CHAPTER 6

Agreement configurations

In defense of "Spec head"*

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This paper argues that "Spec head" agreement, construed as agreement under left to right Merge is not only a possible agreement configuration, but probably the only agreement configuration, contra Agree (Chomsky 2001).The first part addresses DP internal agreement in Maasai and English. The attested agreement patterns within the Maasai DP fall out from Spec head agreement (Koopman 2003a, 2003b). Attested and unattested agreement patterns fall out from the syntactic hierarchy and the derivation. English long distance agreement in the DP does not support Agree, as agreement can be triggered early in the derivation. The second part of the paper discusses individual cases that have been taken to provide support for Agree. I will show how each case is in fact consistent with Spec head, where the following play an important role: agreement can be triggered under pied-piping, accounting for long distance in Tsez (Polinsky and Potsdam 2001) and agreement can be triggered low in the derivation, as in English existential constructions. A case study of nominative objects in Icelandic implements a Spec head account, and argues on the basis of morphological evidence that these constructions should be analyzed as double nominative constructions, with the verb agreeing with two nominatives. The analysis bears on the nature of inherent case (an argument is presented that inherent case must be decomposed), the structural location of nominative case, clausal structure, silent expletives, default agreement, double agreement and intervention effects. The latter are shown not to bear on Agree.

1. Introduction

Agreement is the phenomenon where two elements co-vary in features. It is uncontroversial that the relation between the element that provides the features and the target on which agreement is spelled out is subject to locality. The issue is what notion of locality is relevant: is it sisterhood (Spec head or government), or left to right sister-

hood with the source to the left of the target (Spec head agreement), c-command with the closest target in a local domain (Agree), or c-command within a certain domain (no intervention effects)? How many types of formal agreement relations are there? Can the Spec head relation even be formalized? Chomsky (2001) argues for Agree but also suggests that besides Agree "there is presumably a similar but distinct agreement relation, concord, involving Merge alone." (Chomsky 2001: fn5). The latter leaves open the possibility that agreement can be triggered under Merge in other cases as well. In modern theories of phrase structures (Kayne 1994, Chomsky 1995), Specifiers merge with a sister XP. If Specifiers are universally to the left, agreement under Merger with XP yields in essence the traditional Spec head agreement hypothesis.[1] On theory internal grounds, it is therefore a definite possibility that agreement is not just sometimes but in fact always a by-product of Merge. The question that must therefore be answered is whether Agree is theoretically and empirically motivated. Can agreement indeed be triggered under c-command? If so, how local is Agree? Is agreement sensitive to intervention effects (Boeckx 2000), and if so, should intervention effects be captured by Agree or should they fall under the general theory of locality (Rizzi's (1990, 2002) Relativized Minimality or Chomsky's (1995) Minimal Link Condition? Are there indeed two different ways of getting agreement, under Merge with an XP and under c-command?

This paper addresses these questions and consists of two main parts. A brief general section on the agreement configuration sets the stage. Section 2 discusses agreement phenomena within the DP, and argues on the basis of agreement patterns within Maasai DPs (Koopman 2001, 2003a, 2003b), that agreement within DPs should be handled in the same way as agreement within clauses. The traditional Spec head hypothesis (agreement under Merge with XP) yields an optimally elegant and simple account for the observed agreement patterns within the Maasai DP, which fall out from the structure and derivation. There is no need to assume a different mechanism for "concord". While an Agree account can be formulated, it is redundant and more seriously, it is arbitrary in that it fails to capture possible and impossible agreement systems. Section 2.3 deals with agreement within the English DP, which may provide evidence for Agree. However, the analysis of Maasai provides new insights into the derivation of the English DP, and apparent long distance agreement falls out from Spec head at an early stage in the derivation. The second part of the paper deals with the question if Agree is necessary in addition to Spec head, and evaluates arguments from the literature that have been taken to support Agree. Arguments that establish the existence of Agree must show that the relevant (left right) relation between the trigger and the target does not hold at any point in the derivation, and that Agree has effects that cannot be reduced to movement. Section 3.1 discusses long distance agreement in Tsez (Polinsky and Potsdam 2001), section 3.2 long distance agreement in English existential constructions, and section 4 is a case study of nominative objects and long distance agreement in Icelandic. As I will show, a Spec head analysis can be motivated and independently supported in each of these cases. The specific points this paper will argue for are listed below.

(1) a. Agreement is established in a strictly local left right configuration at some point in the derivation, with the trigger to the left of the target.[2]
b. Agreement can be triggered under pied-piping, giving rise to certain cases of apparent long distance agreement .
c. Agreement can be triggered low in the derivation, giving rise to apparent long distance agreement.
d. Apparent arguments in favor of Agree based on intervention effects only hold in specific syntactic contexts and do not carry over to simpler cases. Intervention effects do not bear on Agree, but on restructuring.

1.1 The agreement configuration

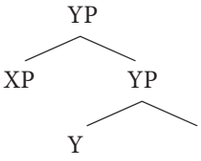
There are different proposals in the literature as to what configuration leads to agreement: Spec head (Kayne 1989, Koopman 1992, Mahajan 1989, Koopman and Sportiche 1991, Chomsky 1991, Sportiche 1990, Sportiche 1998), government (Koopman and Sportiche 1991 among others) and Agree (Chomsky 2000, 2001).
The Spec head configuration has been widely held to represent the canonical agreement configuration:

(2) If Y agrees with XP, XP and Y are or have been in a Spec head relation in the course of the derivation

This hypothesis is compatible with theories that assume Agr nodes, and theories that do not. If Spec positions are to the left of their sisters (XP) and merge with XP (Kayne 1994, Chomsky 1995), we can reformulate (2) as (5):

(3) If XP agrees with Y, YP has merged with XP in the course of the derivation

(4)



It has also been argued that agreement can be established under Government (Koopman and Sportiche 1991, and others), a notion that is based on c-command.

(5) Government: **Y** [$_{ZP}$ **XP** [**Z** [WP

In (5), Y governs its sister ZP, the Spec of its sister, XP, and the head of the complement, Z. With the shift from the complement position to the Spec position as the general licensing configuration in the early nineties, these two notions are unified under Spec head in Chomsky (1995), Koopman (1992). If agreement can be established under government, we expect the following generalization to be correct:

(6) If XP agrees with Y, XP is a sister of Y or XP is merged with ZP, which is merged with Y.

Chomsky (1998, 2000) shifts the licensing configuration back from the Spec position to the complement relation, and abandons Spec head in favor of Agree, a process that requires c-command between the agreement bearing head Y and a triggering DP that is the closest DP to Y in a local domain.

(7) a. Agree: Y [… DP …]
b. If Y agrees with DP, DP is the DP closest to Y in a local domain.

Agreement under Government and Agree allow a direct complement of Y to trigger agreement on Y under Merge. It predicts that we should find languages in which the verb only agrees with what has been merged as its complement, and never with higher specifiers. It predicts that prepositional languages should exhibit prepositional agreement patterns as easily as postpositional languages[3], or that we find languages where only the theme of a noun can trigger agreement. To the extent that we do not find such languages, I will assume that the following generalization is correct[4]:

(8) Y never agrees with its immediate sister XP.

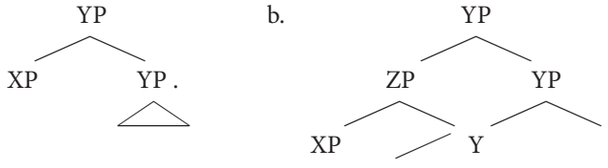
This leads to an immediate problem for Agree (indeed what would be easier than agreeing with one's complement), and it necessitates a reformulation of (6), with the part excluded by (8), crossed out:

(9) If XP agrees with Y, XP is merged with ZP, which is merged with Y

(3) and (9) can be further collapsed, with the linear order derived by an additional step of movement. This paper is based on the hypothesis that these are the only configurations that lead to agreement. I will refer to this as the Spec head hypothesis.

(10) If XP agrees with Y, XP is merged with YP, or XP is merged with ZP which is merged with YP (or XP is merged with WP, which is merged with ZP which is merged with YP, etc)

(11) a. b.



The configuration in (11b) is the canonical pied-piping configuration (Webelhuht 1992, Koopman and Szabolcsi 2000, Koopman 2005b). There is tension in recent development as to whether a single Specifier or adjunction is allowed or not. This depends on what the basic atoms of syntactic structures are. I will assume that only a single Specifier is allowed, a view that is consistent with the non-lexicalist decompositional view in conjunction with the highly articulated nature of syntactic structures[5].

2. DP internal agreement: agreement patterns in Maasai DPs

In Koopman (2001, 2003a, 2003b), I argued that DPs in Maasai (and universally) are essentially relative clauses, following Bach (1968) and Campbell (1996) among others. This proposal generalizes Kayne's (1994) proposal for relative clauses and post nominal possessor constructions to all DPs: DPs are always D CPs, never D NPs. This analysis was inspired by the morphosyntax of the Maasai "noun", and the complex asymmetric agreement patterns found within the Maasai DP. In a nutshell, a Maasai "common noun, like "ol dia" 'dog' is a D CP structure, a bit like a free relative: ol (= *x, x is*) dia (*dog*). It contains a nominal predicate (*dia* 'dog') and its subject, the external argument of the noun (x) (ol). *ol* and *dia* distribute as two independent syntactic constituents, and thus provide particular insights into the structural make-up of DPs and DP internal derivations.

The following sections focus on how the complex asymmetric agreement patterns within the Maasai DP arise, spell out the basic structure of DPs and discuss how the DP internal derivation in conjunction with the Spec head account for agreement yield the exact agreement patterns, and only these. Section 2.3 contrasts the account with an Agree account, and section 2.3 extends the analysis to English DP and DP internal agreement.

2.1 Agreement patterns within DPs headed by a common noun

A "simple" common noun in Maasai, i.e. the form used as the citation form, is in fact a complex structure with several overt morphemes[6]. Simple Ns, as the ones listed below, are used as the citation form, as predicate nominals, and as DPs with a generic, indefinite, or definite interpretation, depending on the environment.

(12)	*a-*	*l*	*ayé-*	*ni*	'a boy'
	SG.M	M-	boy	SG.ACC	
(13)	*i-*	*l*	*ayó-*	*k*	'boys'
	PL-	M	boy	PL.ACC	
(14)	*ɛ-*	*ŋ*	*kîné*		'a (she) goat'
	SG.F-	F	goat.	SG.ACC	
(15)	*(ĩ)-*	*ŋ*	*kĩnè -*	*dʒî*	'goats'
	PL	F	goat-	PL.ACC	

The nominal root is lexically specified for gender, and followed by a number suffix. It is flanked by tones that vary with the case, number, and tonal class of the noun[7]. There are two surface case forms in Maasai: nominative, which is used for subjects of tensed sentences, and for the object of (the unique) P, and accusative (or non nominative). All other DPs, including predicate nominals, citation forms, possessors and accusative DPs show up with non-nominative case. I gloss this case accusative, following Tucker and Mpaayei (1955).

The surface constituent structure of the case bearing noun in (15) is presented in (16), with phonologically overt material underlined. I have argued elsewhere that this structure is built from an underlying syntactic hierarchy case>number>gender>(clas s)>N by (phrasal) movement (Koopman 2003a, 2003b), and delivered to spell out for vocabulary insertion, in accordance with late insertion models.

(16) *kïnè dʒî* 'goats'
[$_{L}$ [[kine$_{fem}$] dʒi$_{pl}$] $_{H(acc)}$]

(17) case> number> gender> N
[$_{\underline{caseP}}$ [[N gender] number] case]$_{\sout{case}}$]]] (=dia)

I will refer to this complex structure as the ***caseP.*** This is the syntactic representation of what in minimalist practice would be called a lexical item N, consisting of the ordered features (((N gender) number) case), with "checking" built in from the inside out. The following points are important:

- Morphological case is merged early in the derivation, and not at the D level. This accounts for the fact it triggers agreement on dependents within the DP. The same is true for Icelandic (section 4).
- caseP is a phrasal constituent; this allows:
- establishing a parallel between agreement within DPs to agreement in clauses (as a relation between a triggering phrase) and a dependent.
- treating the constituent parts as phrases (numberP and genderP), which can trigger agreement in the right contexts.
- drawing a parallel between the distribution of the caseP and subjects in clauses.

The nominal root is preceded by article-like elements ɔl, ɛn, ɨl and ɨn. These are composed of two morphemes, one which covaries with gender and number (*ɔ* 'ms. sg', *ɛ* fem.sg, *ɨ* pl) and one which cova with gender (*l* (ms)/*n* (fem) respectively. The morphemes that make up the article lead independent lives. *ɔ* is part of the masculine relative pronoun, *ɛ* is homophonous with 3rd person subject agreement (feminine gender is the unmarked form in Maasai), *ɨ* occurs as a (productive) plural number suffix, n is part of the feminine relative clause marker, and *l* occurs in possessive constructions with masculine possessed nouns. We are thus dealing with two "heads" that agree partially with the features of the noun, a phenomenon that looks like "partial" agreement.

(18) partial agreements: *O* agrees with the N in ⟨number and gender⟩
l agrees with the N in ⟨gender⟩

Two important comments: First, ɔl, ɛn, ɨl and ɨn are independent syntactic constituents, and not nominal prefixes. They are separated from the case bearing noun by the demonstrative root, by a small set of adverbs (temporal adverbs and the high adverb

'*oshi* 'usual'), and the quantifier *other* (which has the form of a reduced relative clause). And second, these elements are *not* Ds, even if in traditional grammars they are classified as articles. Although they occur at the left edge of the DP, their occurrence is not linked to any specific semantic interpretation: "articles" must occur in citation forms, predicate nominals, indefinites, generics, compounds, definite DPs etc[8]. This hybrid behavior, I have argued, follows from the fact that they move to the left periphery of DPs, but start out very low in the DP, local to the NP predicate.

Quantifiers, Numerals, and Adjectives follow the head noun in the universal hierarchical order (Cinque 2000, 2004). They agree in case, number and gender with the caseP. If we partition the DP, we find three well-defined agreement regions within DPs: all dependents to the right of the triggering (caseP) exhibit full and obligatory agreement, the articles on the left edge left show partial agreement, and the intervening parts fail to show any agreement.

(19) a. $[[_{\substack{\text{gender}\\\text{number}}}\ \text{gender}]$ Dem Adv … $[_{\text{Case}}[_{\text{Number}}[_{\text{Gender}}\text{-N}]]]$ $\text{NumeralP}_{\substack{\text{Case}\\\text{Num}}}$ $\text{AP}_{\substack{\text{Case}\\\text{Num}}}$

b. agreement regions:

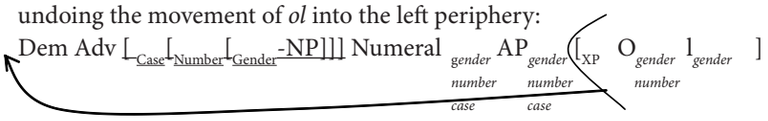
partial agreement	*no agreement* …	*agreement trigger*	*full agreement*

If one considers the possible combination of agreement features in Maasai, only three of the 6 possibilities occur: [9, 10]

(20) gender
gender, number
gender, number and case

No elements agree just for case, or just for plural, or for case and gender; no postnominal elements agree partially, and no pronominal elements agree completely. The question is why this state of affairs should hold. Consider the agreement patterns in (19) again. If the partially agreeing element on the left periphery has in fact moved from a position deep within the DP, the structural agreement pattern can be brought out more clearly:

(21) undoing the movement of *ol* into the left periphery:



In Koopman (2003a, 2003b) I argued that these orderly agreement patterns reflect the structural make-up of the DP and the derivations, in conjunction with Spec head agreement. Gender, number and case are syntactic projections, which serve to "grow" the morphological complex noun yielding the structure in (17). It appears that there are three ordered agreement cycles within the Maasai DP, with the gender agreement cycle most embedded, followed by the number agreement cycle, and the case agree-

ment cycle. These cycles correspond to the constituent structure of the caseP. The agreement patterns reflect the parts of the NP that are present at the respective cycles (genderP at the gender cycle, numberP at the number cycle and caseP at the case cycle: feature complexes are built by agreement, see Koopman (2001), agreement is copying of the features of the trigger onto the element it merges with).

Since the caseP trigger occurs to the left of all agreeing elements, and since no elements that are hierarchically higher than the trigger agree, these patterns follow from the movement patterns in conjunction with Spec head. No element that is merged higher hierarchically than the trigger agrees since it is never in a left right merge relation with the trigger (except for "other" which agrees like a relative clause and which precedes the noun. I assume it is moved there). Elements to the right of the trigger must all agree, because of the history of the derivation. The partial agreement of the articles is in fact total: they agree fully in the respective cycles, when higher projections are simply not yet available. The agreement patterns thus reflect the history of the derivation, and the atoms of structure. I take this to be an important empirical result, which all theories of agreement must capture. The following section spells out the structure and derivation of the Maasai DP, setting the stage for a comparison with an Agree account in 2.3. Section 2.4 discusses how a Spec head account can deal with long distance agreement within the English DP.

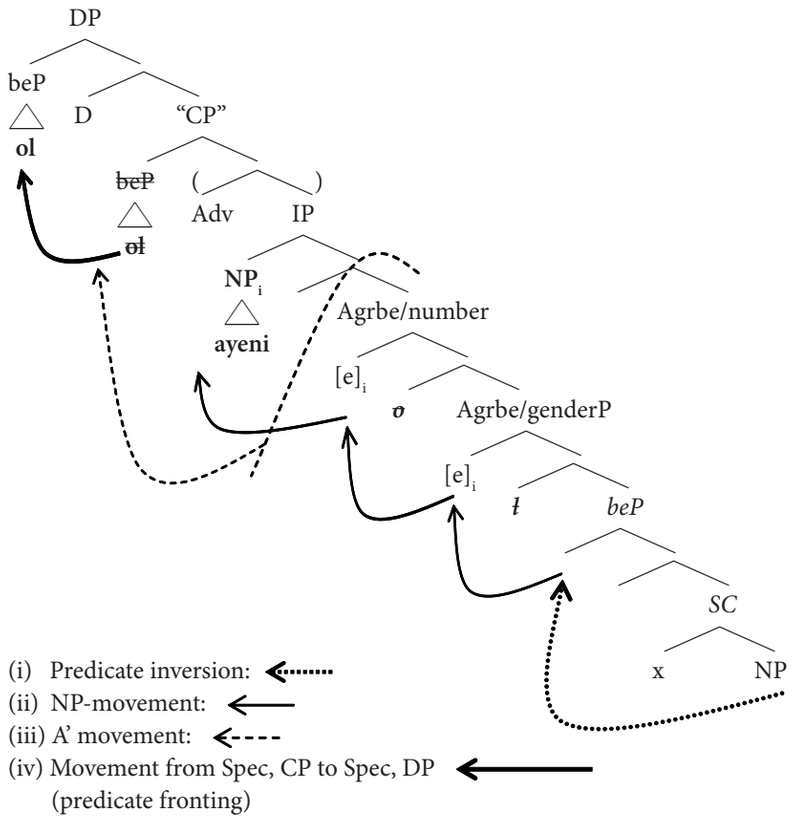
2.2 The Maasai DP: structure and derivation

(Maasai) DPs are always relative clauses of the form D CP (Koopman 2001, 2003a, 2003b, 2005a). They contain a nominal small clause predicate, with a (silent) external argument x, embedded under a (non verbal) copula, *be.* I abstract away here from the fine structure of the number and gender cycles, and collapse *ol* etc into Agr*be,* an element that fuses pronominal agreement features and the non verbal predicate *be* (not unlike the pronominal copula some languages exhibit on the one hand, and a wh-pronoun on the other ('who is a boy , what is a table'):

(22) $[_{DP}$ D $[_{CP}$ C $[_{IP}$ I case [[Agr_{number} Agr_{gender} *be* [.. [x boy]]

Be is embedded in an IP that provides a structural subject position, and a CP, which is the complement of D. CP attracts the constituent that contains x, and the (phrasal) predicate *beP* (Maasai is a VSO, i.e. predicate first language, see Koopman (2005a)). (23) summarizes the derivation, and the text below comments on each step in the derivation:

(23)



(24) PF: /oldia/ LF ~ which is a boy, the x such that x is a boy

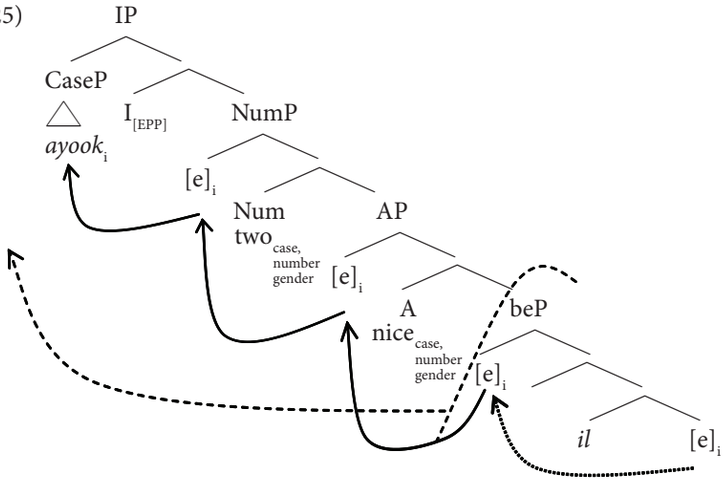
Comments:

(i) *Predicate Inversion.* The predicate *dia* 'boy' is raised by predicate inversion into the specifier of *be*. It is of course well-known that predicate inversion occurs in the environment of *be,* (cf. Moro (1997) *the picture on the wall is the cause of the riot; the cause of the riot is the picture on the wall*). Predicate Inversion moves over the intervening subject, yielding an apparent minimality violation, which is overcome by the overt presence/raising of *be* or some linker (see Den Dikken (1998)). It is the application of predicate inversion that distinguishes the Maasai DP from the English one (see 2.5 below, from Koopman (2003a: 106-107))

(ii) *NP movement.* Because of predicate inversion, the nominal predicate behaves as the highest NP specifier. If there is a clausal subject position within the DP, i.e. an I position endowed with an EPP feature, the predicate NP will be at-

tracted, and undergo regular NP movement to Spec, IP, raising through the Specifier positions of Numeral phrases and APs. As a consequence of this derivation, these line up in the merged hierarchical order Num>AP (Cinque 2000). Note that the NP that undergoes movement to the case position (Spec, IP) is also the NP carrying case morphology, further suggesting a link between Spec, I, structural subject and case. The following tree illustrates the IP part of the derivation (with a mixture of English and Maasai glosses *ayook*=boy-pl *il*= masculine plural)[11]:

(25)



The moved NP (in fact caseP) triggers obligatory agreement in number gender and case on numerals and adjectives to its right. It must do so on each of them because of the locality of NP movement. As is well known, NP movement triggers obligatory agreement on heads when the NP moves through their local Spec position. This analysis thus reduces obligatory nominal "concord" to Spec head agreement and the locality of NP movement. It also yields an account for the fact that dependents merged higher than Spec, IP will not show any agreement with the caseP, since there is no point in the derivation where the required spec head relation exist (Koopman 2001).

(iii) The presence of I, probably a silent T node, can be detected though presence of high (temporal) adverbs.

(iv) *Predicate fronting.* The (remnant) *beP (ol)* predicate fronts as a phrase to the C level. This yields the general predicate initial order in Maasai. The fronted constituent does double duty: it contains what the C level attracts (the predicate *beP*), as well as the external argument of the nominal predicate, x, which will be locally bound by any appropriate operator (D, indefinite, a generic operator, a negative operator, etc) . Predicate fronting to the C region skips over filled intermediate Spec positions and head positions, a standard prop-

erty of local phrasal movement to the C region. The fronted predicate targets a position to the left of the Spec, IP, and to the left of "other", the high adverbs and demonstrative roots, very high in the expanded CP region (see Koopman (2005a)) :

(26) [ol] Dem (Adv) (other) [dia]

(iv) Movement from Spec, CP to Spec, DP. It is difficult to determine if the predicate raises to Spec, DP, since D is silent. However, at least for demonstratives it is likely that this additional step of movement takes place, since *ol* shows up to the left of demonstrative roots (and in plural cases, the Spell-out is sensitive to the fact that it is in Spec, Dem).

(27) ol (Dem) ~~ol~~ (Adv) (other) [dia]

(v) *head movement:* head movement plays no role in deriving the linear orders. It may play a role in enabling predicate inversion.

(v) *Spec head agreements:*
DP agreement patterns (=concord) fall out from the structure and the derivations: dependents to the right of the caseP will fully agree, because of the derivations. Dependents to the left of the caseP will not, because they are never in a Spec head relation with the triggering DP. The element on the left edge agrees partially, simply because it represents extremely "early" DP internal agreement.

Differences between types of DPs follow from the type of D that heads the DP on the one hand, and from the type of predicate that the IP contains on the other. DPs headed by common nouns contain a nominal small clause, possessor constructions a possessive small clause, and relative clauses a full verbal projection (see Koopman (2003a, 2003b, 2005a) for further details).

2.3 An Agree account?

The previous analysis can be translated directly into an Agree account, with Probes located in positions where they c-command the trigger (the Goal), and the right feature combinations assigned to each Probe. No intervention effects are observed, except for the step of predicate inversion, which conforms to Den Dikken's (1998) generalization that a step of predicate inversion always requires an overt copula like element (a linker) to facilitate the inversion. There are technical problems that arise, like what for instance is the feature that leads to phi completeness inside the DP, how to build the idea of different agreement cycles into the system, but these seem pretty much dependent on particular decisions about implementation. One important fact that the Agree account needs to capture is the idea that "assignment" of features reflects the derivation: as I argued, agreement in a cycle is always total, and never partial. It is thus predictable which agreement features particular categories will carry, and

what the possible patterns of agreement are. Thus, my analysis excludes the following agreements systems:

(28) * $NP_{gender, number, case}$ $Number_{gender, case}$ AP_{case}
* $NP_{gender, number, case}$ $Number_{case}$ $AP_{case\ gender\ number}$

It also excludes assigning different features to elements that are merged in the same cycle, or case agreement at the lowest cycle (i.e. a language exactly identical to Maasai with the left edge only expressing case). It seems unclear to me how an Agree account can achieve these results in a principled fashion, and on these grounds the left to right merge account seems clearly superior and less arbitrary. However, it may be objected that other languages may in fact directly support the Agree approach and thus discredit the Spec head approach. This issue is taken up in the next section.

2.3 The English DP: an argument for Agree? On the difference between Maasai and English DP

The proposal that agreement is always triggered under Spec head runs into trouble with the apparent long distance agreement within the DP in English:

(29) a. these three large American cars [Dem [Num [A [A [N]
b. this large American car.

The fact that in English the noun remains low within the DP, seems to provide clear evidence for Agree, as agreement between D and NP cannot be treated as reflecting a direct Spec head relation between the NP and the Dem (assuming the Dem is merged in the D region) under standard analyses. However, if the Spec head hypothesis is correct, and if the D and Dem are merged high, it must be the case that the agreement on D is mediated by some third element, which is in a local relation with the NP at some point in the derivation. The analysis for Maasai offers insight into the question of how to construe the difference between the Maasai and English DP. The basic difference between Maasai and English can be attributed to whether predicate inversion or subject raising applies within the low part of the DP, with agreement between the predicate and its external argument occurring before predicate inversion. This is illustrated in the following parallel Maasai and English derivations which starts at the point where the external argument of the NP predicate x has agreed with the NP predicate under Merge: [x_{sg} [dog_s]. Boldface indicates ultimately pronounced.

In step 4, the constituent that contains the external argument (x_{sg}) of the NP is attracted to Spec, CP/DP, presumably to get bound by the D. (The structure above does not indicate the additional predicate fronting to the CP region in Maasai). Because of this movement, agreement on D can be treated as a reflection of agreement with the silent external argument. Note that the location of the constituent containing x varies depending on whether predicate inversion applied or not, yielding movement to D/CP from a low position in Maasai, but from the subject position in English. The latter is

(30) 1. Movement to subject position be :
predicate inversion

dog$_{sg}$ ***be*** [x$_{sg}$ ~~**dog**$_{sg}$~~] *(Maasai)*

NP mvt (subject raising)

x(sg) *be* [~~**x**~~$_{sg}$ **dog**$_{sg}$] *(English)*

2. NP-mvt (*Maasai and English*)

dog$_{g}$ **big** [~~dog(sg)~~ ***be*** [**x**$_{sg}$ ~~**dog**$_{sg}$~~]] *(Maasai)*

x$_{sg}$ **big** [~~**x**~~$_{sg}$ *be* [~~**x**~~$_{sg}$ **dog**$_{sg}$]] *(English)*

3. NP-mvt to Spec, IP *(Maasai and English)*

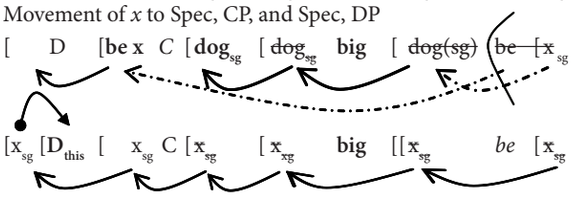
dog$_{sg}$ [~~**dog**~~$_{sg}$ **big** [~~dog(sg)~~ ***be*** [x$_{sg}$ ~~**dog**~~$_{sg}$]] *(Maasai)*

x$_{sg}$ [~~**x**~~$_{xg}$ **big** [[~~**x**~~$_{sg}$ *be* [~~**x**~~$_{sg}$ **dog**$_{sg}$]] *(English)*

4. Movement of *x* to Spec, CP, and Spec, DP

[D [**be x** *C* [**dog**$_{sg}$ [~~**dog**~~$_{sg}$ **big** [~~dog(sg)~~ ~~be~~ [x$_{sg}$ ~~**dog**~~$_{sg}$]] *(Maasai)*

[x$_{sg}$ [**D**$_{this}$ [x$_{sg}$ C [~~**x**~~$_{sg}$ [~~**x**~~$_{xg}$ **big** [[~~**x**~~$_{sg}$ *be* [~~**x**~~$_{sg}$ **dog**$_{sg}$]] *(English)*



precisely what Campbell (1996), who proposed DPs contain a small clause argued for: movement of PRO from the subject position of the DP to Spec, DP.

Thus, if the discussion in this section is correct, the syntax of DPs will not provide much insight into Spec head versus Agree, as there are basically two parts in a DP that can trigger agreement, either some pronominal like element which agrees with the NP, or the "NP' itself. So far then, the discussion supports Spec/head-left to right merge as the only agreement configuration. The next sections examine specific cases that have been argued to support Agree over Spec head.

3. Long distance agreement

Do we really need Agree in addition to Spec head, i.e. agreement under left to right Merge (10)? In this section, I examine three empirical arguments in favor of Agree, and show that each case is compatible with agreement under Merge (i.e. Spec head agreement) under entirely reasonable hypotheses about the underlying syntactic structures and derivations.

3.1 Agreement under government as agreement under pied-piping

Polinsky and Potsdam (2001) present a strong argument in favor of agreement under government/local c-command, based on a crosslinguistically unusual agreement pattern of Long distance agreement in Tsez, a Nakh-Daghestanian language spoken in the Caucasus. Tsez is a head final SOV language, with an ergative-absolutive case system.

The verb agrees with the absolutive in class, and absolutive agreement head precedes the verb. The ergative subject asymmetrically c-commands the absolutive argument. From the examples presented in the paper, we can extract the following surface configuration, with the agreement trigger and the agreement morpheme boldfaced:

(31) (DP $_{erg}$) **DP**$_{absi}$… **Agr**$_i$ V T.Evid C

There is considerable evidence that Kayne's (1994) antisymmetry proposal is correct: head final languages are not the symmetrical counterpart of head initial languages, and head final is a derived property. The surface order in (31) is therefore compatible with Spec head, since the trigger precedes the agreement.

Absolutive complement CPs in Tsez also trigger absolutive agreement. As Polinsky and Potsdam (2001) show, a distinction must be made between two types of absolutive complement CPs, a finite CP and a nominalized past participle clause. The latter allows an absolutive DP, which is the primary topic, to trigger agreement instead of the clausal CP that contains it, the former is opaque, and always triggers clausal agreement (Polinsky and Potsdam's 56a, 56b, 58)). (The gloss in the following examples is adjusted so as to reflect the participial nature).

(32) A primary topic in a nominalized participial absolutive complement can trigger agreement outside the CP (32b).

a. *enir* ***[užā*** ***magalu*** ***bāc'ruƖi]*** ***r-iyxo***
mother boy bread.III.ABS III.eat-PSTPRT.NMLZ.IV IV-know
'The mother knows the boy ate the bread.'

b. *enir* *[užā* ***magalu*** ***bāc'ruƖi]*** ***b-iyxo***
mother boy bread.III.ABS III.eat-PSTPRT.NMLZ III-know
'The mother knows the bread, the boy ate.'

(33) A primary topic in an absolutive finite CP can never trigger agreement outside:

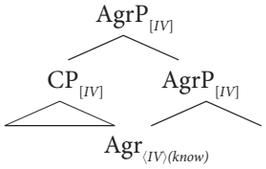
eni-r *[už-ā* *magalu* *b-ac'-si-λin]* **b/**r**-iyxo*
mother-DAT boy-ERG bread.III.ABS III.eat-PST-EVID-C *III/IV knows
'The mother knows that the boy ate bread.'

Polinsky and Potsdam establish through surface constituency tests that the agreement-triggering topic is unambiguously within the complement clause at spell-out. Tsez does not have long distance scrambling, and no A' movement from CP. In addition, neither covert raising nor a "shadow" pronoun in Spec, Agr can be empirically supported. Therefore, they conclude, the absolutive topic is never in a Spec head relation with the agreement probe, and absolutive agreement cannot have been triggered under Spec head agreement. Instead the probe must be able to look 'inside" the CP that it is in an agreement relation with, where it can only "reach" the (primary) absolutive Topic, i.e. the element at the left edge at the relevant level of representation. They show furthermore that participial clauses that contain a non absolutive primary topic, or a wh-phrase block long distance agreement. This, they argue, can

be explained if agreement requires "government", or under Agree, as an intervention effect: these elements intervene between the absolutive topic and the probe. These data thus constitute a strong empirical argument in favor of agreement under c-command/government.

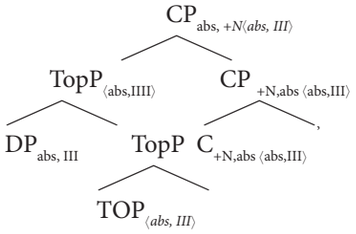
There is an alternative analysis for these data, however, which is compatible with the surface constituency, the Spec head hypothesis, and the intervention effects. We saw in section 1 how the government configuration can be reduced to the Spec head configuration, if agreement can be triggered under pied-piping. In the case under discussion, this would be clausal pied-piping (Koopman and Szabolcsi 2000, Koopman 2003a, 2003b 2005b). As Polinsky and Potsdam show, Topics are arguably in Spec, Top. The left peripheral Spec position is the core configuration for pied-piping (Webelhuht 1992, Koopman and Szabolcsi 2000). If the nominalization C participates in agreement, but none of the other high heads do, the agreement patterns follow. I have labeled the Merged structures fully, with the Spec as "adjunct". Agreement under Merge copies the features of the left sister onto the right sister. Features of a phrase are features of the head of the phrase, (this is what it means to be the head of a phrase); hence Agr carries the same feature as AgrP:

(34) Agreement with absolutive CP (agreement under merge)



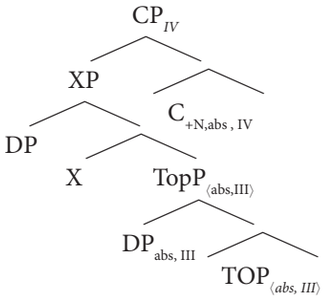
Absolutive agreement with a primary topic Topic within the CP comes about by recursive application of agreement: the CP in (35) will raise to Agr.

(35) Absolutive agreement with (primary) embedded Topic, and nominalizer:



Some of the intervention effects follow straightforwardly: long distance agreement will be blocked if a non-absolutive element has been topicalized, or if a non-absolutive wh-phrase occurs in the left periphery, since these occupy the highest leftperipheral position instead (non absolutives never trigger agreement in Tsez). Hence only clausal agreement is possible, because the absolutive Topic is not the leftmost Spec position (intermediate nodes not labeled).

(36)



Finally, tensed complement clause are introduced by a different C, and agreement with an embedded absolutive Topic is never possible. According to my proposal this must be because this C can never be in an agreement relation with the TopicP. It could be the case that the C is simply of a type that cannot agree, or that this CP is obligatorily embedded under a D which carries *IV* (this recalls old analysis of CPs as ⟨it CP⟩ structures). This will yield only a single type of agreement.

(37) [*it* [D [~~it~~ [$_{CP}$[TopP [ ]C]]
IV

Polinsky and Potsdam discuss a similar percolation approach in footnote 17, and argue against it on the grounds that when the absolutive CP is pronominalized, only III agreement is possible[12].

It is unclear what this argument shows, since we don't really know how clausal pronominalization works. If pronominalization requires a structure as in (37), with CP silent, we would expect only class IV to be available on structural grounds. Pending further research[13], I conclude that the pied-piping alternative is a serious alternative to Government/Agree, thus strengthening the point I made in section 1 that agreement under government can be reduced to Spec head agreement. As this discussion shows, the difference between Government and Spec head is simply very difficult to establish on the basis of cases where the triggering DP is to the left of the agreement bearing head, because of the existence of pied-piping, which allows embedded features to become features of the containing category, a property which I have argued is mediated by agreement.

3.2 Long distance agreement: English

Let us now turn to cases where agreement spans a much bigger syntactic distance: long distance agreement typically found in existential constructions:

(38) a. There seem to be many problems with agreement
b. There seems to be a problem with agreement

Under Agree, the T can simply send out a Probe and value the phi- and case features under local c-command. The expletive is merged directly in Spec, TP to satisfy the

EPP. This is compatible with the standard small clause analysis of the *there*-insertion construction (Stowell 1978).

The Spec head hypothesis runs into problems with agreement, and solutions range from Case transmission along a CHAIN (Chomsky 1981), to covert LF NP movement, replacing the expletive (Chomsky 1986), to (overt) movement of the phi-features of the associate (Chomsky 1995), to Agree, which is in some ways similar to Case chains. If Spec head is correct, however, it must be the case that there is either overt movement of some category carrying the phi-features, or that a local spec head relation between *there* and the associate at some point in the derivation. The early agreement solution is compatible with Moro's (1997) proposal which I adopt here (it is also compatible with Hazout 2004[14]). Moro argues that *there* is merged as a predicate and 'becomes' a subject through predicate inversion[15] which targets the clausal subject position.-

Moro draws a parallel between existential constructions and the inverted copula constructions. Moro shows that *there* has the distribution of a predicate (albeit an inverted one), and behaves just like an inverted predicate in inverse copula constructions. Since predicate inversion requires the presence of a landing site, (39b), and (39d) are out because there is no landing site for predicate inversion).

(39) a. May believes the cause of the riot to be John
b. * Mary believes the cause of the riot John
c. I believe there to be a problem
d. *I believe there a problem.

The stranded argument behaves like a subject, and disallows extraction. The locative PP in examples like (40a) does *not* show the behavior of a predicate, which we would expect under the small clause analysis. It behaves like an adjunct, in the sense it can be optional. PP small clause predicates are always obligatory, but the PP coda in existential constructions is not.

(40) a. Many copies of the book were in the studio
b. * Many copies of the book were
c. were many copies of the book (in the studio)

Since the associate and *there* are in a Spec head/left right relation at the point of Merge, or at a very early point in the derivation, agreement can be subsumed under local Spec head, with the agreement trigger to the left of the predicate. The associate is stranded low in the structure and has the distribution of the complement of *be. There* will of course behave like a structural subject, because of the effects of predicate inversion. This proposal immediately accounts for the ungrammaticality of partial raising of the associate (41c) (Moro 1997: 121):

(41) a. There seems ~~there~~ to be a man in the room
b. I expect [there to be a man in the room]
c. * There seems a man to be in the room

The associate fails to raise, because *there* must undergo predicate raising, and thereby bleeds NP movement of the associate.

(42) There seems [~~there~~ to [be [a man ~~there~~]]in the room]

This is an important result. Attempts to capture the absence of partial raising under the standard analysis of *there* insertion constructions all require additional theoretical principles. Chomsky (1995) proposes to block (41c) by the Economy principle Merge over Move. This principle is *only* motivated by the need to exclude partial movement of the associate. Thus, an analysis in which *there* starts out in a local relation with the associate early in the derivation and raises to subject position, simply renders Merge over Move superfluous.

Strong additional support for the non predicative status of the PP is presented in Zwart (1992). Dutch predicative PPs cannot be extraposed, but argumental/adjunct PPs can be. The locative PP in existential constructions can be extraposed, and patterns like non-predicative PPs[16]. In conclusion, predicate inversion accounts for the subject properties of existential *there.* However, rather than being merged directly in Spec, TP, *there* moves into that position. Long distance agreement in existential constructions is therefore compatible with the very local type of configuration that Spec head imposes. This analysis raises the question of how one can account for the so called intervention effects in agreement configurations with *there* (Boeckx 2000, Holmberg and Hróarsdottir 2003, among others). I will return to this subject in section 4.-

4. Icelandic

Some of the strongest evidence for Agree comes from Icelandic where agreement on the finite verb is triggered by a nominative object and a quirky subject occupies the subject position (S refers to Sigurđsson):

(43) Henni **bötnuðu** verkirnir. (Dat Nom) (S 1991.(51c))
She.DAT better-PAST-PL the.pains.NOM PL
`She recovered from the pains.'

The nominative object behaves like a structural object and is *never* in a Spec head relation with the c-commanding T. If nominative comes from T, the agreement relation must be established under c-command. This cannot be achieved locally, because of intervening syntactic structure.

I will argue that the nominative case on the object is not determined by the (high) T. More particularly, I will argue on the basis of the morphological structure, that the nominative object in (43) *is* in a local Spec head relation with a nominative head that is low in the structure. Morphological evidence support the idea that these structures contain two nominative TPs, with the morphological complex verb agreeing twice. In order to motivate this proposal, I first elaborate on several aspects of the syntactic

structures of Icelandic: how to treat inherent and structural cases, the need to decompose the subject position into two positions (Cardinaletti 2004), and the need for silent expletives. The discussion in the following sections relies heavily on the extensive literature on Icelandic, in particular on the various papers in Maling and Zaenen (1990), and on Sigurðsson (1989) and (1996), and Schütze (1997).

4.1. Agree and intervention effects

As is well-known, Icelandic has nominative objects with experiencer verbs:

(44) Henni **leiddust** strákarnir. (Dat Nom)
her(D) bored.3spl the boys(N)
`She found the boys boring.'

Under a standard Agree story, T values its case and phi features under Agree, and the dative experiencer raises to subject position to satisfy T's EPP feature.

(45) $T_{\text{u. nom, u.phi, EPP}}$ $DP_{\text{dat, phi features}}$ $DP_{\text{u nom, phi features}}$

Agree must take place *after* movement of the dative DP, since the dative DP does not intervene and block agreement in number. This seems inconsistent with the hypothesis that features get eliminated as early as possible. When a dative experiencer is indefinite, and stays lower than T, plural agreement appears to be blocked, as shown by the following example from Holmberg and Hróarsdottir (2003). Note that there appears to be speaker variation with respect to the judgment in (47) (Halldór Sigurðsson, personal communication).

(46) *Mér virðist/ virðast* t_{NP} *[hestarnir vera seinir]*
me.DAT seem.SG/seem.PL the.horses.NOM be slow
'It seems to me that the horses are slow.'

(47) *Það virðist/ *virðast einhverjum manni [hestarnir vera seinir]*
EXPL seem.SG/ seem.PL some.DAT man.DAT the.horses.NOM be slow
'It seems to some man that the horses are slow.'

Plural agreement cannot cross an intervening experiencer, and this is explained under an Agree story as an intervention effect. The phi features of the dative intervene between T and the nominative DP, and allow T to only delete the uninterpretable case features on the DP: they interfere with valuing Ts phi-features. Consequently, the unvalued features of T will be valued in the default way, yielding third person singular agreement.

Although the intervention effects at first sight bring strong support for Agree, it meets with what I believe is a fatal problem[17]: with simple experiencer verbs, a da-

tive experiencer *never* acts as intervening between the verb and the nominative object (thanks to Halldór Sigurđsson for providing the following examples)[18]:

(48) a. *það líkuđu mőrgum þessir tómatar.*
EXPL liked.3PL many.DAT these.NOM tomatoes.NOM
'Many liked these tomatoes.'
b. *það leiddust sumum þessar rædur.*
EXPL found.boring.3PL some.DAT these.NOM speeches.NOM
'Some people found these speeches boring.'

The same is true for passive constructions, as the famous example from Zaenen, Maling and Thráinsson (1984) shows:

(49) það voru konungi gefnar ambáttir í vetur
EXPL were.3PL king.DAT given.NOM.PL slaves.NOM in winter
'There was a king given maidservants in winter.' (ZMT: 113 (50a))

It also holds for auxiliary constructions:

(50) *þAð* ***hafa*** *sumum leist* ***þessar rædur***
EXPL have.3PL some.DAT bore these speeches.NOM
'Some people have found these speeches boring.'

The following sums up the distribution of intervention effects:

(51) a. monoclausal dative nominative structures do not show intervention effects
b. auxiliary constructions/passive constructions do not show intervention effects
c. raising constructions show intervention effects; these are subject to interspeaker variability.

It is unclear how long distance Agree can ever capture (51). Thus, either agreement can apply anywhere in a local domain (but is blocked over a clausal boundary), or the derivations are considerably more complex than Agree presupposes.

In the next sections, I show how a Spec head analysis can capture (48) within the theory of agreement developed in this paper, in conjunction with a reasonable account of case and agreement (4.2). I return to nominative objects in section 4.3. Impersonal passives and existential constructions will be left out of discussion, as I assume these can be analyzed as discussed in section 3.2.

4.2 Case and agreement

Icelandic has a rich system of morphological cases (nominative, accusative, dative, and genitive), and extensive DP internal nominal agreement. This reflects merger of morphological case deep within the DP, as in Maasai. Within the assumptions underlying

his paper, the morphological Case features of the DPs, which we can think of as the features that have been added to the NP, must be "matched" with the case features of Case heads in the clausal spine, and this is achieved by moving the DP to Spec positions of designated Case heads. Thus, a nominative DP must move to Spec, Nom, an accusative to Spec, Acc, a dative to Spec, Dat, and a genitive to Spec, Gen, the latter two very much very much in the spirit of Kayne's (1994, 2000) general proposals for functional prepositions. Elements which are in a local Spec head relation with the DP will agree in features, hence trigger agreement in the course of the derivation.

This analysis of morphological case presupposes that all Icelandic cases behave in the same way, i.e. they share the property of moving to the Spec position of designated case heads. This does not appear to be correct .Nominative and accusative case behave like structural cases and dative, genitive and accusative like inherent or lexical cases. What this means is that for nominative and accusative case, it is predictable on the basis of the derived structure whether some DP will be nominative or accusative. For lexical case, it is a particular predicate that plays the determining role, and it is assumed that these DPs do not move to clausal case heads. As for agreement, all cases can trigger agreement on dependents, but only nominative DPs can trigger subject verb agreement. I will sketch a modular account for Icelandic case that maintains the simple theory of case outlined above. The apparent differences between structural and inherent cases do not fall out from the way the grammar handles the two types of cases , but from the specific positions where they occur in the clausal spine. As I will argue, thematic roles and case must be decomposed, even in the case of inherent case. The difference between structural and inherent cases is due to other properties of the structure: nominative and accusative are case heads in the context of a TP, where T makes a local syntactic subject position available, and the subject property must be decomposed in two parts (Cardinaletti 2004). Inherent cases are case heads introduced by particular vP shells[19].

4.2.1 *Inherent case*

Zaenen and Maling (1990) show an important fact about inherent case and thematic property: one can occur without the other. This is illustrated in (52) below: some inchoative verb alternations show no preservation of case, but dative and genitive idiosyncratic case marking is preserved under passive.

(52) a. *Skipstjórinn sőkkti skipinu* (Zaenen and Maling 1990: 143)
the.captain.NOM sank the.ship.DAT
'The captain sank the ship'

b. *skipið sőkk*
the.ship.NOM sank
'The ship sank'

c. *Skipinu var sőkkt af skipstjóranum*
the.ship.**DAT** was sunk by the.captain.DAT
'The ship was sunk by the captain'

The dative case thus depends on the presence of the v shell, not of the VP shell, where the theme argument is introduced. If passive voice is merged higher than vP, a reasonable assumption, since only verbs with an agentive external argument can be passivized[20] the dative case will be preserved under passivization because of the derivation. This translates Zaenen and Maling's (1990: 142) basic insight:

"We account for the case marking by assuming that idiosyncratic case marking takes place at a level that precedes passive, namely, at the end of the θ-component, and that, like all case marking, idiosyncratic case marking is preserved once it is assigned.".

Consider the following simplified mappings for(52), from the following hierarchy of merger: Nom > T > $\text{Voice}_{\text{passive}}$> Dat> v >VP. Nom conflates the nominative case head as well as the structural subject position, an issue we return to below. (the fact that the external argument cannot raise to the syntactic subject position in passives is indicated by striking out the argument; . participial morphology, V to T movement, and additional intervening structure and movements are omitted.)

(53) a. NOM T [DAT [$_{vP}$ $\text{captain}_{\text{nom}}$ v [$_{VP}$ V ship_{dat} (52a)

b. NOM T [V ship_{nom} (52b)

c. NOM T [PASS [DAT [$_{vP}$ ~~captain~~ v [$_{VP}$ V ship_{dat} (52c)

These structures can also capture a morphological generalization. As Zaenen and Maling show, the only criterion that correlates with whether individual inchoative/causative verb pairs do or not preserve case is a morphological one. Verbs that preserve case have identical past and participle form. Verbs that don't typically have different paradigms for past tense and participles in the two environments (cf. the past tense forms in (52a) and king is preserved under passive.

(52b) *sőkkti* and *sőkk*). This generalization follows from the structures above, if the two different spell-out forms of the past tense of *sink* reflect the different syntactic structures [[V]T] for (52b) or [[V[v]T] for (52a) .Verbs that have an inherent case marked theme in both unaccusative and transitive contexts, will have identical morphology, because inherent case is *always* minimally introduced by a separate shell, i.e. they always result in the morphological structure [[V[v]T] and never in the structure [V]T].

Thus, some verbs can be bare VPs, others cannot but must be dominated by an additional shell structure (which I refer to generally as vP shell). To conclude:

(54) Thematic structure and case are never conflated, but always decomposed

4.2.2 *Nominative case, quirky subjects and agreement*

What happens to the structural Nom in (53c), when the dative raises and becomes the syntactic subject? Is Nominative only projected where needed, or is it a necessary

property of all tensed clauses? I will argue for the latter: nominative must be present and agreement is triggered by a silent expletive.

It is well-known that only nominatives can trigger subject agreement on the verb, but other cases cannot. In the absence of a nominative DP, the finite verb carries 3rd person singular agreement, often called 'default' agreement:

(55) a. *Okkur vantaði vinnu* (Acc Acc)
us.ACC lacked.3SG a-job.ACC
' We lacked a job.'

b þeim batnaði. (Dat)
them.DAT recovered.3SG
`They recovered.

How should the notion of "default' agreement be construed theoretically? The idea of a morphological default seems incompatible to me with basic assumptions of the Minimalist Program: a finite verb in Icelandic carries (uninterpretable) tense and agr features, which must be valued before the interfaces against an element that bears these features. Merger of a silent nominative expletive that "triggers/values" agreement is simply the null hypothesis: what principles could prevent the language learner from postulating a silent expletive? I discuss some possible objections to this analysis below, as well as some historical reasons as to why this is not the standard analysis for Icelandic. Quirky subjects in Icelandic behave as syntactic subjects, i.e. as occupying the highest A position in the clause (Zaenen, Maling and Thrainson 1985, Jónsson 1996, among many others). Although many other languages, like German for example, have superficially similar quirky subject constructions (dative nominative constructions), the quirky subject behaves quite differently: in Icelandic it can be controlled, and reduced under conjunction reduction, in German this is impossible. The tacit assumption in the literature is that the quirky dative is in subject position in Icelandic, but in a Topic position in German, or in languages that have overt expletive pronouns in this configuration. (This raises the important question how we should account for the Icelandic German contrast: see section 4.4 for a proposal). In earlier stages of the theory (pre VP internal subject), there was a unique clausal structural subject position. If the quirky DP was occupying that position in Icelandic, there was simply no room for another silent syntactic element that triggered 3rd singular agreement on the verb. This led to the conclusion that this third person form must be forced in some different way: it is present because of the needs to the morphology: i.e. it is a morphological default form. This argument no longer carries force: theories either admit multiple specifiers or multiple heads with single specifiers. A second objection is that this expletive nominative pronoun in Icelandic must be silent. Besides an overt expletive merged in CP, and a silent arbitrary pro (people/we). Icelandic seems to have silent nominative expletives in precisely the contexts we may expect[21] (in contexts without a topic or a subject of the predication.). We know from other languages that expletives can be silent. Since other languages have overt nominative

expletives with precisely these verbs, it is difficult to see what principle exactly would prevent an Icelandic language learner from postulating one.

At the core of my analysis then is the idea that an expletive must be merged to check nominative case head, Nom. When Nom is merged, a nominative expletive must be merged with Nom to value the features if there is no local DP available that can carry out this task. Again, this yields a left to right agreement configuration, in accordance with the Spec head hypothesis. Quirky subjects raise to the subject position, i.e. there must be more than one subject position. We minimally arrive at the following decomposition of the preverbal subject field, in agreement with Cardinaletti (2004), who argues that the preverbal subject field must be decomposed into at least two specialized projections, which she calls SubjP (a projection for the subject of the predication)[22] and AgrSP, where nominative case is checked and agreement is determined. (for expository convenience, Nom and Agr are collapsed, only nominatives can trigger agreement).

(56) Preverbal subject field:
[DP SUBJ [expl$_{nom,\ 3}$ NOM [T

Recall that only morphologically nominative DPs can raise to Nom, just as only dative DPs can raise to DAT etc. I will assume that this follows from the "matching" of features. Suppose now that a dative DP is the highest DP in the vP region. It will value its Case feature against the DAT head, and move directly to SubjP, bypassing Nom, providing TP with a subject. A silent expletive must merge in Spec, Nom to match the nominative feature, triggering third person agreement on the verb.

(57) [$_{SubjP}$ ship.DAT SUBJ [*expl* [NOM [T

Nominative subject DPs do double duty. They raise to Nom, and as a result trigger full subject agreement, and then move on to Spec, SubjP to provide TP with a subject.

(58) [$_{SubjP}$ ship.nom$_i$ SUBJ [t$_i$ [NOM [T …. t$_i$

Quirky subjects thus never trigger subject agreement because they cannot occupy Spec, NOM, a prerequisite for subject agreement. Quirky subjects otherwise trigger agreement, as revealed on floated quantifiers, or on secondary predicates. They are therefore not hidden PPs, nor topped off with a layer of structure that blocks participation in agreement.

(59) a. *strákunum leiddist öllum í skóla*
the-boys.DAT bored all-DAT.PL.M in school
'the boys were all bored in school' (Sigurðsson 1991: 331(6c))
b. *Njósnraranum var kastað einum út úr þyrlunni*
the-spy.DAT was.SG thrown alone.DAT out from the-helicopter.DAT
(Andrews 1990)

Note that under this analysis, the nominative must be valued under Spec head (left right merge) by the expletive, which is responsible for the 3rd person copy on T.

4.2.3 *Accusative case and quirky case*

Structural accusative case behaves very similar to nominative. In the usual configurations where accusative case is available, i.e. with an active *v* that introduces an external agentive argument, accusative case is available in Icelandic, yielding regular nominative accusative patterns. However, morphological accusative case fails to show up if an object carries dative, or genitive (or nominative case, see below), just as nominative case fails to show up with quirky subjects (or more correctly shows up only in the agreement on the finite verb). Yet, these inherently case marked objects distribute like accusatives objects, and undergo object shift and obligatory raising to object for example.

(60) *Skipstjórinn sőkkti skipinu ekki*
the-captain.NOM sank the.ship.DAT not
'The captain didn't sink the ship.'

We can understand this in exactly the same way as we understand nominative case, if we follow Collins and Transom (1996) and assume that structural accusative structures are similar to nominative case structures, i.e. they are a species of TP, but with an ACC case head. As TPs, they contain a "Subj" position. Only accusative DPs can move to ACC. The highest subject DP in the local domain will be attracted to Subject, if it is an inherently case marked DP, a silent expletive will satisfy the features of ACC. There is never a morphological reflex with an accusative expletive in Icelandic.

(61) a. I love the ship$_{acc}$
… [$_{SubjP}$ ship.acc SUBJ [t_i [ACC [T
b. The captain sank the ship
… [$_{SubjP}$ ship.dat SUBJ [*expl* [ACC [T [DAT v

Thus, because of the hierarchy of merger Acc> T> Dative/Gen, inherently case marked DPs bleed accusative case, but behave like all accusative objects, because they are forced to raise to the subject position of the accusative TP.[23]

4.2.4 *Nominative case in infinitival CPs*

Nominative case is available not only in tensed environments, but also in infinitivals (Sigurðsson 1989, 1991, 1996). Infinitival complements headed by *að* show the same case patterns as tensed causes, with PRO carrying all cases, including nominative (Yip et al 1987, Sigurðsson 1991:337). This can be concluded from nominative floated quantifiers, and agreement with main predicates which can never be triggered by inherent case marked subjects, as shown in (62) and (63):

(62) *Strákana langaði til að komast* ***allir*** *í veisluna*
the boys.ACC wanted.3SG for to get all.NOM.PL.MS to the-party
'The boys wanted to get all to the party

(63) *Stákanumun hafði verið kalt / *kölldum*
the-boys.DAT.PL have.SG been cold.SG cold.DAT

Structural nominative case is therefore available within infinitival clauses of this type. Not all types of infinitival complements license internal nominative case. Raising-to-object verbs license structural accusative: since nominative case is not preserved under raising, nominative cannot be available internal to the infinitival. Since Chomsky (1981), it is commonly assumed that control complements are CPs and raising complements are TPs. We can characterize the contexts in which clause internal nominative case is available as CPs. Clauses which lack a CP level lack the possibility of licensing internal nominative Case.

(64) Nominative case is only available within CP

This point becomes important in the discussion of long distance agreement in dative nominative raising constructions.

4.3 Nominative objects

4.3.1 *Why simple experiencer verbs are not that simple*

Nominative objects are attested with experiencer verbs, either 'simple' verbs or raising to subject verbs, and can be derived from dative accusative double object constructions via passivization. There are two important clues for the analysis. First, the context for nominative objects is severely restricted: there are only dative nominative verbs, and no genitive nominative verbs nor accusative nominative verbs (Zaenen and Maling 1990, Sigurðsson 1991). Secondly, many (though not all) of the nominative object experiencer verbs and raising verbs carry particular voice morphology (*-st*), traditionally called "middle voice" (*leiðast*, 'bore', *virðist* (seem), *sýnast*, ('appear'). This morphology *follows* the inflected verb forms (Anderson 1990) (leiddu-st 'bore.PAST.3PL-ST', leiðum-st bore-PRES.1PL-ST, leið-a-st (bore.INF.ST). Given the syntactic approach to morphological structure building underlying this paper, this has syntactic consequences. If the morphology is derived by regular head movement, or roll up movement, the morphology must reflect the following syntactic structure, with the finite or infinitival TP merged *below* the head that is spelled out as –st.[24]

(65) $[_{\text{Voice}}$ -st $[_{\text{SUBJ}}$ $[$ NOM $[_{\text{T}}$ $]$ $[_{\text{VP}}$ $]$
st pl past

In the structure in (63), –st can be likened to C: what is important is that it selects for a finite tensed complement that contains Nom, as the morphological form indicates. The

argument of V will be nominative since that is the only local available case, yielding a nominative object, which triggers agreement on T, (V picks up the morphology: this is not indicated below):

(66) [$_{\text{Voice}}$ -st [DP$_i$ [SUBJ [~~ÐP~~$_i$-NOM [T] [$_{\text{VP}}$ V ~~ÐP~~$_i$]

Dative experiencer verbs with nominative objects that do not carry overt voice morphology will be assumed to share the same structure, but with a phonological silent voice.

Nominative objects occur *only* with dative experiencer verbs[25]. We take this to show that the structure in (65) can be only selected by a v shell which introduces a dative experiencer. This vP in turn will be dominated by the main TP, either finite or infinitival, as vPs always are, and a Subj position and a Case position that depends on T (Nom or Acc). Within each TP, the highest argument is locally attracted to the subject position, the Nom position of the higher T is satisfied by Nom, as a dative cannot move to this position:

(67) Dative subject Nominative object
[**SUBJ Nom** T [Dat [EXP v [Voice(*st*) [$_{\text{TP}}$ **SUBJ Nom** T [
theme$_{\text{nom}}$ V *it*

At no point in the derivation does the dative experiencer intervene, thus capturing the absence of intervention effects with these types of verbs (51a).

Under the proposed analysis, experiencer verbs with nominative objects are *double nominative* structures, which agree both with a 3rd person expletive and a nominative theme (these structures conform to Collins and Thráinsson (1996), with each shell dominated by TP). The heads in the two TP cycles are "compressed" into a single complex verb, which is doubly marked for nominative agreement (cf. Schütze (2003)).[26] The compression makes double agreement hard to see. We turn to this fact in the next section.

4.3.2 *Double nominative agreement*

With dative nominative verbs, the verb carries either third person singular or third person plural depending on the features of the nominative object. The verb however cannot overtly express first or second person features of the object, unless the verb form is homophonous with both 3rd person subject and 1st or second person (Sigurðsson 1996):

(68) a. *henni* *leiddust* þær
her.DAT bored.3PL they.NOM
'She was bored with them.'
b. Henni *leiddumst |?*leiddust ?*leiddist við.
her.DAT bored.1PL bored.3PL bored.3S we.NOM

When the spelled out form is homophonous with the third person singular, as Sigurðsson (1996) shows, the sentences improve. Sigurðsson links the apparent cha-

otic nature of the judgments to the two slightly differing paradigms of these verbs:

(69)

Sg 1	*líkaði*,	*leiddist*
Sg 2	líkaðir	leiddist
Sg 3	**líkaði**	**leiddist**
Pl 1	líkuðum	leiddumst
Pl 2	líkuðuð	leiddust
Pl 3	líkuðu	leiddust

Speaker judgments show that the boldfaced **líkaði** is compatible with a first person object or a third person object (but not with any other object*). Leiddist* is compatible with a first, a second or a third person object. This is exactly what we expect if the verb agrees with both the nominative object and the 3rd person expletive (as argued in Schütze (2003)). The only survivors are forms where the spell-out forms is compatible with all features specifications. Since these features are morphosyntactic agreement features (i.e. uninterpretable features) that arise as a byproduct of the derivation, no problems arise with the interpretation.

(70) Double agreement configurations (only double agreement indicated)

líkaði	is compatible with	[[like + 1st] +3rd] [[like + 3rd SG] +3rd]
leiddist	is compatible with	[[bore +1st]+ 3rd], [bore +2st]+3nd], [[bore + 3rd SG], 3rd]
líkuðu	is compatible with	[[like+3rd PL]+3rd]
leiddust	is compatible with	[[bore+3rd PL] +3rd]

Thus, these quite opaque morphological agreement facts bear on the double agreement analysis, and find a simple structural explanation, which is consistent with late spell out models of morphology. In keeping with the morphological forms of the verbs, Nom is merged low in the structure and agreement is triggered low as well. [27]

4.3.3 *Plural climbing*

If nominative is merged lower than the experiencer v, we expect only the structure that spells out the "verb" to be sensitive to agreement with the nominative object agreement. This is incorrect, as we can see from auxiliary structures. When the complex verb enters into a compound tense, the auxiliary obligatorily agrees in number with the nominative.

(71) *Hafa einhverjum leiðst þessar rædur.* (Dat Nom)
have.PL someone.DAT bored.3PL.ST these speeches.NOM
`Has someone found these speeches boring?'

Thus, the complex experiencer verb passes its agreement features on to the auxiliary. I will call this "plural climbing" to bring out the parallel with Romance clitic climbing. I will assume that plural climbing arises as a by-product of complex verb formation. Koopman and Szabolcsi (2000) propose that complex verb formation al-

ways requires a local Spec head relation between the restructuring predicate and the predicate of its complement. If that predicate carries plural agreement features, plural climbing can again be triggered under Spec head. In other words, a nominative object DP will trigger agreement on all the verbs in a restructuring domain, because of two different processes: regular nominative agreement triggered low in the structure, and copying of agreement features agreement as a byproduct of complex verb formation.

4.3.4 *Raising verbs*

Let us next turn to raising verbs. Recall what we have so far established: many experiencer verbs and raising verbs carry special voice morphology (-st). *-st* (Voice) takes a TP with VP as its complement, and some experiencer verbs project a silent voice. TP(nom) can be selected by an experiencer v, which introduces dative case. Experiencer constructions are double nominative and double subject agreement constructions. Raising verbs without an experiencer trigger obligatory raising:

(72) *Ólafur virðist [t vera gáfaður]* (H&H 24a)
Olaf.NOM seem.3S be intelligent
'Olaf seems to be intelligent.'

(73) **það virðist [Olaf vera gáfaður]*
það seems.3S Olaf be intelligent

This is because pure raising verbs lack vP shells that introduce case. The clausal complement of the raising verb must be a TP[28] and hence lacks an internal nominative position. Raising is obligatory just as short movement to subject position is obligatory.

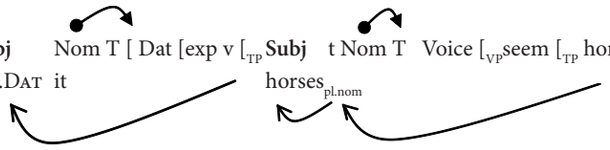
With dative nominative experiencer raising verbs, the experiencer shell embeds VoiceP which provides a nominative TP with a subject position. The dative experiencer must raise to the local Subj position, since it is the closest DP. The verb can agree with the plural nominative (74a), but it can also *always* carry third person singular in this context (74b):

(74) a. *Mér virðast* t_{NP} *hestarnir vera seinir*
me.DAT seem.3PL the.horses.NOM be slow
'It seems to me that the horses are slow.'

b. *Mér virðist* t_{NP} *hestarnir vera seinir*
me.DAT seems.3S the.horses.NOM be slow
'It seems to me that the horses are slow.'

These facts follow from the basic structure of the dative nominative experiencer verbs, if we assume in addition that in this context, raising verbs can take either a TP or a CP clausal complement. (74a) has the structure in (75) with *seem* selecting a TP:

(75) [**Subj** Nom T [Dat [exp v [$_{TP}$ **Subj** t Nom T Voice [$_{VP}$seem [$_{TP}$ horses be slow]
me.DAT it horses$_{pl.nom}$



(74b) has the structure in (76) with *seem* selecting a CP. (This structure is further refined below.)

(76) [**Subj** Nom T dat me [Voice[[**Subj** Nom T [seem [$_{CP}$ Subj Nom horses.nom]
me.DAT *it* [[*it* [horses.NOM

Thus, *seem* never agrees with the nominative horses: it agrees with an expletive. The nominative case on *horses* is checked internal to the infinitival CP, a possibility that Icelandic allows (4.2.4.). Further questions arise as to derived constituency. If the T within the VoiceP requires a Subj, it should attract a subject. I will assume it does attract the CP which contains *horses*. In some sense then, the expletive is the clausal expletive *it*, which we know can occur with CPs, but never with TPs.

(77) [**Subj** Nom T dat me v [Voice [[**Subj** Nom T [seem [$_{CP}$ **Subj** Nom horses.nom]
me.DAT *it* [[$_{CP[}$horses *it* [

The double agreement on the verb is simply double agreement for two third person expletives.

According to this analysis, then, sentences with or without object agreement have different structures, as expected under the Spec head analysis. This is further supported by two facts: first and second nominatives are always fine if the raising verb carries singular agreement (Sigurðsson 1996). Since the verb does not agree with the nominative, but with an expletive, and the nominative is licensed in the CP complement, the verb is insensitive to the features of the nominative.

(78) a Henni **virtist** / *virtumst [$_{CP}$ við vera duglegar].
her.DAT seemed.3SG seemed.1PL we.NOM be industrious
b Henni **hafði** / *höfðuð fundist [$_{CP}$ þið vera duglegar].
her.DAT had.3S had.2PL found you.NOM be industrious

Secondly, whether the verb agrees with the nominative object correlates with different behavior under the Binding theory, as discussed by Taraldsen (1992, 1995). When the nominative object agrees with the raising verb in number, a principle B effect arises:

(79) *Konunum fundust þaer vera gáfaðar*
women-the.DAT seemed-3PL they.NOM be gifted.NOM.FEM.PL
'The women$_i$ though they$_j$ were smart.' (Principle B)

When it does not, no Principle B effect arises.

(80) *Konumum fannst [$_{CP}$ þaer vera gáfaðar]*
women-the-DAT seems.3S they.NOM be gifted.NOM.FEM.PL
'The women though they$_{i, j}$ were smart.'

This follows straightforwardly from their different structures, with raising out of an TP complement in (79), but not in (80).

(81) [**Subj** Nom [DAT exp v [Voice[[**Subj** Nom T [find [$_{TP}$ ~~they~~ be gifted]
woman-DAT *it* [they$_i$ t$_i$ [$_{TP}$]

(82) [**Subj** Nom [DAT exp v [Voice[[**Subj** Nom T [think[$_{CP}$ they$_{nom}$ be gifted]
woman-DAT it [[$_{CP}$ they$_{nom}$ .. it

Icelandic does not allow A- movement of the nominative over an intervening experiencer with these types of verbs:

(83) * *hestarnir virðast mér [t veraseinir]*
horses.NOM seem.PL me.DAT be slow
'Horses seems to me to be are slow.'

This follows once the underlying merged structures for these particular cases are taken into consideration: there is ample evidence that with certain predicates the dative experiencer end up in the highest A-position in the verbal spine. Once we take this into account, all movements of lower DPs over the experiencer dative are excluded with these particular predicates.

(84) [$_{TP}$ **Subj** Nom T [**Dat** [exp v [Voice[[$_{TP}$ **Subj** Nom T [seem [$_{TP}$ horses be slow]

We can also understand Schütze's (1997) cases where agreement with the nominative fails:

(85) *Mér virðist virðast Jóni vera taldir*
me.DAT seems.3S seem.3PL John.DAT to.be believed.NOM.PL
líka hestarnir.
like horses.NOM.PL
'It seems to me that John is believed to like horses.'

This derivation contains the form : *John$_{dat}$ be(pl) believed(pl) to like horses(nom)*. Nominative case on *horses* is determined within the *like* clause, as a function of voice, which is lower than the experiencer shell. *Horses* therefore trigger plural agreement on the infinitival form of *like:* which is carried up to the passive participle form of *believe* through complex verb formation (which transmits it to *be:* if this portion of the structure is finite, *be* will show obligatory plural agreement with *horses)*. This structure is embedded under the experiencer verb, yielding the following:

(86) [Subj Nom dat T [me v [Voice [Subj Nom T seem [$_{TP}$John$_{dat}$ be$_{pl}$
[me.DAT *it* [~~me~~ [[John$_{dat}$ *it* [~~John~~

The verb must be singular because both the TP segments contain an expletive, i.e. both TP segments agree for singular. This raises a problem though. Why cannot the plural be transmitted from *be* to *seem* under complex verb formation? It cannot be assumed that this agreement is optional, as we have seen it is obligatory in compound tenses for example. I believe the answer lies in the way the properties of Nom can be satisfied. The only element that is locally available to check the nominative case head is the expletive, which triggers singular agreement. This leads to a conflict that within the same TP segment the verb must agree for singular (with *it*) and carries plural. I will therefore assume that the only derivation that converges is one where *seem* takes a CP complement:

(87) [Subj Nom dat [me v [Voice[Subj Nom T seem [$_{CP}$John$_{dat}$ be$_{pl}$
[me.dat *it* [[$_{CP}$ John$_{dat}$…] *it* [

So far then, the long distance agreement facts can be captured successfully under the Spec head hypothesis, with a nominative DP in a local relation to a Nom head, in conjunction with an independently supported analysis of the hierarchical structure that underlies these cases. In addition to Spec head agreement between the trigger and the target, a second source for agreement must be assumed, which I have 'agreement climbing' i.e. agreement with a plural predicate triggered under complex verb formation (also reduced to Spec head agreement). This hypothesis successfully captures the absence of intervention effects in monoclausal contexts, and in contexts with compound tenses. Agreement failures follow from the structure (a nominative DP cannot reach the relevant Nom position).

4.3.5 *Intervention effects in raising constructions*

I have so far shown that dative experiencers do not structurally intervene between the position where nominative agreement is determined and the attracted DP. If correct, the question arises how to capture the so-called intervention effects that are found for some speakers with raising to subject verbs, but not with simple experiencer verbs or passivized double object constructions. This effect is shown in the following example from Holmberg and Hóarsdóttir (2003):[29]

(88) *Það virðist / *virðast einhverjum manni [hestarnir vera seinir]*
EXPL seem.3SGseem.3PL some.DAT man.DAT the-horses.NOM be slow.NOM
'It seems to some man that the horses are slow.'

When the experiencer is an indefinite, a singular DP, (or in certain cases a trace of wh-movement[30]), plural agreement appears to be blocked. When a plural DP intervenes, the intervention effects are quite weak:

(89) ?*Það **finnast** mörgum stúdentum tölvurnar ljótar*
EXPL find.3pl many.DAT students.DAT the computers.NOM ugly.NOM
'Many students find the computers ugly.'

These facts are surprizing under the story I have developed so far since the experiencer never structurally intervenes. Indefinite experiencers occur to the *left* of the verb in compound tenses, and behave differently from indefinite themes, bringing further support to the idea that experiencers are always introduced by the higher vP shell, and do not intervene between NOM and the nominative object.

(90) *Það hafa sumum leist (*sumum) þessar rædur*
EXPL have.3PL some.DAT boring some.DAT these.NOM speeches.NOM
'Some people have found these speeches boring.'

It seems therefore unlikely that this effect is due to intervention for nominative case and agreement. In the present account, it must rather be due to the way agreement is carried up under complex verb formation. In the latter case, the experiencer shell does intervene in the structure. It is as if the experience shell allows plural climbing parasitically on the features of its specifier. The theoretical challenge then is to provide a principled account for the fact that "tight" restructuring with simple experiencer verbs and passive constructions has different surface effects from restructuring under raising verbs. Future research will have to yield further insight into these issues, and yield a clearer picture of speaker variation, and the grammars of individual speakers, both within Icelandic as well as crosslinguistically.

4.4 Icelandic and German quirky subjects

In 4.2.4 we saw that infinitival CPs must contain PRO, which starts out its life with morphologically case. As is well known, Icelandic has quirky PRO, in addition to nominative PRO (Sigurðsson 1991):

(91) *Ég vonast til að verða hjálpað*
I.NOM hoped for C be helped
'I hope to be helped.'

Under the proposal here, there is no difference between these two instances of PRO from the point of view of the external syntax. The uninterpretable case features have been deleted *below* the Subj position that hosts PRO.

(92) a. [I_i hope [C[PRO_i **Subj** it be Pass $PRO_{\underline{dat}}$ **dat** help]
b. [I_i hope [C[PRO_i Subj $PRO_{\underline{nom}}$ **NOM** PRO speak]

Interestingly, this analysis is not incompatible with GB analyses which requires PRO to be "caseless", i.e. protected by a particular type of C. Given the proposals in this paper, caselessness can arise in two ways: either the uninterpretable case features have been deleted, below the highest A-position, or they have never been added in the first place.

The German verb *help* takes an inherent dative as well, but quirky case marked PRO impossible:

(93) *Ich hoffe [PRO geholfen zu werden]
I hope helped to be
'I hope to be helped.'

This can be excluded if the dative in German is not a DP, as in Icelandic, but in fact a PP with a silent P. If so, (93) can be ruled out by whatever principle excludes PRO from being the complement of P.

(94) *Ich hoffe [$_{PP}$*[[$_{P}$e] PRO]] geholfen zu werden]
I hope helped to be
'I hope to be helped'

(95) *I spoke [to PRO]

Additional support comes from Italian dative nominative constructions, where the dative is visibly marked by a P:

(96) a Gianni piaceva molto la musica
to Gianni pleased much the music
'Gianni liked music a lot.'

Cardinaletti (2004) shows, that the dative raises to Subj. As in German, a dative subject cannot be controlled (Adriana Belletti, Anna Cardinaletti, personal communication):

(97) *Gianni cerca in tutti i modi di piacere questo tipo di musica
Gianni tries in all the ways to like this kind of music
'Gianni tries hard to like this kind of music.'

The difference between Icelandic and German/Italian PRO then should be related to the category that raises to the subject position, DP or PP.

A further difference between German and Icelandic falls out from the proposed structure and the difference in category between Icelandic and German. In Icelandic, (but not in German), a quirky subject can be missing under coordination. (Rögnvaldsson 1990):

(98) a. Ég hafði mikið að gera og (mér) var samt ekki hjálpað
I had a.lot to do and me-DAT was nevertheless not helped
'I had a lot to do but nevertheless I was not helped.'
b. Þeim líkar maturinn og (þeir) borða mikið
they.DAT like.3S the.food and they.NOM eat.PL much
'They like the food and eat much'

Again, this follows if both subjects are DPs, and if coordination is coordination of NomP (or SubjP with a silent operator in the second conjunct, as in Munn (1993)). As shown above, the case feature of the DP that raises to Subj has been deleted prior to raising to Subj:

(99) [$_{SubjP}$ they- Subj [$_{NOMP}$ it Nom ~~they~~ **dat** [and [$_{NomP}$ ~~they~~ Nom]

This type of analysis is only possible if quirky case marked DPs are DPs; if they are PPs, as in German, this pattern will be excluded, as ATB is only possible if the categories are identical.

5. Conclusion

In this paper, I have defended the hypothesis that agreement is triggered under Merge of a triggering DP to a XP, a hypothesis that I have referred to as the Spec head hypothesis. I have shown that this hypothesis must be available on theoretical grounds. Whether Agree is available as well, in doubtful: long distance agreement can be captured successfully under Spec head, with agreement either triggered under pied-piping, or early in the derivation. "Agreement climbing" i.e. agreement with a plural predicate triggered under complex verb formation, can also be reduced to Spec head agreement given the theory of complex verb formation in Koopman and Szabolcsi (2000). This hypothesis successfully captures the absence of intervention effects in monoclausal contexts in Icelandic, and in contexts with compound tenses. Agreement failures follow from the structure (a nominative DP cannot reach the relevant Nom position, forcing (null) expletive insertion). A residue of intervention effects remain unaccounted for. These occur over clausal boundaries and generally seem to be related to restructuring, and not to the theory of agreement. Arguments that show the need for Agree in UG must show that the relevant (left right) relation between the trigger and the target does not hold at any point in the derivation, and that Agree has effects that cannot be reduced to movement. In so far as this cannot be shown for the cases we considered, and alternative analyses can be empirically supported, it looks more and more likely that Spec head is the only agreement configuration. If correct, this has important analytical consequences for the type of syntactic derivations that hold. Thus, syntacticians should not ignore agreement patterns, since agreement patterns and agreement asymmetries provide important insights into the properties that syntactic structures and derivations must have.

Notes

* This paper is a further development of Koopman (2001, 2003a, 2003b), and finds its historical roots in my paper on Babbara case chains (Koopman (1987, published as Koopman (1992)). The core ideas on modern Icelandic where developed in a course on Agreement at the (2004) Egg summer school in Cluj and in a UCLA seminar (fall 2004). I would like to thank all participants for their feedback and comments. Special thanks go to Anoop Mahajan, Dominique Sportiche, Carson Schütze, and to Halldór Sigurđsson for generous e-mail discussions and feedback on the fascinating subject of Icelandic agreement.

1. See also Zwart (2004, this volume). This leaves room for further issues, as to whether agree-

ment heads can exist for example. I will assume in this paper they do, though absolutely nothing hinges on this.

2. (1a) directly captures agreement asymmetries where agreement is only possible when a DP has moved sufficiently high into the structure. These will not be discussed in this paper (see Kayne (1989), Koopman (2003a, 2003b), Hallman (1999)).

3. See Kayne (1994: section 5.3) for discussion of a typological asymmetry with postpositions showing agreement frequently, but prepositions never. (Never seems to be too strong, the single P of Maasai for example shows full agreement with a DP complement).

4. This suggests a direct link to Kayne's (2003) proposal that an immediate complement of Y may not move to Spec, YP.

5. See the introduction of Rizzi (2004) for particular helpful perspective on points of tension between the so aptly called "cartographic" approach and the Minimalist Program.

6. Maasai nouns fall into three distinct classes: proper names, pronouns, and common nouns (*ɔ́ldía* 'dog' , *alayéni* 'boy', *ɛŋkîne*ˋ 'goat'). Proper names and pronouns do not have overt "determiners", and trigger slightly different agreement patterns. The discussion here is restricted to common nouns.

7. For a table that includes the approximately 300 nouns in Tucker and Mpaayei (1955) Maasai English dictionary see Koopman (1999).

8. See Greenberg (1978) on the determiner cycle.

9. For a more detailed account and discussion of apparent exceptions see Koopman (2003a, 2003b). The phonological spell out of singular number covaries with gender. Plural forms are invariant.

10. This recalls Greenberg's (1963) universal 32: 'Whenever a verb agrees with a nominal subject or object in gender it also agrees in number.'

11. I assume (contra Cinque (1999)) that these adjectives are heads, not specifiers.

12. I suggested this pied-piping analysis in the question period of the WCCFL presentation at UCLA.

13. I have abstracted from the extensive scrambling that Tsez exhibits.

14. Hazout (2004) argues that *there* cannot be a predicate, because it is not clear what its semantics is, and because it is not clear why it has to undergo obligatory predicate inversion. Hazout does not address any of the empirical arguments that Moro presents in favor of this account. If the existential operator requires the argument to remain within its scope, and is this operator is part of the existential predicate (be there), it is not difficult to see why the associate cannot raise. In order for the features of the associate to be licensed, *there* must agree with it, and move in search of a feature licenser.

15. Predicate inversion has been an extremely powerful tool in the analysis of DPs over the past decade, furthering the understanding of DPs and possessor constructions considerably. (see in particular Den Dikken (1998, *to appear*).

16. Zwart also shows that transitive expletive constructions in Dutch call for a traditional expletive insertion analysis. Here the agreement is mediated by the DP which is to the left of the V.

17. The same point is made independently in Bobaljik (2005) who develops a theory where agreement is post-syntactic and can apply anywhere within a clause.

18. The verb can carry singular agreement here as well; this is generally the case with these two experiencer verbs.

19. In addition to principles that regulate the distribution of morphological cases, there are principles that determine whether the head of an A-chain must be pronounced or not, and where it must be pronounced. These are the principles of the Case module of the GB theory. Thus the subject of a tensed clause is nominative, movement of a DP to the subject position is obligatory, and the subject of an infinitival CP complement is PRO. As scholars working on Icelandic have repeated many times (Maling 2001, Sigurðsson 1991, 2000, among others), the two notions of case cannot be conflated.

20. Yip et al (1987), Maling and Zaenen (1990): only verbs with an external agent argument can be passivized, or pysch verbs of the type with an experiencer object of the type (*this bothers Bill*). Stative passives (also called unpassives) do not preserve case, suggesting VP is the complement of stative Voice.

21. Modern Icelandic also has V first declaratives in certain root and embedded contexts (Sigurðsson 1990), in contexts where one would expect to find *it* or *there*. Sigurðsson (1990) states that V1 declaratives are quite rare in the spoken language, and occur in narratives (they are quite common in casual newspaper narratives, such as sports news).

(i) existential constructions (silent *there*)
  a. *(það) voru oft langar umræður á fundunum* (S 1990: 48-49)
  (það) were often long discussions at the-meetings
  'there were often long discussions at the meetings'

(ii) expletive constructions: atmospheric verbs *it* (silent quasi argument *it*)
  (það) rigni því sennigela mikið á morgun (S 1990: 49)
  rains thus probably much tomorrow

(iii) extraposition contexts (It ..CP) :
  (því) er sinnlegi að rigni mera á morgun (S 1990: 52)
  thus is likely that rains heavier tomorrow
  Thus, it is likely that it will rain heavier tomorrow.

In addition, Icelandic has a silent arbitrary plural PRO.

22. This raises a further issue as to how we should really understand this notion (subject of predication). I will not address this issue here.

23. Contrary to dative and genitive cases, inherent accusative is never preserved when the predicate that dictates accusative is passivized (Zaenen and Maling 1990: 145(16)). Inherent lexical accusative is preserved when embedded in the complement of a passivized raising to object verb (id):

(i) a. *Stormurinn blés strompinn af húsinu*
  the-storm.nom blew the-chimney.acc off the-house
  b. *strompinn blés af húsinu*
  chimney.acc blew.3s off the-house
  c. *Strompurinn var blásinn af húsinu*
  the chimney.nom was blown off the house
  d. *bátana er talið hafa brotið í spón*
  the-boats.acc is believed have broken into pieces

Structural accusative case is never available in Icelandic passive constructions (although it is in the new passive constructions (Maling and Sigurjondottir (2002)) which looks like the Maasai passive (Greenberg 1978). Thus, passive and accusative Case are in complementary distribu-

tion on the "same" predicate, and the question is why. It would follow if accusative depends not on the presence of an active v, but on the presence of a particular voice head, call it Active, a voice that Austronesean languages encode overtly. All predicates with inherent accusative would contain an active Voice head (and ib would read literally as: *it blew the chimney off the house*). Accusative is never preserved under passivization (ic), because active and passive voice are in complementary distribution. (id) is a non problematic, because active voice is on the lower predicate, and passive voice on the higher one.

24. Anderson (1990) presents a phonological argument that voice is closer to V than the inflectional heads. This would not change my main arguments substantially. The surface form 3_v-1_t-2_{voice} from a the hierarchy Tense>voice>V is well attested crosslinguistically (see also Koopman (2005a)).

25. As well as passivized double object constructions; these will not be addressed here.

26. Zaenen and Maling (1990) note that inherent case is *never* preserved under middle voice. Note that this suggest that the –st Voice structure can *only* be merged on top of VP, and not on top of vP.

27. First and second objects should be better in infinitivals, since these show no person inflection (Schütze 2003). Sigurđsson (2004) discusses the fact that these do get better, but are not perfect. Comparative judgments for individual speakers with the finite and infinitival forms of verbs like *like* and *bore* should shed further light on how individual grammars behave.

28. We will see below that in certain cases it can be a CP as well. These cases always involve the presence of another vP shell. It remains to be understood what forces/allows the TP/CP complement selection.

29. This judgment is not shared by all Icelandic speakers (Halldór Sigurdsson personal comm.).

30. The data about wh-traces are unclear and hard to reproduce. The intervention effects of indefinite, singular and plural can be reproduced (Boeckx 2000), and are quite solid (See Koopman (2004) for a summary of judgments by 19 native speakers of English.)

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