

ICELANDIC FINITE VERB AGREEMENT

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Two interrelated facts make Icelandic finite verb agreement particularly interesting. First, Icelandic has so-called quirky or non-nominative subjects that never control agreement, whereas nominative subjects trigger obligatory person (1, 2, 3) and number (sg, pl) agreement. This is illustrated by the contrast between (1) and (2):¹

- (1) Strákarnir leiddust/*leiddist. (subject-agreement)
 the boys(Npl) walked-hand-in-hand(3pl/*3sg)
- (2) Strákunum leiddist/*leiddust. (nonagreement)
 the boys(Dpl) bored(3sg/*3pl)
 `The boys were bored.'

Second, Icelandic has nominative non-subjects that control verb agreement, for example certain objects. Object-controlled agreement is illustrated in (3):

- (3) Henni leiddust strákarnir. (object-agreement)
 her(D) bored(3pl) the boys(Npl)
 `She found the boys boring.'

Facts of this sort illustrate that agreement is not a simple mechanical reflection of a spec-head configuration or relation, but is somehow conditioned by case. More specifically, Icelandic agreement facts suggest that there is an inherent relationship between nominative case and agreement such that:

¹ The four morphological cases of Icelandic, nominative, accusative, dative and genitive, are abbreviated as N, A, D and G in glosses (Nf.pl thus denoting nominative feminine plural, etc.).

- (4) The finite Infl agrees with a nominative NP in its domain, if there is one;² if there is no nominative NP in the domain of Infl, it shows up in a default nonagreeing form

This generalization is rather interesting in view of the fact that the notion "specifier of Infl" does not conflate with the notion "case assignee of Infl". Thus, the dative subject in (2) above is in Spec,IP without being assigned case by Infl and the nominative in (3) is a case assignee of Infl without being its specifier. Whenever the two notions in question do not conflate it can be shown that it is the case assignee of Infl and **not** its specifier in PF that controls finite verb agreement. Thus, Icelandic agreement facts seriously challenge the widely accepted hypothesis that agreement is a reflection of the specifier-head configuration. However, if we assume the minimalist program (Chomsky 1993, 1995) and a certain version of the split Infl hypothesis, a spec-head approach to agreement can be maintained. The major theoretical goal of this paper is to show that this is the case. Another goal of the paper is a descriptive one, namely to present the highly interesting facts of Icelandic finite verb agreement.

1. Non-nominative subjects and nominative non-subjects

Icelandic has all the familiar properties of nominative-accusative languages, but, in addition, it has numerous constructions with non-nominative or quirky subjects, as exemplified in (5):

- (5) a **Hana** þyrstir.
her(A) thirsts
'She is thirsty.'
- b **Hana** vantar vinnu.
her(A) lacks job(A)
'She lacks a job.'
- c **Henni** batnaði.
her(D) recovered
'She recovered.'

² I refer to both NPs and DPs simply as "NPs". The distinction between NPs and DPs is unimportant for our purposes.

- e **Henni** er kalt.
her(D) is cold
`She is freezing.'
- f **Henni** var boðið.
her(D) was invited
`She was invited (by someone).'
- g **Hennar** var leitað.
her(G) was searched
`She was searched for (by someone).'

It is standardly assumed that non-nominative NPs like the boldface ones in (5) are structural subjects (cf. Sigurðsson 1989, 1992a and the references cited there). They occupy Spec,IP (Spec,AgrSP in more recent terms, see below), and hence they also behave like ordinary nominative subjects, and not like preposed objects, with respect to numerous phenomena, including familiar subjecthood tests, such as reflexivization, ECM, raising, control and conjunction reduction. This is illustrated for control and conjunction reduction in (6) and (7):

- (6) **Hún** vonast til að vanta ekki vinnu.
she hopes for to lack not job
`She hopes not to lack a job.'
- (7) **Hún** var blönk og (**hana**) vantaði vinnu.
she was broke and (her) lacked job
`She was broke and (she) lacked a job.'

Quirky subjects also have access to exactly the same positions as do nominative subjects, as seen in (8) and (9):

- (8) a **Fjórir bílar** mundu hafa verið seldir.
four cars(N) would have been sold
- b Það mundu **fjórir bílar** hafa verið seldir.
- c *Það mundu hafa **fjórir bílar** verið seldir.
- d *Það mundu hafa verið **fjórir bílar** seldir.

- e Það mundu hafa verið seldir **fjórir bílar**.
- (9) a **Fjórum bílum** mundi hafa verið stolið.
four cars(D) would have been stolen
- b Það mundi **fjórum bílum** hafa verið stolið.
- c *Það mundi hafa **fjórum bílum** verið stolið.
- d *Það mundi hafa verið **fjórum bílum** stolið.
- e Það mundi hafa verið stolið **fjórum bílum**.

Facts of this sort obviously undermine the standard view that NP-movement is driven by case (see many of my own works, e.g. Sigurðsson 1988, 1989, 1991).

Many languages, including for example German and Finnish, have NPs that appear to be akin to Icelandic quirky subjects. Consider the German examples in (10) and the Finnish ones in (11):

- (10) a **Ihr** wurde geholfen.
her(D) was helped
'She was helped.'
- b **Ihr** ist kalt.
her is cold
'She is freezing.'
- (11) a **Minulla** on kissa.
me(Adesive) is cat
'I have a cat.' (from Kalliokoski 1995).
- b **Minulla** on kylmä.
me is cold
'I am freezing.' (from Kalliokoski 1995).

In spite of their striking similarities with Icelandic quirky subjects, the boldface NPs in these examples have crucially distinct properties from those of nominative subjects in both German and Finnish. Thus, for example, none of the boldface NPs in (10) and (11) can be represented by

an empty category in either PRO-infinitives or conjunction reduction structures, i.e. the only possible case of PRO and other empty subjects in these languages is nominative.³

Not only does Icelandic have non-nominative subjects, it also has several types of nominative non-subjects. Three types of non-subjects are of interest with respect to verb agreement: NP predicates, nominative direct objects, and nominative subjects of a highly interesting infinitival construction (that will be discussed in section 2.4). Agreement with a nominative object was illustrated already in (3) above, and as seen in (12)-(13), the other two types of nominatives can also control verb agreement:

- (12) Það erum/??er bara við.
 it are/??is only we(N)
 `It's only us.'
- (13) Mér virtust/virtist [þeir vera gáfaðir].
 me(D) seemed(3pl/3sg) they(N) be intelligent
 `It seemed to me that they were intelligent.'

We may refer to all instantiations of "backwards" agreement of this sort as **reverse agreement**.

In passing, it should be noted that nominative subjects of infinitives, as in (13), pose a rather serious problem to the standard case theory as developed in Chomsky 1981 and related works (see e.g. Sigurðsson 1991).

In sum, Icelandic has four types of verb agreement:

Subject-verb agreement

Predicate-verb agreement

Object-verb agreement

Agreement with subjects of certain infinitives (see section 2.4)

³ Thanks to Irmeli Oraviita and Anders Holmberg for a very helpful discussion of the Finnish facts. On German, see e.g. Zaenen et al. 1985 (see also Freidin and Sprouse 1991 on similar circumstances in Russian).

The next section is devoted to an explication of these agreement types and various complicating factors that interfere with agreement in Icelandic.

2. The correlation of agreement and case

This section describes the four types of finite verb agreement found in Icelandic and analyzes their correlation with case. The major tasks of the section are, first, to establish and present the facts of Icelandic verb agreement and, second, to examine the question of whether Icelandic agreement can be analyzed as spec-head agreement.

2.1 Clausal agreement and case

Not surprisingly, Icelandic verb agreement is most commonly controlled by nominative subjects. Thus, the subjects in (14)-(15) obligatorily trigger both person and number agreement of the finite verbs; "dft" stands for the default form, homophonous with the 3rd person singular form (see below):

- (14) a **Við** lás**um**/*las bókina.
we(N) read(1pl/*dft) the book(A)
b **Við** höfð**um**/*hafði lesið bókina.
we had(1pl/*dft) read the book
- (15) a **Þið** lásu**ð**/*las bókina.
you(Npl) read(2pl/*dft) the book
b **Þið** höfðu**ð**/*hafði lesið bókina.
you had(2pl/*dft) read the book

In the absence of a nominative NP, on the other hand, the finite verb always shows up in the invariable default form. This is illustrated in (16) and (17):

- (16) a Okkur vantaði/*vöntuðum bókina.
us(D) lacked(dft/*1pl) the book
b Okkur hafði/*höfðum vantað bókina.
us had(dft/*1pl) lacked the book
- (17) a Ykkur vantaði/*vöntuðuð bókina.

- you(Dpl) lacked(dft/*2pl) the book
- b Ykkur hafði/*höfðuð vantað bókina.
you had(dft/*2pl) lacked the book

The correlation between nominative case and agreement is thus quite straightforward: agreement in the presence of the nominative and nonagreement in its absence. This is further illustrated in (18) and (19); the subjects are nominative in (18) but accusative in (19):

- (18) a 1sg: Ég **hef** lesið bókina.
I have read the book
- b 2sg: Þú **hefur** lesið bókina.
- c 3sg: Hún **hefur** lesið bókina.
- d 1pl: Við **höfum** lesið bókina.
- e 2pl: Þið **hafið** lesið bókina.
- f 3sg: Þær **hafa** lesið bókina.
- (19) a 1sg: Mig **hefur** vantað bókina.
me has(dft) lacked the book
- b 2sg: Þig **hefur** vantað bókina.
- c 3sg: Hana **hefur** vantað bókina.
- d 1pl: Okkur **hefur** vantað bókina.
- e 2pl: Ykkur **hefur** vantað bókina.
- f 3sg: Þær **hefur** vantað bókina.

Icelandic is a very rich agreement language, having several agreement or concord types in addition to finite verb agreement. Most importantly for our purposes, adjectives and past participles that function as primary predicates agree with nominative subjects, as illustrated in (20) and (21); the agreement features are number (sg, pl), gender (m, f, n) and case (N, A):

- (20) a Stelpurnar voru duglegar.
the girls(N) were efficient(Nf.pl)
- b Strákarnir voru duglegir.
the boys(N) were efficient(Nm.pl)

- (21) a Stelpurnar voru kosnar.
the girls(N) were elected(Nf.pl)
- b Strákarnir voru kosnir.
the boys(N) were elected(Nf.pl)

In the absence of a nominative NP, however, primary predicates of finite clauses always show up in a default form, homophonous with the neuter singular nominative or accusative form. This is illustrated in (22):

- (22) Stelpunum var kalt/*kaldar.
the girls(D) was cold(dft/*Nf.pl)
`The girls were freezing.'

Primary predicate agreement, then, is conditioned by structural case assignment in the same way as finite verb agreement. Let us refer to both agreement types as **clausal agreement**. The generalization in (23), then, holds without exception (cf. Sigurðsson 1990-1991, 1991, 1992c, 1993):

- (23) Only nominative NPs can control clausal agreement in finite clauses; in the absence of a nominative NP both the finite verb and an adjectival or a participial primary predicate show up in invariable default forms (homophonous with 3sg and N/An.sg, respectively)

The intimate correlation between structural case and clausal agreement is highlighted by "minimal pairs" of the following sort (where the subjects have different theta roles, nominative themes vs. dative experiencers):

- (24) a Strákarnir voru illir.
the boys(N) were(3pl) bad(Nm.pl)
`The boys were angry/evil.'
- b Strákunum var illt.
the boys(D) was(dft) bad(dft)

`The boys were nauseated.'

Parallel facts are found for participial constructions, for example unpassives as in (25a) versus passives as in (25b):⁴

- (25) a Gluggarnir voru lokaðir.
 the windows(Nm.pl) were(3pl) closed(Nm.pl)
 `The windows were closed.' (i.e. in the permanent state of being closed)
- b Gluggunum var lokað.
 the windows(Dm.pl) was(dft) closed(dft).
 `The windows were closed.' (i.e. in the process of being closed by somebody)

Notice that secondary predicate agreement differs from clausal agreement in not being conditioned by structural case. Hence, adjectival and participial secondary predicates not only can but must agree with their predicational subject, irrespective of its case:

⁴ Verbal passives retain dative and genitive object case, whereas adjectival unpassives never do.

- (26) Strákunum verður **kalt** svona **fáklæddum**/*fáklætt.
 the boys(D) will-be cold(dft) so few-clothed(Dpl/*dft)
 'The boys will freeze, so scantily dressed.'

From this fact, we can draw the conclusion that clausal agreement with quirky subjects is not blocked for morphological reasons. Rather, finite verbs and primary predicates -- as opposed to secondary predicates -- enter into a special structural and featural relationship with quirky subjects, this relationship blocking agreement (see below).

It should also be noticed that clausal agreement is conditioned by structural case in general and not specifically by nominative case. This is seen by the fact that nominative predicate agreement of finite clauses is replaced by accusative agreement in ECM constructions, as illustrated below:

- (27) Strákarnir voru gáfað**ir**.
 the boys(N) were intelligent(Nm.pl)
- (28) Ég taldi strákana (vera) gáfað**a**.
 I believed the boys(A) be intelligent(Am.pl)

Cases like (28) are, however, the only instances of non-nominative control of clausal agreement, i.e. ECM accusatives are the only non-nominatives that can ever control such agreement. In view of the fact that ECM accusatives parallel nominatives in finite clauses we may refer to both case types as **clausal case** (cf. Sigurðsson 1991). We can then replace the generalization in (23) above with (29):

- (29) Clausal agreement is controlled by an NP that bears clausal case; in the absence of an NP so case-marked both finite verbs and adjectival/participial primary predicates show up in invariable default forms

In Sigurðsson 1993 I suggested that this generalization should be accounted for in terms of feature-government or F-government, roughly as in (30):

- (30) F-government is visualized on either the F-governing head or its F-governee; agreement arises when such government is visualized on the head, whereas agreement is blocked when the F-government relation is visualized on the F-governee

To see how this works, consider first participle agreement vs. nonagreement, as in (31):

- (31) a Það voru lesnar fjórar bækur.
there were read(Nf.pl) four books(Nf.pl)
b Það var skilað fjórum bókum.
there was(dft) returned(dft) four books(Df.pl)

The participle *skilað* in (31b) assigns case to its theta-governee, whereas the participle *lesnar* in (31a) is not a case assigner. Thus, the inherent dative in (31b) renders the theta-government relation visible on the theta-governee. In (31a), in contrast, the relation is not visible on the argument itself and is thus visualized on the theta-governing head instead.

Next consider finite verb agreement vs. nonagreement, as in (32):

- (32) a Bækurnar voru lesnar.
the books(N) were(3pl) read
- b Bókunum var skilað.
the books(D) was(dft) returned

In (32b) Infl does not assign case to the subject and hence there is no case-government relation between the two to be visualized. In (32a), on the other hand, the subject is case-governed by Infl and the case-government relation is visualized on Infl, the F-governing head.⁵ Thus, agreement of participles (and predicative adjectives) is viewed as head-visible theta-government, whereas finite verb agreement is seen as head-visible case-government.

To the extent that this approach is based on government it is not compatible with the details of the minimalist program as developed by Chomsky (1993, 1995). More importantly, however, its basic insight, as expressed in (33) below, is both easily and naturally preserved under minimalist assumptions:

- (33) There is a featural complementarity between heads and their specifiers, such that the featural correlation of the two is visualized on either the head or the specifier

If this is to go through, we cannot assume that nominative case in general is default in the sense of "no case" (then there would be no featural correlation, to be visualized by agreement, between Infl and its case assignee, cf. the discussion in Sigurðsson 1993). While clause-external nominatives, such as dislocated nominatives, vocative nominatives and enlisted nominatives (in e.g. dictionaries) can easily be analyzed as being caseless, we clearly want to preserve the insight that clause-internal nominative arguments that control agreement enter into a structural case relation with Infl. I shall thus conceive of structural nominatives as default in the sense of "weak" or "unmarked", and not in the sense of "no case".⁶

⁵ This approach is conceptually close to the idea of Holmberg and Platzack (1995, p. 53 ff.) that Agr itself may be nominative in some languages.

⁶ If clause-external "nominatives" are caseless, it follows that Icelandic makes no morphological distinction between "no case" and "unmarked" or "weak" case.

Additional evidence in favor of this approach to clausal case comes from agreement in ECM complements. Like nominative case, ECM accusatives, as in (28) above, are weak in the sense that they do not block agreement. As the "no case approach" cannot extend to ECM accusatives, it does not seem to buy us anything. Instead, we view clausal case in general as default in the sense "weak", "unmarked" or "unspecified".

In his discussion of "weak" and "strong" expletives in Scandinavian languages, Holmberg (1994) tentatively suggests the principle in (34):

- (34) If two functional categories α and β are in a spec-head relation, then α and β cannot both be strong

This is clearly not a universal principle (cf. below on Georgian). However, it captures a very general tendency of language. The generalization in (33) above can be viewed as a subcase of (34).

For the sake of explicitness, let us conceive of default forms as forms that have unspecified feature values, here denoted as "%" (a notation adopted and adapted from Holmberg 1986). Thus, for example, nonagreeing default forms of finite verbs can be analyzed [%1p, %2p; %pl] or [%sp(ecified)] for short (whereas their homophonous agreeing third person singular forms are plausibly analyzed as [-1p, -2p; -pl]).⁷ If clausal case can also be viewed as unspecified, then it follows from (33) that Icelandic allows feature specification of either a head (agreement), as in (35a), or its specifier (nonagreement), as in (35b), whereas it disallows both the underspecification in (36a) and the overspecification in (36b):

- | | | | | | |
|------|---|-------|----|-------|----|
| (35) | a | XP | b | XP | |
| | | ZP | X' | ZP | X' |
| | | [%sp] | | [+sp] | |
| | | X | | X | |
| | | [+sp] | | [%sp] | |

⁷ The necessity to distinguish between nonspecified and negatively specified features is, for example, highlighted by the contrast between (41) and (42) below.

(36)	a	XP ZP X' [%sp] X [%sp]	b	XP ZP X' [+sp] X [+sp]
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Nonagreement with nominative subjects would yield the underspecification in (36a).⁸ Conversely, agreement (of a verb or a predicate) with quirky subjects would result in the overspecification in (36b). Taraldsen (1994) suggests that featural overspecification of this sort is ruled out by the principle of economy of representation: instead of favoring smaller trees over bigger ones in the same candidate set, he suggests, "the relevant evaluation metric actually counts specified features rather than nodes" (p. 49).

Plausibly, economy considerations should somehow take features into account. Even so, Taraldsen is mistaken by ruling the overspecification in (36b) out by economy, hence in principle. This is seen by the simple fact that some languages, for example Georgian (cf. Anderson 1984), do have agreement that is controlled by inherently case-marked NPs. In addition, Taraldsen's economy approach to agreement makes the prediction that language should always prefer the underspecification in (36a) over the other representations in (35)-(36). -- As discussed in Sigurðsson (1993), the featural complementarity between heads and arguments seen in Icelandic and many other languages is a parametric option, albeit the unmarked one in inflectional languages.

2.2 Predicate-verb agreement and minimalist theory

As illustrated in (37), Icelandic predicate NPs show up in the nominative:⁹

⁸ Notice, however, that this approach has a potential weakness, as it is not clear whether it enables us to distinguish between illegitimate feature underspecification and legitimate nonspecification of features, as in impersonal constructions. I leave this problem unresolved.

⁹ With the expected exception of ECM domains, infinitives as well as small clauses, where the predicate shows up in the accusative.

- (37) María er málfraeðingur/*málfraeðing.
 Mary(N) is linguist(N/*A)
 `Mary is a linguist.'

Examples like (37) have the interesting property of having two nominative NPs. Normally, however, verb-agreement must be controlled by the subject and not by the predicate NP (irrespective of whether the latter is a true predicate or identificational). This is illustrated in (38) and (39).¹⁰ The interpretation of sentences such as (39a, b) requires a rather special pragmatic context, but there is no question that the subjects, and not the identificational NPs, control verb agreement:

- (38) a Bítlarnir **hafa**/*hefur lengi verið frægasta hljómsveitin.
 the Beatles(Npl) have/*has long been the most-famous band(Nsg)
 `The Beatles have long been the most famous band.'
- b Frægasta hljómsveitin **hefur**/*hafa lengi verið Bítlarnir.
 the most-famous band has/*have long been the Beatles
- (39) a Við **höfum**/*hafa oft verið þeir.
 we(N) have(1pl/*3pl) often been they(N)
 `We have often been them.'
- b Þeir **hafa**/*höfum oft verið við.
 they(N) have(3pl/*1pl) often been we(N)
 `They have often been us.'

Given standard assumptions, this is exactly what we expect: Being the specifier of Infl, the subject controls its agreement and other NPs do not come into question as agreement controllers, irrespective of their case. Alternatively, we can adopt the analysis suggested in Sigurðsson 1990-1991. Under that analysis the crucial property of the agreement controller is not its status as Spec,IP, but its status as the case assignee of Infl: Only the subject is truly assigned case by Infl,

¹⁰ I am considering the standard language only, but, as pointed out by Jóhannes Gísli Jónsson (p.c.), some speakers accept agreement with identificational NPs in examples like (38b), where the identificational NP refers to specific individuals. As far as I know, no speakers accept agreement with the identificational NP in examples like (38a) and (39a, b).

whereas the NP predicate acquires its nominative through case agreement with the subject (like adjectival and participial predicates). It follows that an analysis according to which the case assignee of Infl controls its agreement can be maintained.

A generalization saying that "NP predicates cannot control verb agreement" comes close to being true. However, it has two important exceptions, namely, clauses with demonstrative *þetta* 'this' and clauses with demonstrative *það* 'it' as a subject. In clauses of this sort, the usual subject-verb agreement gives way to a special type of reverse agreement, **predicate-verb agreement** (PVA). This is illustrated for *það* in (40):

- (40) a *Það erum*/?er bara við.
 it are(1pl)/?is only we(N)
 `It is only us.'
- b *Eruð*/?Er það bara þið?
 are(2pl)/?is it only you(Npl)
 `Is it only you?'

Consider also the contrast between (41) and (42), illustrating that demonstrative *þetta* does not control agreement as opposed to subjects that have specified feature values (e.g. neuter singular, as in (42)):

- (41) *Þetta hafa*/*hefur sennilega verið tveir menn.
 this have/*has probably been two men(Npl)
 `This has probably been two persons/men.'
- (42) *Skáldið hefur*/*hafa sennilega verið tveir menn.
 the poet(Nn.sg) has/*have probably been two men(Npl)
 `The poet has probably been two persons/personalities.'

PVA is impossible to accommodate under a spec-head analysis of agreement in pre-minimalist theory. Interestingly, however, it is easily accounted for in the minimalist program, as we shall see directly.

Chomsky (1986, p. 94 ff.) explores the possibility that "an element is *visible* for theta-marking only if it is assigned Case" and argues that this **Visibility Condition** derives much of

the content of the Case Filter. Let us assume instead that the Visibility Condition takes the following form:

- (43) The phi-features of a nominal element α are visible at LF only if α is assigned case

This formulation seems rather natural in view of the universal tendency of personal pronouns to preserve morphological case, personal pronouns being merely a bundle of phi-features. Possibly, however, the LF visibility of number (as opposed to gender and person) is independent of case, but I shall not pursue the issue.

It follows from (43) that nominals that have no specified phi-features need not be assigned case (and are hence blocked from being assigned case by economy). Thus, for example, Icelandic expletive *það* 'there, it' is caseless (Sigurðsson 1992b), and so is English expletive *there*, as suggested in Chomsky 1995 (p. 287), whereas e.g. the personal pronoun *það* 'it' must have case.

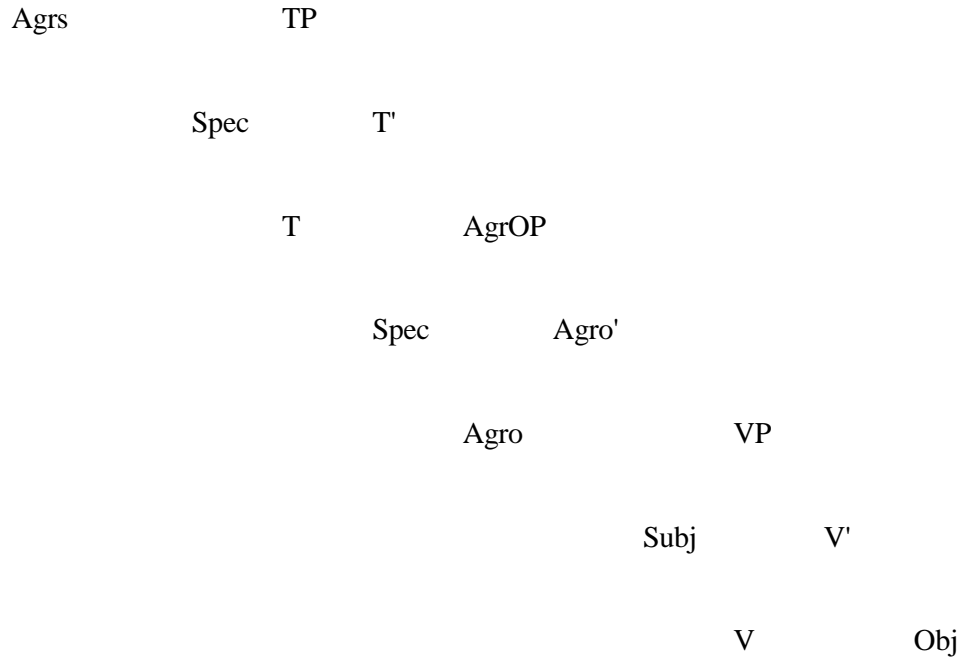
Demonstrative *það* and *þetta* are default forms (traditionally analyzed as nominative/accusative neuter singular), so let us extend this approach to these elements: *þetta* and (demonstrative as well as expletive) *það*, then, have no specified phi-features and are therefore not in any need of "case-support", thus remaining caseless. Accordingly, demonstrative *þetta* and *það* cannot control agreement of Infl, for the simple reason that they are not in any featural relationship with Infl.

The suggestion that demonstrative *þetta* and *það* are caseless is compatible with pre-minimalist theory (albeit not standard pre-minimalist theory, cf. Sigurðsson 1992b). On the other hand, the fact that these elements cannot control verb agreement is compatible with a spec-head approach to agreement only within minimalist theory.

Following Jonas and Bobaljik 1993, Collins and Thráinsson 1994 and recent works by many others I assume that Icelandic has roughly the clausal structure in (44):

- (44) AgrSP

Spec Agrs'



The lexical elements check their features by movement, either prior to Spell-Out or in LF: the verb by head-movement (adjunction) to AgrO, T and Agrs, the subject by movement (substitution) to Spec,TP and Spec,AgrSP, and the object by movement (substitution) to Spec,AgrOP (object movement usually applying in LF only, however). See Collins and Thráinsson 1994 and Chomsky 1993, 1995 for details.

Now, consider reverse agreement in English existentials, as in (45):

(45) There seem/*seems to be three linguists here.

In Chomsky's analysis (1995, p. 286 ff.), the expletive is caseless and has no phi-features. Accordingly, the only feature that needs checking is its categorial feature, D. The D-feature is checked in Spec,AgrSP (for the purposes of EPP, Chomsky suggests), whereas the case- and phi-features of the postverbal logical subject are checked against Agrs under LF raising.

We now extend Chomsky's approach to account for predicate-verb agreement in Icelandic clauses like (40a, b) and (41) above: demonstrative *þetta* and *það* check their D-feature

in Spec,AgrSP, whereas the nominative NP predicates raise to Spec,AgrSP in LF, thus entering into a spec-head correlation with Agrs and hence controlling its agreement.¹¹

Demonstrative *petta* and *pað* differ from expletives in being visible or +Interpretable at LF. Thus, our analysis might seem to make the claim that Spec,AgrSP must be doubly filled at LF. However, the minimalist program as developed in Chomsky 1995 offers a means to avoid this conclusion.

Chomsky (1995, p. 261 ff.) suggests that LF raising of arguments in fact differs from overt NP-movement, such that it "strands" the lexical item itself but adjoins its checked feature F or features FF to the targeted head, i.e. does not involve substitution of a maximal category into a specifier position. It follows that Spec,AgrSP is occupied by only *petta* or *pað* in examples like (40a, b) and (41) above, whereas the phi-features of the NP-predicates adjoin to Agrs, thereby licensing its agreement.¹²

The question now arises why predicate-verb agreement is obligatory in examples like (40a, b) and (41) above, that is, why for example (40a), repeated here as (46), is deviant with a nonagreeing default verb form:

- (46) ??*Pað er bara við.*
 it is(3sg) only we(N)

The ungrammaticality of (46) is accounted for if Infl must agree with its case assignee (if it has one), that is, if the verb's phi-features must be checked or licensed by (raising to Agrs or Spec,AgrSP of) the corresponding features of its case assignee.¹³

In Chomsky 1993 (see p. 33) Last Resort (or Greed) is understood such that movement is always self-serving, that is, elements move for their own benefit only. In "Categories and

¹¹ As we shall see in section 3, this is a simplification. However, it is sufficiently accurate in the present context.

¹² Strictly speaking, then, agreement licensed at LF is not spec-head agreement but a subcase of head-head agreement, i.e. agreement of an adjoined featural head and its hosting head. Following Chomsky 1995, however, I shall continue to refer to agreement of this sort as spec-head agreement.

¹³ Given the approach to clause structure in (44) above, it should be obvious that the term "Infl" is a cover term. I will return to the issue.

Transformations", Chomsky (1995, p. 280) suggests a rather different formulation, such that movement targets a head K only if the moved element enters into a checking relation with some feature ("sublabel") of K -- for the benefit of either the moved element or the targeted K. The above sketched approach to (46) is incompatible with the former formulation but fully compatible with the latter, Icelandic predicate-verb agreement thus lending support to Chomsky's revision.

Compare (46) to (39b) above, repeated here as (47):

- (47) *Þeir hafa/*höfum oft verið við.*
 they(N) have(3pl/*1pl) often been we(N)

Again we have an account of the observed facts if and only if Infl agrees with its case assignee. In (46) the NP predicate is its case assignee. In (47), on the other hand, the subject *þeir* is the case assignee of Infl, thus checking the verb's phi-features and thereby controlling its agreement, whereas the NP predicate acquires its case by case-agreement with the subject. Thus, Icelandic NP predicates get their nominative case in two rather different manners, depending on the case-properties of their subjects.¹⁴

Following Jonas and Bobaljik 1993, Chomsky (1995, p. 340 ff.) assumes that structural nominative case in Icelandic is checked by raising to Spec,TP (or, in the case of covert movement, by adjunction of the nominative case feature to T). As we shall see in section 3, however, nominative objects in the Dat-Nom construction never raise out of AgrOP. In addition, nominative case can be licensed VP-internally through case-agreement, as seen in (47). Also, as mentioned in section 1 above, Icelandic non-nominative subjects have access to exactly the same positions as have nominative subjects, for example Spec,TP (as seen in (9b)). Moreover, Icelandic has even nominative infinitival subjects, as also mentioned in section 1 (see further section 2.4). Thus, Icelandic offers clear evidence that structural case is no different from

¹⁴ Maling and Sprouse 1995 argue that Icelandic NP predicates invariably acquire their nominative by structural case assignment. However, they present no theory or analysis of Icelandic verb agreement. -- My own claim in Sigurðsson 1989 that predicative case is always structural is embedded into a case theory that is rather different from standard views. As this theory did not distinguish between case-marking by government (in pre-minimalist terms) and case-marking by agreement it does not, in fact, make any claims that run counter to my approach here and in Sigurðsson 1990-1991.

inherent case in being licensed VP-internally and, accordingly, that NP-movement is not case-driven (in any meaningful sense, see e.g. Sigurðsson 1992a, 1994).¹⁵ These circumstances suggest that case does not delete by checking (in the sense of Chomsky 1995, p. 280) and is in fact not checked by movement at all. However, a discussion of this issue, important as it is, would lead us much too far astray.

2.3 Object-verb agreement

Predicate-verb agreement shows that non-subjects may sometimes "take over" as both the case assignee and (hence) the agreement controller of Infl. As seen in (3) above, repeated here, this phenomenon is not confined to NP predicates, but a general trait of clauses that have a non-nominative subject and a nominative non-subject:

- (3) Henni **leiddust** strákarnir.
 her(D) bored(3pl) the boys(N)
 `She found the boys boring.'

Nominatives can be objects of only certain verbs and passive participles that take dative subjects. That is, there are no Acc-Nom or Gen-Nom verbs or passives, whereas there are both Dat-Nom verbs and Dat-Nom passives.¹⁶ It is not clear whether this distribution of nominative objects has a principled explanation.¹⁷

It has been noticed (e.g. by Thráinsson 1979, p. 466, Andrews 1990, p. 210 f.) that nominative objects do not always trigger finite verb agreement, as in (48):

- (48) a Henni **leiddist** strákarnir.
 her(D) bored(dft) the boys(N)

¹⁵ Other morphological case languages, e.g. Finnish and Russian, also offer evidence that nominative case is sometimes licensed VP-internally.

¹⁶ Yip et al. 1987 give the Acc-Nom example *Mig sækir syfja* ("me(A) gets sleep(N)", meaning 'I am getting sleepy'). It has, however, an unclear and a questionable status.

¹⁷ Gen-Nom is found in certain predicative constructions (e.g. *Hans er bráðum von*, "his(G) is soon expectation(N)", meaning 'He is expected to arrive soon').

- `She found the boys boring.'
 b Henni **líkaði** ekki þessar athugasemdir.
 her liked(dft) not these comments(N)
 `She did not like these comments.'

Examples of this sort have sometimes, quite incorrectly, been taken to indicate that object-verb agreement is generally optional.

In order to clarify the status of examples such as these I made an investigation of agreement in the language of nine informants, **IoA** (a short for "Investigation of Agreement").¹⁸ As it turned out, lack of agreement with nominative third person objects is exceptional and largely limited to clauses with either *leiðast* 'find boring' or *líka* 'like'. Even in sentences with these two verbs, agreement, as in (49), is preferred to nonagreement:

- (49) a Henni **leiddust** strákarnir.
 her(D) bored(3pl) the boys(N)
 `She found the boys boring.'
- b Henni **líkuðu** ekki þessar athugasemdir.
 her liked(3pl) not these comments(N)
 `She did not like these comments.'

The judgments in IoA of the sentences in (48)-(49) are given in (50); the judgments were graded on a scale ranging from 0 to -4 (0 for "OK", -1 for "?" and so on), and the mean score for each sentence is given within parentheses:

(50)	OK	?	??	?*	*	
48a:	2	6	-	1	-	(-1.00)
48b:	7	1	-	-	1	(-0.56)
49a:	9	-	-	-	-	(0.00)
49b:	9	-	-	-	-	(0.00)

¹⁸ IoA is reported on in Sigurðsson 1990-1991 and 1992c. All nine informants are linguists.

As seen, the agreement in (49) was judged perfect by all nine speakers, whereas the nonagreement in (48) has variable acceptance.

Other Dat-Nom verbs generally require verb agreement. Thus, the sentences in (51)-(52) received the judgments and mean scores in (53):

- (51) a Henni **áskotnaðist** miklir peningar.
her lucked-onto(dft) much money(Nm.pl)
`She got much money (by some luck).'
b Henni **mistókst** allar tilraunirnar.
her failed(dft) all the attempts(N)
`She failed in all the attempts.'
c Henni **batnaði** verkirnir.
her got-better(dft) the pains
`She recovered from the pains.'

- (52) a Henni **áskotnuðust**(3pl) miklir peningar.
b Henni **mistókust**(3pl) allar tilraunirnar.
c Henni **bötnuðu**(3pl) verkirnir.

(53)	OK	?	??	?*	*	
51a:	1	4	1	-	3	(-2.00)
51b:	-	5	1	-	3	(-2.11)
51c:	-	5	1	-	3	(-2.11)
52a:	9	-	-	-	-	(0.00)
52b:	9	-	-	-	-	(0.00)
52c:	8	1	-	-	-	(-0.11)

The only speaker who found (52c) questionable also found (51c) questionable. Additional examples where agreement is obligatory (for myself and most or all other speakers) are given in (54):

- (54) a Henni **skruppu**/*skrapp fætur.
her failed(3pl/*dft) feet(N)
`She fell.'
- b Henni **urðu á**/*varð á mikil mistök.
her became onto (3pl/*dft) great mistakes(N)
`She made a big mistake.'
- c Henni **tæmdust**/*tæmdist margir arfar.
her emptied(3pl/*dft) many inheritances(N)
`She got many inheritances.'

Many more examples of this sort could easily be added.¹⁹

Agreement with nominative objects (in the third person) is clearly the standard strategy in the active voice. Moreover, it is the only possible strategy in Dat-Nom passives, as in (55):

- (55) a Henni **voru gefnir** hattarnir.
her were(3pl) given(Nm.pl) the hats(Nm.pl)
- b *Henni **var gefið** hattarnir.
her was(dft) given(dft) the hats(Nm.pl)

At first sight, nonagreement in examples such as (48a, b) above would seem to undermine the hypothesis that structural nominatives trigger obligatory verb agreement. However, if the nominatives in these examples are not structural (i.e. not assigned by Infl) the problem does not arise.

I propose the following analysis: The nominative in the active Dat-Nom construction is in the process of being reanalyzed as inherent case, assigned by the Dat-Nom verb itself. If so, many speakers have a free choice between structural and inherent nominative case in (48)-(49) (as suggested by the judgments in (50)).

On this approach it is not surprising that nonagreement is largely limited to certain verbs, nor is it surprising that the verbs in question are two the most common Dat-Nom verbs, *leiðast*

¹⁹ However, many or even most of them are idiomatic or semi-idiomatic expressions.

and *lika*. Moreover, this approach makes the correct prediction that nonagreement should be impossible in Dat-Nom passives. The main verb in Dat-Nom passives is an assigner of structural accusative in the active voice, and is thus blocked from being reanalyzed as an assigner of inherent nominative case in the passive voice.

It may seem problematic that one and the "same" case may either be structural or inherent. However, the same phenomenon is found also for accusative case in Icelandic, as seen by the fact that Icelandic has not only structurally case-marked objects in the accusative but also accusative quirky subjects. Moreover, structural accusatives are reanalyzed as being inherent under certain circumstances (see the discussion in Sigurðsson 1989, pp. 216 ff., 280 ff.).

Object-verb agreement differs from both subject-verb and predicate-verb agreement in being confined to the number distinction in third person, that is, Dat-Nom verbs (and Dat-Nom passives) are blocked from taking first or second person objects (as first discussed in Sigurðsson 1990-1991). This is illustrated for first person plural in (56):

- (56) Henni *leiddumst/?*leiddust/?*leiddist við.
 her(D) bored(*1pl/?*3pl/?*dft) we(N)

We shall return to this interesting blocking.

2.4 Dative and Nominative with Infinitive (D/NcI)

Most Icelandic raising verbs can take an optional dative experiencer (cf. Sigurðsson 1989, p. 98 ff.). If the dative is not generated, raising of the infinitival subject is obligatory, but, in case the dative is generated, it blocks raising. This is illustrated in (57)-(58):

- (57) a Hafði **Ólafur**_i virst [_{t_i} vera gáfaður]?
 had Olaf(N) seemed be intelligent
 `Did Olaf seem intelligent?'
 b *Hafði virst [**Ólafur** vera gáfaður]?

- (58) a Hafði þeim virst [**Ólafur** vera gáfaður]?
 had them(D) seemed Olaf(N) be intelligent
 `Did it seem to them that Olaf was intelligent.'

- b *Hafði **Ólafur**_i þeim virst [t_i vera gáfaður]?
- c *Hafði **Ólafur**_i virst þeim [t_i vera gáfaður]?
- d *Hafði þeim **Ólafur**_i virst [t_i vera gáfaður]?

The infinitival construction in (58a) has the interesting property of having a lexicalized nominative subject. Subject-raising infinitives and ECM-infinitives are traditionally referred to as "nominative with infinitive" (NcI, i.e. nominativus cum infinitivo) and "accusative with infinitive" (AcI), respectively. On a par with these labels we may refer to the construction in (58a) as **Dative and Nominative with Infinitive** or **D/NcI**. In addition to *virðast*, *sýnast* 'appear', *finnast* 'find, consider', *þykja* 'find, consider' and *heyra* 'sound (as if)' are common D/NcI verbs.

Agreement is, so to speak, one notch weaker in the D/NcI construction than in the monoclausal Dat-Nom construction. First, number agreement in the third person is generally optional, as shown in (59)-(60):²⁰

- (59) Mér **þóttu/þótti** [þær vera duglegar].
me(D) thought(3pl/dft) they(Npl) be industrious
'I thought they were industrious.'
- (60) Mér **virtust/virtist** [þær vinna vel].
me seemed(3pl/dft) they work well
'It seemed to me that they were working well.'
- (61) Mér **höfðu/hafði** fundist [þær vera gáfaðar].
me had(3pl/dft) found they be intelligent
'I had found them intelligent.'

Second, D/NcI tolerates first and second person nominatives, provided that the nominative does not control verb agreement:

- (62) Þeim **hefur**/*höfum alltaf fundist [við vinna vel].

²⁰ This applies to the standard "dialect"; some speakers find agreement deviant or ungrammatical in examples of this sort.

them(D) has/*have always found we(N) work well

`They have always thought that we work well.'

The fact that nonagreement is always possible in D/NcI suggests that D/NcI infinitives are headed by an Infl-type element that can be activated as a Case assigner. Conversely, the optional agreement in (59)-(61) suggests that the nominatives can alternatively be assigned by the matrix Infl. If so, all the facts we have considered are consistent with our initial generalization in (4), repeated here:

- (4) The finite Infl agrees with a nominative NP in its domain, if there is one; if there is no nominative NP in the domain of Infl, it shows up in a default nonagreeing form

"Infl" is a cover term for the Infl complex, consisting of Agrs, T and Agro. For our purposes, it is sufficiently accurate to assume that structural nominative case has its source somewhere within the Infl complex. Icelandic allows structural nominatives overtly in all specifier positions of the Infl complex (subjects in both Spec,AgrSP and Spec,TP and object shifted objects in Spec,AgrOP, cf. Collins and Thráinsson 1994). In addition, as we have seen, it allows nominatives VP-internally, for example as subjects of D/NcI infinitives.

2.5 (S)object control of +Person is blocked

As we have seen, Dat-Nom verbs cannot normally take an object in first or second person. This is further illustrated for *leiðast* 'find boring' and *líka* 'like' in (63) and (64) (most other Dat-Nom verbs cannot normally take a human object):

- (63) a *Henni leiddust þið.
her(D) bored(2/3pl) you(Npl)
b *Henni leiddumst við.
her(D) bored(1pl) we(N)
- (64) a *Henni líkuðuð þið.
her liked(2pl) you
b *Henni líkuðum við.

her liked(1pl) we

Parallel facts are observed in Dat-Nom passives (see (65)), whereas the corresponding Nom-Dat passives are perfectly grammatical (see (66)):

- (65) a *Henni voruð sýndir/sýndar þið.
her were(2pl) shown(Nm.pl/Nf.pl) you(Npl)
- b *Henni vorum sýndir/sýndar við.
her were(1pl) shown(Nm.pl/Nf.pl) we(N)
- (66) a Þið voruð sýndir/sýndar henni.
'You were shown to her.'
- b Við vorum sýndir/sýndar henni.
'We were shown to her.'

The verb *sýna* 'show' belongs to the largest class of Icelandic double object verbs, with the case pattern Nom-Dat-Acc in the active voice. When passivized, verbs in this class, including *sýna* and e.g. *gefa* 'give', may normally show up as either Dat-Nom or Nom-Dat passives, that is, there is no ban against Dat-Nom passives as such. On the contrary, Dat-Nom is unmarked in the passive of the *sýna*-class as compared to Nom-Dat. Thus, the examples in (65) are not blocked by some special condition on passives, but for the same reason as (63)-(64).

The unmarked third person is plausibly "no person" (cf., e.g., Anderson 1982, p. 576), that is, only first and second person are "true" person. Let us refer to true person as +Person. The tentative generalization in (67) would seem to account for the facts in (63)-(66):

- (67) +Person nominative NPs are blocked from object positions

This conclusion would also be compatible with the fact that nominative NP predicates and nominatives in the D/NcI construction may be marked +Person, neither type being in an object position. However, the facts are not this simple. Consider the examples in (68)-(69). The judgments in (68)-(69) are my own, but the judgments and mean scores in the above mentioned IoA are shown in (70):

			(person of verb -- person of object)
(68)	a	??Henni líkaði ég. her liked I	(1/3sg -- 1sg)
	b	*Henni líkaðir þú.	(2sg -- 2sg)
	c	*Henni líkuðum við.	(1pl -- 1pl)
	d	*Henni líkuðuð þið.	(2pl -- 2pl)
(69)	a	?Henni leiddist ég. her bored I	(1/2/3sg -- 1sg)
	b	?Henni leiddist þú.	(1/2/3sg -- 2sg)
	c	*Henni leiddumst við.	(1pl -- 1pl)
	d	*Henni leiddust þið.	(2/3pl -- 2pl)

(70)	OK	?	??	?*	*	
68a:	3	2	3	-	1	(-1,33)
68b:	-	-	-	1	8	(-3,89)
68c:	-	-	-	2	7	(-3,78)
68d:	-	-	-	1	8	(-3,89)
69a:	5	3	-	-	1	(-0,78)
69b:	5	3	-	1	-	(-0,67)
69c:	1	1	1	-	6	(-3,00)
69d:	1	4	-	-	4	(-2,17)

In 15 cases out of 72, then, +Person nominative objects were judged perfect, whereas they were judged entirely unacceptable (*) in 35 cases. This might seem to be a rather chaotic or even a paradoxical situation. However, it is explained by only two factors. First, one informant accepts certain examples ((69c, d)) with +Person nominative objects that are not accepted by any of the other eight informants. Judging by the answering patterns it seems likely to me that this is a superficial hypercorrection effect, but I shall not speculate on the issue. More generally and interestingly, many speakers seem to accept +Person nominative objects in so far as they can be interpreted such that they both do and do not control agreement ((68a) and (69a, b)). As seen by the past tense paradigms in (71), 13 out of 15 cases that were judged grammatical have verb forms that are homophonous with nonagreeing default forms (third person singular):

(71)	Sg 1	líkaði, cf. (68a)	leiddist, cf. (69a)
	Sg 2	líkaðir	leiddist, cf. (69b)
	Sg 3 (dft)	líkaði	leiddist
	Pl 1	líkuðum	leiddumst
	Pl 2	líkuðuð	leiddust
	Pl 3	líkuðu	leiddust

The tentative generalization in (67), then, is misleading. What we seem to be faced with is, rather, a constraint to the following effect:

- (72) Objects are blocked from controlling +Person agreement (as opposed to number agreement)

Thus, as suggested in Sigurðsson 1990-1991, the judgments in (70) are explained by an optimality effect, in the following manner:

First, being assigned case by Infl, nominative objects should trigger full agreement. Second, however, objects are blocked from controlling +Person agreement (for reasons discussed below). Speakers who cannot resolve this paradoxical situation reject +Person nominative objects or at least judge them questionable. However, (some) other speakers seem to be able to both eat their cake and have it too, thus accepting verb forms that can be interpreted as being either an agreeing form (satisfying the requirement that Infl should agree with its case assignee) or a default nonagreeing form (satisfying the requirement that objects should not control +Person agreement).

The approach in (72) is further supported by the fact that the unacceptability of examples with +Person nominative objects increases in correlation with visibility of agreement. That is, Dat-Nom examples with a +Person object are the less acceptable the more unambiguously agreeing their verb form is. This is seen by the following judgments from IoA:

			OK	?	??	?*	*	
(73)	a	Henni líkuðuð(2pl) þið.	-	-	-	1	8	(-3,89)
	b	Henni líkuðu(3pl) þið.	-	-	2	1	6	(-3,44)

	c	Henni líkaði(dft) þið.	2	-	2	-	5	(-2,67)
(74)	a	Henni leiddumst(1pl) við.	1	1	1	-	6	(-3,00)
	b	Henni leiddust(2/3pl) við.	1	2	2	2	2	(-2,22)
	c	Henni leiddist(dft) við.	3	2	1	2	1	(-1,56)

The same effect is seen in the singular:

(75)	a	Henni líkaðir(2sg) þú.	-	-	-	1	8	(-3,89)
	b	Henni líkaði(dft) þú.	3	1	2	-	3	(-1,89)

In passing, notice that examples with *leiðast* are regularly somewhat better than corresponding examples with *líka*, the reason presumably being that the paradigm of *leiðast* shows a higher degree of syncretism than that of *líka*. The blocking effect in (72) is in fact not confined to objects. As we have seen, the D/NcI construction differs from the monoclausal Dat-Nom construction in that it generally allows +Person nominatives. As we have also seen, however, the nominative infinitival subject in D/NcI is like nominative objects in being blocked from controlling agreement. This is further illustrated in (76):

(76)	a	Henni þótti /*þóttir [þú vera dugleg]. her thought(dft/*2sg) you(N) be industrious
	b	Henni virtist /*virtumst [við vera duglegar]. her seemed(dft/*1pl) we(N) be industrious
	c	Henni hafði /*höfðuð fundist [þið vera duglegar]. her had(dft/*2pl) found you(Npl) be industrious

Lexicalized subjects of both D/NcI and AcI (ECM) infinitives share properties with both subjects and objects of finite clauses, so let us refer to them as **subjects**. We can then replace (72) with the true generalization in (77):

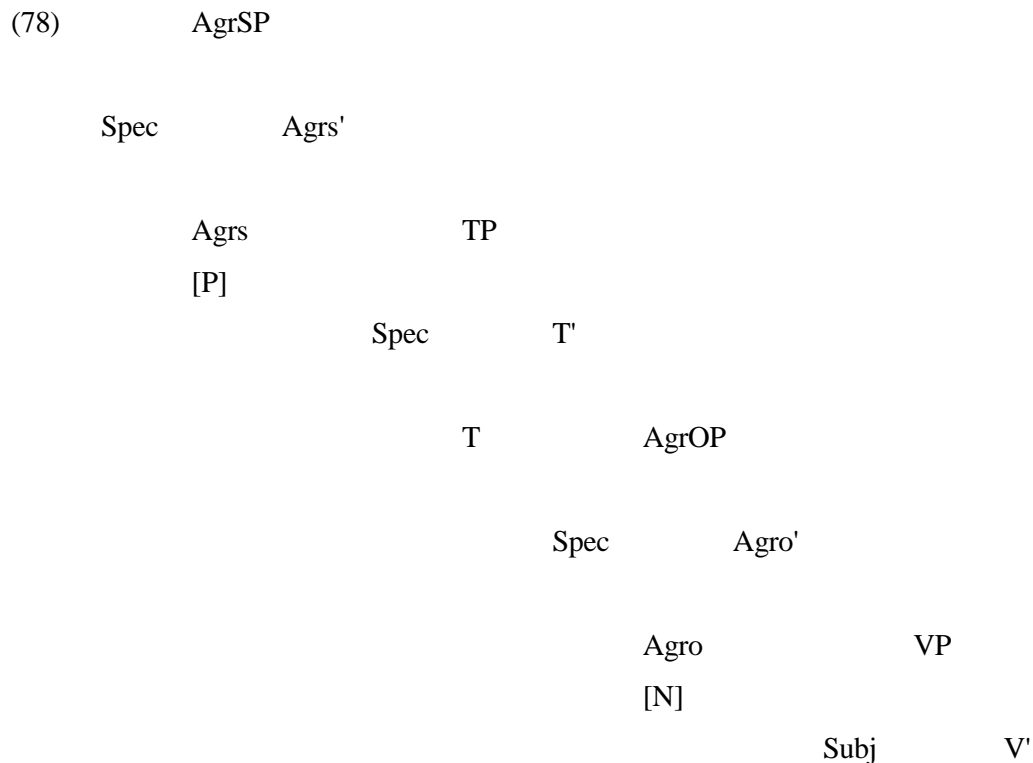
(77)	(S)objects are blocked from controlling +Person agreement (as opposed to number agreement)
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Having established this interesting generalization, we shall now turn to its theoretical implications.

3 The Split Agr Hypothesis

The fact that objects and subjects are blocked from controlling true person agreement but allowed to control number agreement obviously suggests that person and number are hosted by different functional heads. Let us refer to this idea as the **Split Agr Hypothesis**, SAH (a subcase of the more general Split Infl Hypothesis of Pollock 1989 and others).

SAH can be implemented in various ways. For concreteness, let us adopt and adapt the suggestion of Taraldsen 1994 that the finite verb checks its number feature against Agro and its person feature against Agrs in the structure in (44), repeated here and slightly modified as (78):²¹



²¹ For a slightly different approach see Taraldsen 1995. Our approach differs from that of Taraldsen's in several respects. Crucially, it explains the ungrammaticality of object and subject controlled +Person agreement and accounts for predicate-verb agreement.

This is the structure of a simple nominative-accusative construction. Quirky subjects are arguably generated lower than the highest Spec,VP. At least some of them are plausibly generated in a lower Spec,VP position in a Larsonian VP-shell, whereas other quirky subjects are arguably generated as objects (Sigurðsson 1989). However, as all quirky subjects are in a chain with the highest Spec,VP, this is not of importance here. For expository ease I shall thus assume the simple VP structure in (78) for quirky constructions as well as for nominative constructions. Notice, in passing, that we obviously do not adopt Chomsky's suggestion (1995, p. 349 ff.) that Agrs and Agro can be eliminated from UG.

Any approach to agreement in Icelandic (and hence in UG) must crucially be able to account for the following facts and analytical conclusions:

- A Both object-verb agreement and subject-verb agreement involve only number
- B +Person nominative subjects differ from +Person nominative objects in being generally acceptable, provided that they do not trigger agreement
- C Both predicate-verb agreement and subject-verb agreement involve +Person as well as number

Consider first the question (A above) of why objects may not control +Person agreement, that is, why (79a) is out, as opposed to (79b):

- (79) a *Henni höfðum líkað við.
her had(1pl) liked we(N)
- b Henni höfðu líkað þeir.
her had(3pl) liked they(N)
'She had liked them.'

The dative subject in (79b) raises overtly from Spec,VP to Spec,AgrSP via Spec,TP and the nominative raises covertly from the object position to Spec,AgrOP, thereby checking (its own number feature and) the number feature of the verb in Agro, hence licensing number

agreement.²² The verb moves on to (T and) Agrs, but as Spec,AgrSP contains a quirky subject it has a specified case feature in the sense discussed in section 2.1, and thus the features of Agrs must remain unspecified. Accordingly, the verb can only show up in the default third person, as in (79b), third person being "no person". Moreover, the quirky subject raises to Spec,AgrSP through Spec,TP, and hence the nominative object has no access to these positions and is blocked from raising any further than to Spec,AgrOP. It follows that even if Agrs could be specified for person, its person feature could not possibly be checked by the object, i.e. object control of +Person agreement is blocked.

Next consider (A-B above) the D/NcI examples in (80)-(81):

- (80) a Henni **hafði** fundist [þær vera duglegar].
her(D) had(dft) found they(N) be industrious
b Henni **höfðu**(3pl) fundist [þær vera duglegar].
- (81) a Henni **hafði** fundist [þið vera duglegar].
her had found you(Npl) be industrious
b *Henni **höfðuð**(2pl) fundist [þið vera duglegar].

As in (79) the dative subject in (80)-(81) has been overtly moved to Spec,AgrSP and hence the nominative subject cannot move there and is thus blocked from controlling +Person agreement (as seen in (81b)).

ECM subjects are generally assumed to raise covertly to the matrix Spec,AgrOP in order to check their accusative case. The number agreement in (80b), however, suggests that even nominative subjects may move to the matrix Spec,AgrOP, where they can check the number feature of the verb. Conversely, the grammaticality of the nonagreement in (80a) and (81a) suggests that nominative subject-raising need not take place.

As mentioned in section 2.4, the grammaticality of non-raised subjects in examples like (80a) and (81a) suggests that the infinitives are headed by an Infl-type element that can be

²² As already mentioned I follow Chomsky 1995 in assuming that covert movement involves feature adjunction to the targeted head rather than movement to the specifier of the head. For expository ease, however, I will assume movement to Spec whenever the differences between the two approaches are immaterial for our purposes.

activated as a nominative case assigner. No such element is available in the monoclausal Dat-Nom construction, hence the different status of (81a) and (82):

- (82) *Henni hafði líkað þið.
 her(D) had(dft) liked you(Npl)

It seems clear that the Split Agr Hypothesis (SAH) offers an appealing approach to many of the puzzles of agreement in Icelandic Dat-Nom constructions, both the monoclausal construction and the D/NcI construction. Unfortunately, however, simple subject-verb agreement becomes potentially problematic under SAH.

Consider the fact (C above) that subject-verb agreement involves both +Person and number, as in (83):

- (83) Þeir höfðu/*hafði lesið bókina.
 they(N) had(3pl/*3sg) read the book(A)

As in (79) the object raises covertly to Spec,AgrOP, but, having a specified case feature in (83) it cannot control number agreement. However, the question arises, first, why the number feature of the verb cannot remain unspecified (default), and second, how it gets specified. Taraldsen (1994, p. 53) suggests that „a p-feature can only combine with an n-feature agreeing with the same noun phrase`. This is of course the traditional belief, and it is fully in accord with the observed agreement facts in Icelandic, namely that a specified p-feature must combine with a specified n-feature, while the opposite is not true. However, given SAH, where Agrs does not contain any n-element, it is not clear how this combination of p and n takes place.²³ Moreover, it is not clear why there should be a principled requirement to the effect that a specified p-feature must combine with a specified n-feature, nor is it clear which principle would be involved. On the contrary, SAH would seem to make the prediction that split person and number agreement should be cross-linguistically quite common. -- There may be solutions to these problems, much

²³ The coindexing mechanism suggested by Taraldsen has an unclear (and an unexplained) status under the Split Agr Hypothesis.

as there may be an answer to the question of why tense and mood typically "co-inflect". However, no such solutions have yet been developed.

The Split Agr Hypothesis was first mentioned in the context of Icelandic nominative non-subjects in Sigurðsson 1992c. It was rejected there on the basis of the ungrammaticality of examples like (73b) and (74b) above, with "half-agreement", i.e. number agreement but no person agreement. Consider (73b), repeated here as (84), and compare it to (85):

- (84) *Henni líkuðu þið.
her(D) liked(3pl) you(Npl)
- (85) Henni líkuðu þeir.
her liked(3pl) they(Npl)

The nominative object raises covertly to Spec,AgrOP, thereby triggering plural agreement of the verb. The verb, in turn, raises from Agro to Agrs. However, as Spec,AgrSP contains a subject with a specified case feature, Agrs is blocked from being specified, as discussed in section 2.1. Thus, the grammaticality of (85) is accounted for if third person is not +Person, as already discussed. If so, however, we would obviously expect the "no person form" *líkuðu* to be grammatical in (84) as well.

Examples (73)-(75) above revealed that Dat-Nom constructions with +Person nominative objects become the less acceptable the more visible agreement they show. Exactly the opposite effect is seen for predicate-verb agreement. As seen in (86) and (87), the predicate-verb agreement construction is the more acceptable the more visible agreement it displays:

- (86) a ??Þetta **er** bara við.
this is(dft) only we(Npl)
- b ?Þetta **eru**(3pl) bara við.
- c Þetta **erum**(1pl) bara við.
`This is only us.'
- (87) a ??**Er** þetta bara þið?
is(dft) this only you(Npl)
- b ?**Eru**(3pl) þetta bara þið?
- c **Eruð**(2pl) þetta bara þið?

The grammaticality judgments and mean scores of these examples in IoA are shown in (88):

(88)	OK	?	??	?*	*	
86a:	-	3	2	1	3	(-2.44)
86b:	4	2	1	-	2	(-1.33)
86c:	9	-	-	-	-	(0.00)
87a:	2	2	2	1	2	(-1.89)
87b:	4	3	-	-	2	(-1.17)
87c:	8	-	1	-	-	(-0.22)

As seen, number agreement is better than no agreement and full agreement, in turn, is better than only number agreement. Given SAH, the nominative predicate raises (covertly) all the way to Spec,AgrSP in the grammatical (86c) and (87c), thereby checking both number and person. In the questionable (86b) and (87b), the predicate raises no further than to Spec,AgrOP, where it checks number, and in the more deviant (86a) and (87a) the predicate does not raise at all, both person and number thus remaining unchecked. Thus, the facts illustrated in (86)-(88) are much as expected under SAH. In addition, "half-agreement" is much "better" than no agreement in the plain subject-verb agreement construction, as indicated in (89):

(89)	Þið lásuð/*lásu/**las bókina.
	you(Npl) read(2pl/*3pl/**dft) the book

In many Germanic languages and dialects, verbal inflection has shown an intermediate historical stage, with a number distinction but reduced or no person distinctions (see e.g. Falk 1993, Holmberg and Platzack 1995). Both historical facts of this well-known sort and the judgments in (89) would seem to lend support to the Split Agr Hypothesis.

4 Conclusion

In conclusion, we are forced to admit that the Split Agr Hypothesis (SAH) yields conflicting results. It offers an appealing account of many of the fascinating agreement properties of constructions with nominative non-subjects. In contrast, it makes suspicious predictions for plain

subject-verb agreement constructions. Moreover, it accounts unsatisfactorily for "half-agreement" in Dat-Nom constructions (worse than no agreement) whereas it makes correct predictions for "half-agreement" in both the predicate-verb construction and the plain subject-verb construction (better than no agreement).

In spite of these conflicting results, the Split Agr Hypothesis, embedded into Chomsky's minimalist theory, is clearly a highly promising research program, opening new insights into the nature of agreement in natural languages. Most importantly, it enables us to analyze all four types of finite verb agreement in Icelandic as spec-head agreement. This is a particularly interesting development in view of the fact that Icelandic finite verb agreement has traditionally been taken to seriously challenge the spec-head approach to agreement.

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