

Icelandic non-nominative subjects

Facts and implications

Halldór Ármann Sigurðsson

Introduction

In this chapter I shall describe oblique subjects in Icelandic and discuss some of their theoretical implications.¹ It has become customary to refer to these subjects as ‘quirky’. Oblique subject-like arguments in many other languages, e.g. Latin, German and Russian, have, on the other hand, often been referred to as ‘quasi-subjects’, ‘logical subjects’ or ‘impersonal arguments’. Instead of these terms, I shall be using the terms **non-nominative subjects** and **subject-like non-nominatives**, abbreviated NNSs and SNNs, respectively:

- (1) a. NNSs = non-nominative subjects (as in Icelandic)
- b. SNNs = subject-like non-nominatives (as in German, etc.)

The paper is organized as follows: In section 1, I give a general description of the NNSs phenomenon in Icelandic. In section 2, I illustrate that Icelandic NNSs behave like ordinary nominative subjects with respect to various syntactic phenomena such as conjunction reduction, control, reflexivization and so on. In section 3, I briefly illustrate the well-known fact that Icelandic NNSs are ‘more subject-like’ than subject-like non-nominatives (SNNs) in many other languages, e.g. German. Section 4 discusses the impact of this cross-linguistic difference in the ‘subjectness’ of NNSs/SNNs. In particular, I shall argue against the idea that Icelandic NNSs differ from similar arguments in e.g. German by matching or being assigned nominative case – in addition to their non-nominative morphological case. The idea of double case-marking is a priori quite plausible, but, as for Icelandic, it is empirically refuted. That is, given that subjects, including NNSs, do check or match some abstract structural feature F, Icelandic illustrates that the structural matching in question is *not* tantamount to nominative case – a result that is not surprising if nominative case is licensed vP-internally, as I have argued elsewhere (Sigurðsson 2000, 2003). Interestingly, however, an account that is conceptually very close to the double case approach is strongly suggested by the facts: Although Icelandic NNSs do not enter into an invisible case-relation with the finite verb, they do enter into another (largely invisible) relation with it, namely *Person Matching*. This has far-reaching consequences for our understanding of the syntactic computation and the role of case and other features in it, discussed in section 5. In particular, we need to

restate the minimalist approach to phases and the computation in ‘functionalistic’ terms, including the central notions of the Speech Phrase and the Event Phrase. This ‘functionalistic turn’ of the approach is an interesting but also a somewhat surprising result. Section 6 concludes the paper.

1. A descriptive overview

Icelandic has all the familiar properties of accusative languages: Nominative subjects, accusative objects, verb and predicate agreement with nominatives, passive accusative “absorption” and NP-movement in the passive as well as in various unaccusative and raising constructions. However, as has been widely discussed, Icelandic also has numerous NNSs, that is, dative, accusative or genitive subjects.² This is illustrated for datives in (2b), (3b), (4) and (5):

Active-passive pairs (Nom–V–*Oblique_i*, vs. *Oblique_i*–V):

- (2) a. Við hjálpuðum **stelpunum**.
we.NOM helped girls.the.DAT
b. **Stelpunum** var hjálpað.
girls.the.DAT was helped
‘The girls were helped.’

Transitive-unaccusative pairs (Nom–V–*Oblique_i*, vs. *Oblique_i*–V):

- (3) a. Þið seinkuðuð **ferðunum**.
you.NOM delayed journeys.the.DAT
b. **Ferðunum** seinkaði.
journeys.the.DAT was.delayed
‘The journeys (were) delayed.’

Unaccusative predicates:

- (4) a. **Þeim** er kalt.
them.DAT is cold
‘They are freezing.’
b. **Henni** fór fram.
her.DAT went forth
‘She got better.’

Raising constructions:

- (5) a. **Þeim** virðist [hafa verið hjálpað].
them.DAT seems have been helped
‘They seem to have been helped.’
b. Ég mundi þá telja [**þeim** virðast [hafa verið hjálpað]].
I would then believe them.DAT seem have been helped
‘I would then believe them to seem to have been helped.’

All NNSs of passives and many NNSs of unaccusatives correspond to (and have the same morphological case and theta-role as) objects of corresponding transitives and causatives, as illustrated in (2) and (3). Thus, there is clear evidence that at least many NNSs are derived. If so, they obviously have interesting implications for case-theoretic approaches to subjecthood, NP-movement and EPP.

In the statistical research on Icelandic case-marking reported in Barðdal (2001; see, in particular, p. 89), around 93-94% of all subjects turned out to be nominative, 4-6% dative (depending on text-types, highest in the spoken language), 1.2% accusative and only 0.2% genitive. Nonetheless, the 'NNS-phenomenon' is a pervasive trait of the language, found in a wide variety of constructions. Thus, almost all types of lexical items that can head a predicate include some items that select an oblique subject, rather than a nominative one.³ The list in (6) is not exhaustive:⁴

(6)	<i>Predicate type:</i>	<i>NNS case</i>
a.	Monadic verbs:	Dat, Acc or (rarely) Gen
b.	Acc-Acc verbs:	Acc
c.	Acc-Infinitive/Clause verbs:	Acc
d.	Dat-Nom verbs:	Dat
e.	Dat-Infinitive/Clause verbs:	Dat
f.	Particle verbs:	Dat or Acc
g.	Predicative adjectives:	Dat
h.	Predicative nouns:	Dat or Gen
i.	Monadic passives:	Dat or Gen
j.	Dyadic passives:	Dat
k.	Present participles:	Dat or Gen
l.	Unaccusativized infinitives:	Dat, Acc or Gen

These different types are exemplified in (7) (the nominative *hún* 'she' is out in all cases):

(7)	a.	Hana þyrstir. her.ACC thirsts 'She is thirsty.'	Monadic verb
	b.	Hana vantaði peninga. her.ACC lacked money.ACC 'She lacked money.'	Acc-Acc verb
	c.	Hana grunar að hann fari. her.ACC suspects that he leaves 'She suspects that he will leave.'	Acc-Clause verb
	d.	Henni líkuðu hestarnir. her.DAT liked horses.the.NOM 'She liked the horses.'	Dat-Nom verb

- | | | |
|----|--|----------------------------|
| e. | Henni virtust þeir vera horfnir.
her.DAT seemed they.NOM be disappeared
'They seemed to her to have disappeared.' | Dat-Infinitve/Clause verb |
| f. | Henni varð þetta á.
her.DAT became this.NOM on
'She did this wrongdoing (by mistake).' | Particle verb |
| g. | Henni var óglatt.
her.DAT was nauseated
'She was nauseated.' | Predicative adjective |
| h. | Henni var engin vorkunn.
her.DAT was no pity.NOM
'There was no reason to pity her.' | Predicative noun |
| i. | Hennar var saknað.
her.GEN was missed
'She was missed (by someone).' | Monadic passive |
| j. | Henni voru gefnar bækurnar.
her.DAT were given books.the.NOM
'She was given the books.' | Dyadic passive |
| k. | Henni er ekki bjóðandi.
her.DAT is not inviting
'She is not invitable.' | Present participle |
| l. | Hana er hvergi að finna.
her.ACC is nowhere to find
'She is nowhere to be found.' | Unaccusativized infinitive |

In addition, some of these types have two or more subtypes, but I shall not detail here (for a more thorough description, see Sigurðsson 1989, Jónsson 1997-1998).

It is well-known that semantics affect case selection of both subjects and objects in Icelandic (for some discussion, see Einarsson 1949, Kress 1982, Barðdal 1993, 2001, Jónsson 1997-1998, 2000, 2001, Maling 1998, Svenonius 2002, Sigurðsson 2003). Thus, agentive subjects are exclusively in the nominative, while experiencer subjects tend more strongly to be dative than do other subjects. However, Icelandic differs from many other case languages, such as Finnish and Russian, and to a certain extent even German and Latin, in that it very frequently applies inherent case-marking that is not (or at least not obviously) predictable. This can be extensively illustrated by examples like (8) and (9) below:

- (8)
- | | |
|----|--|
| a. | Við þurftum vinnu.
we.NOM needed job.ACC
'We needed a job.' |
| b. | Okkur vantaði vinnu.
us.ACC lacked job.ACC
'We lacked/were in need of a job.' |

- (9) a. **Hún** skelfist hættuna.
 she.NOM is.terrified.by danger.the.ACC
 ‘She is terrified/horrified by the danger.’
 b. **Hana** hryllir við hættunni.
 her.ACC is.horrified by danger.the.DAT
 ‘She is horrified by the danger.’
 c. **Henni** ógnar hættan.
 her.DAT terrifies danger.the.NOM
 ‘She is terrified/horrified by the danger.’

2. Subject properties of Icelandic NNSs

Traditionally, Icelandic NNSs were referred to as ‘quasi-subjects’ or as ‘logical subjects’ (e.g. Einarsson 1949: 167 ff.), the idea behind that terminology being that these arguments are ‘semantically subject-like’ but ‘syntactically non-subject-like’. As first argued by Andrews (1976), however, they behave like ordinary nominative subjects with respect to various *syntactic* subjecthood tests or diagnostics, such as reflexivization, word order phenomena and so on. This was further established by Thráinsson (1979) and later by Zaenen, Maling and Thráinsson (1985), Sigurðsson (1989) and many others.

Sigurðsson 1989 (pp. 204–205) contains a list of 11 tests of subjecthood in Icelandic, all passed by NNSs as well as by nominative subjects, in contrast to objects (and 16 such tests are listed in Sigurðsson 1997: 302). I shall limit myself to briefly illustrating this for the following seven phenomena:

- I. Reflexivization
- II. Subject-verb Inversion (in V1 and V2 environments)
- III. Control (i.e. being a controllee)
- IV. Conjunction Reduction
- V. Exceptional Case-Marking
- VI. Raising
- VII. Subject floating

I. *Reflexivization*. Subjects normally trigger obligatory reflexivization, whereas objects at best allow optional reflexivization. NNSs behave like ordinary subjects in this respect:

- (10) **Henni**_i leiðist bókin **sín**_i/*hennar_i.
 her.DAT bores book.the.NOM self_i/s/*her_i
 ‘She finds her (own) book boring.’

II. *Subject-verb Inversion*. As in the other Germanic Verb-Second (V2) languages, the subject ‘inverts’ with the finite verb of the clause in V2 and V1 environments. In this respect, NNSs behave like ordinary nominative subjects; notice that Icelan-

dic, unlike e.g. German, is an SVO language – and thus the post-finite (‘second’ or ‘third’) position is an unequivocal subject position (by and large as in the other Scandinavian languages):

- (11) a. Þá hefur **henni** líklega leiðst bókin.
 then has her.DAT probably bored book.the.NOM
 ‘Then, she has probably found the book boring.’
 b. Hefur **henni** leiðst bókin?
 has her.DAT bored book.the.NOM
 ‘Has she found the book boring?’

III. *Control*. In sharp contrast with objects, NNSs behave like ordinary nominative subjects in that they can be represented by PRO:⁵

- (12) **Hún** vonast til [að PRO leiðast ekki bókin].
 she hopes for to PRO.DAT bore not book.the.NOM
 ‘She hopes not to find the book boring.’

IV. *Conjunction Reduction*. Also in contrast to objects but like nominative subjects, NNSs are acceptable as the missing argument in a conjunct, even when coreferential with a nominative ‘antecedent’:

- (13) **Hún** var syfjuð og (**henni**) leiddist bókin.
 she.NOM was sleepy and (her.DAT) bored book.the.NOM
 ‘She was sleepy and found the book boring.’

V. *Exceptional Case-Marking* (ECM). NNSs have access to the subject position in ECM-infinitives, like structurally case-marked subjects but unlike objects:

- (14) Ég mundi telja [**henni** hafa leiðst bókin].
 I would believe her.DAT have bored book.the.NOM
 ‘I would believe her to have found the book boring.’

VI. *Raising*. NNSs raise in the same way as ordinary raising nominatives, not only in passives but also with raising predicates of the *seem*-type:

- (15) a. **Henni** virðist [hafa leiðst bókin].
 her.DAT seems have bored book.the.NOM
 ‘She seems to have found the book boring.’
 b. **Henni** virðist [hafa verið hjálpað].
 her.DAT seems have been helped
 ‘She seems to have been helped.’
 c. **Henni** virðist [hafa verið talið [hafa verið hjálpað]].
 her.DAT seems have been believed have been helped
 ‘She seems to have been believed to have been helped.’

VII. *Subject Floating*. On standard assumptions both ECM and raising involve NP-movement to the ‘closest available subject position’, and, as we have seen, both apply

to NNSs. In general, NNSs behave *exactly* the same as nominative subjects with respect to both NP-movement and absence of NP-movement. Consider the sentence in (16), where the only possible postverbal position of the pronominal subject is the one it is occupying:

- (16) Því mundi **hann** þá sennilega ekki verða seldur á uppboðinu.
 thus would he/it.NOM then probably not be sold at auction.the
 ‘Thus, he/it would then probably not be sold at the auction.’

In contrast, indefinite subjects can occupy various ‘late’ or ‘low’ positions, irrespective of their case (e.g. Sigurðsson 1989: 304 ff., 1991, 2000; Jónsson 1996). Thus, all the slot positions in (17) are accessible to indefinite subjects, a phenomenon that I refer to as *Subject Floating*; the initial ‘X’ ranges over the expletive *það* ‘there, it’, certain front or fronted elements like *því* ‘thus’ in (16) and zero (in V1 constructions):

- (17) X would ____ then ____ probably ____ not ____ be sold ____ at auction.the

This is illustrated for nominative subjects in (18):

- (18) a. Það mundu **einhverjir bátar** þá sennilega ekki verða seldir á
 there would some boats.NOM then probably not be sold at
 uppboðinu.
 auction-the
 ‘Some boats would then probably not be sold at the auction.’
 b. Það mundu þá **einhverjir bátar** sennilega ekki verða seldir á upp-
 boðinu.
 c. Það mundu þá sennilega **einhverjir bátar** ekki verða seldir á upp-
 boðinu.
 d. Það mundu þá sennilega ekki **margir bátar** verða seldir á
 there would then probably not many boats.NOM be sold at
 uppboðinu.
 auction-the
 e. Það mundu þá sennilega ekki verða seldir **bátar** á uppboðinu.
 there would then probably not be sold boats.NOM at auction.the

Notice that ‘some boats’ would be questionable or awkward in (18d) and (18e), hence the shift to ‘many boats’ and ‘boats’ (see the discussion in Sigurðsson 2000: 83-84). Exactly parallel facts are seen for the dative subject in (19), including this shift to ‘many boats’ and ‘boats’:

- (19) a. Það mundi **einhverjum bátum** þá sennilega ekki verða stolið á
 there would some boats.DAT then probably not be stolen at
 uppboðinu.
 auction.the
 ‘Some boats would then probably not be stolen at the auction.’

- b. Það mundi þá **einhverjum bátum** sennilega ekki verða stolið á uppboðinu.
 c. Það mundi þá sennilega **einhverjum bátum** ekki verða stolið á uppboðinu.
 d. Það mundi þá sennilega ekki **mörgum bátum** verða stolið á uppboðinu.
 there would then probably not many boats.DAT be stolen at auction.the
 ‘Many boats would then probably not be stolen at the auction.’
 e. Það mundi þá sennilega ekki verða stolið **bátum** á uppboðinu.
 there would then probably not be stolen boats.DAT at auction.the
 ‘Boats would then probably not be stolen at the auction.’

Importantly, not just any position is available to floating subjects. Thus, as illustrated in part in (20), all positions between non-finite verb forms are excluded for all subjects, irrespective of case (Icelandic thus differing from e.g. English, cf. Sigurðsson 1991):

- (20) a. *Það mundu þá sennilega ekki verða **bátar** seldir á uppboðinu.
 here would then probably not be boats.NOM sold at auction.the
 b. *Það mundi þá sennilega ekki verða **bátum** stolið á uppboðinu.
 here would then probably not be boats.DAT stolen at auction.the

There are some semantic differences between the accessible positions in (18) and (19), depending on or involving factors like quantification and polarity. Crucially, however, the behavior of DPs with respect to NP-movement and absence of NP-movement is entirely independent of case.

3. The Icelandic-German dichotomy

Many languages other than Icelandic have or have had subject-like non-nominatives (SNNs), for instance Latin, Russian, Old-English and other Older Germanic languages as well as modern German, to mention only a few ‘relatives’ of Icelandic. Consider the German examples in (21) and their Icelandic counterparts in (22):

- (21) a. **Mir** ist kalt. German
 me.DAT is cold
 ‘I am freezing.’
 b. **Mir** wurde geholfen.
 me.DAT was helped
 ‘I was helped (by somebody).’

- (22) a. **Mér** er kalt. Icelandic
me.DAT is cold
'I am freezing.'
b. **Mér** var hjálpað.
me.DAT was helped
'I was helped (by somebody).'

However, while Icelandic NNSs mostly behave syntactically like canonical subjects in Icelandic, German SNNs do not behave like canonical subjects in German. Thus, many Icelandic NNSs constructions can easily be embedded under control verbs, as in (23), whereas similar German constructions cannot, as seen in (24):⁶

- (23) *Ég vonaðist til [að verða hjálpað].*
I hoped for to be helped (i.e. to PRO.DAT be helped)
'I hoped to be helped.'
(24) **Ich hoffte [geholfen zu werden].*
I hoped helped to be (i.e. * PRO.DAT helped to be)

Similarly, many Icelandic NNSs 'participate' in Conjunction Reduction (as we have seen), whereas German SNNs do not:

- (25) *Ég hafði mikið að gera og (mér) var samt ekki hjálpað.*
I.NOM had much to do and (me.DAT) was nonetheless not helped
'I had a lot to do and (I) was nonetheless not helped.'
(26) *Ich hatte viel zu tun, und *(mir) wurde trotzdem nicht geholfen.*
I.NOM had much to do and (me.DAT) was nonetheless not helped

Thus, German SNNs behave 'less subject-like' than do Icelandic NNSs. The same is true of SNNs in many other languages, for instance most Russian SNNs (see the Icelandic-Russian comparison in Sigurðsson 2002a).

4. To be a 'subject'

There is more than one way of conceiving of the Icelandic-German dichotomy with respect to NNSs/SNNs. One is to say that the subjecthood tests discussed above have a narrower scope in German than in Icelandic, such that they test nominative case or some other property in addition to subjecthood, whereas they only test 'plain subjecthood' in Icelandic. If so, German SNNs might be no less subjects than are Icelandic NNSs. Alternatively, one could say that German SNNs indeed are non-subjects, in contrast with Icelandic NNSs. The latter view has long been the standard one within generative syntax (see e.g. Zaenen, Maling and Thráinsson

1985, Sigurðsson 1989). A third view is to say that subjecthood is not a primitive of language (Chomsky 1981: 10) and hence does not and could not decide or control features or properties of grammar, such as reflexivization, control, word order, case-marking and so on (this is the standpoint taken in Sigurðsson 2002a). On this view, however, one would expect there to be some ‘hidden’, more atomic property or feature that is involved in both what is usually understood to be ‘subjecthood’ as well as in various of the phenomena that have been taken to be tests on ‘subjecthood’ (reflexivization, etc.). This feature, I will argue in the following, is *Person* – not Case, as often assumed.

NNSs are often thought of as bearing double case, that is, their inherent morphological case (m-case) plus an invisible structural case feature. On this view, it would seem natural to assume that structural nominative case is carried by *pro* in German SNNs-structures, whereas it is carried by the overt argument in Icelandic, as sketched in (27):

- (27) a. me.DAT_i would *pro*.NOM t_i freezing be ? German
 b. me.DAT.NOM_i would t_i be t_i freezing ? Icelandic

Let us refer to the approach in (27b) as the *Double Case Approach* (DCA) to Icelandic NNSs (assumed by e.g. Jónsson 1996: 122 ff.). As we shall see, it cannot be maintained on a morphological understanding of the notion ‘double case’. That is, Icelandic NNSs plausibly and arguably *do* match the *same* ‘subjecthood’ feature as nominative subjects, but the feature in question is *not* nominative case.

DCA is not a priori implausible. It is at least clear that m-case is not always visible even if it arguably is ‘active’. Thus, for instance, complex NPs usually only show their case partially. Consider (28):

- (28) a. Ég las [bókina [nýútkomna]].
 I read book.the.ACC new.out.come.ACC
 ‘I read the book when it had just come out.’
 b. Ég las [bókina [í kápunni]].
 I read book.the.ACC in cover.the.DAT
 ‘I read the book in the cover.’
 c. Ég las [bókina [sem þú sagðir mér frá]].
 I read book.the.ACC that you.NOM told me.DAT from
 ‘I read the book you told me about.’

Obviously, the accusative ‘is there’ on the whole object DP in not only (28a) but also in (28b) and (28c), although it is only ‘partly visible’ there.⁷ – Furthermore, there is evidence that some languages do apply double m-case marking of subjects under certain circumstances (see below). However, in spite of not being a priori implausible, the Double Case Approach to Icelandic NNSs is empirically refuted.

The refuting evidence comes primarily from Dat-Nom and Dat-Infinitive constructions, as in (29):

- (29) a. Henni höfðu ekki líkað **hestarnir**/*hestana.
her.DAT had.3PL not liked horses.the.NOM/*ACC
'She had not liked the horses.'
- b. Henni voru gefnir **hestarnir**/*hestana.
her.DAT were.3PL given horses.the.NOM/*ACC
'She was given the horses.'
- c. Henni virtust **hestarnir**/*hestana vera of dýrir.
her.DAT seemed.3PL horses.the.NOM/*ACC be too expensive
'The horses seemed (to be) too expensive to her.'

The datives, and not the nominatives, in examples of this sort are the matrix subjects (see e.g. Sigurðsson 1989: 95 ff., 1996). Nonetheless, the nominative objects in (29a-b) and the nominative infinitival subject in (29c) control number agreement of the finite verb, as seen. Evidently, these 'low' nominatives, and not the dative subjects, carry the structural (morphological) nominative of these structures.

Consider the clause in (29a) = (30a) and its English translation in (30b):

- (30) a. **Henni**.DAT höfðu ekki líkað **hestarnir**.NOM
b. **She**.NOM had not liked **the horses**.ACC

In the approach of Chomsky (e.g. 2001), the arguments carry or match abstract structural features, a VP-external one and a VP-internal one. Let us refer to these abstract features as AR₁ and AR₂, respectively ('Argument Relation 1', 'Argument Relation 2'). In Chomsky's approach and in much related work, these argument features are called 'nominative case' and 'accusative case'. The simplest understanding of this terminology is that the argument features are tantamount to the structural cases, such that AR₁ = nominative case, and AR₂ = accusative case. As immediately seen by Dat-Nom constructions, however, this simple understanding is evidently wrong: The dative subject and the nominative object in e.g. (30a) match (or satisfy the requirements of) AR₁ and AR₂ in the same manner as the nominative subject and the accusative object do in (30b). In other words, AR₁ and AR₂ are *not* tantamount to morphological nominative and accusative case.

The matching of AR₁ and AR₂ is unrelated to morphological case (m-case) and to morphology in general (whereas the assignment of m-case is plausibly dependent on structural matching of AR₁ and AR₂). Thus, these features are matched in caseless languages like Chinese in the same manner as in e.g. English and Icelandic. In case languages, however, the phonological form of DPs is decided by PF case-rules that are obviously not operative in caseless languages. That is to say, case languages match AR₁ and AR₂ structurally in the same way as caseless languages, but, in addition, they apply PF realization rules, yielding the correct case forms. While languages like English have only a single layer of structural m-case *C_{Str}* ('tier' in the terminology of Yip, Maling and Jackendoff 1987), thereby showing a very close correlation between the m-cases and AR₁ and AR₂, languages like Icelandic, German, Russian and so on have both a layer or a cycle of inherent and structural m-cases, *C_{Inh}* and *C_{Str}*, each core argument bearing either inherent or structural m-case (see

the discussion in Yip, Maling and Jackendoff 1987, Marantz 2000, and in Sigurðsson 1989, 2000, 2003).⁸

In contrast to these well-known and common case language types, Korean seems to apply double morphological case-marking or so-called *case-stacking* (see e.g. Yoon and Yoon 1991, Yoon 1996, 2001), thus allowing DPs to take the form DP/Case_{Inh}+Case_{Str}, combining for instance the dative marker *-eykey* with the nominative marker *-ka*, yielding forms like *Swunhi-eykey-ka* 'Swhunhi.DAT.NOM'.⁹ In addition, the Dat-Acc construction in Faroese (see Barnes 1986, Petersen 2002) has been analyzed as involving invisible nominative-marking of the dative (Sigurðsson 2003).¹⁰ Similarly, it is tempting to assume an invisible nominative in the Tamil Dat-Acc construction (described by Lehmann 1993: 184 ff; Umarani 2001) and in the Greek Gen-Acc clitic construction (recently discussed in Anagnostopoulou 2002, 2003); if nominative is 'active', albeit invisible, in these constructions, the object accusative is simply accounted for, in the usual manner (as conditioned by the presence or 'activity' of the nominative, cf. e.g. Marantz 2000, Sigurðsson 2000, 2003). – In contrast, Icelandic NNSs are not assigned any invisible nominative, not any more than German SNNs, as seen by the fact that the nominative is 'taken' by the object in the Dat-Nom construction. Presumably, this is so for the simple reason that Icelandic NNSs, as well as German SNNs, never enter a nominative case position in the course of the derivation (whereas the opposite seems to be true of Korean doubly case-marked subjects).

'Subjecthood', even if one were to assume that the notion exists in the traditional sense, cannot – could not – stem from case, single or double, visible or invisible, and this is not only true of Icelandic but generally, even for a language like Korean. However, even if Icelandic NNSs do not have any invisible nominative case, closer scrutiny of Icelandic Dat-Nom constructions reveals that there *is* indeed *a* featural relationship between NNSs and the 'finite complex'. The relationship in question is that of *Person Matching*.

The evidence for this approach comes from agreement asymmetries in Dat-Nom constructions of the following sort (Sigurðsson 1990-1991, 1996, and subsequent work; Taraldsen 1995, Boeckx 2000, Anagnostopoulou 2002, 2003):

- (31) a. Honum mundu alltaf líka þeir. ^{ok}3P.AGR-3P.NOM
 him.DAT would.3PL always like they.NOM
 'He would always like them.'
- b. *Honum munduð alltaf líka þið. *2P.AGR-2P.NOM
 him.DAT would.2PL always like you.NOM.PL
 [i.e. 'He would always like you']
- c. *Honum mundum alltaf líka við. *1P.AGR-1P.NOM
 him.DAT would.1PL always like we.NOM
 [i.e. 'He would always like us']

As seen, the finite verb may agree with a 3rd person nominative object, whereas first or second person agreement is totally out (in contrast to subject controlled first or

second person agreement, which is always obligatory). Strikingly, no asymmetry of this sort is found in German Dat-Nom constructions, as seen below:

- (32) a. Ihm würden sie immer gefallen.
 him.DAT would.3/1PL they.NOM always like
 ‘He would always like them.’
 b. Ihm würdet ihr immer gefallen.
 him.DAT would.2PL you.NOM.PL always like
 ‘He would always like you.’
 c. Ihm würden wir immer gefallen.
 him.DAT would.1/3PL we.NOM always like
 ‘He would always like us.’

The Icelandic agreement asymmetries are accounted for on two assumptions (as argued in the above cited works): First, 3rd person is not ‘true’ person and hence the 3PL agreement in (31a) involves only number agreement, not ‘true’ person agreement.¹¹ Second, the dative subject enters into a default (3rd person) ‘null-agreement’ correlation with the person feature or the Person head of the finite verb complex and hence the nominative object cannot enter into that relation and is thus blocked from controlling person agreement whereas it is free to control number agreement. Thus, we get split person-number agreement, as sketched below; both Pers and Num head their own projections, PersP and NumP:¹²

- (33) C ... Pers_i ... Dat_i ... Num_j ... [... ~~Dat~~ ... Nom_j ...]

In German, on the other hand, only the nominative can enter into an agreement correlation with the finite verb complex. Reasonably, this German type of agreement is long distance agreement, i.e. the nominative does not raise to Spec,PersP any more than in Icelandic. The German dative presumably differs from the Icelandic one in raising out of the agreement scope of the finite verb prior to person agreement (Sigurðsson 2002c). Notice that this is not obviously refuted by examples like *Es wurden ihm solche Ideen nie gefallen*, lit. ‘there would.3PL him.DAT such ideas.NOM never like’, i.e. ‘He would never like such ideas’:¹³ the effects of dative-raising might be masked by a subsequent raising of the finite verb across the dative.

Russian Dat-Nom constructions and Romance Dat-Nom clitic constructions are like German Dat-Nom constructions with respect to agreement, and so are similar constructions in e.g. Telugu (K.V. Subbarao, p.c.). In contrast, the Russian infinitival dative construction (obviously) does not have any visible finite verb complex and could thus be analyzed as involving ‘null-person agreement’ (Sigurðsson 2002a), and so could the Faroese Dat-Acc construction, briefly mentioned above. A quick glance at Tamil suggests that that language might also have ‘null-person agreement’ with dative subjects of roughly the Icelandic type, blocking nominative objects in the Dat-Nom construction from being [+definite, +rational], hence from being in the first or the second person and controlling agreement.¹⁴

Notice also that the agreement in the English type *There have been three men ar-*

rested might be analyzed on a par with the Icelandic number agreement in (31a)/(33): Plausibly, the associate (*three men*) agrees in only number, not in person, and, hence, *there* may null-agree with Pers – like Icelandic NNSs! If so, Icelandic NNSs are not as ‘quirky’ or isolated as usually assumed.

To review, non-nominative subjects in Icelandic are not assigned any ‘hidden’ or invisible nominative m-case, not any further than e.g. German experiencer datives or English expletive *there*. Nevertheless, they do behave like ordinary nominative subjects in entering into a featural correlation with the finite verb complex of the clause, namely the correlation of Person Matching.

Matching of Person (or of an EPP feature on Person) is arguably also the driving force behind ‘high’ Verb Raising of the Italian type as well as of ‘high’ NP-movement of the English type, both processes moving a ‘personal’ element to the left edge of the clause (Sigurðsson 2003, inspired by Alexiadou and Anagnostopoulou 1998). Thus, Person Matching is really doing the ‘work’ that has standardly been ascribed – in part – to structural nominative case.¹⁵

5. Case, Person, and the computation

There is abundant evidence from Icelandic and many other languages that nominative case is licensed vP-internally (Sigurðsson 1989, 1991 and e.g. 2000, 2003, Alexiadou and Anagnostopoulou 2001 and many others). In fact, this is true of *all* languages I know of, even English to an extent. Under the common assumption that nominative case is an EPP feature, this is a truly critical problem. If, on the other hand, the EPP feature that drives NP-movement is not case but Person (or hosted by Person), then vP-internal nominatives are to be expected.

Arguably also, finite verb agreement is *not* ‘triggered’ by nominative case. Rather, finite verb agreement in e.g. German and Icelandic takes place in PF whenever the finite verb complex ‘finds’ a predicate internal DP that is not inherently case-marked, is close enough (locality) and is also the closest available ‘partner’ (relativized minimality). That is, instead of being ‘triggered’ by nominative case, finite verb agreement is *not blocked* by it, hence free to apply.

The underlying assumption here is that Agree reduces to Merge. Thus, Pers may merge with the rest of the predicate, [Pred/-Pers] for short, because they have matching pluses and minuses, figuratively speaking, that is, they ‘agree’ in an abstract sense (make up a Featural Bond in the terminology developed in Sigurðsson 2002b, 2002c). That the phonological host of Pers visibly agrees with one member of [Pred/-Pers], which bears a Pers feature, is a different, albeit a related, PF phenomenon. Thus, Pers and [Pred/-Pers] in for instance Chinese merge or ‘agree’ in the same way as in e.g. German, while only the latter language shows any PF reflection of this.¹⁶

It follows that agreement has *no bearing at all* on the licensing of nominative case (although it is preconditioned by the presence of an ‘accessible’ nominative).

Hence, it is unproblematic that we find various types of 'low' non-agreeing nominatives in environments where the nominative is beyond the reach or scope of a 'probing' finite verb – in for instance Icelandic, Romance, Tamil and Welsh, to mention only a few languages (see, among many, Rizzi 1982, Roberts 1993, Mensching 2000, Egerland 2002, Sigurðsson 1989 and subsequent work, e.g. 2003, Holmberg and Hróarsdóttir 2002).

In Chomsky's approach (e.g. 2001), Case is an uninterpretable feature that must be eliminated in the course of the derivation, by Agree/Move. However, while (dependent) agreement features are 'invisible' at the conceptual interface, Case *is* interpretable and must therefore remain intact throughout the derivation. Crucially, Case distinguishes between event participants – *primary participant* ('nominative') vs. *secondary participant* ('accusative'). That is, nominative and accusative can be seen as different values of one and the same binary or 'digital' feature, 0Case and 1Case, much as e.g. present and past can be seen as 0Tense and 1Tense (which raises the intriguing question of whether *all* features can be analyzed as 'digital', reminding, conceptually, of binary branching). Much as past tense gets its interpretation in relation to present tense (or, more accurately, the Reichenbachian S), and much as e.g. second person gets its interpretation in relation to first person (or, more accurately, the speaker or the logophoric center in the sense of Bianchi 2002), so are accusative and nominative interpretable in relation to each other. None of these features have any *absolute* inherent meaning, but they are all relatively interpretable. *Relative interpretability* of this sort is nothing special to Case, but a general property of the formal features of language.

This simple approach only applies unqualified to the structural cases. The inherent cases are more complex, not only distinguishing between event participants ('first', 'second', ...) but also encoding specific relations (roles, aspectual relations, ...) of the participants to the event (i.e., they are 'semantically associated', in the sense of Chomsky 2002: 113). Moreover, the underlying relations involved are numerous and their interaction is often so intricate that the case correlations between PF and LF can become completely opaque, such that one and the same underlying deep case is expressed by more than one morphological case or such that one and the same morphological case is an exponent of many deep cases (Sigurðsson 2003).

This kind of opacity of LF-PF correlations is a common trait of 'semantically associated' categories of language, such as mood, tense and aspect. The structural cases are exceptional in being straightforwardly interpretable as purely relational features. Thus, it should come as no surprise that structural case-marking is a more widespread phenomenon in the world's languages than is inherent case-marking (see Blake 2001, p. 156 ff.).

It is worth emphasizing that English, for instance, does *not* differ from Icelandic with respect to abstract Case, structural or inherent. Much as it has 'deep moods', for example, it arguably has all the underlying semantic factors that enter into morphological case-marking in Icelandic, only differing from Icelandic in its degree of PF explicitness. Even in 'rich' case languages, the number of underlying case relations is

obviously much higher than the (historically accidental) number of morphological cases. As far as I can see, there are *no* truly morphologically rich languages, if morphological richness is understood as a high and an accurate degree of reflecting or expressing underlying LF relations in morphology.

The present understanding of case gains support from the nominative marking of ‘objects’ of verbs like *heita* ‘be called’ and of predicate NPs (on the latter, see e.g. Maling and Sprouse 1995):

- (34) a. Hún er prestur/*prest.
 she.NOM is priest.NOM/*ACC
 ‘She is a priest.’
 b. Hún heitir María/*Maríu.
 she.NOM is.called Mary.NOM/*ACC
 ‘Her name is Mary.’

Since the event structure of predicates like ‘be X’ and ‘be called X’ has only one participant, accusative marking of the ‘second’ NP/DP is not required, hence out.¹⁷

While the structural Cases (‘Argument Relation 1’, ‘Argument Relation 2’, or simply, ‘Participant 1’, ‘Participant 2’) *distinguish* between the event participants, Person, often in combination with Number and Gender/Status, *identifies* these cased participants, that is, evaluates them in relation to the speaker. The logical structure thus minimally contains:¹⁸

- The *Speech Event*, with the speaker and the speech time, S_T (Reichenbachian $S=R$)
- The *Predicational Event*, with its participants and its event time E_T (Reichenbachian E)
- The Cases
- Person and other identificational features

Inspired by Chomsky’s approach (in e.g. 2001) but also departing from it, I propose that the clause contains two phases, the *Speech Phrase*, SP , headed by S_T , and the *Event Phrase*, EP , headed by E_T (directly dominating CP and vP , respectively, I assume).¹⁹ This gives us the (partial) structure in (35):

- (35) [_{SP} Speaker [_{ST} [_{CP} ... [_{PersP} ... Pers ... T ... [_{EP} ... E_T ... [_v [_{NOM} [_V [_{ACC} ...

The computation crucially relates features of EP to features of SP , and this holds of participant features as well as of temporal features: T relates E_T to S_T , whereas *Pers* relates *Nom* (or a *NNS*) to the Speaker.²⁰ Thus, NP movement of both nominative subjects and of Icelandic *NNS*s involves Person Matching.

To review, the computation is not driven by a need to *eliminate* absolutely uninterpretable LF features, such features arguably being nonexistent. Rather, it is driven by the need to ‘derelativize’ features, *interpret* them in relation to the Speech Event. To this extent, at least, the computation is ‘functional’ and ‘naturalistic’, an interest-

ing but also a surprising result, in view of the level of abstraction of the analysis applied and the exceptional status of the phenomena studied.²¹

6. Concluding remarks

Case theory, as developed in Chomsky 1981 and related work, has been an extremely effective tool in linguistic research, raising many intriguing questions: Why do NPs move? Why is structural accusative only available in the presence of an external theta-role? Why is it impossible to lexicalize the subject position of most infinitives? Related questions also arose: What is the status of agreement in grammar? Why is it that many languages with rich person inflection of verbs also have both Verb Raising and *pro*, whereas languages with poor or no person inflection of verbs usually have neither Verb Raising nor *pro*?

Many answers to these important questions have been proposed, by Chomsky and others. Icelandic NNSs have long been one of the major challenges to the case-based answers and ideas suggested, without, however, forcing any fundamental revision of Chomsky's original hypotheses of the central status of case in language (although Chomsky, in view of the Icelandic NNSs facts, now admits that "structural Case is demoted in significance" (2000: 127) and that "Case assignment is divorced from movement" (2001: 17)).

As we have seen, however, Icelandic NNSs do not merely cast doubt on the usual answers; above all, they are an exciting challenge to deepen our understanding of the important phenomena of language that Case theory was designed to elucidate. In this paper, I have developed an approach that not only accounts for the 'original insights' but also for the intriguing and fascinating properties of Icelandic NNSs. The result should be a stronger theory, with more coverage and greater explanatory power. Surprisingly, and strikingly, our findings suggest that the syntactic computation must be understood in terms that are more 'functional' than has usually been assumed within generative approaches to language.

Notes

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2. See Andrews 1976, 1982, 2001, Thráinsson 1979, Zaenen, Maling and Thráinsson 1985, Yip, Maling and Jackendoff 1987, Sigurðsson 1989, 1991, 1992, 1996, 2000, 2002a, 2003, Jónsson 1996, 1997-1998, Barðdal 2001, Landau 2001, among many. – Icelandic nominals inflect for number (singular, plural), gender (masculine, feminine, neuter), and case. *Nominative* is the canonical case of clause-external DPs, subjects and predicate NPs and APs, *Accusative* is the canonical case of affected verbal objects and of certain adverbial NPs, *Dative* the canonical case of prepositional objects, of benefactive indirect objects, and of certain types of direct verbal objects (e.g. direct objects that are benefactive or put in motion), *Genitive* the canonical case of adnominal possessors, to mention only the most central or typical functions of the cases. – Finite verbs inflect for person (1, 2, 3) and number (sg, pl), showing four to six distinct forms (mostly five) in both tenses (present and past) and both moods (indicative and subjunctive). However, NNSs differ from nominative subjects and certain nominative non-subjects in that they never trigger verb or primary predicate agreement, a fact that I shall not discuss here (but, for discussion, see Sigurðsson 1996, 2002a, 2002c, 2003).

3. See for instance Sigurðsson 1989 (p. 198 ff.), Jónsson 1997-1998 and Jónsson 1998. Jónsson 1998 contains a list of around 690 non-passive predicates that take a non-nominative subject, but many of them are ‘complex’ in the sense that they enter into more than one quirky construction (i.e. the number of quirky constructions is considerably higher). In addition, many passives take a non-nominative subject. Importantly, also, certain quirky constructions are productive and thus cannot really be listed.

4. Mediopassives or ‘middles’ in *-st* are for instance not treated as a special predicate type, a disputable simplification.

5. On case-marking in PRO infinitives, see Sigurðsson 1991 (and in part 2002a). The infinitive marker *að* is arguably a complementizer (Sigurðsson 1989: 53 ff.), hence the order *to* PRO in the glosses. – I use the notion ‘PRO’ here for expository purposes only, see note 21 below.

6. Icelandic-German contrasts of this sort are discussed by e.g. Zaenen, Maling and Thráinsson 1985.

7. Due to relativized minimality with respect to morphological case-marking. There are of course many much clearer instances of totally invisible case in case languages, but, the importance of examples like (28) is that they illustrate the effect of case-minimality (cf. Sigurðsson 1989), and, arguably, invisible case-marking plus visible case-marking within Icelandic.

8. As in earlier work (for instance Sigurðsson 1989 and 1996), I assume that structural case is ‘repelled’ by inherent case that is already there, in languages like Icelandic and German. However, given that nominative case is vP-internal (Sigurðsson 2000, 2003), this only applies vP-internally.

9. See also Blake (2001: 102 ff.) on some other languages. For arguments against case-stacking in Korean, see Schütze 1997 (164 ff.) and 2001 (arguing that the nominative marker is a focus particle, an interesting alternative).

10. For a different (optimality theoretic) approach to Faroese Dat-Acc, see Woolford 2003.

11. This is an oversimplification; Icelandic sometimes distinguishes between ‘personal’ or [+ human] 3rd person and ‘non-personal’ or [– human] 3rd person nominative objects, the type ‘Her.DAT like they.NOM’ being degraded or ungrammatical when the nominative object

is [+human]. This does not extend to the Dat-Nom verb *leiðast* ‘find boring’, though. For a discussion, see Maling and Jónsson 1995.

12. For a more thorough account of these and related data, see Sigurðsson 1996. I am assuming the radically split clausal heading, argued for in Sigurðsson 2000 and subsequent work, under which Infl minimally splits into Person, Number, Mood, Tense. Some others have argued for similar ideas. For an early work on related issues and ideas, from a Scandinavian (and a Romance) point of view, see Egerland 1996 (who, however, assumes AgrS as well as Pers). – As indicated, I assume that the dative raises into the vicinity of the Pers head prior to agreement (for discussion, see Sigurðsson 2002c).

13. Josef Bayer, p.c.

14. P. Umarani, p.c.; see also Lehmann (1993: 26 ff., 184 ff.). There is no such constraint on accusative objects in the Dat-Acc construction. However, something more than agreement blocking is going on in Tamil, as the [+definite, +rational] restriction extends to nominative objects in the Nom-Nom construction (alternating with the general transitive Nom-Acc pattern). Similarly, also, nominative first and second person objects in Icelandic infinitival constructions are degraded, as compared to nominative third person objects, although they are by no means as sharply ungrammatical as in finite contexts. Thus, even for Icelandic, something in addition to ‘agreement competition’ is needed to account for all the facts of the person constraints of nominative objects.

15. Icelandic is often described as a typical Verb Raising language, but this is very misleading as it is highly exceptional – and problematic – in applying both ‘high’ Verb Raising and ‘high’ NP-movement (one of two such languages in the 100 language sample of Gilligan, see 1987: 196). I shall, however, not discuss this issue here (for an initial discussion, see Sigurðsson 2002c, 2003).

16. This is of course a much too sketchy account. For a more thorough discussion, see Sigurðsson 2002c.

17. It would seem natural to understand the Tamil Nom-Nom construction in similar terms (see the description in Lehmann 1993: 26 ff.) – the nominative object canonically not being an ‘independent event participant’, but I shall not pursue this here.

18. Notice the word ‘minimally’. In particular, it seems necessary to assume that the Hearer (or the ‘Receiver’) has an independent status, but I shall not pursue the issue here (for some discussion, see e.g. Poletto 2000). A more general discussion of the Speech Event and clausal structure would lead us much too far away from the topic of this paper.

19. Long Distance Reflexivization illustrates the need for a projection containing a specifier position in the ‘middle of the clause’ that is distinct from Spec,vP (Sigurðsson 2002b). Spec,EP is possibly the landing site of ‘short’ Object Shift.

20. Notice that even 3rd person participants like ‘Harold’ are evaluated in relation to or anchored by the speaker (getting different values depending on who is speaking, i.e., ‘my Harold’ is different from ‘other Harolds’ (abstracting away from coincidences). Moreover, objects are indirectly related to the speaker through their subjects, so to speak. Thus, in a clause like *Harold loves Mary* uttered by *PETER*, *Mary* is identified in relation to *Harold* (‘the Mary who is loved by Harold’), who in turn is identified in relation to the speaker *PETER* (‘the Harold of Peter’s speech’). I assume, albeit very tentatively so, that this ‘pragmatic’ *speaker-linking* is a property of language and not merely a property of more general systems of mind (as

pointed out to me by Valentina Bianchi, object agreement in many languages would seem to point in this direction, but I am in no position to pursue the issue). – Much work remains to be done on these fundamental issues.

21. Subordinate clauses have an embedded ‘Secondary Speech Event’ (Bianchi 2002; see also the facts discussed in Sigurðsson 1990). ‘PRO’-infinitives are headed by anaphoric Pers (cf. the anaphoric Agr of Borer 1989). The necessarily ‘deficient’ reference of the ‘subject’ of such infinitives is blocked if their anaphoric Pers is lexicalized (but, a more elaborated theory of control is of course needed, see Landau 2000). – Actually, PRO can be dispensed with since anaphoric Pers is all that is needed (a solution that is, in a sense, in line with Hornstein 1999, as well as with the findings in Sigurðsson 1991, but does not rely on the problematic movement/trace analysis).

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