Dative as an optionally weak head: Agreement in Icelandic

Akiko KOBAYASHI

2023年3月

島根大学法文学部紀要言語文化学科編 島大言語文化 第54号 抜刷

島根大学法文学部

Dative as an optionally weak head: Agreement in Icelandic

Akiko KOBAYASHI

1 Icelandic dative-nominative constructions

In Icelandic, nominative subjects alone trigger agreement on the finite verb. With nonnominative subjects, the verb shows up in a default (i.e. 3rd person singular) form.

 (1) Icelandic (adapted from Thráinsson 2007: 167)
 Mér/Þér/Henni/Okkur leiðist aldrei. me.DAT/you.SG.DAT/her.DAT/us.DAT get.bored.3sG never 'I/You/She/We never get bored.'

This study analyzes agreement patterns in *dative-nominative constructions* (DNCs), that is, sentences with a dative subject (DAT) and a nominative object (NOM). In DNCs with 3rd person NOM (DN₃Cs), the verb may either appear in a default form or show agreement with NOM (NOM-agreement).¹

(2) Taraldsen (1995: 307)

- a. <u>Henni</u> <u>leiddist</u> **peir**. [default agreement] her.DAT bored.3sG they.NOM 'She was bored with them.'
- b. Henni **leiddust þeir**. [NOM-agreement] her.DAT bored.3pL they.NOM

According to Sigurðsson & Holmberg (2008), there are three varieties of Icelandic with respect to acceptability judgments for these agreement forms. One variety (Icelandic B) allows either agreement; another (Icelandic A) prefers NOM-agreement; and a third

¹ See Boeckx (2000) for evidence on the subjecthood of DAT.

(Icelandic C) admits only default agreement.

The following example is a bi-clausal DN₃C, where NOM is the subject of an infinitive clause. In this case, too, Icelandic B allows either agreement, and Icelandic C admits only default agreement. For Icelandic A, NOM-agreement is "one notch weaker" (Sigurðsson 1996: 29) in this environment: it allows default agreement as well.

(3) Sigurðsson (1996: 6)

Mér virtist/**virtust** [beir vera gáfaðir]. me.DAT seemed.3sg/3pL they.NOM be intelligent 'It seemed to me that they were intelligent.'

This study mainly examines how Icelandic B patterns are derived, but refers to the other varieties whenever necessary.

Researchers have found that various factors constrain agreement in DNCs or DNCs themselves. I list each of them below.

• *NOM-agreement in expletive DN_3Cs : In (4), the expletive bað occupies the subject position, and DAT appears in a lower position. Here the plural NOM cannot control agreement.

vera seinir].

(4) Holmberg & Hróarsdóttir (2004: 652) Það virðist/*virðast einhverjum manni [hestarnir EXPL seem.3sg/*3PL some man.DAT horses.the.NOM be slow

'It seems to some man that the horses are slow.'

Here, I discuss only bi-clausal expletive DNCs because other factors seem to affect the acceptability judgments for monoclausal counterparts. See the appendix for a discussion on monoclausal expletive DNCs.

² Holmberg & Hróarsdóttir (2004) note that the verb can take a plural form as well if both DAT and NOM are plural. However, Kučerová (2007) claims that their observation is empirically incorrect.

•**NOM-agreement in* $D_{wh}NCs$: When DAT is A'-moved, NOM-agreement is illegitimate.

(5) Holmberg & Hróarsdóttir (2004: 655)
 <u>Hvaða stúdent</u> <u>finnst/</u>??finnast [tölvurnar ljótar]?
 which student.DAT find.3sG/??3PL the.computers.NOM ugly
 'Which student finds the computers ugly?'

• A person restriction on $DN_{1/2}Cs$: DNCs with 1st or 2nd person NOM ($DN_{1/2}Cs$) are generally excluded. Either example presented below is deviant no matter what form the verb takes. The judgment is invariant among Icelandic A, B and C.

(6) (6a) Sigurðsson (1996: 28); (6b) Thráinsson (2007: 236)

- a. <u>Henni</u> ?*<u>leiddist</u>/***leiddumst**/?*leiddust við. her.DAT bored.?*DFT/*1PL/?*3PL we.NOM
- b. <u>Henni</u> *<u>hefur</u>/?***hafa** leiðst þið.
 her.DAT have.*3SG/?*3PL bored you.PL.NOM

Judgment for bi-clausal DN_{1/2}Cs is somewhat different, which I discuss in Section 3.2.

• The syncretism effect on $DN_{1/2}Cs$: The person restriction above is lifted when a NOM-agreement verb form is homophonous with the default form.

(7) Thráinsson (2007: 237)

a. (?)Henni leiddist ég.

her.DAT bored I.NOM

'She was bored with me.'

b. (?)Henni leiddist þú.

her.DAT bored you.SG.NOM 'She was bored with you.' *Leiddist* 'was/were bored with' is ambiguous among 1sG, 2sG, and 3sG. Either sentence is acceptable as the verb takes a default and NOM-agreement form at the same time.

• *Infinitive $DN_{1/2}Cs$ in raising sentences: Raising verbs can take an infinitive $DN_{3}C$ complement, as in (8a). However, infinitive $DN_{1/2}Cs$ are deviant in this context, as seen in (8b).

(8) Boeckx (2008: 94), slightly modified

- a. Mér fannst [henni leiðast **þeir**]. Me.DAT seemed.3SG her.DAT be.bored they.NOM 'It seemed to me that she was bored with them.'
- b. *Jóni virtist [Bjarna hafa líkað John.DAT seemed.3sG Bjarni.DAT have liked ég/við/þið].
 I.NOM/we.NOM/you.NOM
 'It seemed to John that Bjarni likes me/us/you.'

The verb in the embedded clause shows up in an infinitive form. The deviance of (8b) indicates that the lack of agreement does not lift the person restriction on $DN_{1/2}Cs$.

• \checkmark Infinitive $DN_{1/2}Cs$ in control sentences: Compare (8b) with the following example, in which a control verb takes an infinitive $DN_{1/2}C$ complement:

(9) Sigurðsson & Holmberg (2008: 271), slightly modified ?Hún vonaðist auðvitað [til að leiðast she hoped of-course for to be.bored við/þið ekki mikið].
we.NOM/you.NOM not much 'She of course hoped not to find us/you very boring.'

DN_{1/2}Cs are slightly degraded, but acceptable.

This study accounts for these facts within the recent minimalist framework. The rest of this paper is organized as follows. Section 2 introduces two assumptions, either of which has been proposed on independent grounds. Section 3 accounts for DNC data. Section 4 examines alternative approaches and associated problems. Section 5 concludes the paper.

2 Assumptions

2.1 Optionally weak heads

Chomsky (2013; 2015) maintains that the nature of a newly formed syntactic object (SO) is determined at the phase level by a labeling algorithm. When a lexical item (H) is merged with a phrase, as in (10a), minimal search selects H as the label of the SO. When two phrases merge, as in (10b), minimal search finds X and Y, but cannot determine which head should be the label. In this case, there are two ways to label the SO: (i) Make XP or YP invisible by raising it, or (ii) take the most prominent feature(s) shared by X and Y to be the label of the SO.

(10) a. SO = {H, XP} b. SO = {XP, YP}

This algorithm, however, encounters an immediate problem regarding the labeling of {*there*, TP}, as acknowledged by Chomsky (2015) himself.

(11) (11b, c) Bjorkman & Zeijlstra (2019: 530)

- a. There is a book on the table.
- b. There are three books on the table.
- c. There's three books on the table. [informal]

Agreement in (11a, b) is not controlled by *there*, but by the postverbal nominal. How, then, is the SO in (12) labeled without Agree?

(12) SO = {there, [T [be a book/three books on the table]]}

The notion of *weak heads* might be able to solve the problem. Chomsky (2015) suggests that T in English is "too 'weak' to serve as a label" (p. 9). Saito (2016; 2018), extending this notion to Case particles in Japanese, assigns the structure (13b) for the sentence (13a).

(13) Japanese

a. Hanako-ga Taroo-o shikat-ta. Hanako-NOM Taro-ACC scold-PST 'Hanako scolded Taro.'



Saito claims that case heads (Ks) are weak. I indicate the weakness of K with shadowing. With K being weak, search applied at SO1 chooses T as the label. (Weak heads are visible to minimal search. They do not qualify as a label.) When minimal search into SO2 finds D and K, it chooses D as the label. Consequently, Japanese sentences can be labeled without Agree.

The labeling puzzle in (12) may be solved by assuming that *there* is associated with a weak head K. Then minimal search chooses T as the label of the SO.³ T's $[u \phi]$ features are valued by a postverbal nominal. Labeling and agreement in *there*-sentences are explained with the assumption that the expletive is headed by a weak head.

Strictly speaking, the expletive is headed by an *optionally weak* head. In (11c), where *there* is followed by a singular verb and a plural noun phase, *there* should

³ According to Chomsky, T becomes strong once its $[u \phi]$ features are valued. The labeling of the SO in (12) might be postponed until Agree(T, *a book/three books*) makes T a strong head.

trigger singular agreement. That is, *there* should be headed by a strong head K with a [SG] feature. Then the SO in (12) is labeled as $\langle \phi, \phi \rangle$ because of ϕ -feature sharing between K and T.

I assume that DAT in Icelandic is also headed by an optionally weak head. The structure of the dative phrase *okkur* 'us.DAT' is analyzed as below:



DAT consists of a DP and a dative head K. If K is weak, the SO is labeled as DP; if not, SO is labeled as KP.

I follow Chomsky (2000) in assuming that DAT bears an inherent dative Case feature ([Case: DAT]) and an unvalued Case feature ([uCase: _]). I also assume that DAT bears a [SG] feature but lacks a person feature. This is just the opposite of what researchers like Taraldsen (1995), Sigurðsson (2000; 2002) and Boeckx (2000) have claimed: DAT is specified for person ([3] or [+person]), but not for number. I assume that 3rd person is a non-person (cf. Benveniste 1966; Kayne 2000; Harley & Ritter 2002; Béjar 2003). Finite verbs show up in "3rd person" forms when T fails to receive a person value.

2.2 Point-of-View (PoV) licensing

Boeckx (2000) and Rezac (2008) observe that the person restriction on Icelandic $DN_{1/2}Cs$ bears some resemblance to what Bonet (1991) calls *the Person-Case Constraint* (PCC). The PCC is a family of restrictions. A strong PCC, attested in Basque, French and Greek, prohibits 1st/2nd person direct objects in ditransitive sentences. In a weaker version, which Italian, Spanish and Bantu languages are subject to, the constraint applies *if the dative object is 3rd person* (Preminger 2019; Deal 2021).

Compare them with the restriction on Icelandic $DN_{1/2}Cs$ (16).

(16) Icelandic $DN_{1/2}Cs:$ (*)[DAT ··· [NOM_{1/2} ···

(* unless the syncretism effect is relevant)

It resembles the strong PCC (15a) in that a dative argument, irrespective of its person, blocks the occurrence of 1st/2nd person pronouns in a lower position.⁴

Notice that sentences such as *John hit me* are non-problematic. The person restriction applies to a phase that contains more than one argument (see Rezac 2008; Richards 2008 for similar remarks): DAT and ACC in (15a, b) are in the same vP phase; DAT and NOM in (16) are in the same CP phase (vP is not a phase since otherwise T cannot assign nominative Case to the object). *John hit me* is not constrained as *John* and *me* are in different phases.

Given this much, I propose the following licensing procedure for 1st/2nd person pronouns: $\overset{\scriptscriptstyle 5}{}$

(17) Point-of-View (PoV) licensing

- a. Every phase contains a PoV head in the left periphery.
- b. A nominal is PoV-licensed at LF under local c-command by PoV. Only the highest copy of a nominal is visible for PoV-licensing.
- c. A 1st/2nd person pronoun must be PoV-licensed.

If a DP is PoV-licensed, its referent bears a role of what Sells (1987) calls PIVOT, from whose point of view the report is made. If DAT in (16) were PoV-licensed, the speaker or the hearer would be described from the point of view of the third party, which renders the sentence semantically odd.

⁴ There is a significant difference between the PCC and the person restriction in Icelandic, though. The former, but not the latter, works only when the two arguments are *phonologically weak* (Bonet 1991).

⁵ Baker (2008) makes a very similar proposal, assuming that CP, not a phase, contains a licensing head.

3 An explanation

3.1 DN₃Cs

Now let us consider how the assumptions above account for the data. Recall that in DN_3Cs , NOM optionally controls agreement (see (2) and (3)). The optional NOM-agreement is explained with the assumption that DAT is headed by an optionally weak head K. If K is weak, labeling and Agree proceed as depicted in (18).



Minimal search applied at the SO1 finds K and T. Since K is weak, T determines the label of the SO1. T's $[u \phi]$ features remain unvalued. Minimal search continues and eventually finds NOM (*beir* 'they'). Agree(T, *beir*) assigns T a [PL] value but not a person value. At the stage of vocabulary insertion (VI), the partial valuation is repaired by inserting a default [3] value, and the finite verb shows up in a 3rd person plural form.^{6,7}

(19) Repair of partial valuation

 $T [uPn:_/uNr: PL] \rightarrow T [uPn: 3/uNr: PL] \rightarrow [3PL]$

NOM-agreement is thus explained.

If K is not weak, labeling and Agree proceed as in (20).

⁶ See Kobayashi (2014; 2020; 2022) for how partial valuation is repaired in other languages.

⁷ This means that a derivation converges with unvalued features. I follow Preminger (2014) in assuming that unvalued features must be valued if possible, but may remain unvalued if not.



Minimal search applied at the SO1 finds K and T, both qualified as a label. The SO1 is labeled as $\langle \phi, \phi \rangle$ through ϕ -feature sharing between K and T. Thus, T receives a [SG] value from K. Minimal search continues and undergoes Agree(T, *beir*), assigning *beir* a nominative value. However, the nominal's [PL] value is not assigned to T as T has already been given a [SG] value.⁸ Consequently, the finite verb shows up in a [3SG] form. The default agreement in DN₃Cs is therefore DAT-agreement. If the argument is on the right track, optional NOM-agreement in DN₃Cs is a consequence of the optionally weak status of the dative head K.

The varied judgments over DN₃Cs agreement might be attributed to the status of K. Icelandic A prefers K to be a weak head, and thus NOM-agreement. Icelandic C prefers K to be a strong head, and thus DAT-agreement. Icelandic B has no preference, and thus allows either agreement.

Recall that NOM-agreement is one notch weaker in bi-clausal DN_3Cs (3): even Icelandic A allows DAT-agreement. Sigurðsson (1996) explains this by assuming that an infinitive T can be activated as a Case assigner. This amounts to saying that an infinitive clause can optionally constitute a phase.

⁸ This may have to do with the non-tampering condition (NTC) suggested by Chomsky (2000; 2007; 2008). Although Chomsky's NTC is a constraint on Merge, there is no reason to restrict the NTC to Merge operations if it is a manifestation of the third factor. See Kato et al. (2014) for another attempt to extend the scope of the NTC.

(21) DAT V-T<sub>[u
$$\phi$$
]</sub> [phase NOM V-T_{inf[u ϕ]} ···]

Due to the phase-impenetrability condition (PIC) (Chomsky 2000; 2001; 2004), the matrix T has only DAT to Agree with.⁹ This is why even Icelandic A allows DAT-agreement in bi-clausal DN_3Cs .

A note is in order. Consider (18) again. DAT has moved up to the subject position from a lower position. Does the A-trace of DAT not intervene in Agree(T, *beir*)? Here I follow Chomsky's (2008) claim that A-traces are invisible for Agree.

Let us then consider why NOM-agreement is disallowed in expletive DN_3Cs (4) and $D_{wh}NCs$ (5). This has to do with DAT intervening between T and NOM, as argued by Holmberg & Hróarsdóttir (2004) and Chomsky (2008). The configuration of (4) is schematically represented in (22).

(22) Expl V-T_[uPn, uNr] DAT_[SG] [NOM[PL]
$$\cdots$$
]

According to Sigurðsson (1996) and Sigurðsson & Holmberg (2008), the expletive lacks ϕ -features (or, it might be headed by a weak head, as I have assumed for the English expletive). T's [u ϕ] features are thus to be valued by a lower goal. Minimal search first encounters DAT. Agree(T, DAT) thus applies. Once T is valued by DAT's [SG], the second Agree(T, NOM) cannot overwrite the value. DAT-agreement is the only option in this construction.

A similar explanation is given to obligatory DAT-agreement in $D_{wh}N_3Cs$ (5). Given that (i) DAT directly moves to SPEC-C and (ii) A'-traces are visible for Agree (Holmberg & Hróarsdóttir 2004; Chomsky 2008), the A'-trace of DAT (DAT² in (23)) intervenes

⁹ The following sentence supports this claim.

⁽i) Taraldsen (1995: 317)

Konunum_i <u>fannst</u>/*fundust [þær_i vera fáfaðar].

women.the.dat seemed.3sg/ $*3_{PL}$ they.nom be gifted

^{&#}x27;The women thought they were smart.'

The pronominal NOM coreferential with DAT is ruled out by the Binding Principle B when the matrix verb agrees with NOM. In contrast, the sentence is well-formed when the verb takes a default form. The well-formedness is expected if the infinitive clause can constitute a phase.

between T and NOM.

(23) Wh(DAT)¹ [
$$_{TP}$$
 T_[uPn, uNr] [DAT²[SG] \cdots NOM[PL] \cdots]]

To conclude, optional NOM-agreement in DN₃Cs results from the optionally weak status of dative head K. DAT-agreement is obligatory if DAT remains in situ or A'-moved since in such configurations T must Agree with DAT before NOM.

3.2 Finite $DN_{1/2}Cs$

Let us now turn to the deviance of (monoclausal) $DN_{1/2}Cs$ (6). 1st/2nd person NOM needs PoV-licensing, as formulated in (17). However, licensing fails since DAT intervenes between PoV and NOM_{1/2}:

There is a way out of this problem. Suppose that DAT has been displaced (by some driving force) somewhere above PoV. Then the following configuration is obtained at the point of transfer:

(25)

$$\begin{bmatrix} DAT^{1} \dots \begin{bmatrix} PoV \end{bmatrix} T[uPn, uNr] \begin{bmatrix} DAT^{2}[SG] \dots NOM[1, PL] \end{bmatrix} \end{bmatrix}$$

$$(ii)$$

The PoV-licensing rule (17b) states that only the highest copy is visible for PoV. That is, DAT² does not intervene between PoV and the 1st person NOM. NOM is PoV-licensed and interpreted as pivot of the report.

Let us now consider how Agree applies in this configuration. With DAT displaced above TP, T's $[u\phi]$ features should be valued by a lower goal. Agree(T, DAT²) first applies, and assigns DAT's [SG] value to T (Agree (i)). Agree(T, NOM) then applies to value NOM's [uCase]. Whereas NOM's [PL] value cannot be assigned to T, its person value [1] can, as T's [uPn] is unvalued (Agree (ii)). Syntactic computation and LF thus converge without any problems.

A problem arises at PF. Since the derivation ends up with the two Agree instructions, the output form must conform to both instructions.

(26) Agree (i): [uPn: _/ uNr: sG] → [uPn:] / uNr: sG] → [3sG] (repair by inserting a default [3] value) Agree (ii): [uPn: 1/ uNr: _] → [uPn: 1/ uNr: SG] → [1sG] (repair by inserting a default [sG] value)

Agree (i) and (ii) require [3sG] and [1sG] forms to be inserted, respectively. The derivation crashes at PF due to the conflicting instructions.

The syncretism effect (7) naturally follows from this analysis. If the [3sg] and [1sg] forms of a verb are homophonous, the requirements from Agree (i) and (ii) are satisfied, and the sentence is well-formed.¹⁰

In passing, bi-clausal DN_{1/2}Cs are acceptable with DAT-agreement.

(27) Sigurðsson (1996: 30)

<u>beim</u> <u>hefur</u>/***höfum** alltaf fundist [**við** vinna vel]. them.DAT have.3sG/*1PL always found we.NOM work well 'They have always thought that we work well.'

This is explained by Sigurðsson's (1996) claim that an infinitive clause optionally constitutes a phase. Consider (21) again. In this configuration, NOM can be PoV-licensed by PoV in the infinitive clause. Since T has only DAT to Agree with, DAT-agreement is obligatory in (27).

In sum, $DN_{1/2}Cs$ are different from DN_3Cs in that DAT must be displaced to ensure PoV to license 1st/2nd person NOM. Consequently, T Agrees with DAT for number and with NOM for person. The two Agree operations lead to conflicting instructions for VI unless the inserted morphology is syncretic between DAT- and NOM-agreement

¹⁰ Atlamaz & Baker (2018) provide a similar analysis of DN_{1/2}Cs: since both DAT and NOM are agreement controllers, DN_{1/2}Cs are legitimate only when the agreement morphology of the finite verb satisfies both requirements. However, they are not clear about how DN₃Cs are convergent with either DAT or NOM agreement. The same criticism applies to Thráinsson (2007).

forms.

3.3 Infinitive DN_{1/2}Cs

Now let us consider infinitive $DN_{1/2}Cs$ (8b) and (9). Why are $DN_{1/2}Cs$ embedded by raising verbs excluded, whereas $DN_{1/2}Cs$ embedded by control verbs are acceptable?

The deviance of $DN_{1/2}Cs$ in raising sentences has to do with the failure of PoVlicensing of $NOM_{1/2}$. Since a raising verb is an unaccusative verb, the smallest phase containing a $DN_{1/2}C$ is the matrix clause, as seen in (29a). In contrast, since the control verb takes an external argument (EA), the smallest phase containing a $DN_{1/2}C$ is a matrix vP, as seen in (29b).

(29) a. Raising sentence:



In (29a), the PoV-licensing of NOM_{1/2} is blocked by DAT in the infinitive clause (DAT in the matrix clause may be displaced above PoV). The sentence is thus ruled out for semantic reasons. In (29b), DAT in the infinitive clause moves to the EA position (under the movement theory of control proposed by Hornstein 2001). Since the EA is further moved to the subject position, there is no intervener between PoV and NOM_{1/2} at LF. $DN_{1/2}Cs$ are therefore legitimate in control sentences.

A note is in order. The proposed analysis assumes that infinitive clauses as in (29a) can optionally constitute a phase. Then it wrongly predicts that PoV in the embedded clause can license $NOM_{1/2}$ if DAT is displaced somewhere above PoV. I assume, in line with Pesetsky and Soare (2011), that infinitive clauses are "reduced" in that they cannot provide a landing site for dislocated DAT.

In sum, the acceptability of infinitive DN_{1/2}Cs depends on the success or failure

of PoV-licensing of $NOM_{1/2}$. PoV-licensing is successful in control sentences as the intervening DAT is moved out of the infinitive clause.

4 Possible alternative analyses

Researchers have proposed different analyses for agreement patterns in DNCs. There are three major types of analyses, namely the person-licensing analysis, the Case-licensing analysis, and the PoV-licensing analysis. I present these below and point out the problems inherent in them.

4.1 The person-licensing analysis

Researchers like Taraldsen (1995), Sigurðsson (2000), Thráinsson (2007), and Sigurðsson & Holmberg (2008) have proposed that the person feature of NOM causes the person restriction. Sigurðsson & Holmberg (2008), who provide the most detailed analysis, explain the differences and the similarities among Icelandic A, B and C. Their analysis runs as follows.

- (30) a. Person (Pn) and Number (Nr) are separate probes.
 - b. The [+person] feature of 1st/2nd person pronouns needs licensing from Pn.
 - c. Subject movement consists of two steps, (i) sub-movement to SPEC-Nr and (ii) sub-movement to SPEC-Fin.

$$\begin{bmatrix} FinP & Fin[EPP][PnP Pn [NrP & Nr[EPP] [DAT ... NOM]]] \end{bmatrix}$$

$$(ii)$$

$$(i)$$

d. The order between Nr-Agree and subject sub-movement (i) may differ among the varieties.

In Icelandic A, Nr-Agree occurs *after* subject sub-movement (i). Then Agree(Nr, NOM) applies, yielding NOM-agreement. The opposite holds for Icelandic C: Nr undergoes Agree *before* subject sub-movement (i). Nr Agrees with DAT, the closest matching goal. Obligatory DAT-agreement thus results. In Icelandic B, the verb allows either

agreement pattern because the order of Nr-Agree and subject sub-movement (i) is not fixed in this variety.

On Sigurðsson & Holmberg's analysis, the ill-formedness of $DN_{1/2}Cs$ is due to the failure of [+person] feature licensing. In all varieties, Pn-Agree occurs before subject sub-movement (ii). Pn Agrees with DAT because it is the closest goal. The unlicensed [+person] feature of NOM causes the derivation to crash.

The syncretism effect is explained as follows. Suppose that the derivation of a DNC involving 1st person singular NOM has reached the stage of Pn-Agree.

(31) $[FinP _ Fin [PnP Pn [NrP DAT Nr [tDAT ... NOM]]]]$

Pn first Agrees with DAT. However, Pn can Agree with NOM as well, "in case this does not lead to a morphological clash" (Sigurðsson & Holmberg 2008: 271). Suppose that this option is taken. Pn is assigned a 3rd person value from DAT and a 1st person value from NOM. Thus, the verb must be 3rd and 1st person at the same time. If this is impossible, Pn does not undergo the second Agree. In contrast, if 3rd and 1st person (singular) forms of the verb happen to be syncretic, nothing prevents the second Agree. The derivation converges with NOM's [+person] feature licensed.

Despite its descriptive attractiveness, the analysis suffers from several problems. First, the idea that operations are ordered or that the order of operations is parameterized does not fit the spirit of minimalism. Ordering would maximally complicate syntactic computation, and parametric variations should be limited to the lexicon.

The second problem concerns the "no look-ahead" condition (Chomsky 2000). Syntactic computation must be locally determined. At the stage of (31), therefore, computation cannot take a PF outcome into account to decide whether to undergo the second Agree.

The third problem is empirical. The analysis wrongly predicts that infinitive $DN_{1/2}Cs$ such as (8b) and (9) are either uniformly ruled out (if Pn in an infinitive clause is inert), or uniformly ruled in (if Pn is active). It seems hard to explain why (8b) is

excluded and (9) is legitimate.

4.2 The Case-licensing analysis

The second analysis builds on Baker's (2008; 2011) observation that predicative adjectives in many languages agree with their subjects in number and gender, but not in person. The absence of person agreement is also observed between ditransitive verbs and their theme arguments in languages with rich object agreement morphology. Baker proposes the following condition to explain these facts:

(32) The Structural Condition on Person Agreement (SCOPA) (Baker 2011: 878) A category F can bear the features +1 or +2 if and only if a projection of F merges with a phrase that has that feature and F is taken as the label of the resulting phrase.

Put simply, person agreement requires a SPEC-head relation. The absence of person agreement is reduced to the absence of a SPEC-head relation between an argument and its licensing head, as seen in (33).

- (33) Baker (2011: 880, 885) with slight modification
 - a. $[_{PredP} \operatorname{Subj}_{[1,F,PL]} \operatorname{Pred} [_{AP} \operatorname{Adj}_{[F,PL][*1]}]]$
 - b. $\left[_{vP} \left(\text{Subj} \right) \left[_{vP} IO_{[1,SG]} \mathbf{v}_{[1,SG]/[AN,PL]} \left[_{vP} t_{IO} V_{ditr} \mathbf{DO}_{[AN,PL]} \right] \right] \right]$

Baker (2008; 2011) argues on independent grounds that the subject of Adj is not generated within AP, but in SPEC of the higher predicate (Pred). Adj may be given the subject's gender and number feature values under Agree, but not the subject's person value. Similarly, the direct object (DO) does not enter into a SPEC-head relation with its accusative Case assigner, v. DO therefore cannot value the person feature of v.

Baker (2008: 89) maintains that the SCOPA can also account for agreement patterns in Icelandic DNCs (Baker deals only with Icelandic A). Baker's account runs as follows. DAT has no ϕ -features whatsoever. Therefore T obligatorily Agrees with NOM and receives its number value. Let us consider how Agree(T, NOM) occurs in the following configurations:

(34) a. DAT $T_{[PL]} \cdots NOM_{[PL]}$ b. DAT $T_{[PL][*1]} \cdots NOM_{[1PL]}$

In (34a), 3rd person NOM assigns a [PL] value to T; T, in return, assigns nominative Case to NOM. In (34b), 1st person NOM assigns to T a [PL] value but not a [1] value because of the SCOPA. This creates a problem because T cannot assign Case to a partially-agreeing goal (see Rezac 2008 for similar remarks). PCC phenomena are thus reduced to the violation of the Case Filter.

There are at least two problems with this analysis. First, as acknowledged by Baker (2011: 889, fn.13) himself, it does not predict the grammaticality of the following copula sentences with a demonstrative subject and a pronominal complement:

(35) Sigurðsson & Holmberg (2008: 262)

- a. Það/Þetta erum (bara) við.
 it/this are.1pL (only) we.NOM
 'It/This is (only) us.'
- b. Það/Þetta eruð (bara) þið.
 it/this are.2PL (only) you.PL.NOM 'It/This is (only) you.'

The SCOPA would exclude these sentences since NOM_{1/2} does not occupy SPEC-T.

These sentences, in contrast, are not problematic for the present analysis. According to Sigurðsson (1996) and Sigurðsson & Holmberg (2008), the demonstratives are devoid of ϕ -features. Thus, they neither induce Agree with T nor block PoV-licensing of NOM_{1/2}.

Agree in person & number

Second, this analysis does not predict the syncretism effect: (34b) violates the Case Filter, no matter the form in which the verb appears. It categorically rules out $DN_{1/2}Cs$,

contrary to fact.

4.3 The PoV-licensing analysis

The last analysis is provided by Boeckx (2000), according to whom the deviance of $DN_{1/2}Cs$ has to do with the failure to qualify 1st/2nd person NOM as a PoV holder.

Boeckx suggests the following account for PCC phenomena of both Romance and Icelandic types. Unlike my analysis, Boeckx claims that NOM must raise to SPEC-PoV to be licensed.

(37) Boeckx's (2000) account for PCC phenomena

- a. Both 1st/2nd person pronouns and DAT are [+person], and hence candidates for PoV-interpretation.
- b. DAT prevents (covert) raising of a 1st/2nd person pronoun to SPEC-PoV.

Under this analysis, the PCC phenomena arise as DAT prevents the raising of 1st/2nd person pronouns:

Let us then consider agreement patterns in DN₃Cs. Boeckx, like Baker, deals only with Icelandic A. According to Boeckx, DAT and NOM undergo Agree with separate probes.

$$\begin{array}{cccc} (40) \left[{}_{\text{AgrsP}} \text{DAT}_{[+\text{person}]} \text{Agrs}_{[u\phi]} & \cdots & \left[{}_{\text{AgroP}} \text{NOM} \quad \text{Agro}_{[u\phi]} \right] \cdots \right] \\ \text{DAT-Agree} (\rightarrow [3]) & \text{NOM-Agree} (\rightarrow [\text{SG or PL}]) \end{array}$$

 $DAT_{[+person]}$ assigns a 3rd person value to Agrs. 3rd person NOM assigns to Agro a number value but not a person value (Boeckx assumes that 3rd person is a non-

person). The ϕ -values assigned to Agrs and Agro determine the PF form of the verb. Consequently, the verb shows number agreement with NOM.

Boeckx's analysis has the advantage of accounting for Icelandic and Romance data in a uniform manner. However, it has a difficulty in explaining the syncretism effect observed only in Icelandic. According to Boeckx, $DN_{1/2}Cs$ are excluded at a syntax-semantics interface, where a 1st/2nd person NOM fails to be PoV-licensed. Why, then, does the PF form of a verb rescue the problem?

Another problem concerns the unclear properties of DAT.¹¹ According to Boeckx, DAT bears a [+person] feature as do the 1st/2nd person pronouns; DAT triggers 3rd person agreement; and 3rd person NOM does not trigger person agreement since 3rd person is a non-person. How can we interpret them in a coherent way?

In conclusion, all three analyses have conceptual and/or empirical problems. However, the present paper has adopted important ideas from each analysis: (i) DAT is underspecified for ϕ -features; (ii) 1st/2nd person NOM needs special licensing; and (iii) the licensing is blocked by intervening DAT. With due modifications, they are restructured into an analysis that accounts for DNC data in a coherent manner.

5 Conclusion

I have accounted for the agreement patterns in Icelandic DNCs. DAT is headed by an optionally weak head K with a singular-number ([SG]) feature. If K is weak, T has only NOM to Agree with. If not, T Agrees with DAT and receives its [SG] value before it Agrees with NOM. In this case DAT-agreement (i.e. default agreement) emerges. The absence of NOM-agreement in expletive DNCs and DNCs involving A'-moved DAT is due to the intervening DAT between T and NOM.

I have also discussed why DNCs cannot torelate 1st/2nd person NOM, and why the person restriction is lifted if the NOM-agreement form of a verb is homophonous with the default agreement form. DAT in a $DN_{1/2}C$ must be displaced for $NOM_{1/2}$ to be licensed (PoV-licensing). Thus, T Agrees with (the trace of) DAT for number and with NOM for person. The two Agree operations lead to conflicting instructions for vocabulary insertion. The conflict can be resolved if the NOM-agreement form of a

¹¹ Baker (2008: 88) makes a similar remark too.

verb is homophonous with the DAT-agreement form.

The grammaticality of infinitive $DN_{1/2}Cs$ is reduced to the possibility of PoVlicensing. Raising verbs cannot take infinitive $DN_{1/2}Cs$ because of DAT intervening between PoV and NOM_{1/2}. Control verbs can, because DAT is moved to a θ -position in the matrix clause and ceases to be an intervener.

Appendix: Variation in judgments on agreement in monoclausal expletive DN₃Cs

As seen in the main text, DAT-agreement (i.e. default agreement) is obligatory in biclausal expletive DNCs. The relevant example (4) is repeated here as (1).

 (1) Það
 virðist/*virðast
 einhverjum manni

 EXPL
 seem.3sG/*3PL
 some
 man.DAT

 [hestarnir
 vera
 seinir].

 horses.the.NOM be
 slow

 'It seems to some man that the horses are slow.'

I have argued that the intervening DAT blocks Agree between T and NOM.

In this appendix, I briefly touch upon agreement in monoclausal expletive DNCs, which I have ignored so far. Researchers have observed that NOM-agreement is legitimate in monoclausal expletive DNCs (cf. Alexiadou & Anagnostopoulou 2006; Broekhuis 2007).

(2) Broekhuis (2007: 53-54)

- a. Það líkuðu <u>einhverjum</u> þessir sokkar.
 EXPL liked.3PL somebody.DAT these socks.NOM
 'Somebody liked these socks.'
- b. Það **voru** <u>einhverjum</u> gefnir **þessir sokkar.** EXPL were.3PL somebody.DAT given these socks.NOM 'Somebody was given the socks.'

Sigurðsson & Holmberg (2008) note that Icelandic A allows NOM-agreement in (3), but Icelandic B and C do not.

(3) Sigurðssson & Holmberg (2008: 256)
Það líkuðu <u>einum málfræðingi</u> þessar hugmyndir.
EXPL liked.3PL one linguist.DAT these ideas.NOM
'A linguist liked these ideas.'

In Árnadóttir & Sigurðsson's (2013) survey, 368 out of 712 speakers found NOMagreement in the following sentence grammatical, whereas 187 rejected it:

(4) Árnadóttir & Sigurðsson (2013: 109, fn 13)
Það hafa mörgum blöskrað þessi ummæli.
EXPL have.3PL many.DAT been.shocked.by these statements.NOM
'Many people are shocked at these statements.'

A stronger claim is made by Kučerová (2006), who claims that NOM-agreement is obligatory in monoclausal expletive DNCs.

(5) Kučerová (2006: 272)

Það **voru** <u>konugi</u> gefnar **ambáttir** í vettur. EXPL were.3PL king.DAT given slaves.NOM in winter 'A king was given female slaves in winter.'

In Ussery's (2013) survey of 61 speakers, 36% favored NOM-agreement over default agreement in the following sentence.

(6) Ussery (2013: (3))

Það líka/líkar mörgum stúdentum peningarnir. EXPL like.3PL/3SG many students.DAT money.the.NOM.PL 'There like many students the money.'

Those who prefer default agreement are presumably speakers of Icelandic B or C. Although the above researchers differ on whether NOM-agreement is possible or obligatory, they all observe that DAT may not block NOM-agreement in monoclausal expletive DNCs.

This is a potential problem for the present analysis. As DAT apparently intervenes between T and NOM, the present analysis expects that DAT-agreement is the only option, even for Icelandic A.

(7) Expl
$$\cdots$$
T \cdots DAT_[SG] \cdots NOM_[PL]
Agree (i) \rightarrow [SG] valuation
Agree (ii) \rightarrow no ϕ -valuation

The presence of NOM-agreement means that Agree (ii) may precede Agree (i) in a monoclausal environment. How is this possible?

Although a full-fledged account is beyond the scope of this paper, I would like to point out two possible explanations. Notice that the examples in (2b) and (5) contain the passive verb *gefnir/gefnar* 'given'. According to Wood & Sigurðsson (2014), the two internal arguments of *gefa* 'give' are symmetric in that either argument can be the subject of a passive sentence.

(8) Zaenen, Maling & Thráinsson (1985: 460)

- a. **Ambáttin** var gefin <u>konunginum</u>. maid.servant.the.NOM was given king.the.DAT 'The female slave was given to the king.'
- b. <u>Konunginum</u> voru gefnar **ambáttir.** king.the.DAT were given maid.servants.NOM 'The king was given female slaves.'

This suggests that DAT may not necessarily occupy a higher position than NOM: c-command relation between DAT and NOM may be changeable; or, there may be no c-command relation between them. If either is the case, DAT does not block NOM-agreement in (7).

Notice also that the examples in (2a), (3) and (6) contain the verb *lika* 'like'. It is often mentioned that verbs may affect agreement patterns in (non-expletive) DNCs.

According to Sigurðsson (1996), an Icelandic A speaker, NOM-agreement is generally preferred, and DAT-agreement is "exceptional and largely limited to clauses with either *leiðast* 'find boring' or *líka* 'like'" (p.25). Árnadóttir & Sigurðsson (2013) note that for the majority of their informants, DAT-agreement is obligatory in clauses with *líka* whereas they may allow (or prefer) NOM-agreement in clauses with other verbs. Their observations may be paraphrased as follows:

- (9) a. Even Icelandic A speakers (who prefer NOM-agreement) allow DAT-agreement with *lika*.
 - b. Icelandic B speakers (who accept either DAT- or NOM-agreement) prefer DAT-agreement with *lika*.

The observed agreement patterns in clauses with *lika* are summed up as follows.

(10) a. Expl líka-T $DAT_{[SG]}$ $NOM_{[PL]}$ b. $DAT_{[SG]}$ líka-T $NOM_{[PL]}$

In expletive DNC (10a), T can skip DAT and Agree with NOM. In non-expletive DNC (10b), T prefers to Agree with DAT. The invisibility of DAT in (10a) may have to do with the preferred (or obligatory) DAT-agreement in (10b).

Recall that in Icelandic A, DAT is headed by a weak head K, because of which T has only NOM to Agree with. The presence of DAT-agreement in (10b) might mean that the DAT argument of *lika* is not headed by a weak head K, but by a null preposition (as suggested by Baker 2008). As the preposition is not weak, Agree between DAT and T takes place to label the SO.



In expletive DNCs, T has DAT and NOM to Agree with, as seen in (12). Since neither DAT nor NOM c-commands the other, Agree(T, DAT) can either precede or follow Agree(T, NOM). NOM-agreement is thus possible in this configuration.



If the argument is on the right track, NOM-agreement is acceptable in monoclausal expletive DNCs when DAT does not necessarily c-command NOM. I leave further elaboration of this idea for future research.

Abbreviations

1/2/3= 1st/2nd/3rd person, ACC=accusative, AN=animate, DAT=dative, DFT=default, EXPL=expletive, F=feminine, NOM=nominative, Nr=number, PL=plural, Pn=person, PST=past tense, SG=singular.

Acknowledgments

This study was partly supported by JSPS KAKENHI Grant Number 20K00543. I thank Hiroyuki Nawata and Masako Ohara for their helpful comments. All errors are my own.

References

- Alexiadou, Artemis & Anagnostopoulou, Elena. 2006. From hierarchies to features: Person splits and direct-inverse alternations. In Boeckx, Cedric (ed.), *Agreement systems*, 41–62. Amsterdam: John Benjamins.
- Árnadóttir, Hlíf & Sigurðsson, Einar Freyr. 2013. Case in disguise. In Fernández, Beatriz & Etxepare, Ricardo (eds.), Variation in datives: A microcomparative perspective, 96–143. Oxford: Oxford University Press.
- Atlamaz, Ümit & Baker, Mark. 2018. On partial agreement and oblique case. *Syntax* 21. 195–237.
- Baker, Mark C. 2008. *The syntax of agreement and concord*. Cambridge: Cambridge University Press.
- Baker, Mark C. 2011. When agreement is for number and gender but not person. *Natural Language & Linguistic Theory* 29. 875–915.
- Béjar, Susana. 2003. Phi-syntax: A theory of agreement. Doctoral dissertation, University of Toronto.
- Benveniste, Émile. 1966. Problèmes de linguistique générale I. Paris: Gallimard.
- Bjorkman, Bronwyn M. & Zeijlstra, Hedde. 2019. Checking up on (\$-)Agree. Linguistic Inquiry 50. 527–569.
- Boeckx, Cedric. 2000. Quirky agreement. Studia Linguistica 54. 354-380.
- Boeckx, Cedric. 2008. The Person-Case Constraint and patterns of exclusivity. In D'Alessandro, Roberta & Fischer, Susann & Hrafnbjargarson, Gunnar Hrafn (eds.), Agreement restrictions, 87–101. Berlin: Mouton de Gruyter.
- Bonet, Eulàlia. 1991. *Morphology after syntax: Pronominal clitics in Romance languages*. Doctoral dissertation, MIT.
- Broekhuis, Hans. 2007. Does defective intervention exist? *Linguistics in the Netherlands* 2007. 49–61.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Martin, Roger & Michaels, David & Uriagereka, Juan (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2007. Approaching UG from below. In Sauerland, Uli & Gärtner, Hans-Martin (eds.), *Interfaces + recursion = language?: Chomsky's minimalism and the view from syntax-semantics*, 1–29. Berlin: Mouton de Gruyter.

Chomsky, Noam. 2008. On phases. In Freidin, Robert & Otero, Carlos P. & Zubizarreta, Maria Luisa (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, 133–166. Cambridge, MA: MIT Press.

Chomsky, Noam. 2013. Problems of projection. Lingua 130. 33–49.

- Chomsky, Noam. 2015. Problems of projection: Extensions. In Di Domenico, Elisa & Hanmann, Cornelia & Matteini, Simona (eds.), *Structures, strategies and beyond: Studies in honour of Adriana Belletti*, 3–16. Amsterdam: John Benjamins.
- Deal, Amy Rose. 2021. Interaction, satisfaction, and the PCC. To appear in *Linguistic Inquiry*.
- Harley, Heidi & Ritter, Elizabeth. 2002. Person and number in pronouns: A featuregeometric analysis. *Language* 78. 482–526.
- Holmberg, Anders & Hróarsdóttir, Thorbjörg. 2004. Agreement and movement in Icelandic raising constructions. *Lingua* 114. 651–673.
- Hornstein, Norbert. 2001. Move! A minimalist theory of construal. Oxford: Blackwell.
- Kato, Takaomi & Kuno, Masakazu & Narita, Hiroki & Zushi, Mihoko & Fukui, Naoki. 2004. Ippan tansaku-to sou-no hashi [Generalized search and the phrase edge]. In Fujita, Koji & Fukui, Naoki & Yusa, Noriaki & Ikeuchi, Masayuki (eds.), Gengono sekkei, hattatsu, shinka [The design, development and evolution of language], 97–119. Tokyo: Kaitakusha.
- Kayne, Richard S. 2000. *Parameters and universals*. New York: Oxford University Press.
- Kobayashi, Akiko. 2014. Relativized Agree. English Linguistics 31. 439-476.
- Kobayashi, Akiko. 2020. Relativized Agree and agreement asymmetries in Standard Arabic. *Studies in Language and Culture* (Memoirs of the Faculty of Law and Literature, Shimane University) 47/48. 13–43.
- Kobayashi, Akiko. 2022. Past participle agreement in French and Italian: A two-Agree analysis. *Glossa* 7(1). 1–41.
- Kučerová, Ivona. 2007. Agreement in Icelandic: An argument for derivational theory of intervention effects. *Proceedings of the 34th Western Conference on Linguistics* (WECOL 2006). 272–284.
- Pesetsky, David & Soare, Gabriela. 2011. Where's 'why'? *Linguistic Inquriy* 42. 651–669.

Preminger, Omer. 2014. Agreement and its failures. Cambridge, MA: MIT Press.

- Preminger, Omer. 2019. What the PCC tells us about "abstract" agreement, head movement, and locality. *Glossa* 4(1). 1–42.
- Rezac, Milan. 2008. The syntax of eccentric agreement: The Person Case Constraint and absolutive displacement in Basque. *Natural Language & Linguistic Theory* 26. 61–106.
- Richards, Marc D. 2008. Quirky expletives. In D'Alessandro, Roberta & Fischer, Susann & Hrafnbjargarson, Gunnar Hrafn (eds.), *Agreement restrictions*, 181–213. Berlin: Mouton de Gruyter.
- Saito, Mamoru. 2016. (A) case for labeling: Labeling in languages without ϕ -feature agreement. *The Linguistic Review* 33. 129–175.
- Saito, Mamoru. 2018. Kase as a weak head. *McGill Working Paper in Linguistics* 25. 382–390.
- Schütze, Carson T. 2003. Syncretism and double agreement with Icelandic nominative objects. In Delsing, Lars-Olof & Falk, Cecilia & Josefsson, Gunlög & Sigurðsson, Halldór Á. (eds.), *Grammar in focus: Festschrift for Christer Platzack*, 295–303. Lund: Lund University.
- Sells, Peter. 1987. Aspects of logophoricity. Linguistic Inquiry 18. 445-479.
- Sigurðsson, Halldór Ármann. 1996. Icelandic finite verb agreement. *Working Papers in Scandinavian Linguistics* 57. 1–46.
- Sigurðsson, Halldór Ármann. 2000. The locus of case and agreement. *Working Papers in Scandinavian Linguistics* 65. 65–108.
- Sigurðsson, Halldór Ármann. 2002. To be an oblique subject: Russian vs. Icelandic. *Natural Language & Linguistic Theory* 20. 691–724.
- Sigurðsson, Halldór Ármann & Holmberg, Anders. 2008. Icelandic dative intervention: Person and number are separate probes. In D'Alessandro, Roberta & Fischer, Susann & Hrafnbjargarson, Gunnar Hrafn (eds.), *Agreement restrictions*, 251–279. Berlin: Mouton de Gruyter.
- Taraldsen, Knut Tarald. 1995. On agreement and nominative objects in Icelandic. In Haider, Hubert & Olsen, Susan & Vikner, Sten (eds.), *Studies in comparative Germanic syntax*, 307–327. Dordrecht: Kluwer.
- Thráinsson, Höskuldur. 2007. The syntax of Icelandic. Cambridge: Cambridge

University Press.

- Ussery, Cherlon. 2013. Variability in Icelandic agreement: An interaction of DP licensing and Multiple Agree. *Proceedings of NELS* 40. 211–226.
- Wood, Jim & Sigurðsson, Halldór Ármann. 2014. *Let* causatives and (a)symmetric datnom constructions. *Syntax* 17. 269–298.
- Zaenen, Annie & Maling, Joan & Thráinsson, Höskuldur. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language & Linguistic Theory* 3. 441–483.