the theme argument and originates as the object of *read/lesa*).

Now the question is: What is the behavior of IMC verbs in this respect?

(165)   a.   Bókin   á/verður/þarf   að hafa   verið lesin.
              the.book.NOM ought/has.to/needs to have.INF been read.PASS

              'The book is supposed to/has to/needs to have been read.'

    b.   Textinn má ekki hafa   verið birtur   opinberlega.
              the.text can not have.INF been published.PASS publicly

              'For the lyrics to have been published publicly is not allowed.'
                                        (https://goo.gl/A75THh)

The sentences in (165) are fine, with an embedded passive and *bókin* 'the book' or *textinn* 'the text' as the subject of the clause. This suggests that the modal verbs

in question do not take their own thematic subject. In this respect, IMC verbs behave exactly like raising verbs, such as *seem* and *virðast* in (161b) and (162b), respectively.

We therefore conclude that IMC verbs show raising behavior with respect to embedding a passive. There are, however, three modal verbs that behave differently from the IMC verbs above, namely *kunna* 'know how', *vilja* 'want' and *ætla* 'intend'.

(166)   a.   # Bókin   kann   að vera/verða   lesin.
             the.book.NOM knows to be.INF/become.INF read.PASS

        b.   # Bókin   vill   vera/verða   lesin.
             the.book.NOM wants be.INF/become.INF read.PASS

        c.   # Bókin   ætlar   að vera/verða   lesin.
             the.book.NOM intends to be.INF/become.INF read.PASS

These three verbs, when they have a root reading, behave like control verbs, such as *try* and *reyna* in (163b) and (164b), respectively. With an epistemic reading, the sentences would be fine.

The conclusion here is therefore that while *kunna*, *vilja* and *ætla* with a root reading seem to be control verbs, IMC verbs are raising verbs.

4.3.5.5.3   Non-argument subjects

As briefly discussed in §4.3.4.3.2, weather verbs in English take an expletive *it* subject. In addition, existential clauses take an expletive *there* subject ((54) repeated as (167a)).

(167)   *English*

    a.   It is raining.

    b.   There is a unicorn in the garden.

Expletives do not bear a thematic role and they are therefore compatible with raising verbs but not control verbs ((55a–b) above repeated as (168a)) and (169a), respectively).

(168)   a.   It seemed to be raining.

    b.   There seems to be a unicorn in the garden.

(Davies and Dubinsky 2004:7)

(169)   a.   * It tried to be raining.

    b.   * There tried to be a unicorn in the garden.

Icelandic shows the same contrast between raising (171) and control predicates (172) ((56a), (56b) and (56c) repeated as (170a), (171a) and (172a), respectively).

(170)   *Icelandic*

    a.   Það   rignir.
           EXPL rains
           'It is raining.'

    b.   Það   er einhyrningur í   garðinum.
           EXPL is unicorn   in garden.the
           'There is a unicorn in the garden.'

(171)   a.   Það   virtist   rigna.
           EXPL seemed rain.INF
           'It seemed to rain.'

    b.   Það virðist vera einhyrningur í garðinum.
          EXPL seems be.INF unicorn in garden.the

          'There seems to be a unicorn in the garden.'

(172)   a.   *Það reyndi að rigna.
          EXPL tried to rain.INF

          Intended: 'It tried to rain.'

    b.   *Það reyndi að vera einhyrningur í garðinum.
          EXPL tried to be.INF unicorn in garden.the

If IMC verbs are raising verbs, then they should be fine with sentences as in

(170).

(173)   a.   Það verður/þarf að rigna! Annars er ég í vondum málum
          EXPL has.to/needs to rain.INF otherwise am I in bad things

          af því að ég spáði rigningu!
          because I predicted rain

          'It has to rain! If not, I'm in trouble because I predicted it would rain!'

    b.   Það verður/þarf að vera einhyrningur í garðinum þegar
          EXPL has.to/needs to be.INF unicorn in garden.the when

          krakkarnir koma. Ég var búinn að lofa þeim því.
          kids.the come I was done to promise.INF them it

          'There must be a unicorn in the garden when the kids arrive. I made them a promise.'

(174)   a.   Samkvæmt veðurspánni á að rigna á morgun.
          according weather.forecast.the ought to rain.INF tomorrow

          'According to the weather forecaset, it is supposed to rain tomorrow.'

    b.   Það á alltaf að vera einhyrningur í garðinum
          EXPL ought always to be.INF unicorn in garden.the

          þegar krakkarnir eru í heimsókn!
          when kids.the are in visit

          'It's always the case that a unicorn is supposed to be in the garden when the kids are visiting!'

(175)   a.   Það   má   alls ekki   rigna   vegna þess að þá   verður fluginu
                  EXPL may not.at.all rain.INF because   then will.be the.flight

                mínu aflýst!
                my   cancelled

                'It may not rain because then my flight will be cancelled!'

       b.   Samkvæmt lögum má   vera   einhyrningur í   garðinum.
                according   laws   may be.INF unicorn   in the.garden

                'According to the law, a unicorn may be in the garden.'

These sentences are all fine, suggesting that IMC verbs are indeed raising verbs. It should be noted, however, that *einhyrningur* 'a unicorn' in these examples always gets narrow scope: For example, in (173b), there is some unicorn or other that must be in the garden, but not anyone in particular.

Let us now compare the data above with *kunna*, *vilja* and *ætla*, the modal verbs we concluded before are different from other modal verbs.

(176)   a.   * Það   kann   aldeilis að rigna.
                EXPL knows totally to rain.INF

                Intended: 'It sure knows how to rain.'

       b.   * Það   kann   að vera   einhyrningur í   garðinum.
                EXPL knows to be.INF unicorn   in the.garden

(177)   a.   * Það   vill   rigna   á morgun.
                EXPL wants rain.INF tomorrow

                Intended: 'It wants to rain tomorrow.'

       b.   * Það   vill   vera   einhyrningur í   garðinum.
                EXPL wants be.INF unicorn   in garden.the

(178)   a.   * Það   ætlar   að rigna   á morgun.
                EXPL intends to rain.INF tomorrow

                Intended: 'It intends to rain tomorrow.'

b. *Það ætlar   að vera   einhyrningur í garðinum.
    EXPL intends to be.INF unicorn   in garden.the

We see immediately that these verbs behave differently from IMC verbs as all these

examples are ungrammatical. With an epistemic conversational background, exam-

ples parallel to these would all be grammatical.

Thráinsson and Vikner (1995:58–59) discuss the use of modal verbs with weather

verbs. The modal verbs they discuss are, unfortunately, only *kunna* and *vilja*; they

point out that examples similar to (176a) and (177a) are only possible if the modals

have an epistemic interpretation.

They also show the following examples:

(179) a. Það virðast   koma   tíu stúdentar   á fyrirlesturinn.
           EXPL seem.3PL come.INF ten students.NOM to the.talk
           'It seems that ten students will come to the talk.'

       b. *Það reyna að koma   tíu stúdentar   á fyrirlesturinn.
           EXPL try.3PL to come.INF ten students.NOM to talk.the

                                              (Thráinsson and Vikner 1995:58)

(180)   Það kunna   að hlusta   tíu stúdentar   á fyrirlesturinn.
          there may.3PL to listen.INF ten students.NOM to the.talk

          ✓'Ten students may listen to the talk.' (epistemic)
          ✗'Ten students are able to/know how to listen to the talk.' (root)
                                              (Thráinsson and Vikner 1995:58)

Here, we see that control verbs behave differently from raising verbs in this respect:

the former are ungrammatical in the structure whereas the latter are grammatical.

In these examples, the DP *tíu stúdentar* 'ten students' stays low. Therefore it cannot

be an argument of the control verb, as it is in the embedded clause. The control verb

will need an external argument but there is none and the sentence is ungrammatical.

In (180) we see that in the same kind of structure, a root interpretation of *kunna* 'know how' is not possible (with an epistemic reading, the sentence in (180) is fine). That is not surprising, we have already seen above that the root modal *kunna* behaves like a control verb. Using IMC verbs should be fine, however. That is indeed the case.

(181)　a.　Það mega hlusta tíu stúdentar á fyrirlesturinn.
　　　　　EXPL may.3PL listen.INF ten students.NOM to the.talk

　　　　　✓'Ten students (doesn't matter which students) are allowed to listen to the talk.'
　　　　　✗'Ten students, namely John, Mary, Sue, Bill ..., are allowed to listen to the talk.'

　　　b.　Það eiga/verða/þurfa að hlusta tíu
　　　　　EXPL are.supposed.3PL/have.to.3PL/need.3PL to listen.INF ten

　　　　　stúdentar á fyrirlesturinn.
　　　　　students.NOM to the.talk

　　　　　✓'It is necessary that ten students (doesn't matter which students) will listen to the talk.'
　　　　　✗'For ten students, namely John, Mary, Sue, Bill ..., it is the case that they are required to listen to the talk.'

As with the unicorn examples above, *tíu stúdentar* 'ten students' can only have narrow scope. That is, the only reading for (181a), for example, is where there are some ten students (or other) that are allowed to listen to the talk; the reading where there are certain ten students (namely John, Mary, Sue, Bill, etc.) allowed to listen, is unavailable. This needs further investigation but I leave it for future research.

The conclusion is that IMC verbs are raising verbs and that *kunna*, *vilja* and *ætla* with root interpretations are control verbs.

4.3.5.5.4   Idiom chunks

As discussed in §4.3.4.3.3, idiom chunks are frequently used to determine whether a verb is a raising predicate or a control predicate. We can test how they work for modal verbs in Icelandic. Thráinsson and Vikner (1995) argue that this is possible in Icelandic with epistemic modal verbs only (which excludes IMC verbs, which are root modals). They discuss the following idiom.

(182)   Þarna liggur hundurinn   grafinn.
         there lies   the.dog.NOM buried

         Literal: 'The dog lies there buried.'
         Idiomatic: 'This is where the problem is.'
                                        (Thráinsson and Vikner 1995:59)

Under the idiomatic reading, *hundurinn* is a subject idiom chunk which denotes 'the problem.'

   If we try to combine this idiom with *kunna* 'know how', *vilja* 'want' and *ætla* 'intend' with a root reading, that only gives us (rather odd) literal readings.

(183)   a.   ? Þarna kann   hundurinn   að liggja grafinn.
                 there knows the.dog.NOM to lie.INF buried

                 Literal: 'There, the dog knows how to lie buried.'

         b.   Þarna vill   hundurinn   liggja grafinn.
               there wants the.dog.NOM lie.INF buried

               Literal: 'There, the dog wants to lie buried.'

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c.   Þarna ætlar   hundurinn   að liggja grafinn.
      there intends the.dog.NOM to lie.INF buried
      Literal: 'There, the dog intends to lie buried.'

Turning to IMC verbs, it does not seem to be possible at first sight to embed
the idiom under an IMC verb. If we give it an appropriate context, however, such
sentences give us the idiomatic reading as well as a (rather odd) literal reading. I
use the modal verbs in (184a) in the subjunctive as that makes the reading more
plausible.

(184)   a.   Þarna yrði/þyrfti   hundurinn   að liggja grafinn
              there have.to.SBJV/need.SBJV the.dog.NOM to lie.INF buried

              til að   tilgáta   þín gæti gengið upp.
              for that hypothesis your could work

              Idiomatic: 'For your hypothesis to work, this would have to / need
              to be where the problem is.'
        b.   Þarna á   hundurinn að liggja grafinn samkvæmt
              there ought the.dog   to lie.INF buried according.to

              leiðbeiningunum.
              the.instructions

              Idiomatic: 'According to the instructions, this is where the problem
              is supposed to be.'
        c.   Þarna má   hundurinn alveg   liggja grafinn,
              there may dog.the   altogether lie.INF buried

              vegna þess að   það hefur engin áhrif á tilgátu   mína.
              beacause   that that has   no   effect on hypothesis my

              Idiomatic: 'The problem may be there [it is fine if it is] because that
              doesn't have any effect on my hypothesis.'

It looks like the idiom chunk in these examples is compatible with IMC verbs. It is,
however, not as easy to use it with IMC verbs as it is with raising predicates such

as *virðast* 'seem'. The reason may be that *virðast* adds very little to the semantic derivation, unlike IMC verbs. My conclusion here is that this test suggests that IMC verbs are raising verbs. This needs to be studied further, nevertheless. I leave that for future research.[31]

4.3.5.5.5 Interim summary

I have argued that the IMC verbs are different from *kunna* 'know how', *vilja* 'want' and *ætla* 'intend' in a few ways. While *kunna*, *vilja* and *ætla* are probably control verbs when they have a root interpretation, I argue that IMC verbs are raising verbs. I summarize my results, based on the four diagnostics discussed above, in Table 4.3.

We now turn to properties of the Impersonal Modal Construction.

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[31]Thráinsson and Vikner also discuss the idiom chunk in (ia) below. They note that it is not possible to use *kunna* with it on the root reading whereas it is fine on an epistemic reading.

(i) a.   Skörin   færist upp í bekkinn
          step.the moves up   in bench.the

          'This is going too far.'

    b.   Skörin   kann að færast upp í bekkinn.
          step.the can   to move up in bench.the

          ✓'This may go too far.'
          ✗'This knows how ...'   (Thráinsson and Vikner 1995:59)

This would need to be tested with more modal verbs, especially IMC verbs. I am not familiar enough with this idiom to be able to give native judgments on its use, however.

	IMC	*kunna*	*vilja*	*ætla*
Case preservation	raising	control	control	control
Embedded passive	raising	control	control	control
Non-argument subjects	raising	control	control	control
Idiom chunks	raising	control	control	control

Table 4.3: Raising vs. control diagnostics for Icelandic modal verbs.

—————————————

4.3.5.6 Properties of the IMC

4.3.5.6.1 The structure

I argued above that root modals are structurally lower than epistemic modals in Icelandic. I furthermore argued that IMC verbs are root modals and that they are raising verbs. This goes against Thráinsson and Vikner's (1995) claim that root modals in Icelandic are control verbs. The results of the raising vs. control diagnostics discussed in §4.3.5.5 fit nicely with the results of the syntactic structure diagnostics in §4.3.5.6.1: If IMC verbs are not control verbs, they should embed less structure than control verbs do. That is indeed borne out as we will now see.

Since we have argued that IMC verbs are raising verbs, the structure of the complement of the modal verbs *eiga*, *mega*, *verða* and *þurfa* should be less than the structure of the complement of control verbs, which take CP complements. We want to know, though, how limited this structure is.

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First of all, I take *v* to be the attachment point of manner adverbs, such as *vandlega* 'carefully', and Voice to be the locus of the external argument; when we have an (agentive) external argument, we can use agentive modifiers, such as *af kappi* 'enthusiastically' and *viljandi* 'intentionally'. The grammaticality of the examples below suggests that in these examples we have both a *v*P and a VoiceP.

(185)   a.   Það á/verður/þarf   að lesa   bókina   **vandlega**.
             EXPL ought/has.to/needs to read.INF the.book.ACC carefully

             'One has to/is supposed to/needs to read the book carefully.'

       b.   Það má lesa   bókina   **vandlega**.
             EXPL may read.INF the.book.ACC carefully

             'One is allowed to read the book carefully.'

(186)   a.   Það þarf að brjóta lögin   **viljandi**   (til að fara í   fangelsi).
             EXPL needs to break law.the intentionally   for to go   to jail

             'One needs to break the law intentionally (in order to go to jail).'

       b.   Það   má   ekki svindla **viljandi**.
             EXPL may not   cheat   intentionally

             'It is not allowed to cheat intentionally.'

We might think, given examples like (185)–(186), that the modal locally selects a VoiceP without an overt subject. That cannot be the case, however, as Aspect is an intervener. The examples below, which contain *hafa* 'have' between the modal and VoiceP, show this.

(187)   Af hverju **á/verður/þarf**   að **hafa**   skilað   inn gögnum
         why   ought/has.to/needs to have.INF turned in   documents

         þegar maður sækir um?
         when one   applies

         'Why is it necessary that one has already turned in documents when one applies?'

Finally, negation in Icelandic is different from English negation *not* (see discussion on negation in aspectual structures in Icelandic in §4.3.4.4 above). Icelandic *ekki* 'not' is an AdvP left-adjoined to at least as high as the edge of the verb phrase (e.g., Collins and Thráinsson 1996, Thráinsson 2001a, 2007). Negation is not possible within the infinitival in the IMC. Since the negation is lower than TP, this suggests that the complement of the modal has less structure.

(188) ***Negation in IMC***

a. Það virðist {**ekki**} **mega** {***ekki**} dansa {***ekki**} hér.
EXPL seems not may.INF not dance.INF not here
'It doesn't seem like it's allowed to dance here.'

b. Það virðist {**ekki**} **þurfa** {***ekki**} að borða {***ekki**}
EXPL seems not may.INF not to eat.INF not

kökuna.
the.cake.ACC

✓'It doesn't seem like it is needed to eat the cake.'
✗'It seems like that the cake not be eaten is needed.'

This is different from control verbs, like *reyna* 'try', which take a CP complement, which in turn contains a TP.

(189) ***Negation with a control verb***

Jón **reyndi** að borða **ekki** kökuna.
John tried to eat.INF not the.cake.ACC
'John tried not to eat the cake.'

In the infinitival clause in (189), the verb moves above negation to at least T. We thereby see that control verbs embed richer structure (CPs) than IMC verbs. With IMC verbs, negation between Aspect and the infinitival phrase seems to be

possible, as expected, even though it is not perfect (note that *maður* 'one' is within parentheses, indicating that the sentence is equally good with or without an overt subject).[32]

(190)   ***Negation in IMC***

? Til þess að teljast   hlutlaus, virðist (maður) verða/þurfa að
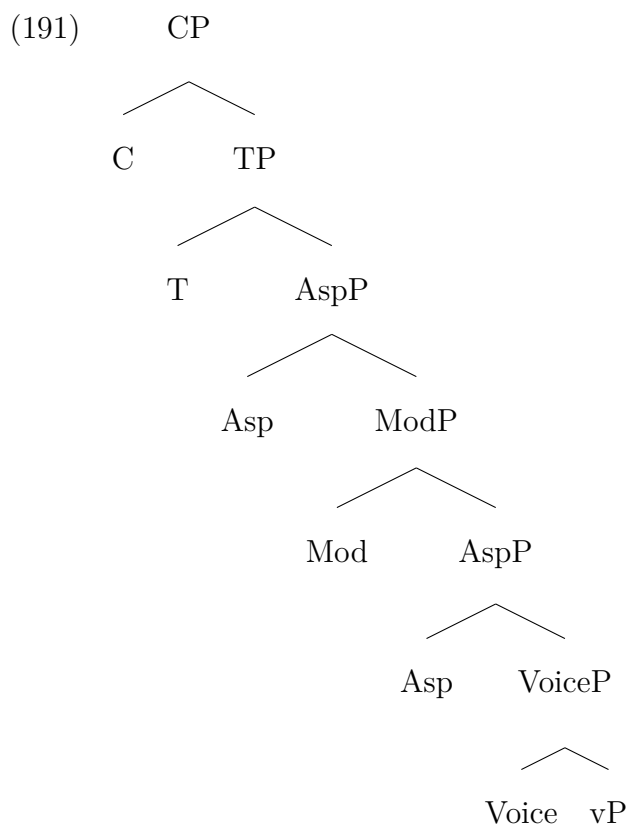   in order to be.considered unbiased seems   one   have.to/need to

hafa   **ekki** fjallað um þetta mál áður.
have.INF not   discussed this   case before

✓'In order to be considered unbiased, one has to/needs to have not discussed this case before.'
✗'In order to be considered unbiased, it does not seem like one has to/needs to have discussed this case before.'

Based on the data above, we propose a syntactic structure for root modals (in the tree below, I do not include the higher (epistemic) modal verb position, as that is not of concern for the IMC). As seen in the tree, I argue that the infinitival phrase complement of the modal contains less structure than a TP, which is at least as rich as an AspP.

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[32]Thanks to Hlíf Árnadóttir for discussing the example in (190) and giving her judgment.

(191) CP

A syntactic tree diagram:

```
(191)        CP
           /    \
          C      TP
               /    \
              T      AspP
                    /    \
                  Asp     ModP
                        /    \
                      Mod     AspP
                            /    \
                          Asp     VoiceP
                                /    \
                             Voice    vP
```

In the tree, we see that there is an AspP above and below the ModP. This is because we have seen examples where a root modal can be below *hafa* 'have' and at the same time be above another such auxiliary. See, e.g., example (152).

4.3.5.6.2 Comparison of the IMC and the NIP

The IMC and the NIP (and, as a matter of fact, the AspPass) have many important properties in common. We will now look at various properties of the IMC and compare them to the NIP. I argue that there is a WIA projected in SpecVoiceP, just as in the NIP (and the AspPass), although it is also grammatical to project an SIA there, unlike the NIP.

First of all, structural accusative case can be assigned to the object, just like in the NIP. Even if the DP is definite, no DE violation arises. However, unlike the NIP, there is no passive morphology. (124) is repeated as (192) below.

(192) a. Hér **má** byggja **nýja**   **brú**.
           here may build.INF new.ACC bridge.ACC
           'Here, one is allowed to build a new bridge.'
                                (H.Á. Sigurðsson and Egerland 2009:169)

       b. Það **á/verður/þarf**   að lesa   **bókina**.
           EXPL ought/has.to/needs to read.INF the.book.ACC
           'One has to read the book.'

Second, movement of the object DP to subject position is blocked ((127) repeated as (193)).

(193)   ***A-movement blocked in IMC***

       a. * Hér **má nýja**   **brú**   byggja.
           here may new.ACC bridge.ACC build.INF
           Intended: 'Here, one may build a new bridge.'

       b. * **Verður bókina**   að lesa?
           has.to   the.book.ACC to read.INF
           Intended: 'Does one have to read the book?'

Third, idiomatic readings are preserved and inalienable body-part interpretation is available. We have already seen that that is the case for the NIP also.

(194)   ***Inalienable body-part interpretation in IMC***

       a. Þarf   að rétta   upp höndina til þess að spyrja spurninga?
           needs to raise.INF up   the.hand for it   to ask   questions
           'Does one$_i$ need to raise one$_i$'s hand to ask questions?'

b. Það á   alltaf að bursta   tennurnar kvölds   og morgna.
   EXPL ought always to brush.INF teeth   evenings and mornings

   'One$_i$ ought to brush one$_i$'s the.teeth in the evening and in the morning.'

(195) ***Idiomatic readings in IMC***

a. Það þarf að taka   þátt   í hlaupinu til að eiga
   EXPL needs to take.INF thread.ACC in the.run for to have

   möguleika á sigri.
   change   of win

   'One needs to take part in the run to have a chance of winning.'

b. Það   verður bara að rífa kjaft   svo að þeir hætti þessu.
   EXPL has.to just to tear mouth.ACC so that they stop this

   'One just has to direct foul language at them so that they will stop.'

c. Í nútímasamfélagi má ekki rífa   kjaft   við börn.
   in modern.society   may not tear.INF mouth.ACC to kids

   'In modern society, one is not allowed to direct foul language at kids.'

Fourth, binding of anaphors is grammatical in the IMC and the implicit argument can control PRO in an adjunct infinitival clause.

(196) ***Binding in IMC***

Það þarf að upphefja sjálfan sig   í umsókninni   til að
EXPL needs to glorify.INF self.ACC REFL.ACC in the.application for to

eiga möguleika á að fá starfið.
have chance   on to get the.job

'One has to glorify oneself in the application in order to have a chance of getting the job.'

(197)   ***Control in IMC***

Það   má   ráða   tvo   menn án þess að hafa næga   menntun.
EXPL may hire.INF two.ACC men   without to have enough education

'Somebody who doesn't have enough education is allowed to hire two men.'

In (197), the implicit argument can control PRO in the infinitival clause (*án þess að hafa næga menntun* 'without having enough education') but the DP 'two men' cannot.[33]

The use of secondary predicates is also available in the IMC ((128) repeated as (198)).

(198)   ***Secondary predicates in IMC***

a.   **Má** ekki vera   hérna **fullur**?
     may not be.INF here   drunk.M.NOM.SG

     'Is it not allowed to be here drunk?'   (H.Á. Sigurðsson 2011b:158)

b.   Það **á**/**verður**/**þarf**   að gera   þetta   **óþreyttur**.
     EXPL ought/has.to/needs to do.INF this.ACC untired.M.NOM.SG

     'One has to do this while not tired.'

Nevertheless, 'by'-phrases are grammatical in the IMC, at least in some cases, as demonstrated above, but, importantly, they cannot be used at the same time as depictive secondary predicates as we will now see.

'By'-phrases being acceptable in the IMC suggests that the structure does not contain an SIA whereas secondary predicates do suggest an SIA, under Landau's

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[33]The example in (197) is based on Jónsson's (2009) passive examples shown in (30b) and (31) above.

(2010) proposal. This predicts that 'by'-phrases and secondary predicates should not be able to co-occur. The prediction is borne out, as demonstrated below. As a matter of fact, binding of complex reflexive pronouns does not seem to be able to co-occur with a 'by'-phrase, either. That may suggest that an SIA is needed to bind (complex) reflexive pronouns, as argued by Landau (2010).[34]

(199)   Til þess að einhver árangur náist á þessu sviði, þarf að mínu mati að ...

'For there to be any success in this field, in my opinion, there needs to ...

    a.   ... skoða   þetta betur af lækni eða öðrum fagmanni.
           look.at.INF this   better by doctor or   other   professional

        '... look at this further by a doctor or another professional.'

    b.   ... skoða   þetta   óhræddur   (??af lækni eða öðrum
           look.at.INF this.ACC unafraid.M.NOM.SG   by doctor or   other

        fagmanni).
        professional

        Intended: '... look at this while not afraid by doctor or other professional.'

    c.   ... skoða sjálfan sig   (*af lækni eða öðrum fagmanni).
           look.at self.ACC REFL.ACC   by doctor or   other   professional

        Intended: '... look at oneself by a doctor or other professional.'

This is the same result as for the AspPass in (108), where a secondary predicate could not co-occur with a 'by'-phrase. In (199a), we have the IMC with a 'by'-phrase. This sentence is fine. In (199c), the implicit argument binds an anaphor (the reflexive pronoun *sjálfan sig*). The sentence is fine without the 'by'-phrase, with

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[34]Thanks to Hlíf Árnadóttir for discussing the examples in (199) with me and giving her judgments.

it the sentence is ungrammatical. The use of the secondary predicate in (199b) is also fine as long as there is no 'by'-phrase.

What we can conclude from this is that the implicit argument in the IMC when 'by'-phrases are allowed is different from the implicit argument when secondary predicates and binding of anaphors is possible. What is important for our purposes is the fact that 'by'-phrases are sometimes grammatical in the IMC. In my analysis, I will focus on the WIA version, giving the IMC essentially an analysis equivalent to that of Legate's (2014) for the NIP.

4.3.5.6.3 Interim summary

Above we compared the IMC to the NIP. As was clear, they behave the same in many important ways. The IMC also shares a lot features with the AspPass. This is summarized in Table 4.4.

Before we analyze the IMC when 'by'-phrases are possible, we take a closer look at when 'by'-phrases are available.

4.3.5.6.4 'By'-phrases and dispositional readings

We have seen that 'by'-phrases are sometimes possible in the IMC. We will now look at a few examples where 'by'-phrases are not acceptable in the IMC. Let us contrast (200a) and (200b).

	NIP	AspPass	IMC	CanP	active
Passive morphology	✓	✓	✗	✓	✗
'By'-phrases	✓	✓	✓	✓	✗
Overt external argument	✗	✗	✓/✗	✗	✓
Secondary predication of ext. arg.	✗	✓/✗	✓/✗	✗	✓
Structural case on object	ACC	ACC	ACC	NOM	ACC
Binding of reflexives	✓/✗	✓	✓(/✗)	✗	✓
Inalienable body-part interpr.	✓	✓	✓	✗	✓
Preservation of idiomatic readings	✓	✓	✓	✗	✓
Control by external argument	✓	✓	✓	✗	✓
A-movement of an internal arg.	✗	✗	✗	✓	✗
Definiteness Effect	✗	✗	✗	✓	✗
Subject type	φP	φP(/DP)	φP(/DP)	–	DP

Table 4.4: Properties of the NIP, the AspPass, the IMC, the CanP and the active.

(200) a. Það þarf að rannsaka   þetta   betur **af fræðimönnum**.
           EXPL needs to investigate.INF this.ACC better by scholars

           'This needs to be studied further by scholars.'

       b. *Í dag þarf að skila   skattframtali **af útlendingum**.
           today needs to hand.in.INF tax.return.DAT by foreigners

           'Foreigners have to hand in their tax returns today.'

That only (200a) is acceptable but not (200b) is surprising. We saw before that when the IMC contains an SIA, 'by'-phrases are ungrammatical. Saying that (200b) simply has an SIA can hardly be the case — what is there to rule out that we have a WIA there?

There is an important difference between the sentences in (200) that we need to consider: In (200a), the most natural reading is that 'this' needs to be studied further, by some scholar or other. That is, the modal scopes over the existential quantifier (narrow scope existential). Given our lexical entries for modal verbs that take properties, where Existential Closure is built into the lexical entries, this is the scope we expect — the only plausible reading is with the existential scoping low. In (200b), the most natural reading is that for foreigners it holds that they need to hand in their tax returns. That is, the existential quantifier scopes over the modal. This gives us the implausible reading that it is generically true of foreigners that they have to hand in their tax returns today.

Let us look at another example:

(201) Það   verður að skrifa   skýrsluna   af hlutlausum aðila.
       EXPL has.to to write.INF the.report.ACC by unbiased   party

       'The report has to be written by an unbiased party.'

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A reading where there exists an unbiased party such that s/he has to write the report would not be plausible. That is, the existential quantifier does not have wide scope. The example is only acceptable under a reading where it has narrow scope: The report has to be written by some unbiased party or other.

Consider yet another example:

(202)   Í dag á   samkvæmt dagskrá að brenna föður   minn
          today ought according.to schedule to burn.INF father.ACC my.ACC

          (af femínistum og   fylgifiskum).
           by feminists   and followers

          'Today, according to schedule, my father is supposed to be burned (by feminists and followers)'   (https://goo.gl/piOT4H;
                                                     E.F. Sigurðsson 2012:91)

In this example, the only possible reading is where the modal scopes over the existential quantifier. That is to say, the meaning cannot be that for feminists and followers it generically holds that they are supposed to or ought to burn the speaker's father.

I will not go deeper in this problem but a relevant notion for future research may be that of dispositional readings. Pitteroff (2014) discusses German *lassen*-middles and demonstrates that they disallow 'by'-phrases when the 'by'-phrase has a specific referent. Pitteroff argues that in such cases they are incompatible with dispositional semantics of middles.

A dispositional reading of, e.g., an object can be described as an inherent property of it. A book that reads easily has that general property, it should not matter who it is that reads it — it is easy to read that book.

In (203) we see the use of *lassen*-middles with a 'by'-phrases. The 'by'-phrase in (203a) has a non-specific referent; it can be used in the *lassen*-middle example where the inherent property of the book is that (even) small children can read it.

(203)   ***German***

     a.   Das Buch lässt sich (von kleinen Kindern) gut   lesen.
            the book lets   REFL (by small   children) good read
            'The book can be read easily (by small children).'

     b.   Das Buch lässt sich   leicht von einem Antiquar   beschaffen.
            the book lets   REFL easily by   an   antiquarian obtain
            'The book can be obtained easily by an antiquarian.'

     c.   * Das Buch lässt sich   von mir beschaffen.
            the book lets   REFL by   me organize
            'The book can be gotten by me.'   (Pitteroff 2014:46–47)

In (203c), on the other hand, there is a specific referent and that is crucial to the unavailability of the 'by'-phrase: A book can in general not have the inherent property of a certain individual being able to read it.

The same is presumably the case for 'by'-phrases in the IMC. It does not allow 'by'-phrases where, e.g., a report has the inherent property that it has to be written by a certain individual. I leave these speculations for future research.

4.3.5.7 Analysis: WIA in SpecVoiceP

4.3.5.7.1 Modal verbs in the IMC taking propositions

As discussed in §4.2.4, Landau argues that Weak Implicit Arguments lack a D-head. For him, D is needed for binding of anaphors and secondary predicates of subjects. As I follow, e.g., H.Á. Sigurðsson (1989) and H.Á. Sigurðsson and Egerland (2009), in arguing that the IMC contains an implicit argument, the question what kind of an implicit argument now becomes important.

(204)   *Icelandic*

Það **þarf** að upphefja **sjálfan sig**   í umsókninni   til að
EXPL needs to glorify.INF self.ACC REFL.ACC in the.application for to

eiga möguleika á   að fá   starfið.
have chance   on to get the.job

'One has to glorify oneself in the application in order to have a chance of getting the job.'

(205)   a.   **Má** ekki vera   hérna **fullur**?
            may not be.INF here   drunk.M.NOM.SG

            'Is it not allowed to be/stay here drunk?'

                                           (H.Á. Sigurðsson 2011b:11)

   b.   Það **verður** að æfa   sig   **óþreyttur**.
            EXPL has.to   to practice.INF REFL.ACC untired.M.NOM.SG

            'One has to practice while not tired.'

The fact that both binding of anaphors (204) and secondary predicates (205) are possible (at least sometimes) suggests that the subject is an SIA. In that case, the implicit argument, which has a D-head, saturates the SpecVoiceP position. Let us compare the derivation for the NIP in (35b) above to the derivation of the VoiceP

of the IMC, in a sentence like (206), when it takes an SIA subject (we leave possible

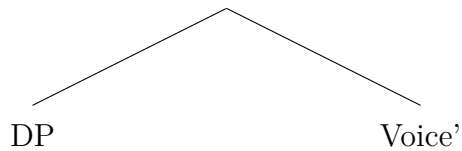world semantics aside in the derivation).

(206)   a.   Það þarf að lesa   bókina.
             EXPL needs to read.INF the.book.ACC

        'The book needs to be read.'

   b.   VoiceP
        Function Application
    λe. AGENT(e,DP) ∧ reading(e)
        ∧ THEME(e,the book)
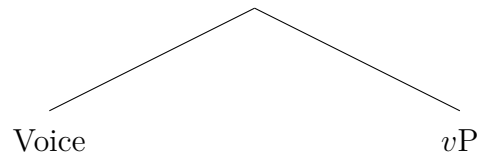
DP   Voice'
                    Event Identification
              λx.λe. AGENT(e,x) ∧ reading(e)
                    ∧ THEME(e,the book)

        Voice   vP
    λx.λe. AGENT(e,x)   λe. reading(e) ∧ THEME(e,the book)

                              v   √P
                                    Function Application
                              λe. reading(e) ∧ THEME(e,the book)
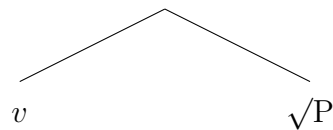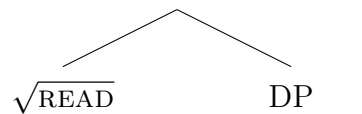
                                    √READ   DP
                                 λx.λe. reading(e)
                                 ∧ THEME(e,x)   *the book*

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Here, the SIA in SpecVoiceP saturates the argument position. There is no restricton therefore written in the truth-value of VoiceP (like $\varphi(x)$ in (35b)); instead, all instances of 'x' (one in this case) are replaced by 'DP'. This means that existential closure is not needed to saturate the external argument position as it has already been saturated through Function Application. This also means that a 'by'-phrase should not be possible.

Now that we are thinking in terms of world semantics, the complement of the modal verb will be a proposition, of type $\langle s_w, t \rangle$. The lexical entries for *verða* 'have to' and *þurfa* 'need' might be as in (207) (for lexical entries, I give English translations):[35]

(207)   a. $[\![\mathbf{have\ to}]\!]^w = \lambda p_{\langle s_w, t \rangle}.\forall w'$ compatible with the rules in w: $p(w') = 1$.

        b. $[\![\mathbf{need}]\!]^w = \lambda p_{\langle s_w, t \rangle}.\forall w'$ compatible with the needs in w: $p(w') = 1$.

For a sentence like (206) *Það þarf að lesa bókina*, with an SIA in SpecVoiceP (given the derivation in (206b)), *þurfa* 'need' has the lexical entry in (207b). That is, it takes as its input a VoiceP where the external argument position has been saturated.

Things get more complicated when we look at instances of the IMC where 'by'-phrases are allowed. We look at that in §4.3.5.7.2.

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[35]Here, I limit myself to showing lexical entries for *verða* 'have to' and *þurfa* 'need'.

4.3.5.7.2 Modal verbs in the IMC taking properties:
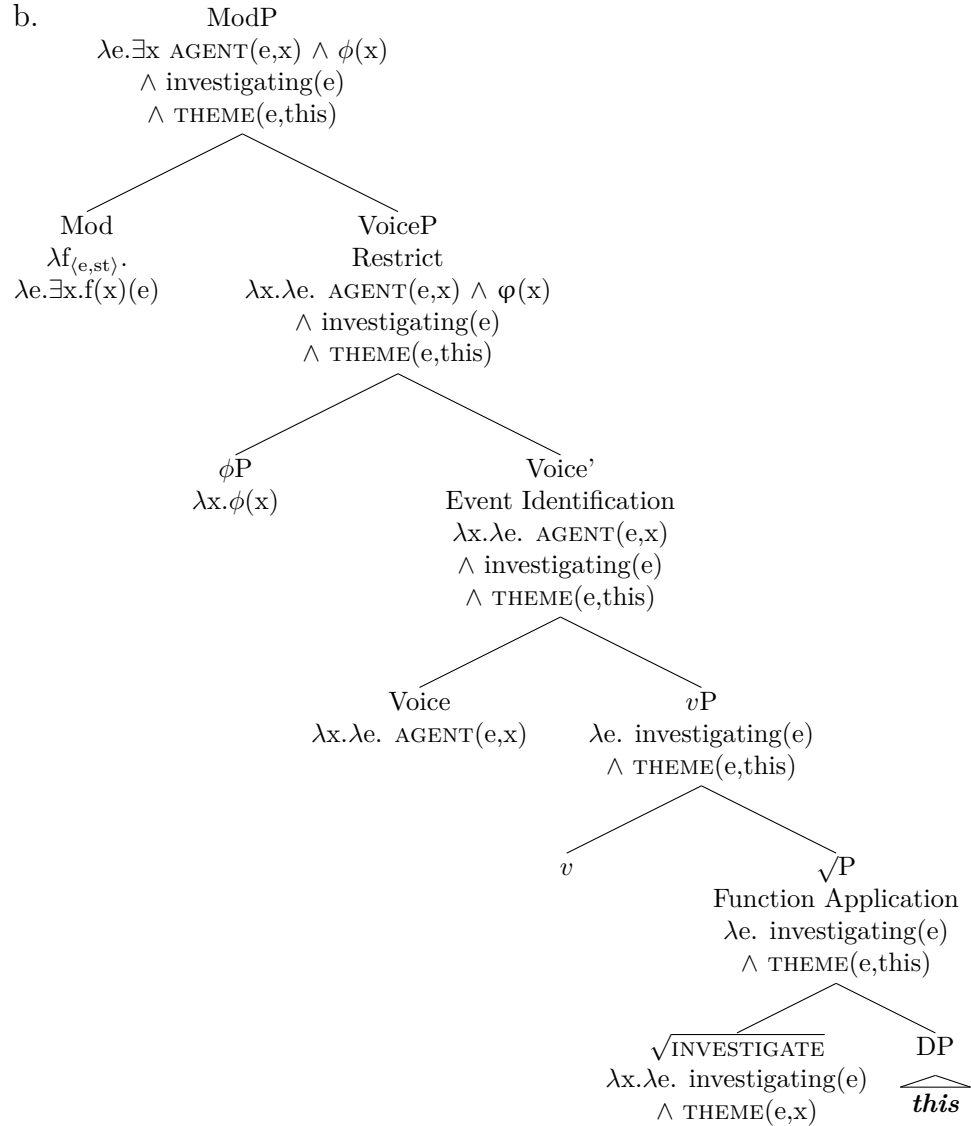
'By'-phrases allowed

The data in Section 4.3.5.7.1 was clear, pointing to an SIA in SpecVoiceP. When an argument position has been saturated, it is no longer accessible for further semantic saturation processes. If the IMC always contains an SIA, 'by'-phrases should not be possible. But they sometimes are, as has been pointed out above.[36]

The fact that a 'by'-phrase is possible in an example like (208a) below, suggests that the agent argument position has not been saturated by the time the 'by'-phrase adjoins to the structure. This might suggest that we sometimes have SIAs in the IMC and sometimes WIAs. As a matter of fact, I argue for examples like (208) that there a φP (WIA) is introduced in SpecVoiceP.
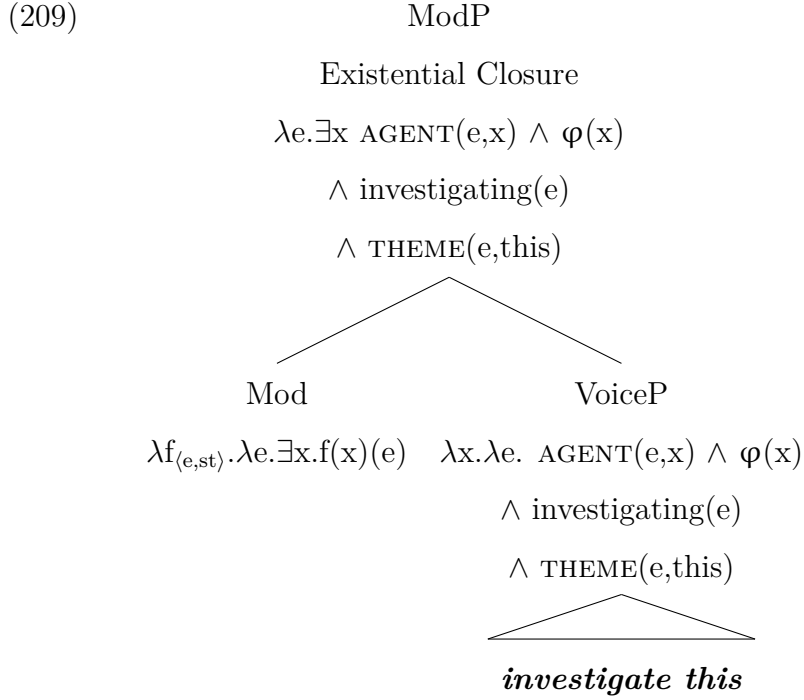
The question arises how saturation of the external argument can be accomplished. Since specific modals are needed to allow null subjects, I propose that the modals themselves provide Existential Closure (cf. also Wood 2015). This is shown below, where I abstract away from world semantics and the meaning of the modals in question.

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[36]The IMC is not restricted to verbs taking agentive subjects even though the implicit argument always corresponds to the highest argument (the subject) of the embedded verb. All the 'by'-phrases discussed here for the IMC are agentive, however. It remains to be studied whether 'by'-phrases in the IMC are restricted to agents.

(208) a. Það þarf að rannsaka   þetta   betur (af fræðimönnum).
           EXPL needs to investigate.INF this.ACC better (by scholars)

       'This needs to be investigated further (by scholars).'

b.

ModP
$\lambda e.\exists x$ AGENT(e,x) $\wedge$ ϕ(x)
$\wedge$ investigating(e)
$\wedge$ THEME(e,this)

Mod
$\lambda f_{\langle e,st \rangle}.$
$\lambda e.\exists x.f(x)(e)$

VoiceP
Restrict
$\lambda x.\lambda e.$ AGENT(e,x) $\wedge$ φ(x)
$\wedge$ investigating(e)
$\wedge$ THEME(e,this)

ϕP
$\lambda x.\phi$(x)

Voice'
Event Identification
$\lambda x.\lambda e.$ AGENT(e,x)
$\wedge$ investigating(e)
$\wedge$ THEME(e,this)

Voice
$\lambda x.\lambda e.$ AGENT(e,x)

vP
$\lambda e.$ investigating(e)
$\wedge$ THEME(e,this)

v

$\sqrt{}$P
Function Application
$\lambda e.$ investigating(e)
$\wedge$ THEME(e,this)

$\sqrt{}$INVESTIGATE
$\lambda x.\lambda e.$ investigating(e)
$\wedge$ THEME(e,x)

DP
this

Here, a Voice introduces an agent; a φP is projected in SpecVoiceP but it does not

saturate the agent argument. Therefore, EC is needed. When Mod merges with

VoiceP of type $\langle e,\langle s,t \rangle \rangle$, it existentially closes over the agent.

(209)
$$\text{ModP}$$

$$\text{Existential Closure}$$

$$\lambda e.\exists x\ \text{AGENT}(e,x) \wedge \varphi(x)$$

$$\wedge\ \text{investigating}(e)$$

$$\wedge\ \text{THEME}(e,\text{this})$$

$$\text{Mod} \qquad\qquad \text{VoiceP}$$

$$\lambda f_{\langle e,st\rangle}.\lambda e.\exists x.f(x)(e) \quad \lambda x.\lambda e.\ \text{AGENT}(e,x) \wedge \varphi(x)$$

$$\wedge\ \text{investigating}(e)$$

$$\wedge\ \text{THEME}(e,\text{this})$$

investigate this

The morphology is identical between a WIA and an SIA in SpecVoiceP. That, and the fact that existential binding is not encoded on Voice, suggests that there are no flavors of Voice as such (Voice$_{\text{ACT}}$, Voice$_{\text{PASS}}$, Voice$_{\text{EXPL}}$, etc.) but rather an interaction of Voice and its specifications (the kind of implicit argument, whether it is projected or not). On the current approach, it makes more sense to say that there are flavors of the head that can existentially bind the external argument, in this case Mod. It must come in two flavors, one which is able to combine with a property and close over the agent, and another which is able to combine with a proposition.

When a 'by'-phrase is included in the IMC, no general property, such as need, obligation, etc., is appointed to the agent expressed in a 'by'-phrase. This has to be accounted for in the semantics.

If we take a closer look at *þurfa* 'need', as in (208), it is clear that the investigation event does not have to do with any need or obligation of the scholars. Rather, I take the IMC sentence above to express some general need.

(210)   ***Property derivation with a 'by'-phrase in IMC***

$\llbracket \textbf{need} \rrbracket^w = \lambda P_{\langle e, \langle s_w \langle s_e, t \rangle \rangle \rangle}.\text{GEN}[y].\forall w'$ compatible with **y's needs** in w:

$\exists e \exists x [P(x)(e)(w') = 1].$

Here we have a generic operator, quantifying over y which does not have anything to do with the agent expressed in the 'by'-phrase. Rather, (210) expresses that in all worlds that apply, there is a general need, attributed to y, for a researching event, whose theme is 'this' and whose agent is x and x = researchers.

4.3.5.7.3   Interim summary

Above we argued that the IMC is compatible with both an SIA and a WIA. This means that two lexical entries are needed for each IMC verb: one where it takes a proposition as an argument, as in (207), and another where it takes a property. The part of our analysis that introduces WIA in SpecVoiceP is an extension of analyses given above for the New Impersonal Passive (cf. Legate 2014) and the Aspectual Passive. Our analysis suggests that there are no flavors of Voice.

Somebody might object and say that even though we might want to argue for a *pro*/PRO (SIA) subject in the IMC when secondary predicates and binding of anaphors is possible, there is no way to distinguish between "nothing" and a WIA,

even though with alleged WIA, the IMC, e.g., takes accusative case objects. In §4.3.5.8, however, we will look at such a case, where we have a semantically null element in SpecVoiceP under IMC verbs: the clitic *-st*.

4.3.5.8   Extension: Modal *-st* passive

4.3.5.8.1   A clitic generated in SpecVoiceP

The *-st* morpheme is found in a variety of constructions. Two of them are anti-causatives and generic middles.

(211)   a.   ***Active***
Maðurinn   opnaði gluggann.
the.man.NOM opened the.window.ACC
'The man opened the window.'

    b.   ***Anticausative***
Glugginn   opnaði-st.
the.window.NOM opened-ST.
'The window opened.'

(212)   a.   ***Active***
Við seljum rafmagnsbíla.
we   sell   electric.cars.ACC
'We sell electric cars.'

    b.   ***Generic middle***
Rafmagnsbílar   selja-st (vel) hér.
electric.cars.NOM sell-ST   well here
'Electric cars sell well here.'   (Wood 2015:62)

In neither of these is there an implicit argument, unlike the passive, as shown in

(213) through the use of a 'by'-phrase and *viljandi* 'intentionally'.

(213)   a.   ***CanP***

Dyrnar   voru opnaðar   (viljandi)   / (af manninum).
doors.the.NOM were opened.PASS intentionally   by the.man

'The door was opened (intentionally) / (by the man).

       b.   ***Anticausative***

Dyrnar   opnuðu-st (*viljandi)   / (*af manninum).
doors.the.NOM opened-ST *intentionally   *by the.man

'The door opened.'   (Ottósson 1986:67)

Wood convincingly argues that *-st* is a clitic in examples like (211b) and (212b). Without going further into his arguments, two points he makes should be mentioned regarding positioning *-st* syntactically and valency reduction.

First, *-st* usually sits outside tense and agreement morphology as well as participial morphology (see Wood 2015:74–79):

(214)   a.   Hurðin   opna-ði-st.
               the.door.NOM open-3SG.PST-ST

'The door opened.'

       b.   Dyrnar   opnu-ðu-st.
               the.doors.NOM open-3PL.PST-ST

       c.   Ólafur   hefur lengi dá-ð-st   að Pétri.
               Ólafur.NOM has   long admire-PTCP-ST at Peter

'Ólafur has long admired Ólafur.'

This suggests that *-st* is a clitic rather than a suffix.

Second, *-st* verbs often alternate with non-*st* verbs (this is true for, e.g., 'open'). The verb that has *-st*, in at least anticausatives and middles, has one argument fewer than the non-*st* verb; see, e.g., (211) and (212). This, Wood says, suggests that *-st* is generated in an argument position. In fact, he argues it is generated in SpecVoiceP.

(215)

```
              VoiceP
             /      \
          -st       Voice'
                   /      \
               Voice        vP
                           /  \
                    open the door
```

open the door
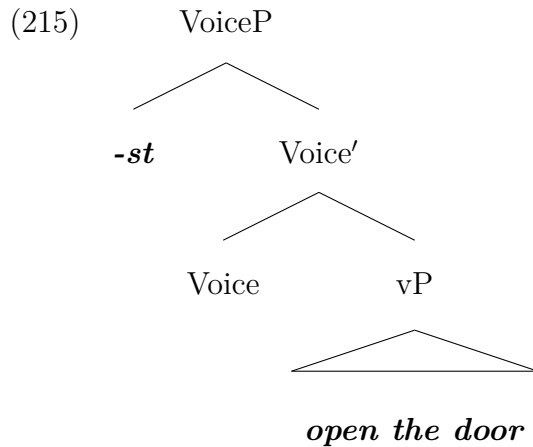
Under Wood's analysis, *-st* is a type-neutral identity function, a function which takes the denotation of its sister and returns the same denotation:

(216) $[\![\text{-st}]\!] = \lambda x.x$ (Wood 2015:27)

This means that if Voice′ in (216) is of type $\langle s_e, t \rangle$, then *-st* will simply pass that denotation up the tree:

(217) $[\![\text{-st}]\!] = \lambda p_{\langle s_e, t \rangle}.p_{\langle s_e, t \rangle}$

Syntactically, *-st* occupies an argument position but it does not have any semantic effect. By being a clitic, *-st* has a different syntactic effect from an implicit argument: Even though it has overt material and is posited in SpecVoiceP (external

argument position), *-st* does not trigger the object getting accusative case and the clitic does not prevent A-movement of the theme to subject position (SpecTP). When projected, the covert (implicit) arguments discussed above (WIAs and SIAs) trigger on the other hand accusative case on the object and prevent the theme from A-moving to subject position.

In addition to arguing that *-st* has no semantic effect, Wood furthermore argues that Voice is ∅, introducing no θ-role. The result is that the semantics of Voice′ is the same as that of *v*P and we do not need Event Identification. Let us compare ∅ Voice and Voice where an external argument is introduced. The former could be an anticausative *opna-st* 'open-ST' and the latter could be causative *opna* 'open':

(218)   Voice′

λe. opening(e)

$\wedge$ THEME(e,the door)

Voice   *v*P

λe. opening(e)

$\wedge$ THEME(e,the door)

(219)   Voice′

Event Identification

λx.λe. AGENT(e,x) $\wedge$ opening(e)

$\wedge$ THEME(e,the door)

Voice   *v*P

λx.λe. AGENT(e,x) λe. opening(e)

$\wedge$ THEME(e,the door)
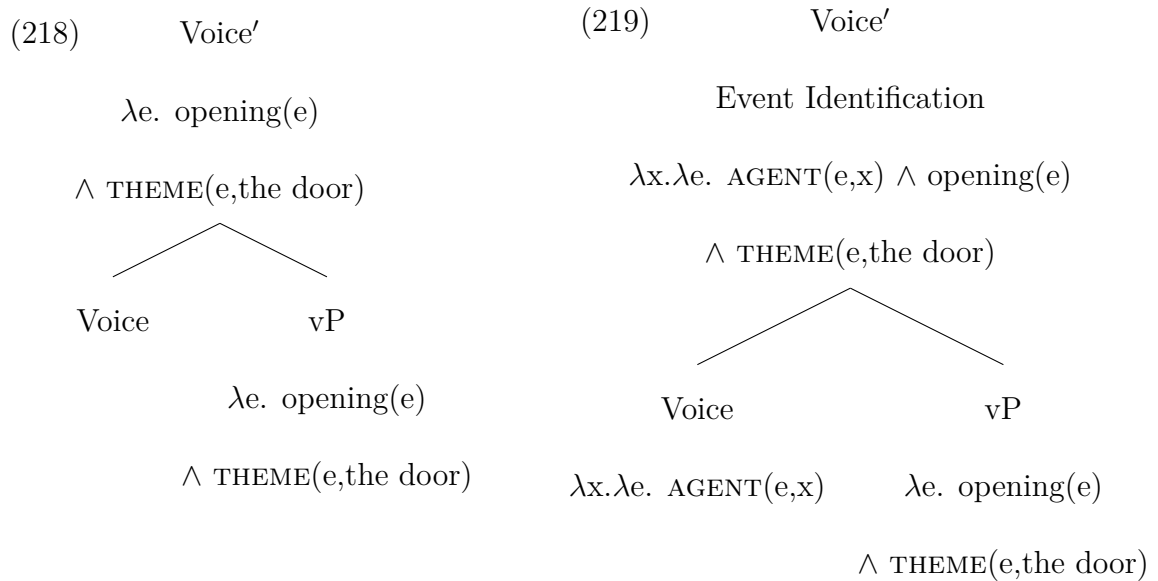
The latter, (219), introduces an agent that needs to be saturated whereas the former, (218), does not.

4.3.5.8.2 Verbs requiring an agent incompatible with *-st*

As Wood discusses, not all verbs are compatible with the use of *-st*. He uses *myrða* 'murder' as an example.

(220) a. Konan   myrti   manninn.
           the.woman.NOM murdered the.man.ACC
           'The woman murdered the man.'

       b. * Maðurinn   myrti-st.
           the.man.NOM murdered-ST   (Wood 2015:147)

In the derivation of *myrða* 'murder', Voice can never be empty (unlike Voice of anticausative 'open'), whether in the grammatical sentence (220a) or the ungrammatical sentence (220b). The denotation Wood gives is shown in the following:

(221)   ⟦Voice⟧ = λx.λe. AGENT(x,e)

That is, Voice introduces an argument that needs to be saturated and since *-st* is only an identity function at semantics, it cannot do the job. As Wood (2015:147) notes, "SpecVoiceP of 'murder' must be an entity, and one capable of bearing the agent relation. If *-st* were merged in such a SpecVoiceP, the derivation would crash at semantics due to the unsaturated entity argument."

There is, however, a way to saturate the external argument position: IMC verbs can existentially close over the argument.

4.3.5.8.3 Modal *-st* passives

Ottósson (1986:111–112) discusses "middles with passive meaning" (Icel. *miðmynd í þolmyndarmerkingu*). Some of the examples he discusses involve modals.

(222) a.   Fundurinn   á/verður/þarf   að auglýsa-st   vel.
            the.meeting.NOM ought/has.to/needs to advertise-ST well

       'The meeting is supposed to/has to/needs to be well advertised.'

       b.   Fundurinn   átti   að haldast daginn eftir.
            the.meeting.NOM was.supposed to hold-ST the.day after

       'The meeting was to be held the next day.'   (Ottósson 1986:111)

Interestingly, these are all IMC verbs. As far as I know, examples like the above are only found with IMC verbs. I follow Wood in calling these modal *-st* passives.

Relating something to passives suggests that the construction has an implicit argument. As Wood (2015:259) points out, this implicit argument can indeed be recovered with 'by'-phrases.

(223) ?Biblían   á   að lesa-st   og rannsaka-st   af öllum mönnum
        the.Bible.NOM ought to read-ST and investigate-ST by all   men

       alls staðar.
       everywhere

       'The Bible ought to be read and studied by all men everywhere.'
                                                        (Wood 2015:259)

This means that the modal *-st* passive, on the one hand, is different from anti-causatives and generic middles, on the other hand, in an important way: There is an implicit argument in the former but not in the latter. Wood (2015) points

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out that even though 'murder' does not work in the anticausative structure, it is attested in the modal *-st* passive:

(224) a. Misak var kallaður sem atvinnuhermaður og átti að myrðast.
           Misak was called   as   mercenary   and ought to murder-ST

           'Misak was known as a mercenary and was supposed to be murdered.'

       b. Þér   álítið   þá að þessi maður   hafi átt
           you.POL.PL consider.2PL then that this man.NOM has ought.PTCP

           að myrðast   í   hefndarskyni?
           to murder-ST in revenge

           'Then you think that this man was supposed to be murdered in
           revenge?'   (Wood 2015:261)

This further supports the conclusion that modal *-st* passives have an implicit argument.

A similar kind of support for an implicit argument comes from looking at transitive verbs and their anticausative variant with a different anticausative morpheme from *-st*. Using *-st* is not the only way to form an anticausative verb. For some verbs, the morpheme *-na* marks anticausativity.

(225) a. Ég   bræði   klakann.
           I.NOM melt.TR the.ice.ACC

           'I melt the ice.'

       b. Klakinn   bráð-na-r   / *bráð-na-st   /
           the.ice.NOM melt.INTR-NA-3SG *melt.INTR-NA-ST

           *bræði-st   / *bráða-st.
           *melt.tr-ST *melt.intr-ST

           'The ice (in the frozen ground) melts.'
                                    (adapted from H.Á. Sigurðsson 1989)

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For the verb 'melt', the only way to mark an anticausative is with the intransitive root allomorph *bráð-* and to add the anticausative suffix *-na*; it is not possible to add the *-st* clitic on top of *-na* (**bráð-na-st*) nor use either the transitive root allomorph *bræð-* or the intransitive *bráð-* and cliticize *-st* onto that (**bræði-st*, **bráða-st*), as shown in (225b).

When 'melt' is embedded under an IMC verb, on the other hand, not only the verb form *bráð-na* is possible, see (226), but also *bræða-st*, see (227). The former gives an anticausative reading, the latter a causative reading (modal *-st* passive). For the transitive root allomorph with the *-st* clitic, Wood (2015) gives the example in (227a). In that context, as he points out, the intransitive allomorph is not possible, cf. (227b):

(226) Klakinn   á   að bráð-na   í sólinni.
       the.ice.NOM ought to melt.INTR-NA in the.sun
       'The ice is supposed to melt in the sun.'

(227) a. Lifrin   af   þessum skipum mun eiga   að bræða-st í landi.
           the.liver.NOM from these   ships   will ought to melt-ST in land
           'The liver from these these ships supposedly ought to be melted on land.'

       b. # Lifrin   af   þessum skipum mun eiga   að bráð-na í landi.
           the.liver.NOM from these   ships   will ought to melt-NA in land
           'The liver from these ships supposedly ought to melt on land.'
                                                                (Wood 2015:266)

The obvious question that arises is: Why are examples like (224) grammatical? Why does the derivation not crash? By bringing in modal verbs, existential closure over the implicit agent is achieved, Wood (2015) argues. I agree, and, in fact, as it

looks like only IMC verbs are possible in this construction, there is reason to believe we can capture existential closure in the same way as with the IMC above, that is, by writing it into the modal verbs.

For a sentence like *Maðurinn verður að myrðast* 'The man has to murder-ST', we need the semantics where the modal existentially binds the agent.

(228)   ⟦Mod⟧ = λf$_{⟨e,⟨s,t⟩⟩}$.λe.∃x.f(x)(e)

This is the same entry as we proposed for modal verbs in the IMC previously, and this is essentially the same as what Wood (2015) proposes for the modal -*st* passive. Furthermore, as an external argument is existentially bound by Mod, 'by'-phrases, adjoining to VoiceP, are available.

4.3.6   Summary

Above we compared the Aspectual Passive (AspPass) and the Impersonal Modal Construction (IMC) to the New Impersonal Passive (NIP) and found out that there are striking similarities between the constructions. I argued that we should extend Legate's (2014) analysis for the NIP to the other two constructions.

The IMC and the AspPass provide evidence that Existential Closure is not encoded on Voice but outside it. The Mod(al) head and the Asp(ect) head close over the external argument and in that sense, they are passive heads (comparable to Bruening's (2013) Pass head). Furthermore, the IMC suggests that Voice does not come in flavors.

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4.4 Weak Explicit Arguments

4.4.1 Introduction

The focus in §4.3 was in part on implicit arguments, mainly Weak Implicit Arguments. Strong Implicit Arguments have an overt counterparts in various pronouns, which are sometimes all taken to be DPs. As there is another group of implicit arguments, Weak Implicit Arguments (WIAs), we may wonder whether there is also an overt counterpart of WIAs. I argue here that the reflexive pronoun of inherently and naturally reflexive verbs in Icelandic is a Weak Explicit Argument (WEA).[37]

4.4.2 Reflexive Passives

As Strong Implicit Arguments have overt counterparts (pronouns), we can ask whether Weak Implicit Arguments are ever overtly realized. I argue that the simplex reflexive pronoun *sig/sér/sín* in Icelandic is a Weak Explicit Argument (WEA), consisting of φ-features but lacking D.

This relates to the Reflexive Passive (ReflPass), which is superficially similar to the New Impersonal Passive (NIP) in that the accusative form of the reflexive pronoun is grammatical in the construction and yet there is no overt antecedent.

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[37]The discussion on Weak Explicit Arguments is in large part based on joint work with Thórhallur Eythórsson and Anton Karl Ingason (see Eythórsson et al. 2016 and Ingason et al. 2016b).

(229)   ***ReflPass***

     Svo   var   drifið   sig   á   ball.
     then was hurried.DFLT REFL on dance

     'Then there was hurrying off to a dance.'

Even though the NIP is ungrammatical for many speakers, most speakers either find reflexive passives of monotransitives grammatical or at least much better than the NIP, as first pointed out by H.Á. Sigurðsson (1989:355 n. 60). This means, as Schäfer (2012) notes, that we need a different analysis for the ReflPass, as in (229), than for the NIP.

The ReflPass was tested in M&S, Var1 and REAL. In (230) we see ReflPass sentence tested in Var1 and the percentage of speakers in each age group that accepted it. We contrast it with the NIP sentence in (231), also tested in Var1. A much higher percentage in all age groups accepted the ReflPass than the NIP.

(230)   ***ReflPass in Var1***

     Svo   var   drifið   sig   á   ball.
     EXPL was hurried.DFLT REFL on dance

     'Then there was hurrying off to a dance.'
     (15: 70%, 20–25: 63%, 40–45: 30%, 65–70: 17%)
                                          (Thráinsson et al. 2015:94)

(231)   ***NIP in Var1***

     Það   var   skammað   mig   fyrir letina.
     EXPL was scolded.DFLT me.ACC for   the.laziness

     'I was scolded for being lazy.'
     (15: 40%, 20–25: 9%, 40–45: 3%, 65–70: 2%)
                                        (Thráinsson et al. 2015:103)

Furthermore, Árnadóttir et al. (2011:54) report that out of the 107 speakers in Var1 that accepted the NIP sentence in (231), 85 speakers, i.e., 78%, also accepted the ReflPass sentence in (230). It should be added that 355 speakers accepted (230) in Var1.

I argue that there is no syntactically projected implicit argument in the ReflPass, of inherently and naturally reflexive verbs (cf. also Schäfer 2012). The simplex reflexive pronoun *sig* has the form of accusative case, which would normally indicate a nominative case antecedent higher in the clause. It is, however, the highest argument in its domain. Importantly, there is a gap in the reflexive pronoun paradigm, such that there is no nominative form. I argue that the realization of the reflexive pronoun assigned structural case is *sig*, whether or not there is a another phrase marked for structural case higher in the same dependency. In the active, see (232), the reflexive pronoun has a syntactic antecedent, and as expected, its structural case is realized as *sig*.

(232)   ***Reflexivization in the active***
         Jón dreif   sig   á ball.
         Jón hurried REFL.ACC on dance
         'Jón hurried off to a dance.'

One way of looking at *sig* is to say that it is not only a reflection of accusative case but also of nominative case. Another way is to say that in the absence of a special nominative case form, structural case is realized the same, whether or not it is the highest structural case marked phrase.

In addition, I argue that *sig* is an explicit realization of a WIA, lacking a D-feature. That is, it is a Weak Explicit Argument (WEA). As there is no implicit argument syntactically projected in the ReflPass, unlike the NIP, the IMC and the AspPass, the construction requires semantic binding on my account, discussed in §4.4.2.2.2.

I lay out the details of the analysis below. I will start, however, with a discussion on reflexive pronouns in Icelandic.

4.4.2.1 Reflexive pronouns

4.4.2.1.1 Three classes of reflexive verbs

Reflexive verbs are often divided into three classes (Sigurjónsdóttir 1992, Sigurjónsdóttir and Hyams 1992): (i) inherently reflexive verbs, (ii) naturally reflexive verbs and (iii) naturally disjoint verbs. The verbs in the ReflPass are either inherently or naturally reflexive, but not naturally disjoint. As noted above, Icelandic has both a simplex and a complex reflexive pronoun. The simplex reflexive pronoun *sig* is used with inherently and naturally reflexive verbs whereas the complex reflexive pronoun *sjálfan sig* is used with naturally disjoint verbs.

The object of inherently reflexive verbs is obligatorily co-indexed with the subject; these verbs cannot take a non-reflexive (referential) DP object. Only the

simplex reflexive pronoun is allowed; the complex reflexive pronoun cannot be used with these verbs. This is shown below.[38]

(233) ***Inherently reflexive verb in the active***

Jón$_i$ missteig sig$_i$ / *sjálfan sig$_i$ / *Maríu.
Jón misstepped REFL.ACC / *self.ACC REFL.ACC / *María.ACC
'Jón missed his footing.' (cf. Sigurjónsdóttir 1992:75)

Naturally reflexive verbs can take either the simplex reflexive pronoun or a non-reflexive DP. The complex reflexive pronoun can be used if it has a focus (such as contrastive focus). In "out-of-the-blue contexts, the simple reflexive is strongly preferred" (Schäfer 2012:217).

(234) ***Naturally reflexive verb in the active***

Jón$_i$ rakaði sig$_i$ / ??sjálfan sig$_i$ / Guðmund.
Jón shaved REFL.ACC / ??self.M.ACC REFL.ACC / Guðmundur.ACC
'Jón shaved (Guðmundur).'
(cf. Sigurjónsdóttir 1992:70, Árnadóttir et al. 2011:43)

Finally, naturally disjoint verbs are most naturally used with non-reflexive DP objects. When a reflexive object is used, it is usually the complex reflexive pronoun.

(235) ***Naturally disjoint verb in the active***

Jón$_i$ hatar ??sig$_i$ / sjálfan sig$_i$ / Pétur.
Jón hates ??REFL.ACC / self..ACC REFL.ACC / Pétur.ACC
'Jón hates himself/Pétur.' (cf. Sigurjónsdóttir 1992:70)

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[38]The same facts as are shown in (233)–(235) hold for Dutch (Schäfer 2012).

To summarize, the simplex reflexive pronoun is used obligatorily with inherently reflexive verbs and is often preferred with naturally reflexive verbs over the complex reflexive. With naturally disjoint verbs, the complex reflexive is usually preferred.

We now take a closer look at the simplex and the complex reflexive pronouns in Icelandic with respect to gender, case, number and person.

4.4.2.1.2   The simplex vs. complex reflexive pronoun in Icelandic

The 3rd person simplex reflexive pronoun in Icelandic is the same for both numbers (singular and plural) and all genders (masculine, feminine and neuter). It is found in three out of four cases, accusative, dative and genitive, as seen in Table 4.5. There is no nominative form of the reflexive.

	3
acc.	sig
dat.	sér
gen.	sín

Table 4.5: The third person simplex reflexive pronoun.

Therefore, the anaphor in the active clauses in (236)–(238) is the same whether the antecedent is 3rd person singular masculine *strákurinn* 'the boy', feminine *stelpan* 'the girl' or neuter *barnið* 'the child'; or 3rd person plural masculine *strákarnir* 'the boys', feminine *stelpurnar* 'the girls' or neuter *börnin* 'the children'. The only

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difference between the examples regarding the reflexive is case, but that does not

have anything to do with the person, number or gender of the antecedent.

(236) a. **Strákurinn**   montaði   **sig**   af þessu.
           the.boy.M.NOM.SG boasted.3SG REFL.ACC of this

           'The boy boasted of/about this.'

       b. **Strákarnir**   montuðu   **sig**   af þessu.
           the.boy.M.NOM.PL boasted.3PL REFL.ACC of this

           'The boys boasted of/about this.'

(237) a. **Stelpan**   hegðaði   **sér**   vel.
           the.girl.F.NOM.SG behaved.3SG REFL.DAT well

           'The girl behaved well.'

       b. **Stelpurnar**   hegðuðu   **sér**   vel.
           the.girl.F.NOM.PL behaved.3PL REFL.DAT well

           'They behaved well.'

(238) a. **Barnið**   skammaðist **sín**.
           the.child.N.NOM.SG shamed.3SG REFL.GEN

           'The child was ashamed.'

       b. **Börnin**   skömmuðust **sín**.
           the.child.N.NOM.PL shamed.3PL REFL.GEN

           'The children were ashamed.'

However, we find the equivalent of the 3rd person *sig* for other persons, where

there is a distinction made between singular and plural. This is shown in Table 4.6.

The anaphor is therefore different for a first person singular antecedent *ég* 'I', see

(239a), than for a first person plural antecedent *við* 'we', see (239b). The same goes

for second person singular and plural, as shown in (240a) and (240b), respectively.

(239) a. **Ég**   montaði   **mig**   af þessu.
           I.NOM boasted.1SG me.ACC of this

           'I boasted of/about this.'

	1.SG	1.PL	2.SG	2.PL
acc.	mig	okkur	þig	ykkur
dat.	mér	okkur	þér	ykkur
gen.	mín	okkar	þín	ykkar

Table 4.6: The simplex reflexive pronoun for first and second person.

b. **Við** montuðum **okkur** af þessu.
we.NOM boasted.1PL us.ACC of this
'We boasted of/about this.'

(240) a. **Þú** hegðaðir **þér** vel.
you.NOM.SG behaved.2SG you.DAT.SG well
'You (sg.) behaved well.'

b. **Þið** hegðuðuð **ykkur** vel.
you.NOM.PL behaved.2PL you.DAT.PL well
'You (pl.) behaved well.'

The complex reflexive pronoun, on the other hand, consists of the simplex reflexive pronoun as well as *sjálfur* 'self'. The element *sjálfur* is found in the nominative even though there is no complex reflexive form in the nominative. There is a difference made in number and gender for *sjálfur* 'self', but not in person. This is shown in combination with 3rd person *sig* in Table 4.7.

To summarize, the reflexive pronoun is found in 1st, 2nd and 3rd person. 3rd person *sig* is the same in the singular and the plural but 1st and 2nd person make a distinction between singular and plural. The reflexive pronoun itself does not

	M.SG+3	F.SG+3	N.SG+3	M.PL+3	F.PL+3	N.PL+3
acc.	sjálfan sig	sjálfa sig	sjálft sig	sjálfa sig	sjálfar sig	sjálf sig
dat.	sjálfum sér	sjálfri sér	sjálfu sér	sjálfum sér	sjálfum sér	sjálfum sér
gen.	sjálfs sín	sjálfrar sín	sjálfs sín	sjálfra sín	sjálfra sín	sjálfra sín

Table 4.7: The complex reflexive pronoun for third person.

show gender distinctions whereas the element *sjálfur* 'self' in the complex reflexive pronoun does.

4.4.2.2 The internal structure of the simplex reflexive pronoun

4.4.2.2.1 A difference between ReflPass and the NIP

It has been noted in the literature that even though the NIP is ungrammatical for many speakers, most speakers either find the ReflPass grammatical, or at least much better than the NIP (H.Á. Sigurðsson 1989; Maling and Sigurjónsdóttir 2002; Árnadóttir et al. 2011).[39] It is therefore important to analyse the ReflPass and the NIP differently, as some speakers' grammars can generate the ReflPass even though they cannot generate the NIP. On the other hand, I assume that all NIP speakers can generate reflexive passives.

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[39]This is the case in German as well: The NIP is ungrammatical whereas reflexive passives are grammatical (Schäfer 2012).

There is a crucial difference between the ReflPass example in (229), repeated as (241a), which contains the simplex reflexive pronoun, and (25) of §4.3.3.1, repeated as (241b), which involves the complex reflexive pronoun.

(241)   a.   **ReflPass**

         Svo   var   drifið   sig   á   ball.
         then   was   hurried.DFLT   REFL   on   dance
         'Then there was hurrying off to a dance.'

         b.   **NIP**

         Þar   er   gagnrýnt   sjálfan   sig.
         there   is   criticized.DFLT   self.ACC   refl.ACC
         'There is criticizing of oneself there.'

Many speakers find examples like (241b) ungrammatical, even though they find reflexive passives grammatical. The reasons for this, I propose, are twofold: (i) *sjálfan sig* is a DP, whereas inherently and naturally reflexive *sig* is a φP, lacking D; and (ii) the structure of the ReflPass and the NIP is different in that there is no projected antecedent in the ReflPass, but there is a syntactically projected WIA in the NIP. I argue that (241b) is an instance of the NIP, generated by a different grammar than generates the ReflPass.

The difference in judgments between the ReflPass and the NIP with a complex reflexive pronoun *sjálfan sig* indicates, I propose, that reflexivization is possible without a projected implicit argument. Above we contrasted a simplex reflexive pronoun in the ReflPass and a complex reflexie pronoun in what I argue is the NIP. It is not only the simplex reflexive pronoun, however, that is possible without a

projected antecedent. Let us look at the following results from M&S; in both of these passive examples we have an accusative DP which is the object of a preposition.

(242)   ***Reflexive PP passives in M&S***

    a.   Það var horft á sjálfan sig í speglinum.
           EXPL was looked at self.ACC REFL in the mirror

        (Adolesc. elsewhere 58%, Adolesc. Inner Rvík 48%, Adults 34%)

    b.   Það var bent á sjálfan sig á myndinni.
           EXPL was pointed at self.ACC REFL in the.picture

        (Adolesc. elsewhere 19%, Adolesc. Inner Rvík 11%, Adults 13%)
                             (Maling and Sigurjónsdóttir 2002:122)

Here we have the complex reflexive pronoun *sjálfan sig*. A projected implicit argument is not required for the realization of accusative case object of a preposition. Whether or not a projected antecedent is required in these examples is another matter. The relatively high percentage of adult speakers that accepted (242a) is noteworthy, given the low percentage of adult speakers that accepted the NIP in M&S in general. One of the NIP sentences in M&S and its results is shown in (243).

(243)   ***NIP in M&S***

    Það var beðið mig að vaska upp.
    EXPL was asked me.ACC to wash up

    'I was asked to do the dishes.'
    (Adolesc. elsewhere 74%, Adolesc. Inner Rvík 47%, Adults 8%)
                         (Maling and Sigurjónsdóttir 2002:112)

This may be suggest that many speakers allow reflexivization in the passive even though they do not allow the NIP. We had already seen the same by comparing the ReflPass and the NIP.

4.4.2.2.2 A φP but not a DP

The status of the simplex reflexive pronoun (which I will call *sig* below) is not entirely clear: Jónsson (2011) argues it is an argument whereas Árnadóttir et al. (2011) claim it is a syntactic but not a semantic argument. I argue that it occupies an argument position, but that it does not saturate it. I propose that *sig*, when it is the object of inherently and naturally reflexive verbs, is a defective argument. More precisely, it is a Weak Explicit Argument (WEA), consisting of φ-features but lacking a D-layer. I also argue that it lacks gender. The arguments in favor of this proposal are presented below.

First, *sig* cannot easily be coordinated with a DP.[40]

(244) a. ? Jón rakaði sig og mig / bróður sinn /
           Jón shaved REFL and me.ACC / brother.ACC own.REFL.ACC /

           Guðmund.
           Guðmndur.ACC

           'Jón shaved himself and me / his brother / Guðmundur.'

       b. ? Jón baðaði sig og mig / bróður sinn /
           Jón bathed REFL and me.ACC / brother.ACC own.REFL.ACC /

           Guðmund.
           Guðmundur.ACC

           'Jón bathed himself and me / his brother / Guðmundur.'
                                              (Árnadóttir et al. 2011:77)

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[40]Árnadóttir et al. (2011:77) mark this example with two question marks but other speakers do not seem to find it that bad.

If *sig* and the following DP were of the same type, we would expect coordination to be perfectly fine in the examples above (cf. Chomsky 1957:36). A possible reason why coordination does not work well in these examples might be that *sig* is a φP (lacking a D-layer), i.e., of different type than a regular DP.[41]

Second, there is no Definiteness Effect (DE) in the ReflPass and the NIP, but for different reasons, as I propose. In the NIP, a φP is located in SpecVoiceP. Having φP in SpecVoiceP does not lead to DE as the φ-bundle is not definite (it lacks D). The object must stay in situ since φP blocks movement to a derived subject position — the object can be definite without causing DE. For the ReflPass, I propose that there is no projected WIA in SpecVoiceP. I assume that the D-feature on pronouns is responsible for their definiteness and if *sig* in ReflPass lacks D, then there is no DE in ReflPass (i.e., DE applies to elements with a D-feature).

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[41]Note, though, that it is not always impossible to coordinate phrases of different types or categories (e.g., Sag et al. 1985).

Third, *sig* is ungrammatical with a secondary predicate,[42] unlike *sjálfan sig.* For

apparent counterexamples, see Eythórsson et al. (2016) and Ingason et al. (2016b).[43]

(245)   a.   Jón   dreif sig   {*fullan}   í búðina   {*fullan}
             Jón.NOM drove REFL.ACC   drunk.ACC to the.store   drunk.ACC

             'Jón hurried to the store.'

       b.   Jón dreif Maríu/hana   {fulla}   í búðina
             Jón drove María.ACC/her.ACC   drunk.ACC to the.store

             {fulla}
              drunk.ACC

             'Jón drove María/her, who was drunk, (with him) to the store.'

       c.   Jón dreif sjálfan sig   {?fullan}   í búðina
             Jón drove self.ACC REFL.ACC   drunk.ACC to the.store

             {?fullan}
              drunk.ACC

             'Jón drove himself drunk to the store.'

In both of the sentences above, we see the verb *drífa*, which has the meaning

of 'drive', in the sense of making somebody do something (not in the sense of

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[42]Note, however, that in M&S, the following ReflPass sentence with a secondary predicate was

tested.

(i)   Svo var bara drifið sig   einn   á ball.
      then was just hurried REFL one.NOM/ACC to dance

      (Adolesc. elsewhere 60%, Adolesc. Inner Rvík 48%, Adults 23%)
                                                    (Maling and Sigurjónsdóttir 2015:46)

The high acceptance rate of this sentence is in need of an explanation, as it could be argued that

here a depictive is predicated of either an implicit argument that originates in SpecVoiceP or the

reflexive pronoun.

[43]Examples like (245c) are usually not perfect but definitely not ungrammatical.

driving a car). *Drífa* is a naturally reflexive verb: It can either take a simplex reflexive pronoun (245a) or a DP (245b–c). The former has a somewhat idiomatic reading, as it means 'to hurry'. What is interesting about these examples is that an adjective like *fullur* 'drunk' can only be predicated of the direct object if it is a DP (*Maríu/hana/sjálfan sig*) but not if it is a simplex reflexive pronoun. The contrast is explained if *sig* is a defective argument. On Landau's approach, this would suggest that *sig* lacks D, which is supposed to be necessary for secondary predication — and that is exactly what we have been proposing, that *sig* is a φP, not a DP. However, we will look at the possibility that what matters here for the unavailability of secondary predicates is the fact that the φ-feature set of the WEA lacks gender.

Fourth, when an antecedent is present, such as in the active counterpart of the ReflPass, its φ-features are expressed overtly on the WEA.

(246)   Við drifum   **okkur**   á ball.
        we   hurried.1PL REFL.ACC.1PL on dance
        'We hurried off to a dance.'

Sig is a deficient pronoun but the example above shows that at least person and number are present. That is, something other is missing from REFL, and we are arguing that it is D. Gender does also seem to be lacking.

I propose that the simplex reflexive pronoun lacks D and a gender feature, that it is a bundle of unvalued φ-features — number and person — that need to get valued in the derivation. It is an overt equivalent of a Weak Implicit Arguments

and I am therefore calling it a Weak Explicit Argument (WEA). As mentioned above, on Legate's (2014) analysis, secondary predicates are not possible in the NIP because they cannot be predicated of a WIA, which lacks a D-layer. The complex reflexive pronoun has a richer structure, on the other hand, and has a D-head (and an unvalued gender feature).

If there is no syntactic antecedent in the ReflPass, as I propose, then we have to say something about Binding Principle A. I take WEAs in the ReflPass to suggest that Binding Principle A applies to DP anaphors like *sjálfan sig* but not φP anaphors like *sig*, which are φPs.

On the present approach, reflexivity of *sig* only requires semantic binding. I follow Legate (2014) (see also discussion above), who proposes that a WIA (φP) of the type ⟨e,t⟩ can restrict an argument position but cannot saturate it (cf. Chung and Ladusaw 2004). In the same way, the WEA restricts the object position. The WEA, of the type ⟨e,t⟩, combines with a property of type ⟨e,⟨s,t⟩⟩ via the Restrict operation. This is shown in (247b) for the ReflPass sentence in (247a):

(247) a. Það var rakað sig.
       EXPL was shaved REFL

       'Someone shaved.'

   b.   VoiceP
                        Predicate Modification
                    λx.λe. AGENT(e,x) ∧ shaving(e)
                        ∧ THEME(e,x) ∧ φ(x)

              Voice   vP
        λx.λe. AGENT(e,x)   λx.λe. shaving(e)
                                ∧ THEME(e,x) ∧ φ(x)

                              v   √P
                                              Restrict
                                λx.λe. shaving(e) ∧ THEME(e,x) ∧ φ(x)

                                      √SHAVE   φP
                                  λx.λe. shaving(e)   λx.φ(x)
                                    ∧ THEME(e,x)
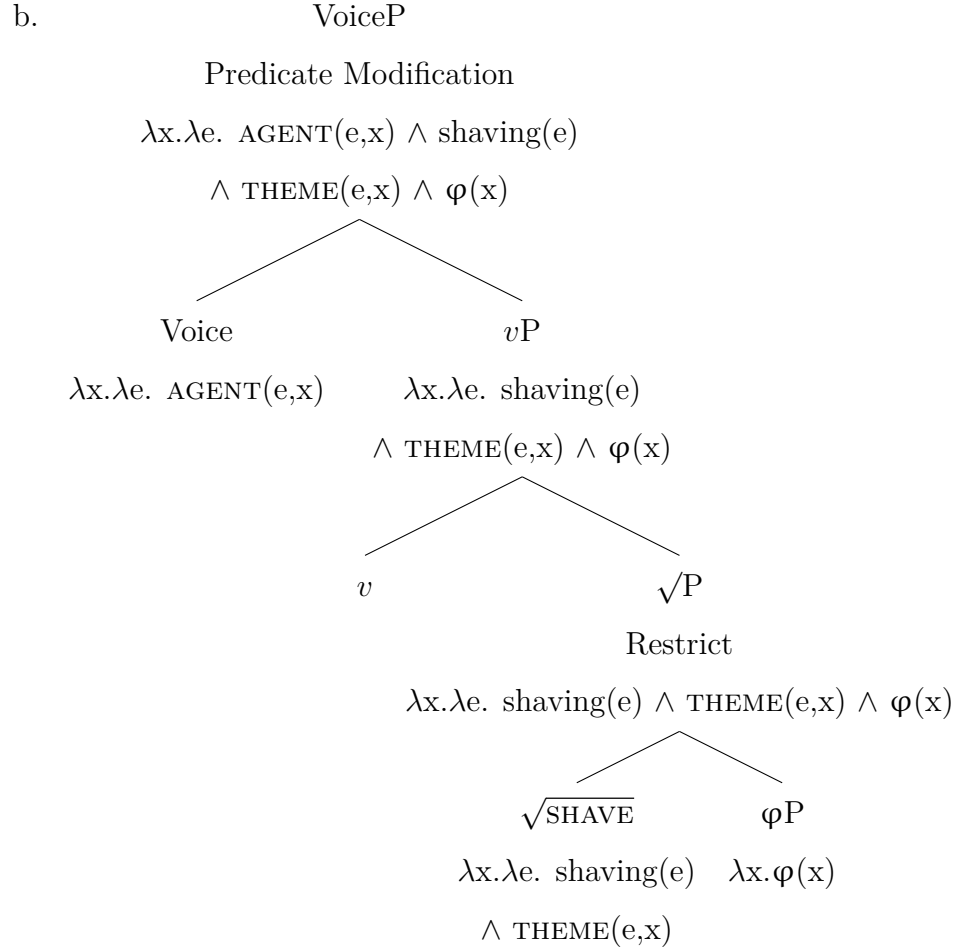
I assume that a φP object of *raka*, of the type ⟨e,t⟩, combines with the verb via
Restrict, ensuring identity of theme and agent. Existential Closure then gives:

(248)   ***Existential Closure***

         ⟦AspP⟧ = λe.∃x [AGENT(e,x) ∧ shaving(e) ∧ THEME(e,x) ∧ φ(x)]

That is, the agent and the theme are bound by the same existential quantifier (there is some x such that x is the agent and x is the theme).

4.4.2.3 Case

If the ReflPass does not have any syntactically projected antecedent, then that creates a problem for our understanding of case: How can a phrase bear accusative case if there is no phrase higher in the same domain that bears structural case?

I argue that accusative reflexive morphology has been extended to the nominative for Weak Explicit Arguments. When the simplex reflexive pronoun has a syntactic antecedent, such as in the active, it is assigned structural case. In the morphological component, this is translated into dependent case (accusative). The realization of the simplex reflexive pronoun in the dependent case, at Vocabulary Insertion, is *sig.*

In the ReflPass, the simplex reflexive pronoun is not assigned case, just like a direct object in the Canonical Passive (CanP). The WEA cannot value the unvalued features of Asp or T, however, because of its defectiveness: either because D is missing or because gender is missing. At Spell-Out its case is translated to structural case which in turn is translated into unmarked case (nominative) at MC. However, there is no nominative form of the reflexive. The derivation does not crash,

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nevertheless, as the reflexive is realized also as *sig*, even though this is unmarked case.[44]

Note that even though there is no nominative case form of the reflexive, nominative reflexive forms as such are not ruled out. Possessive reflexive pronouns are found in the nominative in Icelandic, for example.

Note also that in long-distance binding, the simplex form of the reflexive is used. In nominative case environment, the pronoun is not realized as *sig*, but *hann* 'he', *hún* 'she', *það* 'it', *þeir* 'they.M', *þær* 'they.F' or *þau* 'they.N'. Instead of *sig* being extended to the nominative form, the nominative form of personal pronouns is extended to the paradigm of long-distance reflexives.

The idea of *sig* being the realization of structural case, both where it is realized as nominative and accusative, needs further research which I leave for the future. Note that this idea is simply a way of trying to understand how a reflexive pronoun can be realized even though it does not seem to have a nominative case antecedent. Schäfer (2012) is another way of deriving the same data without a syntactically projected implicit argument.

4.4.2.4   A brief note on the Impersonal Passive

In general, the Impersonal Passive is grammatical with unergatives only, not unaccusatives. There are, however, various examples of unaccusatives being used in

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[44]See Schäfer (2012) for a different analysis.

the impersonal passive (cf. also Perlmutter 1978). The following examples suggest "that semantic features like agentivity or volition may play a role in licensing the impersonal passive in Icelandic" (Thráinsson 2007:268):[45]

(249) a. Það var farið snemma af stað.
EXPL was gone early from place
'People left early.'

b. Það var komið til mín í gærkvöldi út af þessu.
EXPL was come to me last night because of this
'People came to me last night because of this.'

c. Það var alltaf sofnað snemma heima.
EXPL was always fallen.asleep early at.home
'People went to bed early at my place.'

d. Enn er barist og dáið fyrir föðurlandið.
still is fought and died for the.fatherland
'People are still fighting and dying for their fatherland.'

I propose that passive Asp can only select an agentive VoiceP. When an unaccusative is passivized its theme argument is demoted (predicate restriction) but there is also an additional agent role (which is usually not found in the active). The derivation is very similar to that of the reflexive passive.

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[45]Cf. also Abraham and Leiss (2006:502): "Beyond doubt, the impersonal passive does not involve any passive semantics. In this sense, impersonal "passive" is a misnomer to the extent that it is not a true passive. [...] Impersonal passives are always derived from one-place arguments where the demoted subjects of these constructions carry the features [+AGENT], [+HUMAN]."

(250) a. Það   var dáið (fyrir föðurlandið).
           EXPL was died (for   the.fatherland)

     b.   VoiceP
                         Predicate Modification
                     λx.λe. AGENT(e,x) ∧ dying(e)
                        ∧ THEME(e,x) ∧ φ(x)

                   Voice   vP
              λx.λe. AGENT(e,x)   λx.λe. dying(e)
                                  ∧ THEME(e,x) ∧ φ(x)

                          v   VP
                                             Restrict
                           λx.λe. dying(e) ∧ THEME(e,x) ∧ φ(x)

                                    V   φP
                                   die   λx.φ(x)
                              λx.λe. dying(e)
                               ∧ THEME(e,x)
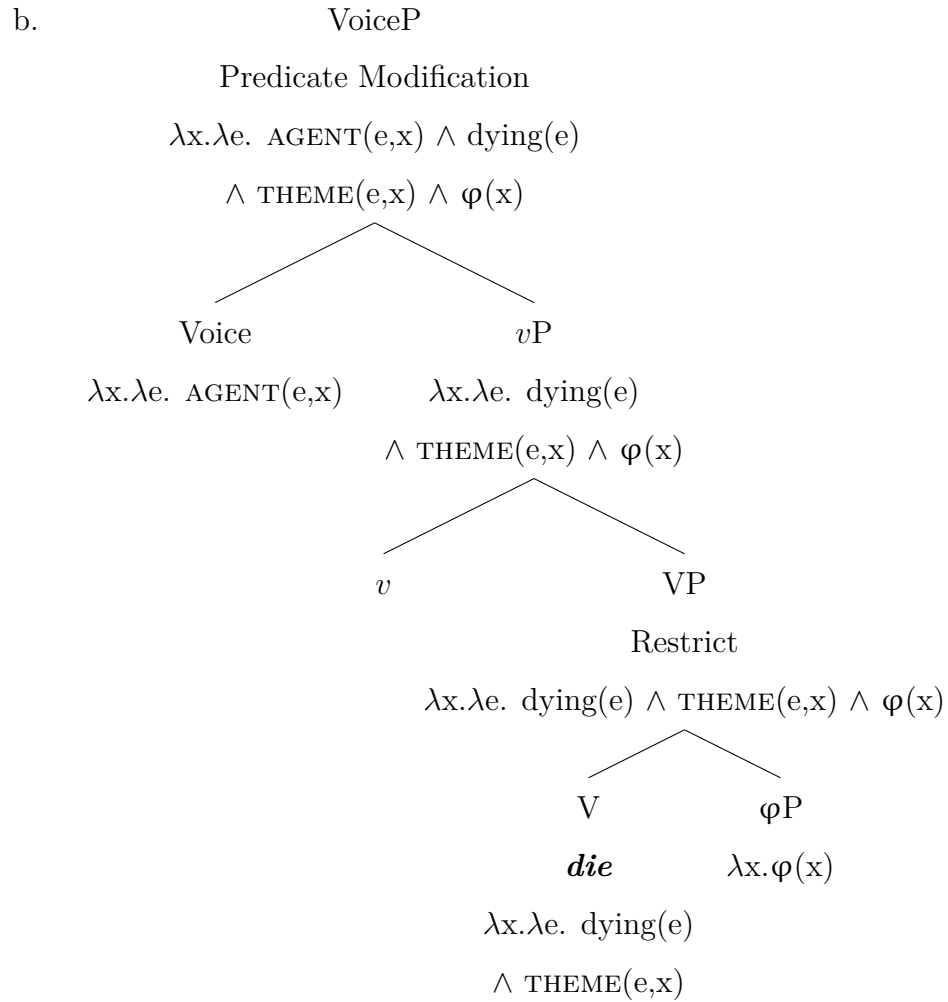
As in the case of the ReflPass, when existential closure applies, it quantifies over both the agent and the theme, and thus ensures identity of the two.

4.4.2.5   Interim summary

Even though superficially they are very similar, the fact that most speakers find the ReflPass grammatical whereas only a subset of these speakers find the NIP

grammatical makes us posit two different analyses, one for the NIP and one for the ReflPass. I argued above that the ReflPass is different from the NIP in not having a syntactically projected implicit argument.

4.4.3 Different accounts

The hypothesis of Weak Explicit Arguments, as well as Weak Implicit Arguments, relates also to somewhat similar ideas found elsewhere in the literature, especially that of the weak/strong distinction in Cardinaletti and Starke's (1996, 1999) work and also Déchaine and Wiltschko's (2002, 2012) work on the three-way distinction of pronouns and different categories of reflexive pronouns. We will discuss these accounts now. Future work should look at how the account I have given above of weak arguments can be reconciled with these similiar, to a certain extent, but different approaches.

Déchaine and Wiltschko (2002, 2012) introduce three categories of pronouns (pro-DP, pro-φP and pro-NP) and five for reflexive pronouns. This suggests that we could expect the implicit arguments and reflexive pronouns in Icelandic to be even more fine-grained than proposed here.

There are also obvious parallels between the current work and Cardinaletti and Starke (1996), especially with respect to reflexive pronouns. Cardinaletti and Starke build on work by Kayne (1975) who divides French pronouns into clitics and strong

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pronouns. Cardinaletti and Starke add the third category, weak pronouns. Together with clitics, weak pronouns form a class of deficient pronouns.

Cardinaletti and Starke (1996) argue that the same form can both be weak (deficient) and strong in the sense of their system. For example, German *ihn* 'him.ACC' is sometimes strong and sometimes weak on their account (Cardinaletti and Starke 1996:29). Furthermore, they argue that inherently reflexive *sich* is a weak pronoun (251a), even though *sich* with other verbs is strong (251b).

(251)   ***German***

    a.   Er hat sich nicht geschämt.
           he has REFL not been.ashamed

    b.   Er hat sich nicht gewaschen.
           he has REFL not washed   (Cardinaletti and Starke 1996:59)

Their conclusion is suggested by the fact that the reflexive pronoun cannot coordinate with a DP. Note that this is not restricted to 3rd person reflexives, as the coordination data in (253) show, which contain a 1st person anaphor.

(252)   a.   * Er erholt sich und ihn.
               he recovers REFL and him.ACC

    b.   Er wäscht sich und ihn.
           he washes REFL and him.ACC
           'He washes himself and him.'   (Cardinaletti and Starke 1996:59)

(253)   a.   * Ich fürchte mich und ihn.
               he fear me.ACC and him.ACC

    b.   Ich wasche mich und ihn.
           I wash me.ACC and him.ACC
           'I wash myself and him.'   (Cardinaletti and Starke 1996:59)

Cardinaletti and Starke (1996:60) also show that *sich* with inherently reflexive verbs cannot be used contrastively even though *sich* with verbs like *waschen* 'wash', which is a naturally reflexive verb, can.

(254) a. * Otto erholt   Sonntags   nicht sich.
         Otto recovers on.Sonday not   REFL

     b.   Otto wäscht morgens   nicht sich, sondern ihn.
          Otto washes in.the.morning not   REFL but   him

                                    (Cardinaletti and Starke 1996:60)

We saw these same tests applied to Icelandic above. We see that Icelandic *sig* and German *sich* are similar in that they are both deficient in some cases — at the very least with inherently reflexive verbs.

4.4.4   Secondary Predicates

In the discussion above, we often made reference to the claim that D is needed for secondary predication. We now take a closer look at this claim.

We saw above that depictives could not be predicated of WIAs. This would be explained on Landau's (2010) analysis if WIAs do not have a D-layer.

(255)   ***Icelandic***

      % Var barið   hana   (*fullur)?
        was beaten her.ACC *drunk.M.NOM.SG

      'Was she hit (by somebody who was drunk)?'

                                    (H.Á. Sigurðsson 2011b:157)

However, depictives have been reported to be grammatical in English and German in environments where there is not an SIA subject, but a WIA.

(256) **English**

This song must not be sung drunk.   (Baker 1988)

(257) **German**

a. Ihr$_j$ wurde nackt$_i$/$_j$ geholfen.
    her.DAT was   naked   helped

b. Auf dem Land   wird auch betrunken gefahren.
    on the country is   also drunk   driven
    'There is also driving drunk in the country.'   (Müller 2008)

These data are puzzling if D is required for secondary predication. In both English and German, adjectives do not show agreement in predicative position. These languages allow depictives to modify Weak Implicit Arguments more freely than languages which show overt agreement, such as Icelandic.

4.4.4.1 Two kinds of secondary predicates

We can distinguish between two kinds of secondary predicates: resultatives and depictives. Landau (2010) argues that secondary predicates can only be predicated of DPs but not of Weak Implicit Arguments, i.e., φPs. However, as we will see, there are indications that depictives do not seem to be predicated of a DP even though resultatives are.

Pylkkänen argues that a depictive, of type $\langle e, \langle s, t \rangle \rangle$, combines with the verb or Voice′ but not directly with a DP. An argument in favor of this analysis comes from Bruening (2016).

(258)   ***English***

    a.   It's best to hammer metal flat wet, but it's OK if it has dried by the time it's completely flat.

    b.   # It's best to hammer metal flat dry, but it's OK if it's wet during the hammering.   (Bruening 2016)

To hammer metal flat is a resultative, the metal becomes flat as a result of the hammering. *Flat* modifies *metal* and denotes the end state of it. If the depictives *wet* (258a) and *dry* (258b) would also modify the DP, then we would expect it to characterize the end state. The examples above show, however, that the depictives modify the hammering event; the hammer is wet in (258a) during the event. The reason for *It's best to hammer metal flat dry* in (258b) being semantically ill-formed is that the sentence *it's OK if it's wet during the hammering* suggests that the depictive *dry* denotes the end state.

Pylkkänen (2008) argues that in addition to attributing a property to an individual, depictives assert that the state described by the adjective holds during the event, as suggested by the examples in (258). Depictives are therefore not just like adjectives but like adverbs in that they attribute a property to an event. Pylkkänen (2008) argues for a Dep(ictive) layer that the *a*P merges with.

(259)　a.　John read the book tired.

b.

Voice′

$\lambda x.\lambda e.\exists s \text{ AGENT}(e,x)$

$\wedge$ reading(e)

$\wedge$ tired(s)

$\wedge$ in(x,s) $\wedge$ $e_o s$

Voice′

$\lambda x.\lambda e.$

AGENT(e,x)

$\wedge$ reading(e)

DepP

$\lambda x.\lambda e.\exists s$ tired(s)

$\wedge$ in(x,s) $\wedge$ $e_o s$

Voice

$\lambda x.\lambda e.$

AGENT(e,x)

vP

$\lambda e.$ reading(e)

$\wedge$ THEME(e,the book)

aP

$\lambda x.\lambda s.$ tired(s)

$\wedge$ in(x,s)

Dep

$\lambda p_{\langle e,\langle s,t\rangle\rangle}.\lambda x.\lambda e.\exists s.$

$p(s,x) \wedge e_o s$

tired

v

read

$\lambda x.\lambda e.$ reading(e)

$\wedge$ THEME(e,x)

DP

the book
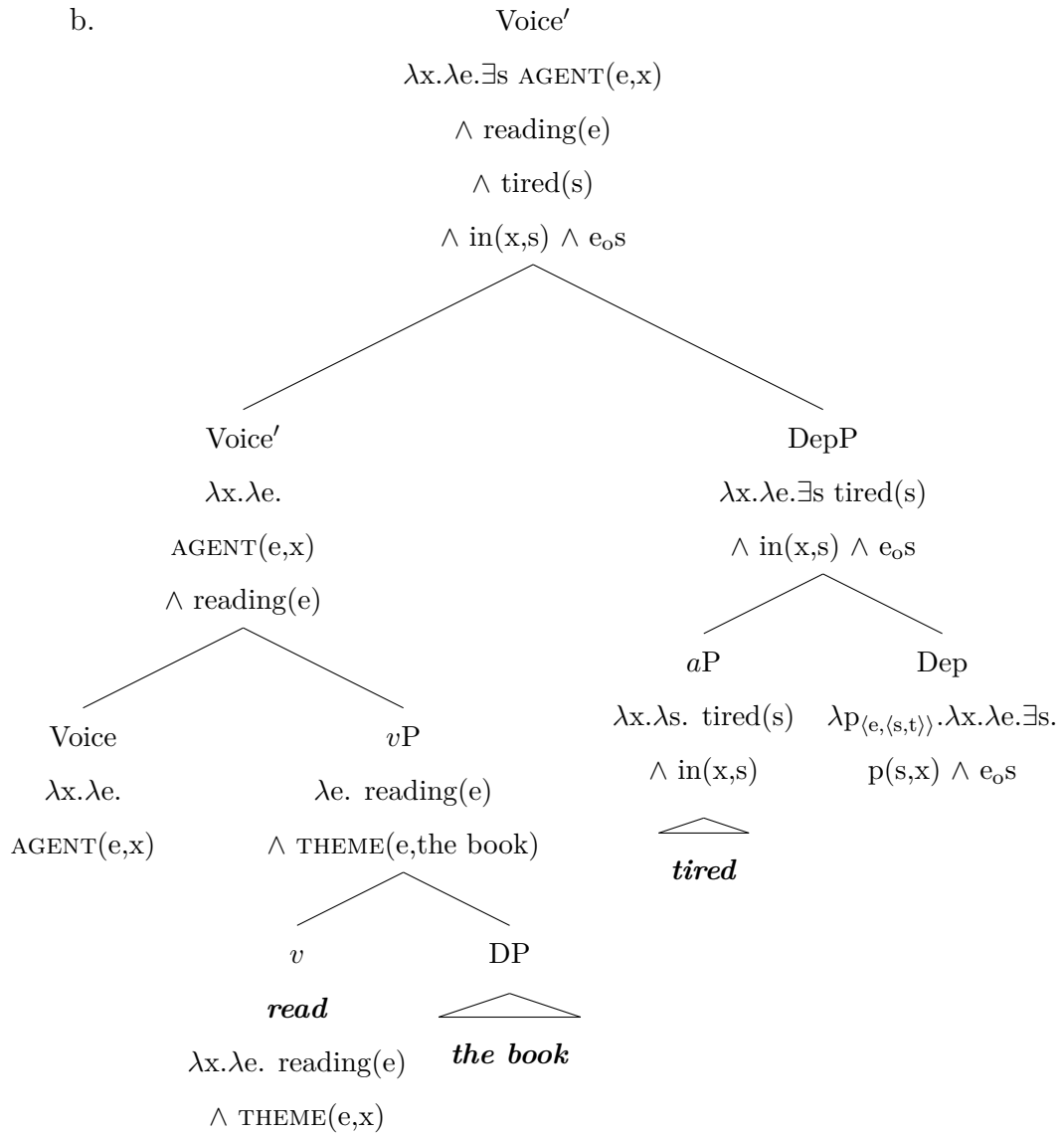
(adapted from Pylkkänen 2008)

Based only on the semantics, there is nothing that predicts that depictives should

not be able to modify a WIA. That is, existential closure should be able to quantify

over the agent and DepP (see, however, discussion in Pylkkänen 2008). And that is exactly what we get in English and German, as we saw above.[46]

I will suggest a solution to this problem which involves a missing D-layer: The adjective probes to get its features valued but φP is not able to do that for some reason.

In primary and secondary predicate position, English and German adjectives get default values. They do not probe for a value. For German, we see that adjectives do have unvalued φ-features by looking at their behavior DP-internally, see (260a–b) and comparing it to their behavior DP-externally, see (260c).

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[46]In resultatives, on the other hand, the adjective is predicated of a DP and it probes upward to get its features valued; the values for gender, number and case will be the same as those on the DP.

(i) a. Jón öskraði sig   hásan
         Jón screamed REFL.ACC hoarse.ACC

b.
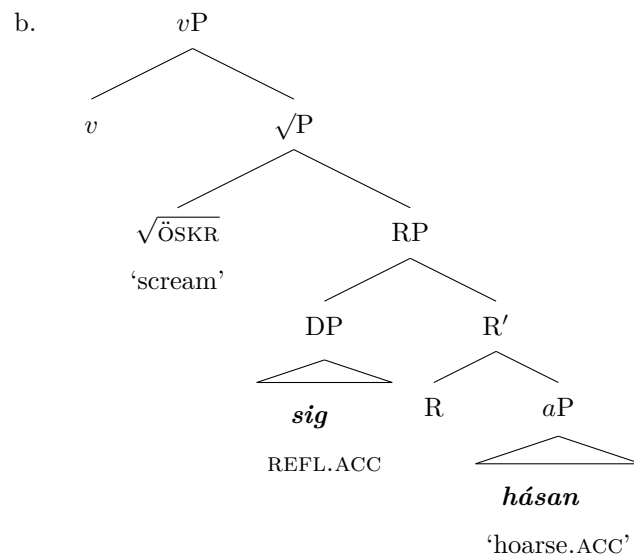
(260)   *German*

    a.   ein   gut-es   Buch
          a.NEUT good-NEUT.SG.INDEF book

          'a good book'

    b.   das   gut-e   Buch
          the.NEUT good-DEF book

          'the good book'

    c.   das   Buch ist gut-∅
          the.NEUT book is good

          'The book is good.'

DP-internally, the features are valued with feature sharing via Merge (see Chapter 3).

A projected WIA/WEA in Icelandic does not have a full set of φ-features, it is defective and therefore cannot value unvalued features on secondary predicates. WEAs have case, number and person, but they lack gender (see §4.4.2.1.2 above). If person is located on D, as is often argued, then WEAs must be defective DPs. When the adjective probes upward for the right features, it will target a defective pronoun.

(261) a. Ég   montaði mig   (fullur/*fullan).
           I.NOM boasted me.ACC (drunk.M.NOM.SG/*drunk.M.ACC.SG)

           'I boasted (drunk).'

b.

```
                          VoiceP
                  _____/    _____
                 /                      \
                DP                      Voice′
              [π:1]              _____/     _____
              [#:SG]            /                    \
              [γ:M]          Voice′                  DepP
              [case:STR]    __/   \__               __/  \__
                 ⌒         /         \             /        \
                 I       Voice        vP          aP        Dep
                                    __/  \__     [#:✓]
                                   /        \    [γ:✓]
                                   v        √P   [case:✓]
                                          __/  \__      ◠
                                         /        \    drunk
                                        DP         √
                                        me      __/  \__
                                      [π:1]     /        \
                                      [#:SG]  √MONT      DepP
                                      [case:STR] 'boast' __/  \__
                                                        /        \
                                                       aP        Dep
                                                     [#:_]
                                                     [γ:✗]
                                                     [case:_]
                                                        ◠
                                                      drunk
```
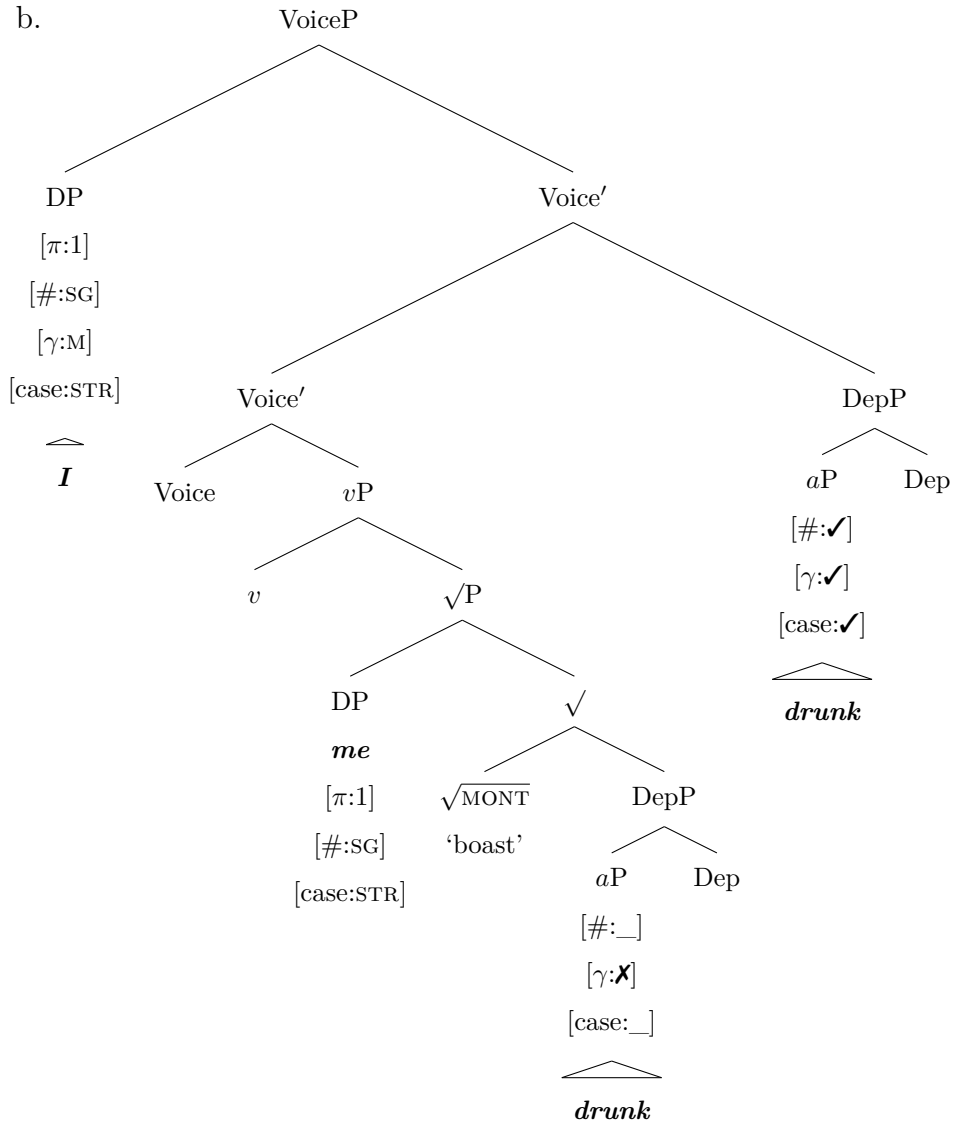
This needs further research with cross-linguistic comparison between languages like

Icelandic, on the one hand, and languages like English and German, on the other.

4.5 Chapter summary

In this chapter, I demonstrated that an approach that makes a clear distinction between actives and passives in language is too simple. I extended Legate's (2014) analysis of the NIP to the IMC and the AspPass. I argued that these structures all have a projected φP in SpecVoiceP.

Furthermore, I argued that what being a passive comes down to is Existential Closure of the external argument. Also, I argued that Voice does not encode EC and that it does not come in flavors, such as $Voice_{PASS}$ or $Voice_{ACT}$.

Chapter 5

Interaction of Voice and case

5.1 Introduction

In Chapters 2–3 we focused on case and case-related matters and in Chapter 4 we focused on Voice and implicit arguments. In this chapter we will continue our research, with an emphasis on the interaction of case and Voice.

We start in §5.2 by discussing dative-accusative (DAT-ACC) structures in passives without a projected implicit argument and in an active construction. When we discussed the New Impersonal Passive (NIP), the Impersonal Modal Construction (IMC) and the Aspectual Passive (AspPass) in Chapter 4, we emphasized the importance of there being a projected implicit argument bearing nominative case for accusative case being assigned to the object. Furthermore, when we discussed the ReflPass, we argued for the accusative form *sig* really being nominative as there was no other argument bearing nominative (with structural case in syntax) higher in the clause. In §5.2, on the other hand, we discuss two passive constructions where the

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direct object is realized in the accusative case even though there is no nominative case argument higher in the clause. Crucially, both these passive constructions have an indirect dative argument. For these passives, we make a connection to DAT-ACC active structures found in Faroese and, to some extent, Icelandic.

In §5.3 we look at stative and resultative participles in Icelandic. These have important implications for case as they further corroborate that Voice is the locus of quirky case.

Finally, §5.4 looks at quirky case from the perspective of attributive passive participles. We introduce an interesting problem, which we call the Quirky Case Problem.

5.2 Dative-Accusative constructions

5.2.1 Introduction

We now turn our attention to three constructions. What they have in common is a dative argument generated in SpecApplP and an accusative object, even though there is no nominative argument around. Two of these constructions are passives and the third one is an active construction.

(1)   ***Applied Reflexive Passive***

    % Það   var   fengið   sér   öllara.
       EXPL was gotten.DFLT REFL.DAT beer.ACC

     'People got themselves a beer.'   (Eythórsson 2008a:187)

(2) *DAT-ACC **passive***

% Var þeim   ekki einu sinni sýnt   íbúðina   fyrst?
was them.DAT not even   shown.DFLT the.apartment.ACC first

'Weren't they even shown the apartment first?'   (Jónsson 2009b:303)

(3) *DAT-ACC **active***

% En hey, hljómsveitin er samt ekki slæm þó   mér   líkar
but hey the.band.F   is still not bad   though me.DAT likes.3SG

hana   ekki.
it.F.ACC not

'But hey, the band isn't bad although I don't like it.'
(Árnadóttir and E.F. Sigurðsson 2013:97)

The constructions in (1)–(2) are reminiscent of the NIP: We see passive morphology and accusative case is assigned to the direct object. Both arguments are in situ in (1) whereas the dative argument moves to subject position in (2). That (2) is grammatical for some speakers is puzzling given our analysis of the NIP, where a nominative case WIA was located in SpecVoiceP, blocking movement to subject position. In (2) we have a direct object in the accusative case, but the indirect object can nevertheless move to subject position. As a matter of fact, Jónsson (2009b) uses data like (2) to argue that Maling and Sigurjónsdóttir's (2002) active analysis cannot be correct. On their analysis of the NIP, there is a *pro* subject located in SpecTP. Obviously, such an analysis is not compatible with a dative case argument moving to SpecTP. Furthermore, (2) is a problem for any analysis of the NIP that places a projected implicit argument in a position blocking movement of internal arguments.

I argue that both (1) and (2) differ from the NIP, most importantly in that these constructions do not have an implicit external argument. That means that we need a different explanation for the accusative case assignment.

It is important to note that, as far as I know, no speaker of Icelandic realizes a theme argument of (intransitive) unaccusatives in the accusative case in the active, neither when it moves nor when it stays in situ, in object position (see also Jónsson 2009b:289, H.Á. Sigurðsson 2011b:161)

(4)   ***Active***

    a.   Einhver bíll   / *Einhvern bíl   hvarf.
          some   car.NOM / *some   car.ACC disappeared
          'Some car disappeared.'

    b.   Það hvarf   einhver bíll   / *einhvern bíl
          EXPL disappeared some   car.NOM / *some   car.ACC

This suggests that the dative argument in examples like (3) is important for the realization of accusative case. I will argue that in the structures above, for some speakers, Appl assigns structural case in DAT-NOM constructions (for others T and Asp establish a relation with the theme DP). For most speakers, structural case assignment in general is realized as unmarked case (nominative) on the disjunctive case algorithm if there is no other structurally case marked DP higher in the clause. For some speakers, however, structural case is realized as accusative if there is a dative argument higher in the same clause. This means that accusative case is dependent on dative or nominative case for some speakers.

On the current account, the dependent case realization algorithm (cf. Marantz's 1991 case realization disjunctive hierarchy; see §2.2.1) is about the realization of structural case. We have been working with the idea that if there are two structurally case marked DPs in a clause, the lower one will be realized in the accusative and the higher in the nominative. By adding dative marked DPs to the case realization algorithm, we are not stating that dative is structural case, but simply that it can affect how DPs marked for structural case are realized at PF.

We will now take a closer look at the constructions shown above. We start by discussing the DAT-ACC passives as in (2).

5.2.2 Dative-Accusative passives

It has been pointed out (Jónsson 2009b, Árnadóttir and E.F. Sigurðsson 2008) that passive clauses with a dative subject and an accusative object are grammatical for some speakers of Icelandic. (5) was tested in Var1 (see Jónsson 2009b, Thráinsson et al. 2015) where the DP immediately following the finite verb is located in SpecTP (yes/no questions are a fairly robust subject test for Icelandic).[1]

(5)   *DAT-ACC **passive***
     Var þeim   ekki einu sinni sýnt   íbúðina   fyrst?
     was them.DAT not even   shown.DFLT the.apartment.ACC first
     'Weren't they even shown the apartment first?'

---

[1]Below I will refer to survey data results from Var1 and REAL. For discussion on these surveys, see §4.3.2 above.

This is a novelty in Icelandic syntax. The standard is DAT-NOM pattern, as shown in (6) below, where the participle and the finite verb agree with the nominative DP (see also discussion on participle agreement with ditransitive passives in §2.2.3.3.2).

(6) *DAT-NOM **passive***

Henni   voru gefnir   hattarnir.
her.DAT were given.M.NOM.PL the.hats.M.NOM.PL

'She was given the hats.'   (H.Á. Sigurðsson 1996)

DAT-NOM structures in the passive where neither the passive nor the passive participle show agreement with the nominative object are also found sometimes, as pointed out by Árnadóttir and E.F. Sigurðsson (2008). However, most speakers do not seem to find them grammatical (Árnadóttir and E.F. Sigurðsson 2013), and they have been reported as ungrammatical (H.Á. Sigurðsson 1996). (7a) is an attested example.

(7) *DAT-NOM **passive without agreement***

a.   Þegar mér   var gefið   miði   [...]
     when me.DAT was given.DFLT ticket.M.NOM.SG

     'When I was given a ticket ...'   (https://goo.gl/Jj48nE
                                              Árnadóttir and E.F. Sigurðsson 2008)

b.   * Henni   var gefið   hattarnir.
     her.DAT was given.DFLT the.hats.M.NOM.PL

     Intended: 'She was given the hats.'   (H.Á. Sigurðsson 1996)

Jónsson (2009b) argues that the fact that various speakers find (5) grammatical shows that Maling and Sigurjónsdóttir's (2002) claim that the NIP contains a *pro* subject cannot be correct. I agree that (5) does not contain a projected implicit

argument, neither weak nor strong as the dative would have to move past the implicit argument projected in SpecVoiceP — and we argued that WIAs block such movement in the NIP. On the other hand, I argue that this is a different construction from NIP and that we need to analyze the two differently (see also Árnadóttir and E.F. Sigurðsson 2012). In §5.2.6 I link the DAT-ACC passive to the Applied Reflexive Passive grammar.

Jónsson (2009b) uses the grammaticality of DAT-ACC passives (for some speakers) to argue against Maling and Sigurjónsdóttir's (2002) active impersonal analysis: Because the dative argument can move to subject position and the direct object is in the accusative, then the NIP cannot have a *pro* subject.

I argue that DAT-ACC passives are actually not part of the NIP. As do Árnadóttir and E.F. Sigurðsson (2012) who point out that ditransitives with an accusative indirect object are problematic for Jónsson. *Leyna* 'conceal' is such a verb; it takes accusative indirect object and dative direct object.

(8)   a. % Í gær   var leynt   mig   sannleikanum.
            yesterday was concealed.DFLT me.ACC the.truth.DAT
            'Yesterday, the truth was concealed from me.'

      b. * Í gær   var mig   leynt   sannleikanum.
            yesterday was me.ACC concealed.DFLT the.truth.DAT

      c. Í gær   var ég   leyndur   sannleikanum.
            yesterday was I.NOM concealed.M.NOM.SG the.truth.DAT

                               (Árnadóttir and E.F. Sigurðsson 2012)

In (8a), we see an NIP sentence with *leyna* 'conceal': both the accusative indirect object and the direct object are in situ. If indirect objects can A-move to SpecTP in the NIP, we expect the indirect object of *leyna* 'conceal' to be able to do that as well. However, that is not grammatical, as shown in (8b). The answer why that is might be that only inherently-case-marked arguments can move in the NIP. Why that would be is not clear, though. Another possibility would be to say that accusative case is not realized in the NIP when the DP A-moves (cf. (8c), which is a grammatical CanP example). But if we say that, then we can just as well say that A-movement of direct accusative objects is not blocked in the NIP — they are just realized in the nominative under A-movement. This is an unsatisfying answer even though there could easily exist a grammar that realizes structural case as accusative when it does not move, irrespective of there being a nominative case argument higher in the same clause (see, e.g., Baker and Vinokurova's (2010) configurational account of Sakha; see also Levin and Preminger 2015).

Another thing that may suggest that the DAT-ACC passive has a different structure than the NIP comes from Var1. One sentence with DAT-ACC passive was tested (9) in Var1 and one NIP sentence with a ditransitive (10). The raw results for each sentence are shown below.

(9)   DAT-ACC ***passive in Var1***
       Var þeim   ekki einu sinni sýnt   íbúðina   fyrst?
       was them.DAT not even   shown.DFLT the.apartment.ACC first
       'Weren't they even shown the apartment first?'
       (yes N: 177 (23%), ? N: 107 (14%), no N: 485 (63%))

(10)   ***Ditransitive NIP in Var1***

Það   var sýnt   þeim   bæklinga   áður en þau fóru.
EXPL was shown.DFLT them.DAT brochures.ACC before   they left

'They were shown brochures before they left.'
(yes N: 135 (18%), ? N: 80 (11%), no N: 550 (72%))

If we take a look at the difference between the DAT-ACC passive in (9) and the ditransitive NIP in (10), we see that more speakers on the whole accepted the DAT-ACC passive than accepted the ditransitive NIP (177 vs. 135, respectively). The difference is not so big in the two youngest groups (142 vs. 129) but it is, relatively speaking, much bigger in the older groups (35 vs. 6). The difference among the older speakers strongly suggests that it is possible to acquire the DAT-ACC grammar without acquiring the NIP grammar — the two are distinct.

Importantly, DAT-ACC structures in the passive and the active are found in Faroese whereas the NIP is not, as we shall now see. That shows that an NIP grammar is not needed to generate a DAT-ACC passive.

Faroese is well known for its DAT-ACC pattern in the active (Barnes 1986, Eythórsson and Jónsson 2003, Woolford 2003, Thráinsson et al. 2004) with verbs that at an older stage exhibited DAT-NOM pattern. Even though DAT-ACC does not seem to be as wide-spread in the passive as in the active, such instances are also found in the passive, with a dative argument moving to subject position. Barnes shows the attested example in (11), from 1939, and reports on his informants preferring the DAT-ACC pattern in (12b) over the DAT-NOM pattern (12a) with the verb *ynskja* 'wish'.

(11)   **Faroese**

Og var honum   óivað   ætlað   somu   viðferð   og
and was him.DAT doubtless intended same.ACC treatment as

Øgmundi
Øgmundur.DAT   (Barnes 1986:35)

(12)   a. ? Honum   varð ynskt ein   góð   ferð.
             him.DAT was wished a.NOM good.NOM journey

        b.   Honum   varð ynskt eina góða   ferð.
              him.DAT was wished a.ACC good.NOM journey

              'He was wished a good journey.'   (Barnes 1986:35)

It is often the case, however, according to Barnes (1986) (also Thráinsson et al.

2004:270–271), that DAT-ACC is dispreferred, as the judgments in (13)–(14) show.

(13)   a.   Ein   kúgv varð seld bóndanum.
              a.NOM cow was sold the.farmer.DAT

              'A cow was sold to the farmer.'

        b.   Bóndanum   varð seld ein   kúgv.
              the.farmer.DAT was sold a.NOM cow

              'The farmer was sold a cow.'

        c. ?? Bóndanum   varð selt   eina kúgv.
              the.farmer.DAT was sold.DFLT a.ACC cow

              'The farmer was sold a cow.'   (Barnes 1986:35–36)

(14)   a.   Ein blýantur   varð givin henni.
              a   pencil.NOM was given her.DAT

              'A pencil was given to her.'

        b.   Henni   varð givin ein   blýantur.
              her.DAT was given a   pencil.NOM

              'She was given a pencil.'

        c. ?? Henni   varð givið   ein blýant.
              her.DAT was given.DFLT a   pencil.ACC

              'She was given a pencil.'   (Barnes 1986:35–36)

On the other hand, Thórhallur Eythórsson's 62 speaker survey, conducted in 2008, suggests that speakers' judgments vary quite a bit. The two sentences in (15) were tested in Eythórsson's survey; the results are also reported below (see Eythórsson 2012:120–121, Eythórsson et al. 2012:236).

(15)   a.   Gentuni   bleiv givin   ein telda.
               the.girl.DAT was   given.NOM a   computer.NOM
               (yes 26%, ? 21%, no 50%)

        b.   Gentuni   bleiv givið   eina teldu.
               the.girl.DAT was   given.DFLT a   computer.ACC
               'The girl was given a computer.'
               (yes 18%, ? 21%, no 61%)   (Eythórsson et al. 2012:236)

A low percentage of speakers accepted these sentences. It should be emphasized that the direct object is usually promoted in ditransitive passives, as in (13a) and (14a), rather than the indirect object. That is, if one of the arguments moves to subject position, it is usually the theme, "although where for reasons of focus the direct object cannot easily become subject, the indirect object takes its place" (Barnes and Weyhe 1994:213). When it is possible to move the indirect object to subject position, there is some variation in whether the direct object is in the nominative or accusative.

It may look like the New Impersonal Passive found in Icelandic is also available in Faroese: In addition to DAT-ACC passives reported on above, passives where both arguments stay low seem to be grammatical for some speakers of Faroese.

(16)   a.   Tað varð lovað   henni   ein telda.
               EXPL was promised her.DAT a   computer.NOM

               'She was promised a computer.'

    b.   Tað varð lovað   henni   eina teldu.
               EXPL was promised her.DAT a   computer.ACC

               'She was promised a computer.'   (Eythórsson 2008a:207)

Note that this seems to be possible not only with an accusative case direct object but also nominative case direct object. Therefore, at least the grammar that generates (16a) differs from the Icelandic NIP grammar.

Furthermore, even though the Definiteness Effect does not operate on the indirect dative case object in (16), it does operate on the direct object, see (17).

(17)   a.   * Tað varð lovað   henni   henda teldan.
                EXPL was promised her.DAT this   the.computer.NOM

               Intended: 'She was promised this computer.'

    b.   * Tað varð lovað   henni   telduna.
                EXPL was promised her.DAT the.computer.ACC

               Intended: 'She was promised the computer.' (Eythórsson 2008a:207)

Therefore, when the indirect object does not move, a definite direct object in situ, whether in the nominative or the accusative, leads to a DE violation, unlike the Icelandic NIP.

Furthermore, Eythórsson (2008b) reports on the results for the two sentences in (18) from a study conducted in the Faroe Islands in 2006 (principal investigator Höskuldur Thráinsson) among 243 speakers in four age groups.

(18)   a.   Tað   bleiv sligið   meg.
            EXPL was   hit.DFLT me.ACC

            'I was hit.'
            (yes 1%, ? 5%, no 95%)

       b.   Tað   bleiv lovað   konuni   eina teldu.
            EXPL was   promised the.woman.DAT a   computer.ACC

            'The woman was promised a computer.'
            (yes 51%, ? 20%, no 30%)   (Eythórsson 2008b:88)

The sentence in (18a) is equivalent to the Icelandic NIP. Less then 1% judged this as an acceptable sentence whereas a little more than half of the speakers accepted the ditransitive passive in (18b) where both arguments stay low. We conclude from this that the NIP, with an implicit argument in SpecVoiceP, is not available in Faroese grammar(s) even though there is a grammar that generates passive structures as in (18b). That grammar is different from the NIP grammar.

To summarize, some dialects of Icelandic and Faroese allow DAT-ACC passives. Faroese also allows a ditransitive DAT-ACC passive structure where neither of the arguments moves. It is important to note that in Faroese, the indirect dative argument is invisible to DE. In Icelandic, however, DE operates on the highest argument. It is possible that for some non-NIP speakers that find (9) grammatical, (10) is ungrammatical because the dative argument is the highest argument and is therefore a DE violation (recall that non-NIP speakers do not generate a WIA in SpecVoiceP).

We will discuss this possibility further next, in §5.2.3.

5.2.3 Applied Reflexive Passive

Eythórsson (2008a) points out that in addition to the Reflexive Passive (discussed in §4.4.2 above), which involves a monotransitive verb, a reflexive passive of ditransitives is also grammatical for various speakers. Eythórsson labels this as the Impersonal Ditransitive Reflexive Construction (IDRC) but I will refer to it as the Applied Reflexive Passive (ARP) as the reflexive pronoun in this construction is an applied argument, generated in SpecApplP.

Similar to the Reflexive Passive (ReflPass), the ARP grammar is limited to the simplex reflexive pronoun. It is usually in the dative case and it co-occurs with a direct object in the accusative case.

(19)   ***Applied Reflexive Passive in Icelandic***

a.   Það   var   fengið   sér   öllara.
EXPL was gotten.DFLT REFL.DAT beer.ACC
'People got themselves a beer.'

b.   Það   var   keypt   sér   pizzu.
EXPL was bought.DFLT REFL.DAT pizza.ACC
'People bought themselves a pizza.'   (Eythórsson 2008a:187)

In this construction, the indirect object is an inherently or naturally reflexive pronoun, and therefore simplex but not complex. The verbs *kaupa* 'buy' and *fá* 'get' are obviously not inherently or naturally reflexive verbs with respect to their direct object. On the other hand, the applied argument of *kaupa* can only be a simplex

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reflexive, co-indexed with the agent, as shown in (20). Therefore I call the dative

argument in SpecApplP inherently reflexive.

(20) a. Ég keypti mér   / *Jóni   pizzu.
         I   bought me.DAT / *Jón.DAT pizza.ACC
         'I bought myself a pizza.'

     b. Jón keypti sér   / *mér   pizzu.
         Jón bought REFL.DAT / *me.DAT pizza.ACC
         'Jón bought himself a pizza.'

     c. % Það var keypt sér   / *mér   / *Jóni   pizzu.
         EXPL was bought REFL.DAT / *me.DAT / *Jón.DAT pizza.ACC
         'One bought oneself a pizza.'

In the active sentence in (20a), the subject and the object must be co-indexed.

Therefore, I can buy myself a pizza but I cannot buy, e.g., Jón a pizza. The same

goes for (20b), Jón can buy himself a pizza but he cannot buy anyone else a pizza.

When *kaupa* 'buy' is passivized, only a simplex reflexive pronoun is possible as the

applied argument, as shown in (20c).

Fá 'get' can be used with a reflexive indirect object and a full DP. The meaning

of *fá* is not exactly the same in both cases, as pointed out by Árnadóttir et al.

(2011:50): "the inherently reflexive verb *fá sér (eitthvað)* means 'get oneself (some-

thing)', but the non-reflexive *fá (einhverjum eitthvað)* has a different meaning, 'hand

(something) over (to someone)'."

(21) a. Fáðu   þér   bita.
         get.you.IMPER you.DAT.SG bite
         'Have (yourself) a bite.'

b. Fáðu   mér   bókina.
    get.you.IMPER me.DAT.SG the.book

    'Hand me the book.'

I refer to *fá* as being naturally reflexive with respect to an applied argument.

What is intriguing about the ARP is that even though it has an accusative case object, it is not only accepted by NIP speakers — in Var1, it was accepted by more speakers than the NIP but fewer speakers than the Reflexive Passive of monotransitives (see discussion in Árnadóttir et al. 2011). I show the results for all speakers for the ARP in Var1 in (22) below.

(22)   ***Applied Reflexive Passive in Var1***

a. Það   var auðvitað fengið   sér   hamborgara.
    EXPL was of.course gotten.DFLT REFL.DAT hamburger.ACC

    'People had themselves a hamburger, of course.'
    (yes N: 297 (39%), ? N: 105 (14%), no N: 368 (48%))

b. Þá   var bara keypt   sér   nýjan   bíl.
    then was just bought.DFLT REFL.DAT new.ACC car.ACC

    'Then someone just bought herself/himself a new car.'
    (yes N: 181 (24%), ? N: 98 (13%), no N: 489 (64%))

c. Það   var venjulega valið   sér   kjötrétinn.
    EXPL was usually   picked.DFLT REFL.DAT the.meat.dish.ACC

    'People usually chose the meat dish.'
    (yes N: 130 (17%), ? N: 101 (13%), no N: 533 (70%))
                                        (Árnadóttir et al. 2011:56–57)

The results pattern with Eythórsson's (2008a:187) statement that the ARP seems "to be used by speakers for whom the NC [=NIP] with verbs taking non-reflexive objects is ungrammatical". I interpret that such that the NIP grammar can generate

ARP sentences, but, in addition to that, there are grammars that can generate the ARP even though they cannot generate the NIP.

If *sér* in ARP is a φP, it is a WEA just as reflexive pronouns of the ReflPass. That the reflexive pronoun in the ReflPass is a WEA turned out to be an important property, as the φP can stay low without a projected antecedent and without violating the DE. The DE normally applies to the highest argument in Icelandic, as discussed by Preminger (2014:§10.1.2).

(23) a. * Það virtist dómurunum   kona/konan
          EXPL seemed the.judges.DAT a.woman.NOM/the.woman.NOM

          hafa   skrifað bókina.
          have.INF written the.book

          Intended: 'It seemed to the judges that a/the woman had written
          the book.'

      b. ? Það virtist bara tveim   af dómurunum
          EXPL seemed just two.DAT of the.judges

          kona/konan   hafa   skrifað bókina.
          a.woman.NOM/the.woman.NOM have.INF written the.book

          'It seemed to only two of the judges that a/the woman had written
          the book.'   (Preminger 2014:221)

Consider also the ditransitive CanP examples in (24). The direct object is definite in both (24a) and (24b). In (24a), however, the indirect object is indefinite but it is definite in (24b). Only the former is grammatical.

(24) a. ? Það var gefin   einhverjum strák þessi   bók.
          EXPL was given.F.NOM.SG some.DAT   boy   this.F.NOM.SG book

          'Some boy was given this book.'

      b. * Það var gefin   mér   þessi   bók.
          EXPL was given.F.NOM.SG me.DAT this.F.NOM.SG book

As Eythórsson (2008a:184) points out, the dative argument must be indefinite. We conclude that the DE applies (at least) to the higher argument in the ditransitive CanP. If the reflexive pronoun in the ARP is weak, the ARP should not violate the DE.

We have now seen various examples of inherently and naturally reflexive applied arguments in the ARP. Let us now take a look at the following example.

(25)   Jón gaf   ??sér   / sjálfum sér   / Siggu   bókina
        Jón gave ??REFL.DAT / self.DAT REFL.DAT / Sigga.DAT the.book.ACC

        í jólagjöf.
        in Christmas.present

        'Jón gave himself/Sigga the book as a Christmas present.'
                            (adapted from Árnadóttir et al. 2011:79)

With respect to both the indirect and the direct argument, *gefa* 'give' is a naturally disjoint verb (Sigurjónsdóttir 1992) and we get the complex reflexive pronoun on the indirect object. The following example looks like the ARP, but, based on speakers' judgments, the ARP does not seem to be capable of generating it (see also Ingason et al. 2016b). Rather, the grammaticality of the sentence patterns with the NIP.

(26) % Það   var gefið   sjálfum sér   bókina   í
        EXPL was given.DFLT self.DAT REFL.DAT the.book.ACC in

        jólagjöf.
        Christmas.present

        'Someone gave herself/himself the book as a Christmas present.'

What differs between this example and the ARP examples above is the reflexive pronoun: In ARP it is obligatorily simplex but here we have a complex reflexive pronoun, *sjálfum sér.*

This is a familiar pattern from our discussion on reflexive passives in §4.4.2: The passive of inherently and naturally reflexive verbs with simplex reflexive pronouns (in ReflPass) is fine for many non-NIP speakers. Similarly, the ARP is grammatical for many non-NIP speakers, even though it contains a direct object that is a full non-reflexive DP. However, passives of naturally disjoint verbs containing complex reflexive pronouns seem to be grammatical only for NIP speakers. Below we see that the ARP sentence in (27a) was accepted much more in REAL than (27b). This is expected if (27b) is an NIP sentence.

(27)　　**Results from REAL**

　　　　a.　Þar　var auðvitað fengið　　sér　　hamborgara.
　　　　　　there was of.course gotten.DFLT REFL.DAT hamburger.ACC

　　　　　　'People had themselves a hamburger there, of course.'
　　　　　　(yes N: 128 (66%), ? N: 27 (14%), no N: 40 (21%))

　　　　b.　Þar　er gagnrýnt sjálfan　　sig.
　　　　　　there is criticized self.ACC REFL.ACC

　　　　　　'There is criticizing of oneself there.'
　　　　　　(yes N: 69 (35%), ? N: 36 (18%), no N: 92 (47%))

We take this to suggest that the simplex reflexive pronoun of ARP is a φP, see (27a), and the complex reflexive pronoun in examples like (27b) to be a DP.

Secondary predication data provide further support for the reflexive pronoun in the ARP being a WEA. An adjective like *fullur* 'drunk' can be predicated of a

complex reflexive pronoun and a non-reflexive DP in SpecApplP, as shown for the active and the NIP structures below. Importantly, as we will see, depictives predicated of an indirect object in the ARP are ungrammatical. Note that case on the depictive is telling for what it is predicated of — a dative depictive is predicated of a phrase in the dative case. Note also that depictives in Icelandic can be predicated of indirect objects (Maling 2001:457), unlike English.[2]

(28) a. Ólafur gaf Heimi   {meiddum}   tækifæri {meiddum}.
        Ólafur gave Heimir.DAT {injured.DAT} chance   {injured.DAT}

    b. % Það   var gefið   Heimi   {meiddum}   tækifæri
         EXPL was given.DFLT Heimir.DAT {injured.DAT} chance
         {meiddum}.
         {injured.DAT}

(29) a. Heimir gaf sjálfum sér   {meiddum}   tækifæri
        Heimir gave self.DAT REFL.DAT {injured.DAT} chance
        {meiddum}.
        {injured.DAT}

    b. % Það   var gefið   sjálfum sér   {meiddum}   tækifæri
         EXPL was given.DFLT self.DAT REFL.DAT {injured.DAT} chance
         {meiddum}.
         {injured.DAT}   (Ingason et al. 2016b:63, n. 14)

In (28a), Ólafur is the coach of a soccer team and decides to give Heimir an opportunity to play, even though he is injured. (28b) is an NIP version of this. In both cases, a depictive predicated of the dative DP is grammatical.

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[2]The curly brackets, '{}', are used to show different positions for the depictive in each case.

With respect to both the indirect and the direct argument, *gefa* 'give' is a naturally disjoint verb and we get the complex reflexive pronoun on the indirect object in (29). In (29a), Heimir is simultaneously the coach and a player of the team and decides to give himself a chance to play, despite being injured. Here it makes more sense to have the depictive be predicated of the indirect argument as it matters whether or not he is injured as a player; whether or not a coach is injured does in general not affect her or his ability to coach. In the NIP version of this example, see (29b), the use of the dative case depictive is also grammatical (for speakers for whom the NIP is grammatical).

On the other hand, in the ARP (31) and its active equivalent (30), the indirect simplex reflexive object is incompatible with a depictive. (cf. Ingason et al. 2016b:62, n. 14).

(30) a. Ég fékk mér {*fullum} öllara {*fullum}.
I.NOM got me.DAT *drunk.DAT beer.ACC *drunk.DAT

b. Þau keyptu sér {*glöðum} nýjan bíl {*glöðum}.
they bought REFL.DAT *glad.DAT new.ACC car.ACC *glad.DAT

c. Þú valdir þér {*svangri} kjötréttinn {*svangri}.
you chose you.DAT *hungry.DAT the.meat.dish.ACC *hungry.DAT

(31) a. %Það var fengið sér {*fullum} öllara {*fullum}.
EXPL was gotten REFL.DAT *drunk.DAT beer.ACC *drunk.DAT

b. %Það var keypt sér {*glöðum} nýjan bíl
EXPL was bought REFL.DAT *glad.DAT new.ACC car.ACC

{*glöðum}.
*glad.DAT

c. %Það   var valið   sér   {*svangri}   kjötréttinn
   EXPL was chosen REFL.DAT *hungry.DAT the.meat.dish.ACC

   {*svangri}.
   *hungry.DAT

In these ARP examples, and corresponding actives, depictives are ungrammatical

when predicated of the indirect object. This is explained if the simplex reflexive

pronoun is a φP but not a DP. I therefore conclude that the indirect object in these

sentences (the simplex reflexive) is structurally the same as *sig* in ReflPass, that is,

a WEA.[3]

   In the ARP examples we have seen, the direct object is in the accusative case.

According to Eythórsson (2008a), nominative case on the direct object is ungram-

matical for all speakers.

(32)   ***Applied Reflexive Passive with nominative object***

   *Það   var fenginn   sér   öllari.
   EXPL was gotten.M.NOM.SG REFL.DAT beer.M.NOM.SG

   'People had themselves a beer.'   (Eythórsson 2008a:187)

_____

[3]It should be noted that even though it lacks a D-feature, the WEA blocks A-movement, just

like WIAs in the NIP do.

(i)   a. *Í gær   var öllari   fenginn   sér.
          yesterday was beer.M.NOM.SG gotten.M.NOM.SG REFL.DAT

                                                     (cf. Eythórsson 2008a:187)
      b. *Í gær   var öllara   fengið   sér.
          yesterday was beer.ACC gotten.DFLT REFL.DAT

However, Árnadóttir et al. (2011) found a number of examples as the one above on the Internet, that is, with a nominative object and an agreeing participle. The oldest example they found, from 1930, is shown below.

(33) ***Applied Reflexive Passive with nominative object***
Eftir allar þessar þrautir var [...] fengin   sjer
after all   these trials   was   gotten.F.NOM.SG REFL.DAT

hressing
refreshment.F.NOM.SG

'After all these trials [...] people had themselves some refreshment [...]'
  (Árnadóttir et al. 2011:69; *Lesbók Morgunblaðsins* 17, April 1930, p. 132)

In addition to this, in interviews conducted in the Variation in Icelandic Syntax project, when asked about ARP with accusative direct object, one out of 15 speakers produced instead the ARP sentence in (34), where the participle agrees with the nominative DP (Thráinsson et al. 2013:58).

(34) ***Applied Reflexive Passive with nominative object***
Það   var fenginn   sér   hamborgari.
EXPL was gotten.M.NOM.SG REFL.DAT hamburger.M.NOM.SG

'People had themselves a hamburger.'   (Thráinsson et al. 2013:58)

This suggests that the ARP with nominative and agreement is not ungrammatical for all speakers.

Also, there are attested examples such as (35) with nominative in situ where the participle *fengið* 'gotten' does not agree with the DP *köld pitsusneið* 'cold pizza slice'.

(35)   ***Applied Reflexive Passive with nominative object***

Það   er spilaður póker eða Playstation til 5 á   morgnana   í
EXPL is played   poker or   Playstation to 5 at the.mornings in

mörgum klúbbum og   svo   vaknað   klukkan 3 og **fengið**
many   clubs   and then woken.up o'clock 3 and gotten.DFLT

sér   **köld**   **pitsusneið**   [...]
REFL.DAT cold.F.NOM.SG pizza.slice.F.NOM.SG

'Poker or Playstation is played until 5 in the morning in many football
clubs and then there is waking up at 3 o'clock and having oneself a cold
pizza slice [...]'   (Árnadóttir et al. 2011:75)

The example above is reminiscent of the non-agreeing DAT-NOM variety in the active

(Icelandic C) discussed by H.Á. Sigurðsson and Holmberg (2008) (see (56) below).

It is also reminiscent of non-agreeing DAT-NOM passive structures, see (7a) above,

discussed by Árnadóttir and E.F. Sigurðsson (2008, 2013). If examples like these

reflect some speakers' grammar our analysis has to take that into account.

We have now looked at passives where accusative case is realized on the object.

We will now take a look at yet another construction with dative-accusative pattern.

5.2.4   Dative-Accusative in the active

Most speakers of Icelandic do not find it grammatical to use accusative with verbs

that are traditionally DAT-NOM verbs. However, Árnadóttir and E.F. Sigurðsson

(2008, 2013) discuss various such examples found online.

(36) En hey, hljómsveitin   er samt ekki slæm þó   mér   líkar
     but hey, the.band.F.NOM is still not bad   though me.DAT likes

     hana   ekki.
     it.F.ACC not

     'But hey, the band isn't bad even though I don't like it.'

                                              (https://goo.gl/xfElOk,
                                  Árnadóttir and E.F. Sigurðsson 2013:97)

In the attested example above, the direct object of *líka* 'like' is in the accusative

case. Nominative case on the object would normally be expected, however.

(37) a. Mér   líka   ekki þessar   hljómsveitir.
         me.DAT like.3PL not these.NOM bands.NOM
         'I don't like these bands.'

     b. Mér   líkar   ekki þessar hljómsveitir.
         me.DAT like.3SG not these bands
         'I don't like these bands.'

The finite verb agrees in number with the nominative object in (37a) but not in

(37b). Both versions are widely accepted in Icelandic and many speakers even find

both agreement and non-agreement grammatical (Eythórsson and Jónsson 2009:88–

89, Thráinsson et al. 2015, Jónsson 2016).

Árnadóttir and E.F. Sigurðsson (2013) also discuss a speaker survey they con-

ducted among 36 speakers, in which accusative objects where accepted or produced

to a larger degree than we could have expected. My aim here is not to find out how

wide-spread the use of accusative case with DAT-NOM verbs is but to understand

what kind of a grammar generates such structures.

We mentioned above that DAT-ACC is found in Faroese passives, even though it may not be frequent. In the active, however, DAT-ACC (for older DAT-NOM) is grammatical for most speakers.

(38)   ***Faroese***

    a.   Mær   líkar henda filmin.
            me.DAT likes this   film.ACC

        'I like this film.'

    b.   Henni   tókti   bátin   ringan.
            her.DAT thought the.boat.ACC bad.ACC

        'She found the boat to be bad.'   (Barnes 1986:18)

Faroese therefore shows that a grammar can have dative-accusative in the passive and the active without having the NIP.

Having discussed DAT-ACC constructions in Icelandic and Faroese, we now take a look at how speakers of Icelandic have judged them in recent surveys, before we propose an analysis.

5.2.5 Comparison of the constructions in recent surveys

We saw above results from Var1 on the DAT-ACC passive, the ARP and the ditransitive NIP. Var1 did not test the DAT-ACC active, however. All the constructions just mentioned, including the DAT-ACC active, were tested among Icelandic speakers in REAL. In addition, the ARP with non-agreement and a nominative DP in situ was tested in this survey. We now turn to the results.

In (39) we see the ditransitive NIP example tested with dative indirect object and accusative direct object, whereas in (40) we see three of the DAT-ACC passive examples tested.

(39)   ***Ditransitive NIP in Icelandic in REAL***

Það   var sýnt   þeim   bæklinga   áður en þau fóru.
EXPL was shown.DFLT them.DAT brochures.ACC before they left

'They were shown brochures before they left.'
(yes N: 33 (17%), ? N: 27 (14%), no N: 137 (70%))

(40)   DAT-ACC ***passive in REAL***

a.   Var þeim   ekki einu sinni sýnt   íbúðina   fyrst?
      was them.DAT not even   shown the.apartment.ACC first

'Weren't they even shown the apartment first?'
(yes N: 24 (12%), ? N: 34 (17%), no N: 139 (71%))

b.   Í fyrra   var mér   gefið tvo síma.
      last.year was me.DAT given two phones.ACC

'Last year, I was given two phones.'
(yes N: 39 (20%), ? N: 25 (13%), no N: 133 (68%))

c.   Var eigendunum   ekki einu sinni sýnt   samninginn   fyrst?
      was the.owners.DAT not even   shown the.contract.ACC first

'Weren't the owners even shown the contract first?'
(yes N: 26 (13%), ? N: 21 (11%), no N: 150 (76%))

In general, the results for the ditransitive NIP and the DAT-ACC passive tend to be rather similar. Future research should, however, take a closer look at whether speakers who find the NIP grammatical also find the DAT-ACC passive grammatical. The results from Var1 suggested that many speakers who find the DAT-ACC passive grammatical do not find the NIP grammatical.

In REAL there was a notable difference between the ARP sentence shown below and the DAT-ACC passive and the ditransitive NIP shown above.

(41)   ***Applied Reflexive Passive in REAL***

Þar   var auðvitað fengið   sér   hamborgara.
there was of.course gotten.DFLT REFL.DAT hamburger.ACC

'People had themselves a hamburger there, of course.'
(yes N: 128 (66%), ? N: 27 (14%), no N: 40 (21%))

Much higher percentage accepted (41) than did (39) or (40). That is, many speakers who found the ditransitive NIP to be ungrammatical or questionable found the ARP to be grammatical, and, similarly, many speakers who found the DAT-ACC passive to be ungrammatical or questionable found the ARP to be grammatical. In addition, one sentence was tested in REAL resembling the ARP but with nominative in situ and non-agreement (see also (35) above).

(42)   ***Applied Reflexive Passive with nominative object in REAL***

Það   er sofið   til hádegis og fengið   sér   köld
EXPL is slept.DFLT to noon   and gotten.DFLT REFL.DAT cold.NOM

pitsusneið.
pizza.slice.NOM

'People sleep till noon and have themeselves a pizza slice.'
(yes N: 51 (26%), ? N: 50 (25%), no N: 96 (49%))

About quarter of the participants in REAL accepted this sentence, suggesting that this structure truly is grammatical for some speakers.

Next, we show DAT-ACC active structures with the verbs *hlotnast* 'acquire' and *líka* 'like', both of which usually show a DAT-NOM pattern.

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(43)   *DAT-ACC **active in REAL***

    a.   Honum hafði ekki hlotnast þann   heiður áður.
             him.DAT had   not acquired that.ACC honor before

             'He had not acquired the honor before.'
             (yes N: 69 (35%), ? N: 30 (15%), no N: 97 (49%))

    b.   Honum líkar nýju   tölvuna   ekki.
             him.DAT likes new.ACC the.computer.ACC not

             'He doesn't like the new computer.'
             (yes N: 18 (9%), ? N: 17 (9%), no N: 162 (82%))

Much higher percentage accepted DAT-ACC with *hlotnast* than with *líka*, suggesting a variation between individual verbs. Results reported in Árnadóttir and E.F. Sigurðsson 2013 suggest the same. The speakers in their survey rejected overwhelmingly DAT-ACC pattern with *líka* 'like' and *leiðast* 'be bored' whereas DAT-ACC was accepted a little bit more with *áskotnast* 'acquire'. With *nægja* 'suffice', on the other hand, a little less than half of the speakers produced accusative on the direct object. Let us first look at the results for *líka* 'like', *leiðast* 'be bored' and *áskotnast* 'acquire'.

(44)   *DAT-ACC **active in Árnadóttir and E.F. Sigurðsson 2013***

    a.   Hljómsveitin er fín en mér   líkar hana   samt ekki.
             the.band.F   is fine but me.DAT likes it.F.ACC still not

             'The band is fine even though I don't like it.'
             (yes N: 1, ? N: 1, no N: 34)

    b.   Páli   leiðist   handbolta   mjög mikið.
             Páll.DAT is.bored.by handball.ACC very much

             'Páll finds handball boring.'
             (yes N: 3, ? N: 7, no N: 26)

c. María   áskotnaðist glænýjan   bíl   á dögunum.
    María.DAT acquired   brand.new.ACC car.ACC on the.days

    'María recently got a brand new car.'
    (yes N: 6, ? N: 3, no N: 27)
                                    (Árnadóttir and E.F. Sigurðsson 2013:103–105)

Speakers in Árnadóttir and E.F. Sigurðsson's (2013) judgment task were asked to

write in letters the word form instead of the number 2 in Gunna's response in (45).

Nægja 'suffice' is a DAT-ACC verb in Icelandic. If DAT-ACC were ungrammatical

for speakers in general, we would expect the vast majority to produce nominative.

However, 16 out of 36 speakers produced accusative.

(45)   DAT-ACC **active in Árnadóttir and E.F. Sigurðsson 2013**

        Bjarni: Þarf landsliðið   ekki þrjá   sigra?
        Bjarni: needs the.national.team not three.ACC wins.ACC?

        'Bjarni: Doesn't the national team need three wins?'

        Gunna: Nei, ég held að   liðinu   nægi   2.
        Gunna: no   I   think that the.team.DAT suffice.SBJV 2

        'Gunna: No, I think two (wins) will be enough for the team.'
        (NOM N: 19, ACC N: 16, other N: 1)
                                    (Árnadóttir and E.F. Sigurðsson 2013:102–103)

Even though the speakers in REAL and Árnadóttir and E.F. Sigurðsson's (2013)

judgment task do not represent the population of Icelandic speakers well, especially

with respect to age, it is helpful to look at the results and compare different con-

structions to each other.

Relatively few speakers in general accepted accusative with DAT-ACC verbs in the

two surveys discussed here. The results for *hlotnast* and *nægja*, however, strongly

suggest that there is a lot of inter- and intraspeaker variation with respect to DAT-ACC structures in the active and that these should not be dismissed. Also, Var1 established that the DAT-ACC passive is grammatical for many speakers. It was rejected overwhelmingly, however, in Árnadóttir and E.F. Sigurðsson's (2013) survey, see (46), just like the DAT-ACC structures with *líka* (44a) and *leiðast* (44b). And the same goes for the non-agreeing DAT-NOM passive, see (47).

(46)   DAT-ACC ***passive in Árnadóttir and E.F. Sigurðsson 2013***

       Mér   var sent þessa   mynd í tölvupósti.
       me.DAT was sent this.ACC photo in e-mail

       'This photo was sent to me by e-mail.'
       (yes N: 4, ? N: 3, no N: 28) (Árnadóttir and E.F. Sigurðsson 2013:110)

(47)   ***Non-agr.*** DAT-NOM ***pass. in Árnadóttir and E.F. Sig. 2013***

       Forsetanum   var sent grunsamlegur   pakki   frá
       the.president.DAT was sent suspicious.NOM package.NOM from

       útlöndum.
       abroad

       'A suspicious package was sent to the president from abroad.'
       (yes N: 3, ? N: 4, no N: 28) (Árnadóttir and E.F. Sigurðsson 2013:110)

The results from Hlíf Árnadóttir's survey are somewhat similar with respect to the comparison between the ditransitive NIP (48), the DAT-ACC passive (49) and the DAT-ACC active (50)–(51). The examples in (50a–b) and (51) are the same as tested in Árnadóttir and E.F. Sigurðsson's (2013) survey, see (44a–b) and (45) above.

(48)   ***Ditransitive NIP in Hlíf Árnadóttir's survey***

Var gefið   henni   nýjan   bíl?
was given.DFLT her.DAT new.ACC car.ACC

'Was she given a new car?'
(yes N: 16 (2%), ? N: 22 (2%), no N: 891 (96%))

(49)   DAT-ACC ***passive in Hlíf Árnadóttir's survey***

Var þér   gefið þennan   kjól?
was you.DAT given this.ACC dress.ACC

'Were you given.DFLT this dress?'
(yes N: 30 (3%), ? N: 32 (3%), no N: 869 (93%))

(50)   DAT-ACC ***active in Hlíf Árnadóttir's survey***

a.   Hljómsveitin er fín en mér   líkar hana   samt ekki.
the.band.F   is fine but me.DAT likes it.F.ACC still not

'The band is fine even though I don't like it.'
(yes N: 26 (3%), ? N: 27 (3%), no N: 866 (94%))

b.   Páli   leiðist   handbolta   mjög mikið.
Páll.DAT is.bored.by handball.ACC very much

'Páll finds handball boring.'
*(*yes* N: 46 (5%), *?* N: 13 (1%), *no* N: 865 (94%))*

c.   Magnúsi   hlotnaðist þann   heiður að vera valinn
Magnús.DAT acquired   that.ACC honor to be   chosen

efnilegasti   leikmaðurinn.
most.promising the.player

'Magnús receieved the honor of being chosen the most promising player.'
(yes N: 317 (34%), ? N: 84 (9%), no N: 529 (57%))

(51) *DAT-ACC* **active in Hlíf Árnadóttir's survey**

Bjarni: Þarf landsliðið ekki þrjá sigra?
Bjarni: needs the.national.team not three.ACC wins.ACC?

'Bjarni: Doesn't the national team need three wins?'

Gunna: Nei, ég held að liðinu nægi 2.
Gunna: no I think that the.team.DAT suffice.SBJV 2

'Gunna: No, I think two (wins) will be enough for the team.'
(NOM N: 787 (85%), ACC N: 116 (12%), other N: 26 (3%))

It is interesting that we see a similar trend from one survey to another. The surveys show that *líka* and *leiðast* are dispreferred with a DAT-ACC pattern, whereas a much higher ratio of speakers accepts DAT-ACC with *hlotnast*. The surveys also show that a considerable number of speakers produce accusative with *nægja*. The DAT-ACC passive and the ditransitive NIP was accepted to a similar rate as some of the DAT-ACC active data. Both in Hlíf Árnadóttir's survey and in Árnadóttir and E.F. Sigurðsson's (2013) judgment task, these were largely rejected but accepted to a higher degree in REAL. The ARP, tested in REAL, was accepted by a much higher percentage than any of the other constructions discussed here. Even the non-agreeing ARP with a nominative object was accepted by a higher percentage than many of the other sentences tested.

To summarize, the results show a lot of variation in constructions that are generally not widely accepted, except for the ARP with an accusative direct object. As it is tricky comparing results from one survey to another, we focused here on comparing different constructions and their results within each survey.

Having looked at speakers' judgments for the constructions above, we will propose an analysis for them in §5.2.6. As we have looked at various constructions in both Icelandic and Faroese, it will be of help to the reader to see a summary of the constructions and their variations before we go on to analyze them.

We saw DAT-ACC pattern in the ARP, the DAT-ACC passive and the DAT-ACC active. Such examples are shown below.

(52) a. *DAT-ACC* ***active***

    % Mér   nægir tvo   sigra.
    me.DAT suffices two.ACC wins.ACC

    b. *DAT-ACC* ***passive***

    % Mér   var gefið   bílana.
    me.DAT was given.DFLT the.cars.ACC

    c. ***Applied Reflexive Passive***

    % Það var fengið   sér   kalda   pitsusneið.
    EXPL was gotten.DFLT REFL.DAT cold.ACC pizza.slice

There are grammars of Faroese that generate at least the equivalent of the Icelandic examples in (52a) and (52b). In addition, the dative argument in the Faroese DAT-ACC passive can stay low. An Icelandic DAT-ACC grammar cannot generate such examples, possibly because of a DE violation, but the NIP grammar can.

(53) a. ***Icelandic NIP***

    % Það var sýnt   þeim   bæklinga   áður en þau fóru.
    EXPL was shown.DFLT them.DAT brochures.ACC before   they left
    'They were shown brochures before they left.'   (Jónsson 2009b:303)

b. ***Faroese*** DAT-ACC ***passive***

Tað varð lovað henni eina teldu.
EXPL was promised her.DAT a computer.ACC

'She was promised a computer.' (Eythórsson 2008a:207)

Even though on the surface the sentences in (53) seem to reflect identical grammars, we are labeling the Faroese sentence DAT-ACC passive but the Icelandic example (ditransitive) NIP.

The standard in Icelandic is DAT-NOM for at least the active and the passive equivalent of (52a) and (52b), respectively. There is a lot of variation regarding agreement in the DAT-NOM active but the standard for the DAT-NOM passive is without a doubt agreement. Below we show agreement versions of these, along with agreement with the ARP with a nominative object.

(54) DAT-NOM ***with agreement in Icelandic***

a. Mér nægja tveir sigrar.
me.DAT suffice.3PL two.M.NOM.PL wins.M.NOM.PL

b. Mér voru gefnir bílarnir.
me.DAT were.3PL given.M.NOM.PL the.cars.M.NOM.PL

c. % Það var fengin sér köld pitsusneið.
EXPL was gotten.F.NOM.SG REFL.DAT cold.F.NOM.SG pizza.slice

Non-agreement is very common in the DAT-NOM active but non-agreement in the passive has been reported as ungrammatical. It is frequently heard but its status for speakers who produce such sentences is not clear and needs to be studied further. In REAL, the ARP with a nominative object but non-agreement was accepted by

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about 25% of the speakers, suggesting we should not dismiss it entirely, even though the ARP with an accusative object was accepted much more.

(55) DAT-NOM **without agreement**

a. Mér   nægir   tveir   sigrar.
    me.DAT suffice.3SG two.M.NOM.PL wins.M.NOM.PL

b. % Mér   var   gefið   bílarnir.
    me.DAT was.3SG given.DFLT the.cars.M.NOM.PL

c. % Það   var fengið   sér   köld   pitsusneið.
    EXPL was gotten.DFLT REFL.DAT cold.NOM pizza.slice.NOM

We might think that the three structures in (52) represent one and the same grammar, that the sentences in (54) represent another, and (55) represents the third grammar. It is, however, curious that in these dative-structural case structures, both agreement and non-agreement are widespread in the a DAT-NOM active, agreement in a DAT-NOM passive and DAT-ACC in the ARP. This may indicate that there is an ongoing change in the syntax of Icelandic. Now, however, we turn to an analysis of the DAT-ACC structures discussed above.

5.2.6   Analysis of dative-accusative structures

To start, we may ask whether the structures discussed above, i.e., the ARP, the DAT-ACC passive and the DAT-ACC active, are necessarily the output of one and the same grammar. The answer is that there are grammars that can generate, e.g., one of the structures but not the other two, but I will focus on describing a single grammar that can generate all three. I propose that such a grammar has, first of

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all, a functional head assigning structural case to the direct object and, second, an algorithm at PF that makes structural case be realized as accusative when there is a filled SpecApplP (with a case marked phrase, usually dative).

Recall that we proposed for the non-agreeing DAT-ACC active that nominative case in Icelandic C, henceforth Icelandic C1, is assigned (by Voice), see §2.2.3.3.4. In Icelandic C1, non-agreement is obligatory on the direct nominative object.

(56)   ***Icelandic C1***

       Honum   ??hafa/hefur   alltaf   líkað þeir.
       him.DAT ??have.3PL/has.3SG always liked they.NOM

       'He has always liked them.'

                              (cf. H.Á. Sigurðsson and Holmberg 2008:251)

Icelandic C1 and what I call Icelandic C2 share the same syntax: Appl assigns structural case to the direct object which results in T not agreeing with the DP.

(57)

```
                        vP
                       /  \
                      v    √P
                          /  \
                      √LÍK    ApplP
                      'like'  /   \
                            DP     Appl′
                     [○case:DAT○]  [●case:DAT●]
                          honum        /   \
                        'him.DAT'   Appl    DP
                                   [●D●]    [π:3]
                              [●case:DAT●]  [#:PL]
                              [∗case_STR:__∗] [○case:STR○]
                                           þeir/þá
                                           'they'
```
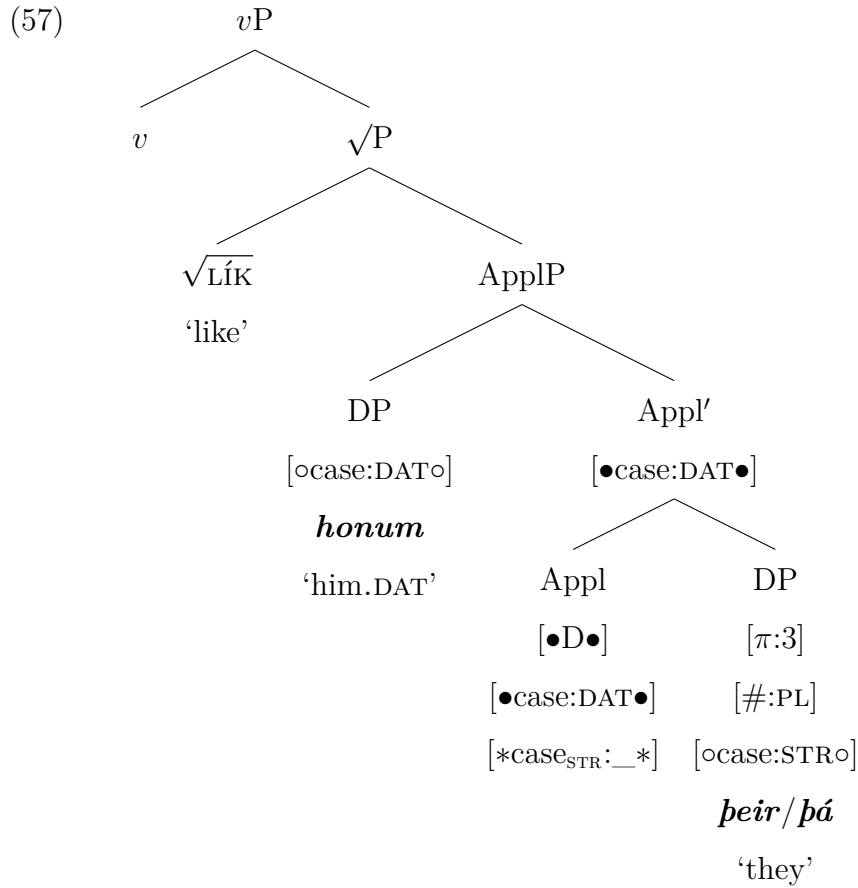
What differs between Icelandic C1 and C2 is how structural case is realized. In Icelandic C1 it is realized in the nominative at PF. In Icelandic C2 it is realized in the accusative when there is a filled SpecApplP.

(58) **Icelandic C2**

Honum hefur alltaf líkað þá.
him.DAT has.3SG always liked them.ACC

'He has always liked them.'

DAT-ACC structures in Icelandic and Faroese deviate from other constructions in that structural case is realized as accusative even though there is no other argument higher in the same dependency also bearing structural case. We propose that the

dative argument in examples like (58) is crucial for the realization of accusative case. For some speakers, structural case is realized as accusative if there is a dative argument higher in the same clause, meaning that accusative case is realized if there is a filled SpecApplP in the same clause.

The same grammar as described here can generate DAT-ACC passives. Appl assigns structural case to the direct object, which in turn is either realized in the nominative (59a) or the accusative (59b).

(59)   a.   *DAT-NOM **passive without agreement***

      Þegar mér   var gefið   miði   [...]
      when me.DAT was given.DFLT ticket.M.NOM.SG

      'When I was given a ticket ...'   (https://goo.gl/Jj48nE
                             Árnadóttir and E.F. Sigurðsson 2008)

   b.   *DAT-ACC **passive***

      Var þeim   ekki einu sinni sýnt   íbúðina
      was them.DAT not even   shown.DFLT the.apartment.ACC

      fyrst?
      first

      'Weren't they even shown the apartment first?'

There is no projected implicit argument in this grammar. If there were it would block the A-movement of the dative argument (see also Jónsson 2009b). This grammar should therefore not be able to generate the following sentence, where both the dative and the accusative argument stay low:

(60)   ***Ditransitive NIP***

% Það   var sýnt   þeim   bæklinga   áður en þau fóru.
    EXPL was shown.DFLT them.DAT brochures.ACC before   they left

'They were shown brochures before they left.'   (Jónsson 2009b:303)

As we have noted, this example is fine for NIP speakers. For non-NIP speakers, including DAT-ACC passive speakers, this example should be ungrammatical — not because of the accusative but because the definite indirect object in situ is a DE violation.

In Faroese, on the other hand, where the NIP is not found, DAT-ACC passives with A-movement of the dative argument to subject position and where neither the indirect nor the direct argument move, are grammatical for various speakers. The reason is that the low definite dative argument does not cause a DE violation.

(61)   ***Faroese***

a.   Gentuni   bleiv givið eina   teldu.
     the.girl.DAT was   given a.ACC computer.ACC

     'The girl was given a computer.'   (Eythórsson et al. 2012:236)

b.   Tað   bleiv lovað   konuni   eina   teldu.
     EXPL was   promised the.woman.DAT a.ACC computer.ACC

     'The woman was promised a computer.'   (Eythórsson 2008b:88)

It remains to be studied whether structures like the following are grammatical for Icelandic DAT-ACC passive speakers, where an indefinite DP stays low and accusative is realized on the direct object in situ.

(62)   ***Icelandic***

% Það   var gefið   einhverjum strák   nýjan   bíl.
EXPL was given.DFLT some.DAT   boy.DAT new.ACC car.ACC

'Some boy was given a new car.'

Finally, the DAT-ACC passive grammar described here also generates ARP structures with accusative direct objects. The reason why the simplex reflexive pronoun in ARP is not a DE violation is because the simplex reflexive pronoun is not definite, it does not contain a D-feature.

(63)   ***Applied Reflexive Passive***

% Það   var fengið   sér   öllara.
EXPL was gotten.DFLT REFL.DAT beer.ACC

'People got themselves a beer.'   (Eythórsson 2008a:187)

Note, however, that the NIP grammar can also generate the ARP. That is, both the DAT-ACC grammar and the NIP grammar can generate the ARP with an accusative direct object. That could explain the reason for the ARP being accepted to a larger degree than the NIP: even though it is generated by the NIP grammar, there is also another grammar that generates it.

The ReflPass is accepted even more than the ARP. The reason for that is that all speakers who find the ARP grammatical should also find the ReflPass grammatical, but not vice versa. There are many speakers, who should find the ReflPass grammatical but the ARP with an accusative object ungrammatical. At least some speakers who find the ReflPass grammatical but not ARP with an accusative object should find ARP with a nominative object grammatical.

5.2.7 Summary

We argued above that structural accusative case is not only dependent on structural nominative case in all nominative-accusative grammars. If there is a filled SpecApplP, structural case is realized as accusative for some speakers.

We described above a grammar that can generate three DAT-ACC structures. It remains to be solved why a speaker can have, e.g., ARP with an accusative object but still have DAT-NOM with verbs like *líka* 'like'. This may be an indication of an ongoing change in the language.

We looked at results from various surveys above. The overview was rather superficial, in that we looked at raw results for what speakers accepted or did not accept. Further research needs to have a closer look at individual speakers, looking at, e.g., which constructions an ARP speaker accepts and which s/he does not.

5.3 Stative and resultative participles

We now turn our attention to stative and resultative participles. They are important for our understanding of case and Voice and their interaction as we will be able to see how much structure is needed for assignment of quirky case.

On the basis of different types of stative participles, we will argue that Voice is needed for quirky case assignment. In order to come to this conclusion, we must look into participles which differ from one another with respect to how rich their

structure is. Our discussion has clear implications for the interaction of Voice and case as I will be arguing for a rich structure of resultative passives — rich enough for dative to be assigned. In, e.g., pure stative participles, on the other hand, there is simply too little structure for quirky case to be assigned.

We start our discussion by looking at different types of participles.

5.3.1 Stative and resultative participles

5.3.1.1 Different types of participles

As is well known, passives are often divided into eventive (or verbal) and stative (or adjectival) passives. An example of each is given below for English, with a paraphrase of their meanings:

(64) **Stative**
      The door is open.
      'The door is in an open state.'

(65) **Eventive passive**
      The door was opened by John.
      'John opened the door.'   (Embick 2003:148)

This dichotomy has turned out to be too simple. There is also a third class, a resultative construction in which the participle denotes a state resulting from a prior event (Embick 2003, 2004):

(66) **Resultative**
      The door is opened.
      'The door is in a state of having become open (state resulting from an event).'   (Embick 2003:148)

Resultatives are similar to eventive passives in that they contain an event variable and similar to statives in that they contain a state as well. The state of an open door is exactly that, "an open state", whereas the state of an opened door is (similar to) a perfect, namely, the state of having become open. I will argue that resultatives can be further divided into different structures, with and without an implicit external argument. This has clear implications for case in Icelandic at least as quirky case assignment is dependent on there being rich enough structure.

Stative participles selected by 'be', including resultative participles, are often taken to be adjectives as they pattern in various ways like adjectives. For example, they can be used attributively, in a prenominal position, just like adjectives (e.g., Freidin 1975, Wasow 1977:338, Levin and Rappaport 1986):

(67)   a. The open / opened letter lay on the table.

        b. The empty / emptied bottle was handed to Al.   (Freidin 1975:398)

Also, verbs like *act*, *become*, *look*, *remain*, *seem* and *sound* in English can take as its complement an adjective (68), but also a stative or a resultative participle (69) (e.g., Wasow 1977:339, Levin and Rappaport 1986).

(68)   a.   Nina remained foolish.

        b.   The customer remained proud of the car.

                          (Levin and Rappaport 1986:646, 652)

(69)   a.   The car remained unsold.

        b.   The vase remained broken.   (Levin and Rappaport 1986:628, 647)

As mentioned already, both resultatives and pure statives involve a state. One of the properties of resultative participles (e.g., *opened* in (66)) that differ from pure statives (e.g., *open* in (64)) is that they are irreversible. A customer who sees a salesman open and then close again a bottle of milk will not buy it; even though it is not open, it is opened. That is, it is in the state of having become open. The opened state holds forever, it is irreversible (Nedjalkov and Jaxontov 1988, Parsons 1990, Kratzer 2000). A pure stative like *open* is reversible, however. We refer to irreversible and reversible states as resultant and target states, respectively (see, e.g., Kratzer 2000).

Note that given the definition of the passive as containing existential closure over an external argument, calling a construction a stative passive is a misnomer if there is no implicit external argument to be existentially closed. At least some resultatives seem to involve such an argument, however (Bruening 2014). In light of that, I will only talk about passives if they have an implicit argument. Statives or stative participles can be pure stative participles and resultative participles; resultatives and resultative participles can either have an implicit argument or not. Resultative passives always have an implicit argument, however. Similarly, I will sometimes refer to attributive participles as passive participles. It should be kept in mind that attributive participles, such as in English, do usually not correspond to

active participles selected by *have* but only to participles selected by *be*; that does not, however, necessarily make them passive participles.

In predicative context, as we saw above for English, *be* can select pure statives, resultatives and eventive passives. In attributive position, on the other hand, eventive passives are not available, as attributive participles denote a state. The fact that participles in attributive position are often taken to be adjectives (e.g., Wasow 1977) reflects that.

5.3.1.2 Differentiating between statives and resultatives

Resultative passives are interesting with respect to their properties, as they are in a way somewhere between stative and eventive passives. For example, in German, predicative stative and resultative passives share the same auxiliary, *sein* 'be', whereas eventive passives are only compatible with *werden* 'become'. In Greek, eventive passives are synthetic, exhibiting non-active morphology, whereas statives and resultatives are periphrastic (Anagnostopoulou 2003). On the other hand, stative passives have been argued to lack verbal structure whereas resultative and eventive passives do have verbal, eventive layer (Embick 2004).

I will now discuss some important differences between statives and resultatives, some of which will help us realize their different structures. A crucial difference between the two is that pure statives do not involve an event, only a state, whereas

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resultatives involve both a state and an event, that is: a state of having undergone a (change-of-state) event.

Below, I go through a few properties that differentiate further between stative and resultative participles. It is important to demonstrate that stative participles can have different structures and, furthermore, that resultative passives have a richer structure than pure stative participles. I will be arguing for a rich structure of resultative passives — rich enough for dative to be assigned. It should be noted that diagnostics in one language used to distinguish between stative and resultative participles do not necessarily work well in another.

(70)   ***Stative vs. resultative participle diagnostics***

     a.   Resultant states and target states

     b.   Morphological differences

     c.   Resultatives allow modification by manner (whereas statives do not)

     d.   Verbs of creation

     e.   Resultative secondary predicates

     f.   Case preservation in resultatives

     g.   Prefixation with *un-*, *ó-* and *ný-*

We now take a closer look at the diagnostics in the list above.

5.3.1.2.1 Resultant states and target states

Statives can differ with respect to whether or not it is possible to return to the initial state (Nedjalkov and Jaxontov 1988:4–5). Parsons (1990) terms the reversible states target states and irreversible statives are called resultant states. These amount, it seems, to Nedjalkov and Jaxontov's (1988) temporary states and irreversible states, respectively. 'Open' is an example of target/temporary state and 'opened' an example of resultant/irreversible state. Nedjalkov and Jaxontov (1988) add the third type, stable state, and give 'know', 'remember' and 'love' as examples. In what follows, we will not include stable states in our discussion.

To highlight the difference between irreversible and reversible states, we can use an adverb like English *still* (*immer noch* in German, see Kratzer 2000, *enn* or *ennþá* in Icelandic). If something is *still* in a certain state, that suggests a temporary state, as it could change. We can use *still* with a reversible state, as in (71a), but not with an irreversible state, as in (71b).

(71)   a.   The milk is still open.

           b.   # The milk is still opened.

Therefore, the difference that is reflected by this diagnostic determines between a target state and a resultant state.

5.3.1.2.2 Morphological differences

Embick (2003, 2004) points out that there is sometimes a morphological difference in English between different types of participles selected by *be*. Even though the form of all three participles is usually the same, when one type differs from the other two, it is the stative participle (Embick 2003). This is shown below for English (72) and Icelandic (73):

(72) | **Root** | **Stative** | **Other participles** | |
|---|---|---|---|
| $\sqrt{\text{BLESS}}$ | bless-èd | bless-ed | |
| $\sqrt{\text{AGE}}$ | ag-èd | ag-ed | |
| $\sqrt{\text{ROT}}$ | rott-en | rott-ed | |
| $\sqrt{\text{OPEN}}$ | open | open-ed | |
| $\sqrt{\text{EMPTY}}$ | empty | empti-ed | (Embick 2003:152) |

(73) | **Root** | **Stative** | **Other participles** |
|---|---|---|
| $\sqrt{\text{OP}}$ | opin-n 'open' | opna-ð-ur 'opened' |
| $\sqrt{\text{TÆM}}$ | tóm-ur 'empty' | tæm-d-ur 'emptied' |

These facts suggest that resultative and eventive passives share something structurally, not shared by the structure of stative participles.

In addition to this, participles of causative alternation pairs show a similar distinction; various anticausatives show different morphology from corresponding causatives, as shown in (74).

(74) **Root**   **Anticausative**   **Other participles**

$\sqrt{\text{FELL}}$ fall-inn 'fallen'   fell-d-ur 'felled'

$\sqrt{\text{SÖKK}}$ sokk-inn 'sunken'   sökk-t 'sunk'

$\sqrt{\text{REIS}}$ ris-inn 'risen'   reis-t-ur 'raised'

$\sqrt{\text{BRENN}}$ brunn-inn 'burnt'   brenn-d-ur 'burnt'

$\sqrt{\text{SPRENGJ}}$ sprung-inn 'blown up'   spreng-d-ur 'blown up'

Participles of the corresponding causatives form a resultative participle with transitive morphology, that is, the morphology used in, for example, the active with an overt agent. The transitive morphology is also used in corresponding eventive passive participles. I take this to suggest that transitive morphology implies an external argument, explicit or implicit. That indicates that transitive resultative participles have a Voice layer that introduces an implicit external argument.

5.3.1.2.3 Modification by manner

Resultatives but not statives allow modification by manner (see also Kratzer 1994), cf. (70), as shown below with the manner adverbial *carefully/vandlega*. This applies to English as well as Icelandic (note that the adjectives *open* (English) and *opinn* (Icelandic) in (75a) and (76a) are pure states whereas *opened* and *opnaður* in (75b) and (76b) are resultatives).

(75) **English**

  a. * the carefully open package

  b. the carefully opened package

(76) **Icelandic**

  a. * hinn vandlega opni pakki
      the   carefully open package

  b. hinn vandlega opnaði pakki
      the   carefully opened package
      'the carefully opened package'

For modification of manner adverbs, the grammaticality or ungrammaticality correlates with the presence or absence of a v head on Embick's analysis: resultatives have a v-layer which explains the grammaticality of manner adverbs whereas the ungrammaticality of manner adverbs in stative passives is because of the lack of v in their structure.

5.3.1.2.4 Verbs of creation

The fourth diagnostic, discussed in Embick 2004, cf. (70d), involves verbs of creation, like *build*. Such eventive verbs take small clauses as complements where the predicate is a state. If, however, the state results from a previous event (= resultative), there should be a contradiction, i.e., whereas it is possible to build a door in an open state, it shouldn't be possible to build a door in a state that resulted from a prior opening event (Embick 2004, see also Alexiadou et al. 2014b).

(77)   *English*

    a.   I built [this door open].
        'I built this door in an open state.'

    b. *I built [this door opened].
        'I built this door in a state resulting from a previous event.'

(78)   *Icelandic*

    a.   Ég byggði [þessar dyr   opnar].
        I   built   this   door open

    b. *Ég byggði [þessar dyr   opnaðar].
        I   built   this   door opened

Therefore the a-examples above are grammatical but not the b-examples.

5.3.1.2.5   Resultative secondary predicates

The next diagnostic, (70e), focuses on resultative secondary predicates — only states can serve as such predicates (Green 1972, Carrier and Randall 1992:184, Embick 2004), both in English and Icelandic (example (80a) is from Whelpton 2011:111).[4],[5]

(79)   *English*

    a.   The door was kicked open.

    b. *The door was kicked opened.

_____

[4]It should be noted that the use of resultative secondary predicates is much more restricted in Icelandic than in English.

[5]As Halldór Ármann Sigurðsson (p.c.) notes, (80b) is possible if the meaning is that the pans have already been cleansed when someone scrubs them, i.e., on a non-resultative reading.

(80)   *Icelandic*

    a.   Hann skrúbbaði pönnurnar hreinar.
           he   scrubbed the.pans   clean

           'He scrubbed the pans clean.'

    b. * Hann skrúbbaði pönnurnar hreinsaðar.
           he   scrubbed the.pans   cleansed

I will not discuss this diagnostic further or how to account for this difference. See,

however, discussion in Embick 2004.

5.3.1.2.6   Case preservation

Sixth, quirky case is preserved in resultative participles but not in pure stative

participles (see also H.Á. Sigurðsson 2012b:204).

(81)   a.   **Active**
           Dyravörðurinn lokaði dyrunum   klukkan sjö.
           the.janitor   closed the.doors.DAT clock   seven
           'The janitor closed the door at seven o'clock.'

     b.   **Eventive passive**
           Dyrunum   var lokað klukkan sjö   (af dyraverðinum).
           the.doors.DAT were closed clock   seven (by the.janitor)
           'The door was closed at seven o'clock (by the janitor).'

     c.   **Stative**
           Dyrnar   voru lokaðar klukkan sjö   (*af dyraverðinum).
           the.doors.NOM were closed   clock   seven (*by the.janitor)
           'The door was closed (i.e., it was in a closed state).'
                                (adapted from Thráinsson 2009:35–36)

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The verb *loka* 'close' takes a dative object in the active, see (81a). In the eventive passive, dative case is preserved, see (81b). When the the root $\sqrt{\text{LOK}}$ forms a pure stative participle, however, dative case is not assigned, see (81c).

Non-structural case is preserved with resultative participles, both with participles of transitive verbs and of unaccusative verbs that assign dative.

(82)   ***Resultative***

       a.   Mörgum spurningum   er enn ó-svarað.
              many   questions.DAT is still un-answered

            'Many questions are still unanswered.'

       b.   Markmiðum okkar er loksins náð.
              goals   our   is finally reached

            'Our goals are finally reached.'

In addition to this, in (82a) we see the use of a prefix that is generally only compatible with resultative participles as we will see in §5.3.1.2.7.

5.3.1.2.7   Prefixation with *un-*, *ó-* and *ný-*

Below I will discuss the diagnostic mentioned in (70g), which has to do with prefixation. I will discuss this diagnostic in some detail here because it will be important for determining the structure of different types of stative participles.

The English prefix *un-* has often been used to diagnose adjectival or stative passives from eventive passives (e.g., Wasow 1977). It has also been pointed out that *un-* is restricted with pure statives, "but applies more or less freely with resulta-

tives" (Embick 2004:359). The prefix *un-* is therefore a good resultative participle diagnostic in English.

Icelandic *ó-* 'un-' and *ný-* 'new(ly), recent(ly)' are the same in this respect: they can prefix participles whose state results from a previous event but they do not prefix eventive participles and do not prefix productively pure stative participles.

(83)   ***English***

    a.   * un-open door

    b.   un-opened door

(84)   ***Icelandic***

    a. ?? ó-opnar dyr
           un-open door

    b.   ó-opnaðar dyr
           un-opened door

(85)   ***Icelandic***

    a.   * ný-opnar dyr
           new-open door

    b.   ný-opnaðar dyr
           new-opened door

In English, the general pattern is as described above even though *un-* prefixation is sometimes possible with states (*unshaven, unhappy*), as Embick (2004) points out.

Icelandic *ó-* can prefix various adjectives and stative participles although its use is limited (see also Thráinsson 1999:190):

(86) a. ó-algengur, ó-djarfur, ó-duglegur,   ó-skýr, ó-skyldur, ó-ljós,
          un-frequent un-daring un-hard.working un-clear un-related un-clear

          ó-tækur
          un-acceptable

     b. ??ó-opinn, *ó-blár, *ó-þungur, *ó-harður, *ó-beittur
          ??un-open *un-blue *un-heavy *un-hard *un-sharp

Ó- is much more productive with resultative participles.

(87) a. ó-opnuð   flaska, ó-bökuð kaka, ó-drýgður   glæpur, ó-lesin
          un-uponed bottle un-baked cake un-committed crime un-read

          bók, ó-brætt   smjör, ó-bætt   tjón,   ó-dagsett bréf
          book un-melted butter un-mended damage un-dated letter

          ó-staðfestar fréttir, ó-skrifuð   bók
          un-confirmed news   un-written book

     b. ?ó-bráðnað smjör, ó-sokkið   skip, ó-fallinn snjór, ó-kominn,
          ?un-melted butter un-sunken ship un-fallen snow un-arrived

          ó-farinn, ??ó-vaknaður maður
          un-left   ??un-waken   man

This holds for both resultative participles of transitive verbs (87a) and intransitive

verbs (87b).

As mentioned above, there is another prefix in Icelandic that can be used for

diagnosing resultatives from statives. This is the prefix *ný-* 'new(ly), recent(ly)'.

This prefix can sometimes combine with adjectives and pure stative participles in

Icelandic, see (88a). However, such a combination is usually ungrammatical, see

(88b).

(88) a. ný-dauður maður, ný-frjálst ríki,   ný-ríkur athafnamaður
          new-dead man   new-free country new-rich businessman

b. *ný-opinn pakki, *ný-hrein panna, *ný-góður matur,
    *new-open package *new-clean pan   *new-good food

    *ný-þreyttur leikmaður
    *new-tired   player

On the other hand, *ný-* prefixation is productive with resultative participles. In (89) we show attributive uses of such participles; in (89a) we see passive participles of transitive verbs and in (89b) we have participles of intransitive verbs.

(89) a. ný-opnaður pakki, ný-hreinsuð panna, ný-byggt hús,
          new-opened package new-cleansed pan   new-built house

          ný-bökuð kaka, ný-eldaður matur, ný-keypt   bók, ný-kveiktur
          new-baked cake new-cooked food   new-bought book new-lighted

          eldur, ný-veiddur fiskur, ný-skrifuð   bók
          fire   new-caught fish   new-written book

      b. ný-fallinn snjór, ný-kviknaður eldur, ný-sloppinn fangi,
          new-fallen snow new-lit   fire   new-escaped prisoner

          ný-sokkið   skip, ný-vaknaður maður
          new-sunken ship new-awaken man

That is, both *ó-* and *ný-* can prefix resultative participles productively but to a lot less degree pure stative participles.

Even though it is possible to use *ný-* with participles of verbs, it is not possible to use the prefix with verbs, such as in the infinitive (90a), in the indicative in the active (90b) or in eventive passives (90c). The same goes for *ó-* prefixation, (91). For comparison we show *ný-* and *ó-* prefixation with the resultative participle of 'write' in (92). Note that *ó-* in Icelandic does not have a reversal meaning as *un-* in English sometimes does (as in verbs like *undo*).

(90)   a.   * María ætlar   að ný-skrifa bók.
            María intends to new-write a.book

       b.   * María ný-skrifaði bókina   á tveimur dögum.
            María new-wrote the.book in two   days

       c.   * Bókin   var ný-skrifuð   af Maríu.
            the.book was new-written by María

(91)   a.   * María ætlar   að ó-skrifa bók.
            María intends to un-write a.book

       b.   * María ó-skrifaði bókina.
            María un-wrote the.book

            Intended: 'María did not write the book.'

       c.   * Bókin   var ó-skrifuð   af Maríu.
            the.book was un-written by María

            Intended: 'The book was not written by María.'

(92)   a.   Bókin   var ný-skrifuð   þegar ég fæddist.
            the.book was new-written when I   was.born

            'The book had just been written when I was born'

       b.   Bókin   var ó-skrifuð   þegar ég fæddist.
            the.book was un-written when I   was.born

            'The book had not been written when I was born.'

Although the active examples above containing *ný-* are ungrammatical, the use of

ný- prefixation is possible in the active when auxiliary *hafa* 'have' selects a perfect

participle prefixed by *ný-*. The same is not true for *ó-*.[6]

_____

[6]Interestingly, in northern Swedish dialects, *o-* 'un-' can prefix verbs, but only in the perfect.

Ny- can also do that in these dialects.

(1)   a.   Jag har   o-äte.
           I   have un-eaten

           'I have not eaten (yet).'

(93)   a.   Jón hafði ný-brotið   stólinn   þegar ég hitti hann.
              Jón had   new-broken the.chair when I   met him

              'Jón had just broken the chair when I met him.'

      b.   Hún hafði ný-hafnað   því að verða   forstjóri fyrirtækisins.
              she had   new-declined it   to become director of.the.firm

      c.   Félagið   hafði ný-hafið   starfsemi þegar ósköpin
              the.company had   new-started activity   when the.misfortunes

              dundu yfir.
              started

(94)   * Jón hafði ó-brotið   stólinn   þegar ég hitti hann.
         Jón had   un-broken the.chair when I   met him

         Intended: 'Jón had not broken the chair when I met him.'

The two prefixes also differ when it comes to *vera búinn* 'be finished' and other aspectual verbs. *ný-* can prefix *búinn* in *vera búinn* constructions, as well as aspectual verbs like *byrja, fara, hætta* when they are selected by *vera*. It does not matter whether these aspectual verbs embed active or passive infinitival clauses, *ný-* can be used in both. Below, this is shown with the active use.

(95)   a.   Ég var ný-búinn   að borða.
              I   was new-finished to eat

              'I had just eaten.'

      b.   Mér   var ný-farið   að leiðast.
              me.DAT was new-gone to get.bored

              'I had just started to get bored.'

---

     b.   Han har ny-komme.
        he   has new-come

     'He has recently arrived.'   (Lundquist 2014:152–153)

Thanks to Halldór Ármann Sigurðsson (p.c.) for pointing this out to me.

c. Hún var ný-byrjuð / ný-hætt að reykja.
   she was new-started / new-stopped to smoke

   'She had just started / quit smoking.'

ó-, on the other hand, cannot prefix any of these.

(96) a. *Ég var ó-búinn að borða.
        I was un-finished to eat

        Intended: 'I had not eaten.' / 'I had not finished eating.'

     b. *Mér var ó-farið að leiðast.
        me.DAT was un-gone to get.bored

        Intended: 'I had not started to get bored.'

     c. *Hún var ó-byrjuð / ó-hætt að reykja.
        she was un-started / un-stopped to smoke

        Intended: 'She had not started / quit smoking.

The behavior of the prefixes *ný-* and *ó-* is important. *ný-* can usually not prefix adjectives or pure statives. Even though *ó-* can prefix various adjectives and pure statives it is more often the case that it cannot prefix these types. Furthermore, as demonstrated above, *ný-* can prefix a perfect participle selected by *hafa* 'have'. This indicates that *ný-* prefixation of resultatives has to do with the perfect. We will now take a closer look at *ný-* prefixation.

Taking a closer look at the meaning of *ný-* and how its prefixation works, it modifies the relation between the reference time and at which point the event culminated.

It should be noted that it is not obvious what *ný-* prefixes syntactically and semantically, that is, it is not obvious whether it is the state or the event that led

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to the result state that is new in, e.g., 'a new-built house'. It is difficult to tease the two apart as when a result state is new, the event that led to it culminated recently, whether or not the whole event took place recently.

I argue, nevertheless, that *ný-* prefixation says that the culmination of the event is new with respect to the reference time, as we will see. Let us consider example (97).[7]

(97)   Context: It took us 20 years to build this house but now it's finally ready.
         ✓ Húsið   er ný-byggt.
         the.house is new-built

This example suggests that *ný-* modifies the state rather than the event. Let us say that there is one event that takes 20 years (rather than many building events over a period of 20 years). The event is old in that it started many years ago. However, at the point of the house being ready we can still use the prefix *ný-*, highlighting that the result state, the culmination of the event, is new. Since *ný-* cannot prefix events (as discussed above) but only stative participles of culminated events (result states), *ný-* is higher than Voice and presumably attaches to an Asp(ectual) layer. The tree below shows this (with the DP in situ before movement).

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[7]Thanks to Remus Gergel (p.c.) and David Embick (p.c.) for pointing out examples like this one to test this matter.

(98) a. Húsið   er ný-byggt.
      the.house is new-built

b.

```
                    AspP
                   /    \
            ný-         /\
          'new-'   Asp    VoiceP
                    |    /      \
                   -t  Voice    vP
                  '-t'        /    \
                            v      √P
                                  /   \
                           √BYGGJ     DP
                           'build'   /‾‾‾\
                                    húsið
                                 'the house'
```
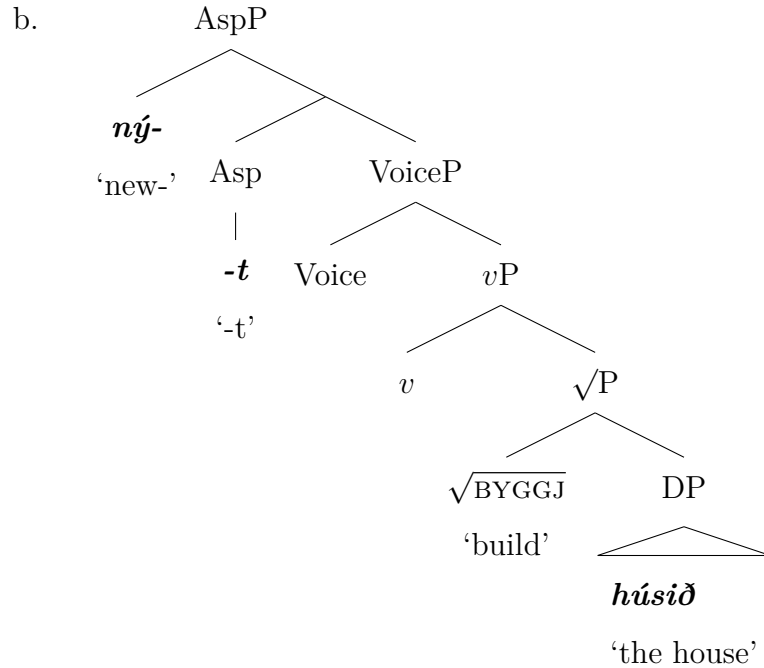
As we will see below, I adopt an approach where the perfect and the resultative are split up. We therefore presumably need at least two aspectual layers, Asp_{PERF} and Asp_{RES}, even though the tree above only shows one.

In the following, I largely adopt Iatridou et al.'s (2001) and Pancheva's (2003) analysis of the perfect and the resultative and their way of implementing the Extended Now theory. First, let us take a look at the semantics of the resultative.

(99)   ⟦RESULTATIVE⟧ = $\lambda P \lambda i \exists e \exists s[i \; ⊐⊏ \; \tau(s) \wedge P(s,e)]$

        $i \; ⊐⊏ \; i'$ iff $i \cap i' \neq \emptyset \wedge \exists t \exists t'[t \in i \wedge t \notin i' \wedge t' \in i' \wedge t' \notin i \wedge t < t']$

$\tau(s)$ is the result state and it holds at a time that includes the endpoint of the reference time. The semantics suggest that the event culminates, leading to the result

state. The reference time interval i and the result state overlap, their intersection is not $\emptyset$ and neither of them contains the other.

Resultant (irreversible) states hold at a reference time such that they have an extended relevance even though the event that led to the state has culminated. This is similar to the perfect and, as a matter of fact, there is not always a clear difference between resultant states and the perfect. To account for the perfect, it is sometimes assumed that it has an extended or continued relevance at the reference time, cf. McCoard's (1978) Extended Now analysis, which has been adopted in more recent analyses, such as those of Iatridou et al. (2001) and Pancheva (2003) (see also discussion in §4.3.4.9 above).

(100) $[\![\text{PERFECT}]\!] = \lambda p.\lambda i.\exists i'\ [\text{PTS}(i',i) \wedge p(i')]$ and $\text{PTS}(i',i)$

       iff i is a final subinterval of i'

The perfect introduces an interval, the perfect time span (PTS), and relates it to the reference time such that the reference time is the final subinterval of the PTS (Iatridou et al. 2001, Pancheva 2003). That is, the reference time is part of the perfect time span, extending the interval of the perfect to the reference time (Extended Now).

In Iatridou et al. 2001 and Pancheva 2003, the perfect and the resultative combine, with the former taking the latter as its argument.

(101)   ⟦PERFECT⟧(⟦RESULTATIVE⟧)

= λp.λi.∃i′ [PTS(i′,i) ∧ p(i′)](λi∃e∃s[i ⊃⊂ τ(s) ∧ P(s,e)])

= λi.∃i′ [PTS(i′,i) ∧ ∃e∃s[i′ ⊃⊂ τ(s) ∧ P(s,e)]

The reference time is the final subinterval of the PTS and the result state of the
culminated event holds at a time that includes the endpoint of the reference time
(Pancheva 2003). The resultative semantics relate the event and its culmination,
on the one hand, and the reference time, on the other, and the perfect makes the
reference time be the final subinterval of the PTS (Extended Now). The semantics
introduced above does not say anything about whether the state is irreversible
(resultant state) or not (target state).[8]

On the approach taken here, the perfect and the resultative have a somewhat
similar aspectual semantics. When the resultative combines with a verb phrase, the
outcome is properties of times. And when the perfect combines with the resultative,
the result is properties of times, as well. It is therefore not easy to tease apart a
perfect and a resultative construction (cf. Larsson 2008 for *vera búinn* in Icelandic;
see also Katz 2003 who discusses various properties of statives shared by the perfect).

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[8]In this respect, however, it is interesting that Nedjalkov and Jaxontov's (1988) perfects and re-
sultatives amount to resultant states and target states, respectively, as noted by Kratzer (2000:385,
n. 2). Parsons (1990) also uses resultant state interpretation to interpret the perfect, as pointed
out by Kratzer.

We saw above that Icelandic *ný-* can prefix participles of various sorts, see (102).

These participles all denote properties of times.

(102)   a.   Bókin   var ný-skrifuð   þegar ég fæddist.
               the.book was new-written when I   was.born

             'The book had just been written when I was born'

         b.   Ég var ný-búinn   að borða.
               I   was new-finished to eat

             'I had just eaten.'

         c.   Mér   var ný-farið   að leiðast.
               me.DAT was new-gone to get.bored

             'I had just started to get bored.'

         d.   Hún var ný-byrjuð   / ný-hætt   að reykja.
               she   was new-started / new-stopped to smoke

             'She had just started / quit smoking.'

Ný- productively prefixes participles that denote properties of times and modifies the relation between the reference time and the time of the culmination of the event. The following adds semantics of *ný-* to the perfect and the resultative semantics discussed above. Below we have added that the culmination leading to the result state is recent with respect to the reference time.

(103)   Póstkassinn er ný-tæmdur
         the.mail.box is new-emptied.PASS

   a.   ***tæmdur***(***póstkassi***):

         λi.∃i′ [PTS(i′,i) ∧ ∃e.∃s[empty(mailbox)(s) ∧ cause(s)(e) ∧ i′ ⌺ τ(e)]]

         i ⌺ i′ iff i ∩ i′ ≠ ∅ ∧ ∃t∃t′[t ∈ i ∧ t ∉ i′ ∧ t′ ∈ i′ ∧ i′ ∉ i ∧ t < t′]

   b.   ***ný-***: λQ.λx.λi[Q(x)(i) ∧ new(i,i′)]

   c.   ***ný***(***tæmdur***(***póstkassi***)):

         λi.∃i′ [PTS(i′,i) ∧ ∃e.∃s[empty(mailbox)(s) ∧ cause(s)(e) ∧ i′ ⌺ τ(e)

         ∧ new(i,i′)]]

         i ⌺ i′ ∧ new(i,i′) iff i ∩ i′ ≠ ∅ ∧ ∃t∃t′[t ∈ i ∧ t ∉ i′ ∧ t′ ∈ i′ ∧ i t′ ∉

         i ∧ t < t′] where t is close to t′

Ný- does not say anything about the event, e.g., whether it took place recently. It
says that the final subinterval of the perfect time span (PTS) is new with respect
to the reference time, i.e., that the event culminated recently with respect to the
reference time. The overlapping operator says that there is time t that is part of i
but not i′ and there is a time t′ that is part of i′ but not i. *Ný-* adds the requirement
that t and t′ are close in time.

   As pointed out above, the use of the prefix *ó-* 'un-' is more restricted than *ný-*.
It cannot be used in, e.g., perfect environments selected by *hafa* 'have'.

(104)   * Jón hafði ó-brotið   stólinn   þegar ég hitti hann.
         Jón had   un-broken the.chair when I   met him
         Intended: 'Jón had not broken the chair when I met him.'

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I take this to suggest that *ó-* can only prefix resultatives but not perfects. When a perfect embeds a resultative, it adds a PTS to it. In resultative participles prefixed by *un-*, there is no time span leading up to the reference time. That is, the negation of *un-* does not have to do with such a time span. Rather, it negates there being an event that culminated at any point prior to the reference time. Even though we relate the PTS to the Extended Now, this still has a relevance at the reference time insofar as denying there was a previous emptying event that came to culmination.

Ó- prefixation is productively used with resultatives. The following builds on Kratzer's (2000) approach to 'un-' prefixation as well as Iatridou et al.'s (2001) and Pancheva's (2003) approach to resultatives.

(105)   Póstkassinn er ó-tæmdur
         the.mail.box is un-emptied.PASS

    a.   ***tæmdur***(***póstkassi***):

        $\lambda i.\exists e.\exists s[\text{empty(mailbox)}(s) \wedge \text{cause}(s)(e) \wedge i' \sqsupset \tau(e)]$

        $i \sqsupset i'$ iff $i \cap i' \neq \emptyset \wedge \exists t \exists t'[t \in i \wedge t \notin i' \wedge t' \in i' \wedge i' \notin i \wedge t < t']$

    b.   ***ó-***: $\lambda Q.\lambda x.\lambda i[\neg Q(x)(i)]$

    c.   ***ó***(***tæmdur***(***póstkassi***)):

        $\lambda i \neg \exists e.\exists s[\text{empty(mailbox)}(s) \wedge \text{cause}(s)(e) \wedge i' \sqsupset \tau(e)]$

        $i \sqsupset i'$ iff $i \cap i' \neq \emptyset \wedge \exists t \exists t'[t \in i \wedge t \notin i' \wedge t' \in i' \wedge i\, t' \notin i \wedge t < t']$

In the resultative passive *tæmdur* 'emptied', the emptying event and its result state (its culmination) overlap with the reference time. *Ó-* in *ótæmdur* 'unemptied' does

not prefix the event itself but the resultant state, such that it negates there being an event that culminated prior to the reference time in which the mailbox was emptied. In other words, the state of there not being a previous emptying event holds.

I conclude from the above that *ó-* prefixes resultatives (resultant states) but *ný-* can prefix both resultatives and the perfect. This suggests that aspectual structures like *vera búinn* are perfects as *ó-* cannot prefix them.

We noted above that it might be the case that we needed at least two Asp layers for it when the perfect embeds the resultative, Asp_{RES} and Asp_{PERF}. Since *ó-* can prefix the resultative but not the perfect, we could have expected *ó-* to be able to prefix Asp_{RES} even though there is Asp_{PERF} on top of it. This may suggest there is a single $Asp_{PERF+RES}$ which can be prefixed by *ný-* but not *ó-*. This needs further study but I leave it here.

The behavior of *ó-* and *ný-* will be useful when we determine the structure of stative and resultative participles.

5.3.2 The structure of stative and resultative participles

Below I will propose three different types of stative participles, based on their structure. As quirky case seems to be preserved only in Voice resultatives, I argue that such resultative participles have a Voice layer and that quirky case is encoded on Voice.

The structure of stative participles (including resultative participles) has been discussed quite a lot. Embick (2004) takes diagnostics like *The house was built open/*opened* to show that stative participles (target state participles), like *open*, lack a *v*-layer as no previous event is involved.

(106)   ***Stative:*** **open**

          AspP

      ⟋‾‾‾⟍
     Asp   √ROOTP

              ...
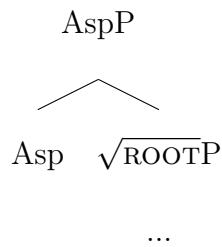
Manner adverbs like *quickly* suggest that participles like *sokkinn* 'sunken' have a *v*-layer, unlike pure statives like *open* which are not compatible with manner adverbs.

The general unavailability of *un-/ó-* and *ný-* prefixation supports a structural difference between stative and resultative participles. Furthermore, as discussed above, quirky case is not assigned in pure stative participles. This supports an analysis of stative participles having less structure than resultatives.

Above, we discussed causative alternation pairs and concluded that the transitive resultative participles indicated an external argument. Intransitive participial morphology suggests a different structure, without a Voice layer. The meaning of, e.g., *a fallen tree* and *a felled tree* corroborates this: The former does not indicate an agent whereas the latter does.

The question then is what structure we should give resualtative participles, such as *the fallen tree* and *a sunken ship.* The structure in (106) is an obvious candidate but it is not evident that, e.g., *sunken* in *a sunken ship*, is a pure stative. If the ship's sunken state is a result of its sinking we seem to need a verbal eventive layer and in such cases *sunken* therefore seems to differ from statives like *open.* This seems to be ambiguous, as a ship can probably be in a sunken state without the state necessarily resulting from a previous event. I therefore postulate two structures for the anticausative participles, one as in (106) and the other as in (107), with a *v*-layer.

(107)   ***Resultative: English* sunk-en*, Icelandic* sokk-inn**

        AspP

    Asp   *v*P

         v   √ROOTP

              ...
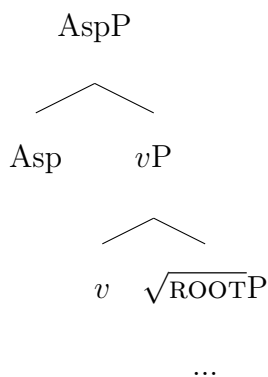
This means that participles of anticausatives in Icelandic, when selected by *vera* 'be', are different from statives like *opinn* 'open' in that in addition to a potential pure stative reading, they also have a stative reading resulting from a previous event (resultative participles), suggesting an eventive *v*-layer. The use of manner adverbs

corroborates this. As we saw above, pure stative participles, such as *open/opinn*, are not compatible with manner adverbs. Anticausative participles are, however.[9]

(108) **English**

    a.   the silently fallen trees

    b.   the quickly sunken ship

(109) **Icelandic**

    a.   hin hljóðlega föllnu tré
         the silently   fallen trees

    b.   hinar snögglega sprungnu   sprengjur
         the   quickly   blown.up.INTR bombs

   Another indication of the anticausative participles differing in structure from pure stative participles is that the former generally work with the prefixes *ó-* and *ný-* whereas the latter generally do not (with exceptions). In the a-examples below, we show anticausative participles prefixed by *ó-* or *ný-*, whereas the b-examples show causative participles used with the same prefixes.

(110) a.   ný-fallið   tré
             new-fallen tree

       b.   ný-fellt   tré
            new-felled tree

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[9]Hlíf Árnadóttir (p.c.) finds these examples a bit odd. However, she also finds the transitive, causative versions odd, such as (i):

(i)   hin hljóðlega felldu tré
       the silently   felled trees

(111) a. ný-risin   bygging
           new-risen building

       b. ný-reist   bygging
           new-raised building

(112) a. ó-brunnin bók
           un-burnt book

       b. ó-brennd bók
           un-burnt book

(113) a. ó-sprungin sprengja
           un-exploded bomb

       b. ó-sprengd sprengja
           un-exploded bomb

I propose that there are, in fact, two types of resultative participles. Intransitive participles reflect one of them, for which there is an eventive v-layer, see (107). Transitive participles reflect the other type; in addition to a v-layer, I argue for a Voice-layer on top of v in such participles, which accounts for the transitive morphology.

(114)   AspP
              /   \
          Asp   VoiceP
                  /   \
              Voice   vP
                        /   \
                       v $\sqrt{\text{ROOT}}$P

                             ...

450
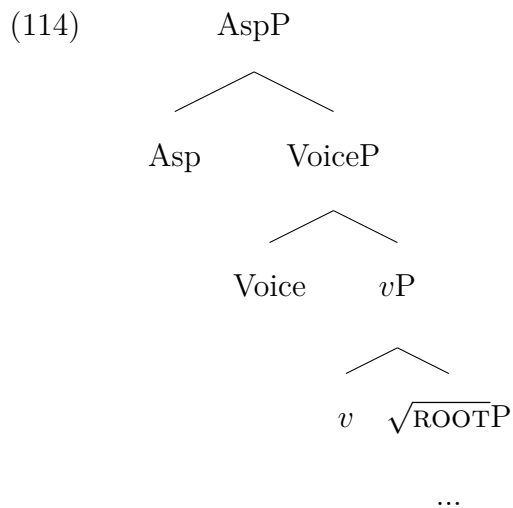
Somewhat similarly, Alexiadou et al. (2014b) discuss causative / anticausative pairs in German which show a morphological difference in verb stems. In (115) we see *versenken* 'sink (causative, transitive)' vs. *versinken* 'sink (anticausative, intransitive)'.

(115)   ***German***

    a.   Hans versenkt   / *versinkt   das Schiff.
            Hans sinks.TRANS / *sinks.INTRANS the ship
            'Hans sinks the ship.'

    b.   Das Schiff wurde (von der Marine) versenkt   / *versunken.
            the ship was   (by the marine) sunk.TRANS / *sunken.SUNKEN
            'The ship was sunk by the marine.'

    c.   Das Schiff versinkt   / *versenkt.
            the ship sinks.INTRANS / *sinks.INTRANS
            'The ship sinks.'

    d.   Das Schiff ist versunken   / versenkt.
            the ship is sunken.INTRANS / sunk.TRANS
            'The ship is sunken / sunk.'   (Alexiadou et al. 2014b:123)

Alexiadou et al. (2014b) argue that the anticausative contains a verbal layer and that the difference between the causative and anticausative stative participles is that the former contains a Voice layer.

One reason for why Kratzer (2000) and Embick (2004) do not postulate a Voice layer in resultative passives is that they consider 'by'-phrases to be ungrammatical in resultative passives. McIntyre (2013) and Bruening (2014), on the other hand, show various examples of *by*-phrases indeed being available in resultative passives in English; Rapp (1997) and Alexiadou et al. (2014b) show the same for German;

and Anagnostopoulou (2003), Alexiadou and Anagnostopoulou (2008) show it for Greek.

(116)   ***English***
    a.   Also, Anne Elliot seems considered a spinster by everyone, including herself, ...
    b.   Invading Commander: I want the treasury left untouched! Underling: Untouched by anyone but you, you mean.
    c.   No longer does Tim Thomas appear trained by Tim Hortons.
                                                                        (Bruening 2014:375, 379)

However, as noted by Alexiadou et al. (2014b), 'by'-phrases in English and German resultative passives are more restricted than in Greek resultative passives. 'By'-phrases are also possible in Icelandic resultative participles as shown below where *ný-* prefixes a participle (which excludes the possibility of a pure eventive passive participle).

(117)   ***Icelandic***
    a.   Sæluhúsið   er nýuppgert   af minjavernd.
          the.refuge.hut is new.up.done by remnants.protection

          'The refuge hut has just been rebuilt by the committee on remnant protection.'   (https://goo.gl/cDC84m)
    b.   Minningarmark á   leiði Pjeturs Guðjónssonar í
          memorial.sign on grave P.GEN G.GEN   in

          Reykjavíkurkirkjugarði er nýreist   af Stúdentafjelaginu
          Reykjavík.churchyard   is new.raised by the.Student.organization

          í Reykjavík, með samskotum   frá   lærisveinum hans.
          in Reykjavík with contributions from disciples   his

          'A remembrance on Pjetur Guðjónsson's grave in Reykjavík cemetery has just been raised by the Student organization in Reykjavík, with contributions from his disciples.'
                                            (*Ísafold* June 25th, 1879; https://goo.gl/5SEIxw)

I therefore take resultative participles, as in *the sunk ship*, to have a Voice layer that introduces an implicit argument, whereas I take resultative participles as in *the sunken ship* to have a verbal layer but not a Voice layer. Stative participles, as in *the open book*, do not have a verbal structure at all, as shown in (106).

5.3.3 Voice is needed for quirky case assignment

Finally, having established the structure of resultative and stative participles, we look at how much structure is needed for quirky case assignment. We saw in (81), repeated as (118), an example of dative case being lost in a stative passive where a Voice layer was missing. Note that (118a) is an example of an eventive passive, not a resultative passive.

(118) a. Dyrunum   var lokað klukkan sjö   (af dyraverðinum).
           the.doors.DAT were closed clock   seven (by the.janitor)

           'The door was closed at seven o'clock (by the janitor).'

       b. Dyrnar   voru lokaðar klukkan sjö   (*af dyraverðinum).
           the.doors.NOM were closed clock   seven (*by the.janitor)

           'The door was closed (i.e., it was in a closed state).'
                                              (adapted from Thráinsson 2009:35–36)

However, the structure of *lokaðar* in (118b) may be that of a pure stative as manner adverbs do not seem to be compatible with the participle:

(119) ?? Dyrnar   eru vandlega lokaðar.
          the.doors are carefully closed
          Intended 'The door is carefully closed.'

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We conclude that pure statives lack a functional head needed for quirky case assignment.[10]

The verb *raða* 'arrange' also assigns quirky dative case in the active and the eventive passive. Resultative participles can be formed with *raða* and manner adverbs, with or without quirky dative case.

(120)   Context: A guest at Jón's house looking at the shoes at the door while

Jón is in the kitchen making dinner.

    a. (?) Skórnir   eru fallega   raðaðir (??af Jóni).
        the.shoes.NOM are beautifully arranged (??by Jón)

       'The shoes are beautifully arranged.'

    b.   Skónum   er fallega   raðað (af Jóni).
       the.shoes.DAT is beautifully arranged (by Jón)

The nominative version is compatible with a reading where the shoes happen to be arranged in a beautiful manner; it could be by coincidence (e.g., after an earthquake) but it could also be that somebody arranged them that way. In the dative version, an implicit argument is implied. The order of the shoes cannot be a coincidence (e.g., after an earthquake). Only in the dative version is a 'by'-phrase possible. The conclusion is that Voice is needed for quirky case assignment, which is exactly what we have been assuming.

A few complications arise which I will not go into here. Even though Voice is needed for quirky case assignment, quirky case is not always preserved even though

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[10]For a different analysis, see H.Á. Sigurðsson (2012b:204) who argues that stative participles have a Voice_EXPL in which all case stars are deleted, i.e., * and *+ and not only * as in the passive.

there is a Voice layer. *Bjóða* 'invite' serves as an example. In the active and the

eventive passive, *bjóða* assigns quirky dative case. With resultatives, dative case is

only sometimes preserved. Neverthless, 'by'-phrases are possible also when dative

is not assigned.

(121) a. Mér er víst boðið í mat í kvöld af fólki
             I.DAT am supposedly invited.DFLT to dinner toight by people

             sem ég þekki lítið sem ekkert.
             which I know little as nothing

    b. Ég er víst boðinn í mat í kvöld af
             I.NOM am supposedly invited.NOM.SG.M to dinner tonight by

             fólki sem ég þekki lítið sem ekkert.
             people which I know little as nothing

             'I am supposedly invited to dinner tonight by people I don't really
             know.'

This may suggest that quirky case assignment guarantees a Voice layer for verbs like

bjóða 'invite' and *raða* 'arrange', whereas nominative case does not exclude Voice.

I leave this for future research.

5.4 The quirky case problem

5.4.1 Describing the problem

In Icelandic, attributive resultative passives are normally fully acceptable only if the verb that passivizes takes a structural accusative object in the active. This is shown in (122)–(123).[11]

(122) a. Ég myrti   konuna.
           I   murdered the.woman.ACC

           'I murdered the woman.'

       b. Ég kálaði konunni.
           I   killed the.woman.DAT

           'I killed the woman.'

(123) a. myrta   konan
           murdered the.woman.NOM

           'the murdered woman'

       b. *kálaða konan
            killed   the.woman.NOM

           Intended: 'the killed woman'

The verbs *myrða* and *kála* have a similar meaning, 'murder' and 'kill', respectively. In the active, *myrða* assigns accusative to its object but *kála* assigns quirky dative case to its object. Only the resultative passive participle of the verb that takes

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[11]Most examples of attributive passives are shown here in the nominative case. It should be noted that they are also found in accusative, dative and genitive case, such as when they, as part of the DP, get non-nominative case from a verb or a preposition.

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accusative object in the active is perfectly acceptable, as demonstrated in (123); the same holds for other verbs as well. I dub this as the quirky case problem.

(124)   ***The quirky case problem***

Verbs that assign quirky case to its object do not form acceptable attributive passive participles.

The problem involves case mismatch. A verb like *kála* usually assigns dative case but in the attributive passive, it is not associated with dative in examples like *kálaða konan 'the murdered woman.NOM'. Note that the attributive passives above show agreement with the noun they modify. This is not necessarily what we would have expected, given the fact that in the eventive passive, participles of verbs that assign dative to their object do not exhibit agreement. Non-agreement is, however, ungrammatical in attributive position, as shown in (125b).

(125)   a.   Konu   var kálað   í bænum í nótt.
             woman.DAT was killed.DFLT in the.town in night
             'A woman was killed downtown last night.'

        b.   * kálað   kona
             killed.DFLT a.woman.NOM

It should be noted that attributive resultative passives are not always strictly ungrammatical. The verb *fresta* 'postpone', for example, takes a dative object but its attributive passive is not ungrammatical when it exhibits the same agreement as the noun it modifies, even though it is not fully acceptable.

(126)   ? frestað-ir   leik-ir
         postponted-M.NOM.PL game-M.NOM.PL
         'postponed games'

Non-agreement as in (127), see also (125b), is strictly ungrammatical, however.

(127)   * frestað   leik-ir
         postponed.DFLT game-M.NOM.PL
         Intended: 'postponed games'

I argue that the quirky case problem has to do with (i) case conflict between a covert DP operator embedded in the structure and the DP as a whole, and (ii) case and φ-feature mismatch between AspP and the head it merges with.

Before going further, it should be noted that I will focus on attributive passives with verbs that take direct objects, leaving out indirect objects for a large part. For both statives and resultative passives, only one argument is possible, cf. the well-known Sole Complement Generalization (Levin and Rappaport 1986:631):

(128)   ***Sole Complement Generalization***

         An argument that may stand as sole NP complement to a verb can be externalized by Adjectival Passive Formation.

                                                     (Levin and Rappaport 1986:631)

Sell is often used for demonstration. Icelandic *selja*, like English *sell*, is a ditransitive verb, as shown in (129a). If one object is left out, only the direct object of *selja*/*sell* may be used as the sole complement, as shown in (129b–c).

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(129)　a.　Ég seldi viðskiptavinunum　bílana.
　　　　　　I　sold　the.customers.DAT the.cars.ACC

　　　　　　'I sold the customers the cars.'

　　　b.　Ég seldi bílana.
　　　　　　I　sold　the.cars.ACC

　　　　　　'I sold the cars.'

　　　c.　* Ég seldi viðskiptavinunum.
　　　　　　I　sold　the.customers.DAT

The Sole Complement Generalization captures the contrast between (130a) and
(130b), that is, in (130), only the direct object can be used as a part of the adjectival
passive formation (i.e., resultative passive in the terms used here) as only the direct
object can be the sole complement of *selja*:

(130)　a.　hinir　　nýlega　seldu bílar
　　　　　　the.NOM recently sold　cars.NOM

　　　　　　'the recently sold cars'

　　　b.　* hinir　　nýlega　seldu viðskiptavinir
　　　　　　the.NOM recently sold　customers.NOM

For Icelandic, at least, the pattern between (129) and (130) above could have to do
with the fact that the indirect object of *selja* is in the dative. However, for double
object verbs that take an accusative indirect object, examples corrosponding to
(130b) above are no better, see (131e) below (it should be noted that (131d) *leyndi
gallinn* is fine on a purely stative reading).

(131)　a.　Ég leyndi　　manninn　　gallanum.
　　　　　　I　concealed the.man.ACC the.defect.DAT

　　　　　　'I concealed the defect from the man.'

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b. Ég leyndi   gallanum.
    I   concealed the.defect.DAT

    'I concealed the defect.'

c. * Ég leyndi   manninn.
    I   concealed the.man.ACC

d. (??) leyndi   gallinn
         concealed the.defect.NOM

    'the concealed defect'

e. * leyndi   maðurinn
      concealed the.man.NOM

The verb *leyna* 'conceal' takes an accusative indirect object and this object cannot

stand as the sole complement of the verb, as shown in (131c). As the generalization

predicts, the indirect object cannot "be externalized by Adjectival Passive Forma-

tion". The reason why *leyndi gallinn* is not perfectly grammatical on a resultative

reading has to do with the verb assigning dative to its direct object (cf. the quirky

case problem).

An analysis of the quirky case problem is given in §5.4.3. Now, however, I will

compare in more detail accusative vs. dative attributive and predicative resultative

passives and discuss verbs that do not form good result states irrespective of case.

5.4.2 Resultative passives and different aspectual classes

5.4.2.1 A comparison of various result states

Even though we have seen minimal pairs where a structural case taking verb works

much better in the attributive resultative passive than quirky case taking verb,

there is one complication in that not all verbs, whether they take structural case or quirky case objects, form acceptable result states. In some cases, bad result states may be the cause of unacceptability rather than case.

It has been pointed out that aspectuality matters when it comes to building resultatives; the four *aktionsart* classes, activities, accomplishments, achievements and states (originally classified so by Vendler 1957), do not all produce equally good result sates. Activity verbs are marginally acceptable as resultative passives and some states, such as *own* and *know*, are ungrammatical (cf. Kratzer 2000). This is shown for German below.

(132)   **German**

    a.   Die Katze ist schon   gestreichelt
          the cat   is already petted

    b.   Der Kinderwagen ist schon   geschoben
          this baby.carriage is already pushed   (Kratzer 2000:388)

(133)   a.   * Dieses Haus ist besessen.
            this   house is owned

    b.   * Die Antwort is gewusst.
          the answer   is known   (Kratzer 2000:389)

Kratzer (2000:388) notes that the resultative passives in (132) are fine if they have a 'job is done' or 'that's over' reading but sound bizarre otherwise (see Gehrke 2015 for a context with resultative 'job-is-done' readings for resultative 'emptied', 'watered' and 'petted'). Embick (2004) makes the same point for English.

Activities like *push* are continuous events with no determined endpoint. Result states, however, give a determined endpoint. Therefore activities are generally not compatible with there being a result state, unless on a reading where, e.g., one has to carry out a task which involves the activity; a 'job is done' reading provides the endpoint of the activity. Note, however, that examples of predicative, resultative passives often sound deviant, even on a 'job is done' reading.

The same is true of activities in Icelandic as in German. In the case of the participles of stative verbs, 'own' and 'know' are ungrammatical whereas other stative verbs are fine; however, a 'job is done' reading is not possible. Taking 'admired' as an example, the state of having become admired is fine but a 'job is done' reading is unavailable. We can imagine a scenario where a father wants his daughter to admire him. He pays a team of experts to interact with the daughter and tell her heroic stories of her dad, with the goal of her admiring her father. At some point the team members realize that the daughter has started to admire her father and therefore their job is done. It would nevertheless be ungrammatical for them to say: *Our job is done, the father is admired.* The same is true for Icelandic.

(134) a. Mjólkin   er drukkin.
           the.milk.NOM is drunk
           'The milk is drunk.'

       b. Málið   er (að fullu) rannsakað.
           the.case is (fully)   investicated
           'The case is (fully) investigated.'

(135) a. * Húsið   er átt.
             the.house is owned

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b.   * Svarið   er vitað.
      the.answer is known

(136)   a.   Faðirinn   er dáður.
             the.father.NOM is admired

             'The father is admired.'

        b.   Karlinn   er hataður.
             the.man.NOM is hated

             'The man is hated.'

Resultative participles of activity verbs that take dative objects are also marginal

or unacceptable, but they usually get better with a 'job is done' reading.

(137)   a.   Kettinum   er klappað.
             the.cat.DAT is petted

             'The cat is petted.'

        b.   Hestinum   er riðið.
             the.horse.DAT is ridden

             'The horse is ridden.'

        c.   Kerrunni   er ýtt.
             the.cart.DAT is pushed

             'The cart is pushed.'

Participles, selected by *vera* 'be', of stative dative object verbs seem to work the

same as participles of stative verbs with accusative objects; when a 'job is done'

reading is imposed on them, they are ungrammatical.

(138)   a.   Konunni   er trúað.
             the.woman.DAT is believed

             'The woman is believed.'

        b.   Manninum   er vorkennt.
             the.man.DAT is pitied

             'The man is felt sorry for.'

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All the examples above show predicative passives. In these examples, it does not matter whether the verbs take structural object case or dative, the examples are equally good or bad. Turning to attributive passives, whereas participles of stative accusative verbs are generally okay in attributive position, participles of stative dative verbs are not.

(139) a. dáði   faðirinn
         admired the.father
         'the admired people'

      b. hataði karlinn
         hated   the.man
         'the hated man'

(140) a. * trúða   konan
           believed the.woman
           'the believed woman'

      b. * vorkenndi maðurinn
           pitied   the.man
           'the pitied man'

When we look at attributive passives of activity verbs, the former verbs (accusative) work fine, wheras the latter (dative) are much worse.

(141) a. drukkna mjólkin
         drunk   the.milk
         'the drunk milk'

      b. rannsakaða málið
         investigated the.case
         'the investigated case'

(142) a. ?? klappaði kötturinn
           petted   the.cat
           'the petted cat'

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b. ?* riðni   hesturinn
   ridden the.horse
   'the ridden horse'

c. ?* ýtta   kerran
   pushed the.cart
   'the pushed cart'

Now that we've looked at states and activities, we will look at accomplishments and achievements. Accomplishments, such as *run a mile* and *draw a circle*, are telic, they have a determined endpoint. If I say that I ran a mile, then that is only true if I ran the whole mile. If I say that I ran yesterday (activity), then that doesn't say anything about how long I ran for. Or, as Vendler (1957) puts it: "[I]f someone stops running a mile, he did not run a mile; if one stops drawing a circle, he did not draw a circle. But the man who stops running did run, and he who stops pushing the cart did push it. Running a mile and drawing a circle have to be finished, while it does not make sense to talk of finishing running or pushing a cart."

Achievements, on the other hand, do not involve a process that takes time, but rather they hold at a definite moment in time. "One reaches the hilltop, wins the race, spots or recognizes something, and so on at a definite moment" (Vendler 1957:146).

Accomplishments usually form good result states, especially with a 'job is done' reading.

(143) a. Húsið   er byggt.
           the.house.NOM is built
           'The house is built.'

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b. Húsið   er rýmt.
   the.house.NOM is evacuated
   'The house is evacuated.'

c. Peningakassinn er tæmdur.
   the.cash.register is emptied
   'The register is emptied.'

The verbs above all take accusative objects in the active. Dative taking accomplishment verbs are also okay in the predicative resultative passive, even though they are sometimes not as good as the ones with accusative verbs.

(144) a. ? Tækifærinu   er klúðrað.
         the.chance.DAT is blown
         'The chance is blown.'

      b. ? Vatninu   er kyngt.
         the.water.DAT is swallowed
         'The water is swallowed.'

      c. ? Steininum   er lyft.
           the.stone.DAT is lifted
         'The stone is lifted.'

Now to achievements. Those usually also form good result states on a 'job is done' reading, irrespective of whether the verbs take accusative or dative objects.

(145) a. Konan   er drepin.
         the.woman.NOM is killed
         'The woman is killed.'

      b. Tréð   er fellt.
         the.tree.NOM is felled
         'The tree is felled.'

      c. Greinin   er samþykkt.
         the.article.NOM is accepted
         'The article is accepted.'

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(146)   a.   Karlinum er kálað.
            the.man   is killed

            'The man is killed.'

        b.   Markmiðinu er náð.
            the.goal.DAT is reached

            'The goal is reached.'

        c.   Greininni   er hafnað.
            the.article.DAT is rejected

            'The article is rejected.'

Attributive resultative passives with accusative verbs are fine in the case of both

accomplishments and achievements. Dative verbs used in the attributive resultative

passive are worse for both classes.

(147)   a.   byggt hús
            built house

            'a built house'

        b.   rýmda   húsið
            evacuated house

            'the evacuated house'

        c.   tæmdur peningakassi
            emptied cash.register

            'an emptied register'

(148)   a.   ? klúðraða tækifærið
            blown   the.chance

            'the blown chance'

        b.   ?? kyngt   vatn
            swallowed water

            'swallowed water'

        c.   ?* lyftur steinn
            lifted stone

            'a lifted stone'

(149)   a.   drepin kona
            killed   woman

            'a killed woman'

        b.   fellda tréð
            felled the.tree

            'the felled tree'

        c.   samþykkt grein
            accepted   article

            'an accepted article'

(150)   a.   * káladur karl
             killed   man

            'a killed man'

        b. ?? náðu   markmiðin
            reached the.goals

            'the reached goals'

        c.   * höfnuð   grein
            rejected article

            'a rejected article'

5.4.2.2 Interim summary

An important contribution of the discussion above concerns (i) what kind of aspectual classes (states, activities, achievements, accomlishments) work for predicative and attributive resultative passives; and (ii) how case is an important factor.

    We now turn to an analysis of the quirky case problem.

5.4.3 Analysis of the quirky case problem

5.4.3.1 Case and agreement mismatch

It is important to look at the structure of the participle in examples like *frestaðir leikir* 'postponed games'. I follow Bruening (2014) who argues for a null operator analysis (lambda abstractor) in attrubutive passives such as *a proven fact*, with movement from an internal argument position to Spec*a*P. His proposed structure is shown below.

(151)   ***English***

    a.   a proven fact

    b.
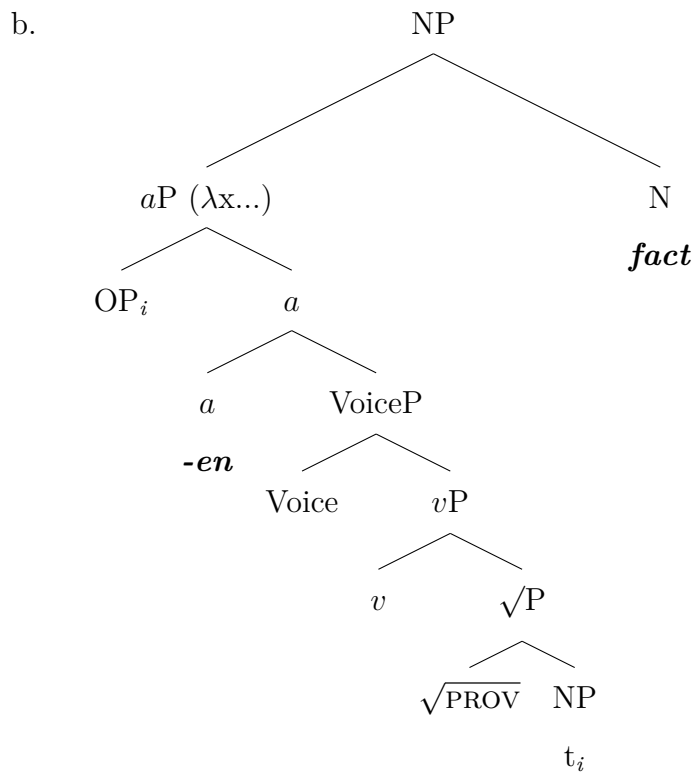
        (adapted from Bruening 2014)

This results in the aP being of type $\langle e,t \rangle$, the same type as N. aP and N can therefore combine semantically via Predicate Modification. I, howver, take attributive participles to be AspP (cf. Embick 2004) and assume that attributive passives are merged in the same place as adjectives (see discussion in Chapter 3).

Voice of a participle like *frestaðir* 'postponed.PASS.NOM' has a case feature specified for dative; the operator, base-generated in object position, is assigned dative by Voice. Deleting the embedded DP under identity seems to be problematic, at least partly because of case mismatch. What supports this idea is the fact that attributive passives of dative verbs are often better when the whole DP is in the dative case:[12] (152c), where 'the postponed games' is in the dative (the verb *ljúka* 'finish' takes a dative argument), is slightly better than (152a), (152b) and (152d), where 'the postponed games' is in the nominative, accusative and genitive case, respectively.

(152)   a.   ? Tveir   frestaðir   leikir   voru spilaðir í gær.
              two.NOM postponed.NOM games.NOM were played yesterday
              'Two postponed games were played yesterday.'

         b.   ? Ég sá   tvo   frestaða   leiki   í gær.
              I   saw two.ACC postponed.ACC games.ACC yesterday
              'I saw two postponed games yesterday.'

         c.   (?) Tveimur frestuðum   leikjum   er lokið.
               two.DAT postponed.DAT games.DAT is finished
              'Two postponed games are finished.'

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[12]Thanks to Jim Wood (p.c.) and Alec Marantz (p.c.) for independently asking questions about this and bringing my attention to the issue.

d. ? Mótið   er ekki búið vegna   tveggja frestaðra
   the.tournament is not done because.of two.GEN postponed.GEN

   leikja.
   games.GEN

   'The tournament is not over because of two postponed games.'

This suggests that the problem has to do with case conflict. Note that (152a,b,d) is

marked with a question mark but (152c) is marked with '(?)', suggesting it is almost

perfectly acceptable. Even when other forms than dative are much worse, even un-

grammatical, using the whole DP in the dative makes it much better, even perfectly

acceptable. Let us take a look at the following contrast between nominative and

dative.

(153) a. * **Hafnaðar   kröfur**   voru sendar til Hæstaréttar.
           rejected.NOM claims.NOM were sent   to supreme.court
           'Rejected claims were sent to the supreme court.'

       b. (?) **Höfnuðum kröfum**   var áfrýjað   til Hæstaréttar.
            rejected.DAT claims.DAT was appealed to supreme.court
           'Rejected claims were appealed to the supreme court.'

Hafna 'reject' assigns dative to its object (see also (150) above). When the whole DP

'rejected claims' is in the dative, it is much better than when it is in the nominative,

as my judgments indicate. Even though (153a) is marked with a star (compare this

to the question mark in (152a), the dative in (153b) is marked with '(?)', the same

as the dative in (152c) above. This further corroborates the claim that the quirky

case problem has to do with case conflict; the operator is in the dative but the

whole DP is assigned another case than dative.

Note that I judge the dative DPs *tveimur frestuðum leikjum* and *höfnuðum kröfum* with a question mark within a parenthesis, '(?)', instead of marking it perfectly acceptable. My judgment seems to differ from most speakers I have talked to, who usually find these dative DPs perfectly acceptable. Why I do not find these perfectly fine, I propose, has to do with participle agreement. As shown below, there is a difference between passive participles of verbs taking dative in predicative and attributive position.

(154) a. * frestað-∅ / ?frestað-ir   leikir
          postponed / postponted-M.NOM.PL game-M.NOM.PL
          'postponed games'

     b. Leikjunum   var frestað-∅ / *frestuð-um.
          the.games.DAT was postponed / postponed-DAT.PL
          'The games were postponed.'

(155) a. * hafnað-∅ / *hafnað-ar   kröfur
          rejected   / rejected-F.NOM.PL claim-F.NOM.PL
          'rejected claims'

     b. Kröfunum   var hafnað-∅ / *höfnuð-um
          the.claims.DAT was rejected   / *rejected-DAT.PL
          'The claims were rejected.'

Since the verb assigns dative to the operator, we would expect **frestað-∅ leikir* or **hafnað-∅ kröfur* to be grammatical.[13] It is not. I take this to indicate that the quirky case problem also has to do with agreement conflict.

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[13]It should be noted that even though I find **hafnaðar kröfur* ungrammatical, it is still much better than **hafnað kröfur*. If forced to produce either of these, I would produce the former and never the latter.

In the following, I show the AspP that merges with n in *frestaðir leikir*. I leave out the movement of the operator as I focus on the case assignment by Voice and feature valuation of Asp.

Voice with a dative case feature and the DP establish an Agree relation before Asp probes. Asp's unvalued φ-features fail to agree with the DP. Before the derivation is sent to the interfaces, we would expect Asp to get default values as a result of failed Agree. However, because AspP merges with n, Asp gets the same values as n has. In the case of *frestaðir leikir*, it is masculine, structural (realized as nominative), singular.

(156)   a.   ? frestaðir   leikir
               postponed   games

       b.

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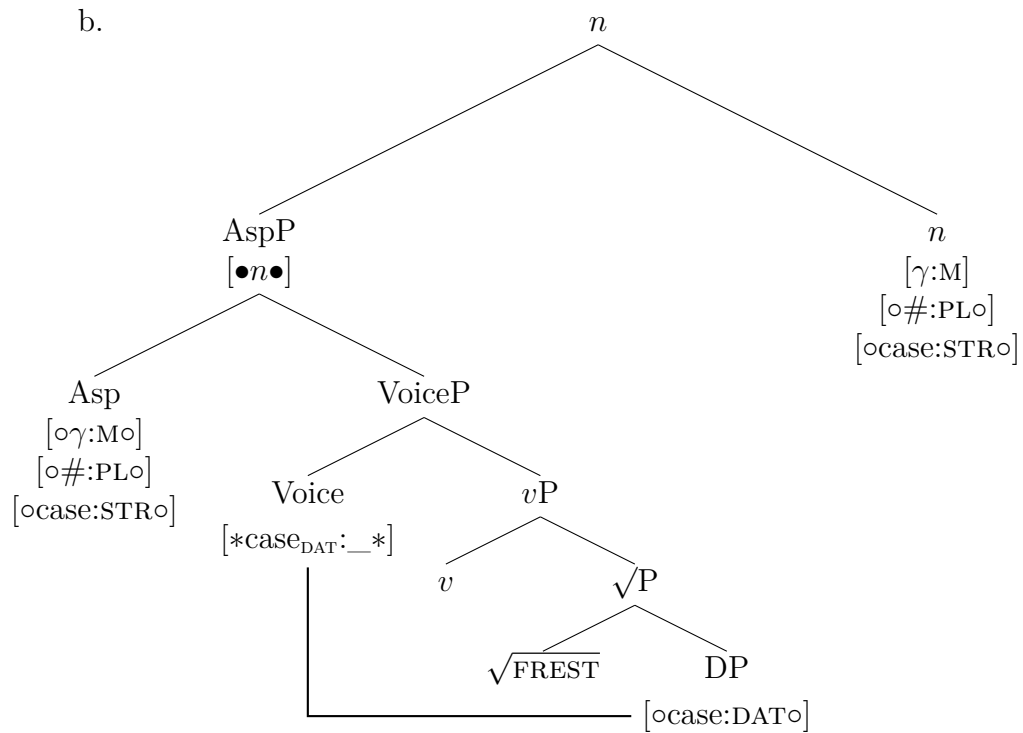
As a lower head assigns case to the DP, Asp's attempt to form an Agree relation fails and as a result its number, gender and case features would normally get default valuation. When n and AspP merge, however, n instantiates its values onto AspP but this does not go the other way: It is crucial that Asp does not have values yet even though it has attempted Agree that failed; it is not until Spell-Out it would get the default values.

This is the agrement conflict part of the problem. Asp does not bear the expected default values but rather values which originate outside AspP. Structural case on Asp but simultaneously dative case on the DP is an agreement conflict that seems to be dispreferred, but not ungrammatical.

As discussed above, there is also a mismatch between the case reflected on Asp and the case on the operator (case conflict). Deletion of the dative DP under identity results in unacceptability or even ungrammaticality when it bears a different case from the whole DP.

On the other hand, no problem arises when a verb that takes a structural accusative case in the active is used in the attributive passive. When AspP has been built, a successful Agree relation has been established between the operator, which does not have a case yet, and Asp. Both the operator and Asp have no valued features at this point. When AspP merges with n, n discharges its features onto AspP, which leads to Asp and the operator receiving those values.

(157)   a.   samþykkt grein
             accepted   article

       b.

```
                                      n
                         ┌────────────┴────────────┐
                       AspP                         n
                       [●n●]                       [γ:F]
                   ┌─────┴─────┐                   [#:SG]
                 OP_i                           [case:STR]
               [○γ:F○]       ┌──────┴──────┐
               [○#:SG○]     Asp          VoiceP
            [○case:STR○]  [○γ:F○]      ┌────┴────┐
                          [○#:SG○]   Voice      vP
                        [○case:STR○]        ┌────┴────┐
                                            v        √P
                                                 ┌────┴────┐
                                              √SAMÞYKKJ  <DP_i>
                                                'accept'
```
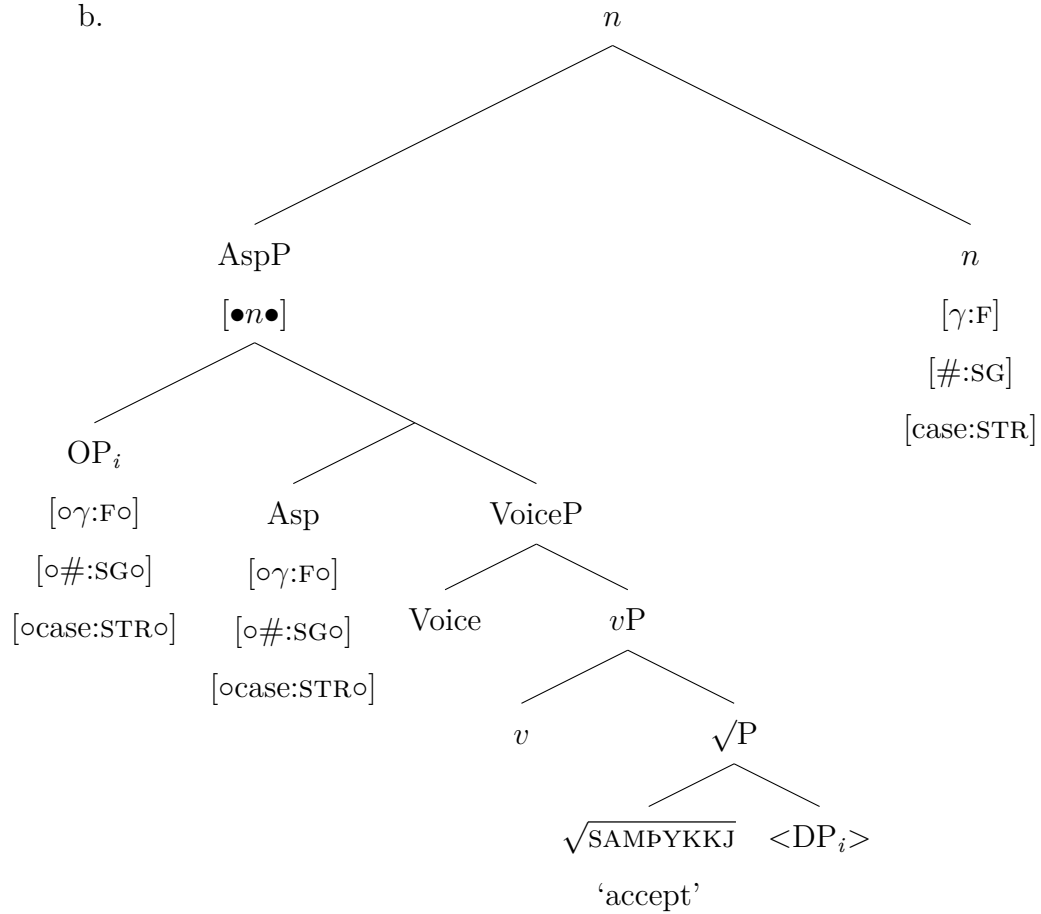
As far as I know, all speakers generally find attributive passives formed of verbs like

samþykkja 'accept' perfectly grammatical, whatever the case of the DP is.

     We proposed above that the main contributor to the quirky case problem is the

case mismatch between the operator and the overt noun which AspP modifies. We

also suggested that participle agreement was part of the problem. When looking

at attributive passives, it is somewhat difficult to tease these two apart. However,

Icelandic Ability Participles give us a chance to take a closer look at the importance
of case conflict.

5.4.3.2   A closer look at the case conflict: Ability Participles

Icelandic Ability Participles (APs) headed by *-andi* (e.g., H.Á. Sigurðsson 1989,
Wood and E.F. Sigurðsson 2014a) offer a perfect testing ground to see the effect of
case vs. φ-features as they allow us to tease these apart. APs preserve quirky and
inherent case (Wood and E.F. Sigurðsson 2014a) but they do not have φ-features
— APs always end in *-andi,* irrespective of gender, number and case.

APs formed of verbs that take DP complements that bear structural case are
fine when used attributively but APs of dative or genitive taking verbs are not.

(158)   a.   Þessum manni   er ó-bjóð-andi.
             this.DAT man.DAT is un-invite-ing
             'This man is uninvitable (because he will ruin the party).'

        b.   ?? Þetta er ó-bjóð-andi   maður.
             this   is un-invite-ing man
             'This is an uninvitable man.'

However, the example becomes much better when the whole DP is in the dative
case.

(159)   (?) Ég vil   ekki bjóða ó-bjóð-andi   fólki   í afmælið mitt.
            I   want not invite un-invite-ing people.DAT to birthdy my
            'I do not want to invite uninvitable people to my birthday party.'

This confirms that case mismatch between a DP operator and the whole DP matters in attributive passives and attributive APs. Unfortunately, we do not have a way of teasing apart case and φ-features to test the effect of case and φ-feature mismatch between AspP and the head it merges with. A further study is needed to compare attributive APs and attributive resultative passives to see what the effect of agreement mismatch is. The prediction is that attributive APs formed of verbs that take non-structural case objects should in general be better then attributive resultative passives formed of the same verbs.

5.5   Chapter summary

In this chapter we discussed the interaction of Voice and case, in particular in Icelandic. In §5.2 we gave an analysis of three constructions that show DAT-ACC pattern. In previous chapters, we have been concerned with probing case features on Voice and a structure-building case feature on Appl. In these constructions, however, we argued that Appl can also have a probing structural case feature; in certain dialects of Icelandic and in Faroese, structural case assigned by Appl is realized as accusative case at PF, even though there is no other element in the same dependency that bears structural case.

In §5.3 we were concerned with how much structure resultative passives and stative participles involve. We argued for the presence of a Voice-layer in resultative passives. We furthermore argued that the preservation of case in resultative passives

indicates that quirky case is indeed encoded on Voice, as we had already concluded in Chapter §2.

Finally, §5.4 discussed the quirky case problem in Icelandic. It has to do with attributive resultative passives. The attributive passive participle contains a Voice-layer on our approach, which in turn has a quirky case feature for verbs that assign quirky case to their direct object. We argued that the problem comes down to (i) case conflict between a covert DP operator embedded in the structure and the DP as a whole, and (ii) case and φ-feature mismatch between AspP and the head it merges with.

Chapter 6

Conclusion

I have argued in this thesis for an architecture of grammar that places case, agreement and Voice phenomena in syntax. Essential to the proposal is that derivational features, i.e., structure-building features (Merge) and probe features (Agree) drive the derivation.

The main conclusions were summarized in Chapter 1, repeated below.

1. **Syntactic case**

   There are three types of syntactic case: structural, inherent and quirky case.

   (i) Structural nominative case is either the result of structural case assignment or the realization of unassigned case. If a DP has not been assigned case by Spell-Out, its syntactic case is determined as STR.

   (ii) The locus of structural accusative case is usually Voice (cf. Legate 2014) when Voice has a filled specifier which is assigned structural case. However, Appl can in certain environments assign structural case to its com-

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plement. This is usually realized as nominative, but in some grammars it is realized morphologically as accusative.

(iii) Inherent case is assigned by Appl via Merge.

(iv) Quirky case is assigned by Voice via Agree.

2. ***From syntactic case to morphological case***

Case morphology is the result of a three-step process:

(i) A syntactic relationship with a functional head (e.g., Agree with Voice)

(ii) A morphological translation of that relationship into a case feature (e.g., from syntactic STR to morphological ACC)

(iii) A morphological realization of that feature at Vocabulary Insertion in the morphological component (e.g., *-an*)

3. ***Derivational features***

(i) The derivation is driven by two types of derivational features: structure-building features (Merge) and probing features (Agree) (Heck and Müller 2007, Müller's (2010)). Both types are essential in deriving case and agreement in the clausal domain and DP-internally. I argue that the derivation DP-internally is driven to a large extent by structure-building features (Merge) and propose a feature-sharing approach via Merge.

(ii) Feature values assigned by Merge take effect immediately whereas feature values assigned via Agree take effect at Spell-Out. That is, even though

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an Agree relation has been established early in the syntactic derivation, feature values are not determined until Spell-Out. This has the effect that Merge can overwrite Agree relation.

4. ***Voice phenomena***

Passive, active, etc., are labels for a collection of properties of VoiceP, where these properties may vary partially independently, yielding constructions that do not fit the traditional labels. I demonstrate how, when and why the dichotomy between actives and passives breaks down.

5. ***Implicit arguments***

Implicit arguments may be projected in the syntax as a bundle of φ-features (φP), or may fail to project. When they are projected syntactically, they are assigned case, which impacts case calculations, even though they are not DPs. φPs are not always implicit, as they can be overtly realized. Syntactically projected implicit arguments, and their explicit counterparts, contribute the same semantically: they restrict argument positions, but do not saturate them.

Bibliography

Abney, Steven Paul. 1987. The English noun phrase in its sentential aspect. Doctoral Dissertation, Massachusetts Institute of Technology.

Abraham, Werner, and Elisabeth Leiss. 2006. The impersonal passive: Voice suspended under aspectual conditions. In *Passivization and typology*, eds. Werner Abraham and Larisa Leisiö, 502–517. Amsterdam: John Benjamins.

Alexiadou, Artemis, and Elena Anagnostopoulou. 2008. Structuring participles. In *Proceedings of the 26th West Coast Conference on Formal Linguistics*, eds. Charles B. Chang and Hannah J. Haynie, 33–41. University of California, Berkeley: Cascadilla Press.

Alexiadou, Artemis, Elena Anagnostopoulou, and Christina Sevdali. 2014a. Opaque and transparent datives, and how they behave in passives. *Journal of Comparative Germanic Linguistics* 17:1–34.

Alexiadou, Artemis, Berit Gehrke, and Florian Schäfer. 2014b. The argument structure of adjectival participles revisited. *Lingua* 149:118–138.

Anagnostopoulou, Elena. 2003. Participles and Voice. In *Perfect explorations*, eds. Artemis Alexiadou, Monika Rathert, and Arnim von Stechow. Berlin: Mouton de Gruyter.

Andrason, Alexander. 2008. The BÚNA-construction in Pidgin Icelandic. *Íslenskt mál og almenn málfræði* 30:121–140.

Andrews, Avery. 1976. The VP-complement analysis in Modern Icelandic. In *Proceedings of the 6th Annual Meeting of the North East Linguistic Society*, eds. Alan Ford, John Reighard, and Rajendra Singh, 1–21. Montreal: Montreal Working Papers in Linguistics.

Arad, Maya. 2003. Locality constraints on the interpretation of roots: The case of Hebrew denominal verbs. *Natural Language and Linguistic Theory* 21:737–778.

Árnadóttir, Hlíf, and Einar Freyr Sigurðsson. 2008. The glory of non-agreement: The rise of a new passive. Ms., University of Iceland, Reykjavík.

Árnadóttir, Hlíf, and Einar Freyr Sigurðsson. 2013. Case in disguise. In *Variation in datives: A micro-comparative perspective*, ed. Beatriz Fernández og Ricardo Etxepare, 96–143. Oxford: Oxford University Press.

Árnadóttir, Hlíf, Thórhallur Eythórsson, and Einar Freyr Sigurðsson. 2011. The passive of reflexive verbs in Icelandic. *Nordlyd* 37:39–97.

Árnadóttir, Hlíf, and Sigurðsson, Einar Freyr. 2012. Another new passive in Icelandic. A paper given at Non-Canonically Case-Marked Subjects within and across Languages and Language Families: Stability, Variation and Change. Iceland, 7 June 2012.

Árnason, Kristján. 1980. *Íslensk málfræði.* Fyrri hluti. Reykjavík: Iðunn.

Axelsdóttir, Katrín. 2011. Fornöfn [Pronouns]. In *Handbók um íslensku. Hagnýtur leiðarvísir um íslenskt mál, málnotkun, stafsetningu og ritun [Handbook on Icelandic]*, ed. Jóhannes B. Sigtryggsson, 42–70. Reykjavík: JPV útgáfa.

Åfarli, Tor, and Eldfrid Haaker Fjøsne. 2012. Weak dative case in Norwegian dialect syntax. *Studia Linguistica* 66:75–93.

Baier, Nico. 2015. Adjective agreement in Noon: Evidence for a split theory of noun-modifier concord. In *Proceedings of the 45th Annual Meeting of the North East Linguistic Society*, eds. Thuy Bui and Deniz Özyıldız, volume 1, 67–80. Amherst, MA: GLSA Publications.

Baker, Mark. 1988. *Incorporation. A theory of grammatical function changing.* Chicago, IL: University of Chicago Press.

Baker, Mark. 2008. *The syntax of agreement and concord*. Cambridge: Cambridge University Press.

Baker, Mark, Kyle Johnson, and Ian Roberts. 1989. Passive arguments raised. *Linguistic Inquiry* 20:219–251.

Baker, Mark C., and Nadya Vinokurova. 2010. Two modalities of case assignment: case in Sakha. *Natural Language and Linguistic Theory* 28:593–642.

Barðdal, Jóhanna. 1993. Accusative and dative case of objects of some transitive verbs in Icelandic and the semantic distinction between them. In *Flyktförsök. Kalasbok till Christer Platzack på femtioårsdagen 18 november 1993, från doktorander och dylika*, 1–13. Lund: Lund University.

Barðdal, Jóhanna. 2001. Case in Icelandic: A Synchronic, Diachronic, and Comparative Approach. Doctoral Dissertation, Lund University.

Barðdal, Jóhanna. 2011. Lexical vs. structural case: a false dichotomy. *Morphology* 21:619–654.

Barðdal, Jóhanna, and Valéria Molnár. 2003. The passive in Icelandic — compared to Mainland Scandinavian. In *Structures of focus and grammatical relations*, eds. Jorunn Hetland and Valéria Molnár, 231–260. Tübingen: Niemeyer.

Barnes, Michael P. 1986. Subject, nominative and oblique case in Faroese. *Scripta Islandica* 37:13–46.

Barnes, Michael P., and Eivind Weyhe. 1994. Faroese. In *The Germanic Languages*, eds. Johan van der Auwera and Ekkehard König, 190–218. London: Routledge.

Benediktsdóttir, Ásbjörg. 2008. Nýja þolmyndin. Fyrsta þolmyndun barna? B.A.-thesis, University of Iceland, Reykjavík. http://hdl.handle.net/1946/3268.

Bhatt, Rajesh, and Roumyana Pancheva. 2006. Implicit Argument. In *The Blackwell companion to syntax*, eds. Martin Everaert and Henk van Riemsdijk, volume II, 558–588. Malden, MA: Blackwell.

Bobaljik, Jonathan David. 2008. Where's phi? Agreement as a postsyntactic operation. In *Phi Theory: Phi-features across modules and interfaces*, eds. Daniel Harbour, David Adger, and Susana Béjar, 295–328. Oxford: Oxford University Press.

Boeckx, Cedric. 2000. Quirky agreement. *Studia Linguistica* 54:354–380.

Bruening, Benjamin. 2013. By phrases in passives and nominals. *Syntax* 16:1–41.

Bruening, Benjamin. 2014. Word formation is syntactic: Adjectival passives in English. *Natural Language and Linguistic Theory* 32:363–422.

Bruening, Benjamin. 2016. Depictive secondary predicates and small clause approaches to argument structure. Ms. University of Delaware.

Bruening, Benjamin, and Thuan Tran. 2015. The nature of the passive, with an analysis of Vietnamese. *Lingua* 165:133–172.

Burzio, Luigi. 1986. *Italian syntax.* A Government-Binding Approach. Dordrecht: Reidel.

Béjar, Susana, and Milan Rezac. 2009. Cyclic agree. *Linguistic Inquiry* 40:35–73.

Cardinaletti, Anna, and Michal Starke. 1996. Deficient pronouns: A view from Germanic. A study in the unified description of Germanic and Romance. In *Studies in Comparative Germanic Syntax II*, eds. Höskuldur Thráinsson, Samuel David Epstein, and Steve Peter, 21–65. Dordrecht: Kluwer.

Cardinaletti, Anna, and Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In *Clitics in the languages of Europe*, ed. Henk van Riemsdijk, 145–233. Berlin: Mouton de Gruyter.

Carrier, Jill, and Janet H. Randall. 1992. The argument structure and syntactic structure of resultatives. *Linguistic Inquiry* 23:173–234.

Carstens, Vicki. 2000. Concord in Minimalist theory. *Linguistic Inquiry* 31:319–355.

Chomsky, Noam. 1957. *Syntactic Structures*. The Hague: Mouton and Co.

Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.

Chomsky, Noam. 1980. On binding. *Linguistic Inquiry* 11:1–46.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, Noam. 1993. A minimalist program for linguistic theory. In *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, eds. Ken Hale and Samuel Jay Keyser, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam. 1995. *The Minimalist Program*. Malden, MA: MIT Press.

Chomsky, Noam. 2000. Minimalist inquiries. The framework. In *Step by step. Essays on Minimalist Syntax in honor of Howard Lasnik*, eds. Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale. A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam. 2008. On phases. In *Foundational issues in linguistic theory. Essays in honor of Jean-Roger Vergnaud*, eds. Robert Freidin, Carlos P. Otero, and Maria Luisa Zubizarreta, 133–166. Cambridge, MA: MIT Press.

Chomsky, Noam. 2013. Problems of projection. *Lingua* 130:33–49.

Chung, Sandra, and William A. Ladusaw. 2004. *Restriction and saturation*. Cambridge, MA: MIT Press.

Collins, Chris, and Paul M. Postal. 2012. *Imposters: A study of pronominal agreement*. Cambridge, MA: MIT Press.

Collins, Chris, and Höskuldur Thráinsson. 1996. VP-internal structure and object shift in Icelandic. *Linguistic Inquiry* 27:475–497.

Comrie, Bernard. 1975. Polite plurals and predicate agreement. *Language* 51:406–418.

Comrie, Bernard. 1976. *Aspect: An introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.

Comrie, Bernard. 1977. In defense of spontaneous demotion: The impersonal passive. In *Grammatical relations.* Syntax and Semantics 8, eds. Peter Cole and Jerrold M. Sadock, 47–58. New York: Academic Press.

Corbett, Greville G. 1979. The agreement hierarchy. *Journal of Linguistics* 15:203–224.

Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.

D'Alessandro, Roberta, and Ian Roberts. 2008. Movement and agreement in Italian past participles and defective phases. *Linguistic Inquiry* 39:477–491.

Danon, Gabi. 2011. Agreement and DP-internal feature distribution. *Syntax* 14:297–317.

Danon, Gabi. 2013. Agreement alternations with quantified nominals in Modern Hebrew. *Journal of Linguistics* 49:55–92.

Davies, William D., and Stanley Dubinsky. 2004. *The grammar of raising and control: A course in syntactic argumentation*. Malden, MA: Blackwell.

Déchaine, Rose-Marie, and Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33:409–442.

Déchaine, Rose-Marie, and Martina Wiltschko. 2012. The heterogeneity of reflexives. Ms., available online: http://ling.auf.net/lingbuzz/001665.

Dowty, David. 1979. *Word meaning and Montague Grammar*. Dordrecht: Reidel.

Egerland, Verner. 1996. The syntax of past participles: A generative study of nonfinite constructions in Ancient and Modern Italian. Doctoral Dissertation, Lund University.

Einarsson, Stefán. 1949. *Icelandic: Grammar, texts, glossary*. Baltimore: The John Hopkins Press.

Embick, David. 1997. Voice and the interfaces of syntax. Doctoral Dissertation, University of Pennsylvania.

Embick, David. 2003. Locality, listedness, and morphological identity. *Studia Linguistica* 57:143–169.

Embick, David. 2004. On the structure of resultative participles in English. *Linguistic Inquiry* 35:355–392.

Embick, David. 2007. Linearization and local dislocation: Derivational mechanics and interactions. *Linguistic Analysis* 33:2–35.

Embick, David. 2010. *Localism versus Globalism in Morphology and Phonology.* Malden, MA: MIT Press.

Embick, David, and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32:555–595.

Eythórsson, Thórhallur. 2008a. The New Passive in Icelandic really is a passive. In *Grammatical change and linguistic theory.* The Rosendal papers, ed. Thórhallur Eythórsson, 173–219. Amsterdam: John Benjamins.

Eythórsson, Thórhallur. 2008b. Stöðugleiki og breytingar í fallakerfi norrænu eyja-málanna. *Frændafundur* 6:75–93.

Eythórsson, Thórhallur. 2012. Varðveisla falla í þolmynd í íslensku og færeysku — ásamt nokkrum samanburði við norsku og ensku. *Frændafundur* 7:109–126.

Eythórsson, Thórhallur, and Jóhanna Barðdal. 2005. Oblique subjects: A common Germanic inheritance. *Language* 81:824–881.

Eythórsson, Thórhallur, Anton Karl Ingason, and Einar Freyr Sigurðsson. 2016. Explicit realization of weak arguments. In *Proceedings of the 46th annual meeting of the North East Linguistic Society*, eds. Christopher Hammerly and Brandon Pricket, volume I, 277–286. Amherst, MA: GLSA.

Eythórsson, Thórhallur, Janne Bondi Johannessen, Signe Laake, and Tor A. Åfarli. 2012. Dative case in Norwegian, Icelandic and Faroese: Preservation and non-preservation. *Nordic Journal of Linguistics* 35:219–249.

Eythórsson, Thórhallur, and Jóhannes Gísli Jónsson. 2003. The case of subject in Faroese. *Working Papers in Scandinavian Syntax* 72:207–231.

Eythórsson, Thórhallur, and Jóhannes Gísli Jónsson. 2009. Variation in Icelandic morphosyntax. In *Describing and modeling variation in grammar*, eds. Andreas Dufter, Jürg Fleischer, and Guido Seiler, 81–96. Berlin: Mouton de Gruyter.

von Fintel, Kai, and Irene Heim. 2011. Lecture notes on intensional semantics Ms., Massachusetts Institute of Technology. Spring 2011 version.

Frampton, John, and Sam Gutmann. 2006. How sentences grow in the mind: Agreement and selection in efficient minimalist syntax. In *Agreement systems*, ed. Cedric Boeckx, 201–237. Philadelphia, PA: John Benjamins.

Frampton, John, Sam Gutmann, Julie Legate, and Charles Yang. 2000. Remarks on derivation by phase. Ms., Northeastern University and MIT.

Freidin, Robert. 1975. The analysis of passives. *Language* 51:384–405.

Friðjónsson, Jón. 1978. *A course in modern Icelandic: Texts, vocabulary, grammar, exercises, translations*. Reykjavík: Tímariti Skák.

Gehrke, Berit. 2015. Stative passives and event kinds. In *Sinn und Bedeutung 15. Proceedings of the 2010 Annual Conference of the Gesellschaft für Semantik*, eds. Ingo Reich, Eva Horch, and Dennis Pauly, 241–257. Saarbrücken: Universaar — Saarland University Press.

Green, Georgia. 1972. Some observations on the syntax and semantics of instrumental verbs. In *Papers from the Eighth Regional Meeting of the Chicago Linguistic Society*, eds. Paul M. Peranteau, Judith N. Levi, and Gloria C. Phares, 83–97. Chicago: University of Chicago, Chicago Linguistic Society.

Hacquard, Valentine. 2009. On the interaction of aspect and modal auxiliaries. *Linguistics and Philosophy* 32:279–315.

Halle, Morris. 1997. Impoverishment and fission. *MIT Working Papers in Linguistics* 30:425–450.

Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, eds. Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge, MA: MIT Press.

Halle, Morris, and Alec Marantz. 1994. Some key features of Distributed Morphology. *MIT Working Papers in Linguistics* 21:275–288.

Harley, Heidi. 2011. A Minimalist approach to argument structure. In *The Oxford Handbook of Linguistic Minimalism*, ed. Cedric Boeckx, 426–447. Oxford: Oxford University Press.

Harley, Heidi. 2013. External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua* 125:34–57.

Harley, Heidi. 2014. Aggressive passives: Voice and implicit arguments in Hiaki. Invited talk given at NELS 45, MIT, October 31, 2014.

Hartmann, Jutta, and Caroline Heycock. 2017. Variation in copular agreement in Insular Scandinavian. In *Syntactic variation in Insular Scandinavian*, eds. Höskuldur Thráinsson, Caroline Heycock, Hjalmar P. Petersen, and Zakaris Svabo Hansen, 233–276. Amsterdam: John Benjamins.

Harwood, William. 2015. Being progressive is just a phase: celebrating the uniqueness of progressive aspect under a phase-based analysis. *Natural Language and Linguistic Theory* 33:523–573.

Harðarson, Jón Axel. 2000. Horf í íslenzku. *Íslenskt mál og almenn málfræði* 22:129–144.

Heck, Fabian, and Gereon Müller. 2007. Extremely local optimization. In *Proceedings of WECOL*, volume 26, 170–183.

Heim, Irene, and Angelika Kratzer. 1998. *Semantics in Generative Grammar*. Malden, MA: Blackwell.

Helgadóttir, Anna. 2011. Notkun málfræðilegra kynja í máli ungs fólks. Rannsókn á kynjanotkun í íslensku máli. M.A.-thesis, University of Iceland, Reykjavík. http://hdl.handle.net/1946/8458.

Heycock, Caroline. 2009. Agreement in specificational sentences in Faroese. *Nordlyd* 36.2:36–57.

Hoekstra, Teun. 1988. Small clause results. *Lingua* 74:101–139.

Holmberg, Anders. 2002. Expletives and agreement in Scandinavian passives. *Journal of Comparative Germanic Linguistics* 4:85–128.

Holmberg, Anders, and Thorbjörg Hróarsdóttir. 2004. Agreement and movement in Icelandic raising constructions. *Lingua* 114:651–673.

Iatridou, Sabine, Elena Anagnostopoulou, and Roumyana Izvorski. 2001. Observations about the form and meaning of the perfect. In *Ken Hale. A life in language*, ed. Michael Kenstowicz, 189–238. Cambridge, MA.: MIT Press.

Ingason, Anton Karl. 2016. Realizing morphemes in the Icelandic noun phrase. Doctoral Dissertation, University of Pennsylvania.

Ingason, Anton Karl, and Einar Freyr Sigurðsson. 2015. Phase locality in Distributed Morphology and two types of Icelandic agent nominals. In *Proceedings of the 45th Annual Meeting of the North East Linguistic Society*, eds. Thuy Bui and Deniz Özyıldız, volume 2, 45–58. Amherst, MA: GLSA.

Ingason, Anton Karl, and Einar Freyr Sigurðsson. 2017 [forthcoming]. The interaction of adjectival structure, concord and affixation. In *Proceedings of the 47th Annual Meeting of the North East Linguistic Society*, eds. Andrew Lamont and Katie Tetzloff.

Ingason, Anton Karl, Julie Anne Legate, and Charles Yang. 2012. Structural and evolutionary basis of the Icelandic New Impersonal Passive. A paper given at Non-Canonically Case-Marked Subjects within and across Languages and Language Families: Stability, Variation and Change. Iceland, 7 June 2012.

Ingason, Anton Karl, Julie Anne Legate, and Charles Yang. 2013. The evolutionary trajectory of the Icelandic New Passive. *University of Pennsylvania Working Papers in Linguistics* 19.2:91–100. http://repository.upenn.edu/pwpl/vol19/iss2/11/.

Ingason, Anton Karl, Iris Edda Nowenstein, and Einar Freyr Sigurðsson. 2016a. The Voice-adjunction theory of agentive 'by'-phrases and the Icelandic impersonal passive. *Working Papers in Scandinavian Syntax* 97:40–56.

Ingason, Anton Karl, Einar Freyr Sigurðsson, and Thórhallur Eythórsson. 2016b. Veik fornöfn í afturbeygðri þolmynd. *Íslenskt mál og almenn málfræði* 38:51–81.

Ingason, Anton Karl, Einar Freyr Sigurðsson, and Jim Wood. 2016c. Displacement and subject blocking in verbal idioms: Evidence from passive-like constructions in Icelandic. *Working Papers in Scandinavian Syntax* 96:26–48.

Ingason, Anton Karl, and Jim Wood. 2017. Clause-bounded movement: Stylistic Fronting and Phase Theory. *Linguistic Inquiry* 48:529–541.

Jaeggli, Osvaldo A. 1986. Passive. *Linguistic Inquiry* 17:587–622.

Jóhannsdóttir, Kristín M. 2011. Aspects of the progressive in English and Icelandic. Doctoral Dissertation, The University of British Columbia, Vancouver.

Jóhannsdóttir, Kristín M. 2015. „Nafnháttarsýki". Um eðli og þróun orðasambandsins *vera að* + nafnháttur. *Íslenskt mál og almenn málfræði* 37:9–68.

Jónsson, Jóhannes Gísli. 1991. Stylistic Fronting in Icelandic. *Working Papers in Scandinavian Syntax* 48:1–43.

Jónsson, Jóhannes Gísli. 1992. The two perfects of Icelandic. *Íslenskt mál og almenn málfræði* 14:129–145.

Jónsson, Jóhannes Gísli. 1996. Clausal architecture and case in Icelandic. Doctoral Dissertation, University of Massachusetts, Amherst.

Jónsson, Jóhannes Gísli. 2003. Not so quirky: On subject case in Icelandic. In *New perspectives on Case Theory*, eds. Ellen Brandner and Heike Zinsmeister, 127–163. Stanford, CA: CSLI.

Jónsson, Jóhannes Gísli. 2009a. Covert nominative and dative subjects in Faroese. *Nordlyd* 36:142–164.

Jónsson, Jóhannes Gísli. 2009b. The new impersonal as a true passive. In *Advances in comparative Germanic syntax*, eds. Artemis Alexiadou, Jorge Hankamer, Thomas McFadden, Justin Nuger, and Florian Schäfer, 281–306. Amsterdam: John Benjamins.

Jónsson, Jóhannes Gísli. 2011. Reflexive *sig* is an argument. *Nordlyd* 37:99–118.

Jónsson, Jóhannes Gísli. 2013a. Dative versus accusative and the nature of inherent case. In *Variation in datives: A micro-comparative perspective*, eds. Beatriz Fernández and Ricardo Etxepare, 144–160. Oxford: Oxford University Press.

Jónsson, Jóhannes Gísli. 2013b. Two types of case variation. *Nordic Journal of Linguistics* 36:5–25.

Jónsson, Jóhannes Gísli. 2016. Testing agreement with nominative objects. *Working Papers in Scandinavian Syntax* 97:57–75.

Jónsson, Jóhannes Gísli, and Thórhallur Eythórsson. 2005. Variation in subject case marking in Insular Scandinavian. *Nordic Journal of Linguistics* 28:223–245.

Julien, Marit. 2005. *Nominal Phrases from a Scandinavian Perspective*. Amsterdam: John Benjamins.

Katz, Graham. 2003. On the stativity of the English perfect. In *Perfect explorations*, eds. Artemis Alexiadou, Monika Rathert, and Arnim von Stechow, 205–234. Mouton de Gruyter.

Kaufman, Daniel. 2014. The syntax of Indonesian imposters. In *Cross-linguistic studies of imposters and pronominal agreement*, ed. Chris Collins, 89–120. Oxford: Oxford University Press.

Kayne, Richard S. 1975. *French Syntax: The Transformational Cycle*. Cambridge, MA: MIT Press.

Kayne, Richard S. 1989. Facets of Romance past participle agreement. In *Dialect variation and the theory of grammar*, ed. Paola Benincà, 85–103. Dordrecht: Foris.

Kjartansson, Helgi Skúli. 1991. Nýstárleg þolmynd í barnamáli. *Skíma* 14:18–22.

Koopman, Hilda. 2003. The locality of agreement and the structure of the DP in Maasai. In *The role of agreement in natural language: Proceedings of the fifth annual Texas Linguistics Society Conference*, ed. William Earl Griffin, 207–227. Austin, TX: Texas Linguistics Society.

Koopman, Hilda. 2006. Agreement configurations: In defense of "Spec head". In *Agreement systems*, ed. Cedric Boeckx, 159–199. Philadelphia, PA: John Benjamins.

Kramer, Ruth. 2014. Gender in Amharic: A morphosyntactic approach to natural and grammatical gender. *Language Sciences* 43:102–115.

Kratzer, Angelika. 1977. What 'must' and 'can' must and can mean. *Linguistics and Philosophy* 1:337–355.

Kratzer, Angelika. 1981. The notional category of modality. In *Words, worlds, and contexts: New approaches in word semantics*, eds. Hans-Jürgen Eikmeyer and Hannes Rieser, 38–74. Berlin: de Gruyter.

Kratzer, Angelika. 1994. The event argument and the semantics of voice. Ms., University of Massachusetts, Amherst.

Kratzer, Angelika. 1996. Severing the external argument from the verb. In *Phrase structure and the lexicon*, eds. Johan Rooryck and Laurie Zaring, 109–137. Dordrecht: Kluwer.

Kratzer, Angelika. 2000. Building statives. In *Annual Meeting of the Berkeley Linguistics Society 26*, 385–399.

Kratzer, Angelika. 2005. Building resultatives. In *Events in syntax, semantics, and discourse*, eds. Claudia Maienborn and Angelika Wöllstein-Leisten, 177–212. Tübingen: Niemeyer.

Kučerová, Ivona. 2012. Toward a phase account of dependent case. *University of Pennsylvania Working Papers in Linguistics* 18.1:141–150. http://repository.upenn.edu/pwpl/vol18/iss1/17/.

Kučerová, Ivona. 2016. Long-Distance Agreement in Icelandic: locality restored. *Journal of Comparative Germanic Linguistics* 19:49–74.

Landau, Idan. 2008. Two routes of control: Evidence from case transmission in Russian. *Natural Language and Linguistic Theory* 26:877–924.

Landau, Idan. 2010. The explicit syntax of implicit arguments. *Linguistic Inquiry* 41:357–388.

Landau, Idan. 2016. DP-internal semantic agreement: A configurational analysis. *Natural Language and Linguistic Theory* 34:975–1020.

Larsson, Ida. 2008. Becoming Perfect. Observations about Icelandic *vera búinn að*. *Íslenskt mál og almenn málfræði* 30:30–92.

Lavine, James E. 2000. Topics in the syntax of nonagreeing predicates in Slavic. Doctoral Dissertation, Princeton University.

Lavine, James E. 2005. The morphosyntax of Polish and Ukrainian *-no/-to*. *Journal of Slavic Linguistics* 13:75–117.

Lavine, James E. 2010. Mood and a transitivity restriction in Lithuanian: The case of the inferential evidential. *Baltic Linguistics* 1:115–142.

Lebeaux, David. 1988. Language acquisition and the form of the grammar. Doctoral Dissertation, Massachusetts Institute of Technology.

Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39:55–101.

Legate, Julie Anne. 2012. Subjects in Acehnese and the nature of the passive. *Language* 88:495–525.

Legate, Julie Anne. 2014. *Voice and v: Lessons from Acehnese*. Cambridge, MA.: MIT Press.

Levin, Beth, and Malka Rappaport. 1986. The formation of adjectival passives. *Linguistic Inquiry* 623–661.

Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity: At the Syntax–Lexical Semantics Interface*. Cambridge, MA: MIT Press.

Levin, Theodore, and Omer Preminger. 2015. Case in Sakha: are two modalities really necessary? *Natural Language and Linguistic Theory* 33:231–250.

Levin, Theodore Frank. 2015. Licensing without Case. Doctoral Dissertation, Massachusetts Institute of Technology.

Lewis, David. 1970. General semantics. *Synthese* 22:18–67.

Lewis, David. 1986. *On the plurality of worlds*. Oxford: Blackwell.

Lockwood, W.B. 1955. *An introduction to Modern Faroese*. Copenhagen: Ejnar Munksgaard.

Lundquist, Björn. 2014. Prefixed negation. *Nordic Atlas of Language Structures (NALS) Journal* 1:149–153.

MacDonald, Jonathan E. To appear. An implicit projected argument in Spanish impersonal and passive *se* constructions. *Syntax*.

Maling, Joan. 1980. Inversion in embedded clauses in Modern Icelandic. *Íslenskt mál og almenn málfræði* 2:175–193.

Maling, Joan. 1988. Variations on a theme: Existential sentences in Swedish and Icelandic. *McGill Working Papers in Linguistics: Special Issue on Comparative Germanic Syntax* 168–191.

Maling, Joan. 2001. Dative: The heterogeneity of the mapping among morphological case, grammatical functions, and thematic roles. *Lingua* 111:419–464.

Maling, Joan. 2002. Það rignir þágufalli á Íslandi: Verbs with dative objects in Icelandic. *Íslenskt mál og almenn málfræði* 24:31–105.

Maling, Joan, Anthony Kroch, and Sigríður Sigurjónsdóttir. 2011. Nothing personal? A system-internal syntactic change in Icelandic. Paper given at DGfS 33 in the workshop Comparative Germanic Syntax and the Challenge from Icelandic. Göttingen, 24 February 2011.

Maling, Joan, and Sigríður Sigurjónsdóttir. 2002. The 'new impersonal' construction in Icelandic. *Journal of Comparative Germanic Linguistics* 5:97–142.

Maling, Joan, and Sigríður Sigurjónsdóttir. 2012. Syntactic change in progress. The Icelandic "New Construction" as an active impersonal. In *Comparative Germanic syntax. The state of the art*, eds. Peter Ackema, Rhona Alcorn, Caroline Heycock, Dany Jaspers, Jeroen van Craenenbroeck, and Guido Vanden Wyngaerd, 249–278. Amsterdam: John Benjamins.

Maling, Joan, and Sigríður Sigurjónsdóttir. 2013. Nothing personal? A system-internal syntactic change in Icelandic. In *From quirky case to representing space. Papers in honor of Annie Zaenen*, eds. Tracy H. King and Valeria de Paiva, 109–126. Stanford, CA: CSLI.

Maling, Joan, and Sigríður Sigurjónsdóttir. 2015. From passive to active: Stages in the Icelandic "New Impersonal". In *Syntax over time: Lexical, morphological, and information-structural interactions*, eds. Theresa Biberauer and George Walkden, 35–53. Oxford: Oxford University Press.

Manzini, Maria Rita. 1983. On control and control theory. *Linguistic Inquiry* 14:421–446.

Marantz, Alec. 1984. *On the nature of grammatical relations*. Cambridge, MA: MIT Press.

Marantz, Alec. 1991. Case and licensing. In *Proceedings of ESCOL '91*, eds. German F. Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Columbus: The Ohio State University, Department of Linguistics, ESCOL Publication Committee.

Marantz, Alec. 2007. Phases and words. In *Phases in the theory of grammar*, eds. Sook-Hee Choe, Dong-Wee Yang, Yang-Soon Kim, Sung-Hun Kim, and Alec Marantz, 191–222. Seoul: Dong-In Publishing Co.

Marantz, Alec. 2013. Verbal argument structure: Events and participants. *Lingua* 130:152–168.

Matushansky, Ora. 2013. Gender confusion. In *Diagnosing syntax*, eds. Lisa Lai-Shen Cheng and Norbert Corver, 271–294. Oxford: Oxford University Press.

McCawley, James D. 1971. Tense and time reference in English. In *Studies in linguistic semantics*, eds. Charles J. Fillmore and D. Terence Langendoen, 97–113. New York: Holt, Rinehart and Winston, Inc.

McCawley, James D. 1975. Review of Chomsky, *Studies on semantics in Generative Grammar*. In *Studies in English Linguistics* (Tokyo) 3, 209–311.

McCloskey, James. 2007. The grammar of autonomy in Irish. *Natural Language and Linguistic Theory* 25:825–857.

McCoard, Robert W. 1978. *The English Perfect: Tense choice and pragmatic inferences*. Amsterdam: North-Holland Press.

McFadden, Thomas. 2004. The position of morphological case in the derivation: A study on the Syntax-Morphology Interface. Doctoral Dissertation, University of Pennsylvania.

McGinnis, Martha. 1998a. Locality and inert case. In *Proceedings of the 28th Annual Meeting of the North East Linguistic Society*, eds. Pius Tamanji and Kiyomi Kusumoto. University of Massachusetts, Amherst: GLSA Publications.

McGinnis, Martha. 1998b. Locality in A-movement. Doctoral Dissertation, Massachusetts Institute of Technology.

McGinnis, Martha. 2010. Evidence for the syntactic attachment of *-able*. Handout from the CUNY Conference on the Word in Phonology, New York, January 14–15.

McIntyre, Andrew. 2013. Adjectival passives and adjectival participles in English. In *Non-canonical passives*, eds. Artemis Alexiadou and Florian Schäfer, 21–41. Amsterdam: John Benjamins.

Milsark, Gary. 1974. Existential sentences in English. Doctoral Dissertation, Massachusetts Institute of Technology.

Milsark, Gary. 1977. Toward an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3:1–29.

Müller, Gereon. 2010. On deriving CED effects from the PIC. *Linguistic Inquiry* 41:35–82.

Müller, Stefan. 2008. Depictive secondary predicates in German and English. In *Secondary predicates in Eastern European languages and beyond*, ed. Winfried Boeder Christoph Schroeder, Gerd Hentschel, 255–273. BIS-Verlag.

Nedjalkov, Vladimir P., and Sergej Je. Jaxontov. 1988. The typology of resultative constructions. In *Typology of resultative constructions*, ed. Vladimir P. Nedjalkov, 3–62. Translated from the original Russian edition. English translation edited by Bernard Comrie. Amsterdam: John Benjamins.

Norris, Mark. 2012. Towards an analysis of concord (in Icelandic). In *Proceedings of the 29th West Coast Conference on Formal Linguistics*, eds. Jaehoon Choi, E. Alan Hogue, Jeffrey Punske, Deniz Tat, Jessamyn Schertz, and Alex Trueman, 205–213. Somerville, MA: Cascadilla Press.

Norris, Mark. 2014. A theory of nominal concord. Doctoral Dissertation, University of California, Santa Cruz.

Noyer, Rolf. 1992. Features, positions and affixes in autonomous morphological structure. Doctoral Dissertation, Massachusetts Institute of Technology.

Ottósson, Kjartan G. 1986. Mörk orðmyndunar og beygingar. *Íslenskt mál og almenn málfræði* 8:63–119.

Pancheva, Roumyana. 2003. The aspectual makeup of Perfect participles and the interpretations of the Perfect. In *Perfect explorations*, eds. Artemis Alexiadou, Monika Rathert, and Arnim von Stechow, 277–306. Berlin: Mouton de Gruyter.

Parsons, Terence. 1990. *Events in the semantics of English*. Cambridge, MA: MIT Press.

Perlmutter, David M. 1972. A note on syntactic and semantic number in English. *Linguistic Inquiry* 3:243–246.

Perlmutter, David M. 1978. Impersonal Passives and the Unaccusative Hypothesis. In *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*, 157–189.

Perlmutter, David M., and Paul M. Postal. 1977. Toward a universal characterization of passivization. In *Proceedings of the Third Annual Meeting of the Berkeley Linguistics Society*, 394–417.

Pesetsky, David. 2013. *Russian case morphology and the syntactic categories*. Cambridge, MA: MIT Press.

Pesetsky, David, and Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture: Syntactic derivation and interpretation*, eds. Simin Karimi, Vida Samiian, and Wendy K. Wilkins, 262–294. Amsterdam: John Benjamins.

Petersen, Hjalmar P. 2002. Quirky case in Faroese. *Fróðskaparrit* 50:63–76.

Pfaff, Alexander. 2015. Adjectival and genitival modification in definite noun phrases in Icelandic: A tale of outsiders and inside jobs. Doctoral Dissertation, University of Tromsø.

Pitteroff, Marcel. 2014. Non-canonical *lassen*-middles. Doctoral Dissertation, University of Stuttgart.

Platzack, Christer. 1979. *The semantic interpretation of aspect and Aktionsarten: A study of internal time reference in Swedish*. Dordrecht: Foris.

Platzack, Christer. 1986. The structure of infinitival clauses in Danish and Swedish. In *Scandinavian syntax*, eds. Östen Dahl and Anders Holmberg, 123–137. Stockholm: Department of Linguistics, University of Stockholm.

Pollard, Carl, and Ivan A. Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago, IL: University of Chicago Press.

Poole, Ethan. 2015. Deconstructing quirky subjects. In *Proceedings of the 45th Annual Meeting of the North East Linguistic Society*, eds. Thuy Bui and Deniz Özyıldız. Amherst, MA: GLSA Publications.

Portner, Paul. 2009. *Modality*. Oxford: Oxford University Press.

Preminger, Omer. 2011. Agreement as a fallible operation. Doctoral Dissertation, Massachusetts Institute of Technology.

Preminger, Omer. 2014. *Agreement and its failures*. Cambridge, MA: MIT Press.

Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, MA: The MIT Press.

Ramchand, Gillian. 2008. *Verb meaning and the lexicon: A first phase syntax*. Cambridge: Cambridge University Press.

Reichenbach, Hans. 1947. *Elements of symbolic logic*. New York: MacMillan.

Richards, Norvin. 2013. Lardil "case stacking" and the timing of case assignment. *Syntax* 16:42–76.

Ritter, Elizabeth. 1991. Two functional categories in noun phrases: Evidence from Modern Hebrew. In *Perspectives on phrase structure: Heads and licensing*, ed. Susan D. Rothstein, 37–62. San Diego, CA: Academic Press.

Ritter, Elizabeth. 1993. Where's gender? *Linguistic Inquiry* 24:795–803.

Ritter, Elizabeth. 1995. On the syntactic category of pronouns and agreement. *Natural Language and Linguistic Theory* 13:405–443.

Roeper, Thomas. 1987. Implicit arguments and the head-complement relation. *Linguistic Inquiry* 18:267–310.

Rögnvaldsson, Eiríkur. 1996. Frumlag og fall að fornu. *Íslenskt mál og almenn málfræði* 18:37–69.

Rögnvaldsson, Eiríkur, and Höskuldur Thráinsson. 1990. On Icelandic word order once more. In *Modern Icelandic syntax*, eds. Joan Maling and Annie Zaenen, 3–38. New York: Academic Press.

Rögnvaldsson, Eiríkur. 1984. Af lýsingarorðsviðurlögum. *Íslenskt mál og almenn málfræði* 6:57–80.

Safir, Kenneth. 1985. *Syntactic chains*. Cambridge: Cambridge University Press.

Sag, Ivan, Gerald Gazdar, Thomas Wasow, and Steven Weisler. 1985. Coordination and how to distinguish categories. *Natural Language and Linguistic Theory* 3:117–171.

Sauerland, Uli, and Paul Elbourne. 2002. Total reconstruction, PF movement, and derivational order. *Linguistic Inquiry* 33:283–319.

Schäfer, Florian. 2012. The passive of reflexive verbs and its implications for theories of binding and case. *Journal of Comparative Germanic Linguistics* 15:213–268.

Schütze, Carson T. 1997. INFL in Child and Adult Language: Agreement, Case and Licensing. Doctoral Dissertation, MIT.

Siewierska, Anna. 1984. *The passive: A comparative linguistic analysis*. London: Croom Helm.

Sigurðsson, Einar Freyr. 2012. Germynd en samt þolmynd: Um nýju þolmyndina í íslensku [Active but still passive: On the New Passive in Icelandic]. M.A.-thesis, University of Iceland, Reykjavík. http://hdl.handle.net/1946/12876.

Sigurðsson, Einar Freyr, and Brynhildur Stefánsdóttir. 2014. 'By'-phrases in the Icelandic New Impersonal Passive. *University of Pennsylvania Working Papers in Linguistics* 20:311–320. http://repository.upenn.edu/pwpl/vol20/iss1/33/.

Sigurðsson, Einar Freyr, and Jim Wood. 2012. Case alternations in Icelandic 'get'-passives. *Nordic Journal of Linguistics* 35:269–312.

Sigurðsson, Halldór Ármann. 1989. Verbal syntax and case in Icelandic. In a comparative GB approach. Doctoral Dissertation, University of Lund, Lund. [Reprinted 1992 by Málvísindastofnun Háskóla Íslands, Reykjavík. Available online: http://ling.auf.net/lingbuzz/002361].

Sigurðsson, Halldór Ármann. 1990–1991. Beygingarsamræmi. *Íslenskt mál og almenn málfræði* 12–13:31–77.

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

Sigurðsson, Halldór Ármann. 1993a. Agreement as head visible feature government. *Studia Linguistica* 47:35–56.

Sigurðsson, Halldór Ármann. 1993b. The structure of the Icelandic NP. *Studia Linguistica* 47:177–197.

Sigurðsson, Halldór Ármann. 1996. Icelandic finite verb agreement. *Working Papers in Scandinavian Syntax* 57:1–46.

Sigurðsson, Halldór Ármann. 2003. Case: abstract vs morphological. In *New perspectives on case theory*, eds. Ellen Brandner and Heike Zinzmeister, 223–268. Stanford: Center for the Study of Language and Information.

Sigurðsson, Halldór Ármann. 2004a. Meaningful silence, meaningless sounds. In *Linguistic Variation Yearbook*, eds. Pierre Pika, Johan Rooryck, and Jeroen van Craenenbroeck, 235–259. Philadelphia, PA: John Benjamins.

Sigurðsson, Halldór Ármann. 2004b. The syntax of person, tense, and speech features. *Italian Journal of Linguistics / Rivista di Linguistica* 16:219–251.

Sigurðsson, Halldór Ármann. 2006a. Agree in syntax, agreement in signs. In *Agreement systems*, ed. Cedric Boeckx, 201–237. Philadelphia, PA: John Benjamins.

Sigurðsson, Halldór Ármann. 2006b. The Icelandic noun phrase: Central traits. *Arkiv för nordisk filologi* 121:193–236.

Sigurðsson, Halldór Ármann. 2006c. The Nom/Acc alternation in Germanic. In *Issues in comparative Germanic syntax*, eds. Jutta Hartmann and Laszlo Molnarfi, 13–50. Amsterdam: John Benjamins.

Sigurðsson, Halldór Ármann. 2008. The case of PRO. *Natural Language and Linguistic Theory* 26:403–450.

Sigurðsson, Halldór Ármann. 2009. The No Case Generalization. In *Advances in comparative Germanic syntax*, eds. Artemis Alexiadou, Jorge Hankamer, Thomas McFadden, Justin Nuger, and Florian Schäfer, 249–279. Philadelphia, PA: John Benjamins.

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

Sigurðsson, Halldór Ármann. 2011a. Conditions on argument drop. *Linguistic Inquiry* 42:267–304.

Sigurðsson, Halldór Ármann. 2011b. On the New Passive. *Syntax* 14:148–178.

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

Sigurðsson, Halldór Ármann. 2012b. Minimalist C/case. *Linguistic Inquiry* 43:191–227.

Sigurðsson, Halldór Ármann. 2014. Context-linked grammar. *Language Sciences* 46:175–188.

Sigurðsson, Halldór Ármann. 2015. Gender: a PF reflection of an edge linker. http://ling.auf.net/lingbuzz/002467.

Sigurðsson, Halldór Ármann. 2016a. Gender/gender. Handout from CGSW 31, Stellenbosch, December 2016.

Sigurðsson, Halldór Ármann. 2016b. Kyn, kyn, kyn. Talk given at Málvísindakaffi, University of Iceland, 23 September 2016.

Sigurðsson, Halldór Ármann. 2016c. Who are we — and who is I? About Person and SELF. http://ling.auf.net/lingbuzz/003210.

Sigurðsson, Halldór Ármann, and Verner Egerland. 2009. Impersonal null-subjects in Icelandic and elsewhere. *Studia Linguistica* 63:158–185.

Sigurðsson, Halldór Ármann, and Anders Holmberg. 2008. Icelandic dative intervention: Person and number are separate probes. In *Agreement restrictions*, eds. Roberta D'Alessandro, Susan Fischer, and Gunnar Hrafn Hrafnbjargarson, 251–280. Berlin: Mouton de Gruyter.

Sigurjónsdóttir, Sigríður. 1992. Binding in Icelandic: Evidence from language acquisition. Doctoral Dissertation, University of California, Los Angeles.

Sigurjónsdóttir, Sigríður. To appear. Nýja þolmyndin nú og þá. Samanburður tveggja kannana [The New Passive now and then. A comparison of two surveys]. In *Tilbrigði í íslenskri setningagerð III. Sérathuganir*, eds. Höskuldur Thráinsson, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson. Reykjavík: Málvísindastofnun Háskóla Íslands.

Sigurjónsdóttir, Sigríður, and Nina Hyams. 1992. Reflexivization and logophoricity. Evidence from the acquisition of Icelandic. *Language Acquisition* 2:359–413.

Simpson, Jane. 1983. Resultatives. In *Papers in Lexical-Functional Grammar*, eds. Lori Levin, Malka Rappaport, and Annie Zaenen, 143–157. Bloomington, Ind.: Indiana University Linguistics Club.

Smith, Peter W. 2017. The syntax of semantic agreement in English. *Journal of Linguistics*.

Smári, Jakob Jóh. 1920. *Íslenzk setningafræði* [Icelandic Syntax]. Reykjavík: Bókaverslun Ársæls Árnasonar. [Reprinted by Málvísindastofnun Háskóla Íslands, Reykjavík, 1987].

Sobin, Nicholas. 1985. Case assignment in the Ukrainian morphological passive construction. *Linguistic Inquiry* 16:649–662.

Spraunienė, Birutė, Auksė Razanovaitė, and Erika Jasionytė. 2015. Solving the puzzle of the Lithuanian passive. In *Voice and argument structure in Baltic*, eds. Axel Holvoet and Nicole Nau, 323–365. Amsterdam: John Benjamins.

Svenonius, Peter. 2002. Icelandic case and the structure of events. *The Journal of Comparative Germanic Linguistics* 5:197–225.

Svenonius, Peter. 2006a. Case alternations and the Icelandic passive and middle. In *Passives and impersonals in European languages*, eds. Satu Manninen, Diane Nelson, Katrin Hiietam, Elsi Kaiser, and Virve Vihman. Amsterdam: John Benjamins. http://goo.gl/Ihgh4S.

Svenonius, Peter. 2006b. Case alternations and the Icelandic passive and middle. Óbirt handrit, University of Tromsø.

Svenonius, Peter. 2008. Projections of P. In *Syntax and semantics of spatial P*, eds. Anna Asbury, Jakub Dotlačil, Berit Gehrke, and Rick Nouwen, 63–84. Philadelphia, PA: John Benjamins.

Svenonius, Peter. 2010. Spatial P in English. In *Mapping Spatial PPs*, eds. Guglielmo Cinque and Luigi Rizzi, volume 6 of *The Cartography of Syntactic Structures*, 127–160. Oxford: Oxford University Press.

Šereikaitė, Milena. 2017. Lithuanian passive-like impersonals and regular passives. *University of Pennsylvania Working Papers in Linguistics* 23:231–240. http://repository.upenn.edu/pwpl/vol23/iss1/26/.

Talmy, Leonard. 1975. Figure and ground in complex sentences. In *Proceedings of the First Annual Meeting of the Berkeley Linguistics Society*, 419–430.

Talmy, Leonard. 1978. Figure and ground in complex sentences. In *Universals in human language*, ed. Joseph Greenberg, 625–49. Stanford, CA: Stanford University Press.

Talmy, Leonard. 1985. Lexicalization patterns: semantic structure in lexical forms. In *Language typology and syntactic description*, ed. Timothy Shopen, 57–149. Cambridge: Cambridge University Press.

Tatevosov, Sergei, and Ekaterina Lyutikova. 2014. Causativization and event structure. In *Causation in grammatical structures*, eds. Bridget Copley and Fabienne Martin. Oxford: Oxford University Press.

Thráinsson, Höskuldur. 1974. *Að vera að gera eitthvað* [To be doing something]. Cand. Mag. thesis, University of Iceland.

Thráinsson, Höskuldur. 1979. *On complementation in Icelandic*. New York: Garland.

Thráinsson, Höskuldur. 1986. On auxiliaries, AUX and VPs in Icelandic. In *Topics in Scandinavian syntax*, eds. Lars Hellan and Kirsti Koch Christensen, 235–265. Dordrecht: Reidel.

Thráinsson, Höskuldur. 1999. Hvað eru margar tíðir í íslensku og hvernig vitum við það? *Íslenskt mál og almenn málfræði* 21:181–224.

Thráinsson, Höskuldur. 2001a. Object Shift and scrambling. In *The Handbook of Contemporary Syntactic Theory*, eds. Mark Baltin and Chris Collins, 148–202. Oxford: Blackwell.

Thráinsson, Höskuldur. 2001b. Um nafngiftir hjálparsagnasambanda. *Íslenskt mál og almenn málfræði* 23:229–252.

Thráinsson, Höskuldur. 2007. *The Syntax of Icelandic*. Cambridge: Cambridge University Press.

Thráinsson, Höskuldur. 2009. *Íslensk setningafræði*. 7th edition. Reykjavík: Málvísindastofnun Háskóla Íslands.

Thráinsson, Höskuldur, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson (eds.). 2013. *Tilbrigði í íslenskri setningagerð [Variation in Icelandic syntax]*. Reykjavík: Málvísindastofnun Háskóla Íslands.

Thráinsson, Höskuldur, Hjalmar P. Petersen, Jógvan í Lon Jacobsen, and Zakaris Svabo Hansen. 2004. *Faroese: An overview and reference grammar*. Tórshavn: Føroya Fróðskaparfelag.

Thráinsson, Höskuldur, Sigríður Sigurjónsdóttir, Hlíf Árnadóttir, and Thórhallur Eythórsson. 2015. Um þolmynd, germynd og *það*. In *Tilbrigði í íslenskri setningagerð II. Helstu niðurstöður. Tölfræðilegt yfirlit* [Variation in Icelandic syntax II], eds. Höskuldur Thráinsson, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson, 77–120. Reykjavík: Málvísindastofnun Háskóla Íslands.

Thráinsson, Höskuldur, and Theódóra A. Torfadóttir. 2015. Um *vera að* og *vera búinn að*. In *Tilbrigði í íslenskri setningagerð: II. Helstu niðurstöður. Tölfræðilegt yfirlit*, eds. Höskuldur Thráinsson, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson, 121–153. Reykjavík: Málvísindastofnun Háskóla Íslands.

Thráinsson, Höskuldur, and Sten Vikner. 1995. Modals and double modals in the Scandinavian languages. *Working Papers in Scandinavian Syntax* 55:55–88.

Thráinsson, Höskuldur, Ásgrímur Angantýsson, Einar Freyr Sigurðsson, Sigrún Steingrímsdóttir, and Thórhallur Eythórsson. 2013. Efnissöfnun og aðferðafræði. In *Tilbrigði í íslenskri setningagerð I. Markmið, aðferðir og efniviður*, eds. Höskuldur Thráinsson, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson, 19–68. Reykjavík: Málvísindastofnun Háskóla Íslands.

Thráinsson, Höskuldur, Einar Freyr Sigurðsson, and Jóhannes Gísli Jónsson. 2015. Samræmi [Agreement]. In *Tilbrigði í íslenskri setningagerð II. Helstu niðurstöður. Tölfræðilegt yfirlit* [Variation in Icelandic syntax II], eds. Ásgrímur Angantýsson Höskuldur Thráinsson and Einar Freyr Sigurðsson. Reykjavík: Málvísindastofnun Háskóla Íslands.

Toosarvandani, Maziar, and Coppe van Urk. 2014. Agreement in Zazaki and the nature of nominal concord. http://ling.auf.net/lingbuzz/002047.

Torfadóttir, Theódóra A. 2008. Event typology and aspectual classes in Icelandic. Manuscript, University of Iceland.

Torfadóttir, Theódóra A. To appear. Ef ég er að skilja þetta rétt. Könnun á notkun *vera að*. In *Tilbrigði í íslenskri setningagerð: III. Sérathuganir*, eds. Höskuldur Thráinsson, Ásgrímur Angantýsson, and Einar Freyr Sigurðsson. Reykjavík: Málvísindastofnun Háskóla Íslands.

Vendler, Zeno. 1957. Verbs and times. *The Philosophical Review* 143–160.

Vergnaud, Jean-Roger. 1977/2008. Letter to Noam Chomsky and Howard Lasnik on "Filters and control," April 17, 1977. In *Foundational issues in linguistic theory. Essays in honor of Jean-Roger Vergnaud*, eds. Robert Freidin, Carlos P. Otero, and Maria Luisa Zubizarreta, 3–15. MIT Press.

Wallenberg, Joel C., Anton Karl Ingason, Einar Freyr Sigurðsson, and Eiríkur Rögnvaldsson. 2011. Icelandic Parsed Historical Corpus (IcePaHC). Version 0.9. http://www.linguist.is/icelandic_treebank.

Wasow, Thomas. 1977. Transformations and the lexicon. In *Formal syntax*, eds. Peter Culicover, Thomas Wasow, and Adrian Akmajian, 327–360. New York: Academic Press.

Wechsler, Stephen. 1997. Resultative predicates and control. *Texas Linguistics Forum* 38:307–321.

Wechsler, Stephen, and Hyun-Jong Hahm. 2011. Polite plurals and adjective agreement. *Morphology* 21:247–281.

Wechsler, Stephen, and Larisa Zlatić. 2000. A theory of agreement and its application to Serbo-Croatian. *Language* 76:799–832.

Wechsler, Stephen, and Larisa Zlatić. 2003. *The many faces of agreement*. Stanford: CSLI.

Whelpton, Matthew. 2011. Building resultatives in Icelandic. In *Researching interfaces in linguistics*, eds. Raffaella Folli and Christiane Ulbrich, 96–115. Oxford: Oxford University Press.

Wide, Camilla. 2002. Perfect in dialogue. Form and functional potential of the *vera búinn að* + inf. construction in contemporary Icelandic. Doctoral Dissertation, University of Helsinki, Helsinki.

Wood, Jim. 2009. Icelandic imposters and the proprial article. In *NYU Working Papers in Linguistics*, eds. Patricia Irwin and Violeta Vázquez Rojas, volume 2. New York: NYU.

Wood, Jim. 2011. Icelandic *let*-causatives and case. *Working Papers in Scandinavian Syntax* 87:1–52.

Wood, Jim. 2014. Reflexive -*st* verbs in Icelandic. *Natural Language and Linguistic Theory* 32:1387–1425.

Wood, Jim. 2015. *Icelandic morphosyntax and argument structure*. Dordrecht: Springer.

Wood, Jim, and Einar Freyr Sigurðsson. 2014a. Building deverbal ability adjectives in Icelandic. *University of Pennsylvania Working Papers in Linguistics* 20:351–360. http://repository.upenn.edu/pwpl/vol20/iss1/37/.

Wood, Jim, and Einar Freyr Sigurðsson. 2014b. 'Get'-passives and case alternations: the view from Icelandic. In *Proceedings of the 31st West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadilla Proceedings Project.

Wood, Jim, and Einar Freyr Sigurðsson. 2014c. Icelandic verbal agreement and pronoun-antecedent relations. In *Cross-linguistic studies of imposters and pronominal agreement*, ed. Chris Collins, 196–237. Oxford: Oxford University Press.

Wood, Jim, and Halldór Ármann Sigurðsson. 2014. *Let*-causatives and (a)symmetric DAT-NOM constructions. *Syntax* 17:269—298.

Woolford, Ellen. 2003. Burzio's generalization, markedness, and locality constraints on nominative objects. In *New perspectives on Case Theory*, eds. Ellen Brandner and Heike Zinzmeister, 299–327. Stanford: Center for the Study of Language and Information.

Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37:111–130.

Wurmbrand, Susi. 1999. Modal verbs must be raising verbs. In *WCCFL 18.* Proceedings of the 18th West Coast Conference on Formal Linguistics, eds. Sonya Bird, Andrew Carnie, Jason D. Haugen, and Peter Norquest, 599–612. Somerville, MA: Cascadilla Press.

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

Yoon, James H. 2004. Non-nominative (major) subjects and case stacking in Korean. In *Non-nominative subjects*, eds. Peri Bhaskararao and Karumuri Venkata Subbarao, volume 2, 265–314. Amsterdam: John Benjamins.

Zaenen, Annie, and Joan Maling. 1984. Unaccusative, passive and quirky case. In *Proceedings of the West Coast Conference on Formal Linguistics* 3, eds. Mark Cobler, Susannah MacKaye, and Michael T. Wescoat, 317–329. Stanford: The Stanford Linguistics Association.

Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language and Linguistic Theory* 3:441–483.

Þórhallsdóttir, Guðrún. 2015a. Gender agreement in 19th- and 20th-century Icelandic. In *Agreement from a diachronic perspective*, eds. Jürg Fleischer, Elisabeth Rieken, and Paul Widmar, 267–286. Berlin: Mouton de Gruyter.

Þórhallsdóttir, Guðrún. 2015b. Notkun málfræðilegra kynja í íslensku og færeysku. *Frændafundur* 8:159–181.